GENERAL INFORMATION

The *University of Illinois at Urbana-Champaign 2020-2021 Academic Catalog* is the official listing of courses, programs, and degree requirements for undergraduate and graduate students. Information on courses, curricula, fees, policies, regulations and other matters is subject to change during the period for which the *Catalog* is in effect.

The class schedule is available each term in the Course Explorer *(*http://courses.illinois.edu*)*. The class schedule lists those courses that will be offered during specific terms, as well as times and locations. Not all courses listed in this *Catalog* are offered every term.

Course Descriptions

The *Catalog* lists courses of instruction alphabetically by subject and numerically by course number. The course number denotes the intended/recommended level of the course:

Courses numbered 000-099 are for preparatory work that does not count toward a degree but do count for tuition and load.

Courses numbered 100-199 are intended primarily for freshmen and correspond to entry-level work. They may be taken by sophomores, juniors, and seniors.

Courses numbered 200-299 are intended for lower-division students who satisfy the published prerequisite(s), if any. Transfer credit from two-year colleges would correspond to 100- and 200-level offerings.

Courses numbered 300-399 are intended primarily for juniors and seniors who satisfy the published prerequisite(s), if any. Transfer work from two-year colleges does not correspond to these numbers.

Courses numbered 400-499 are intended for upper-division undergraduate students sometimes also for graduate students.

Courses numbered 500-599 are intended for graduate and professional school students.

Courses numbered 600-799 are available for certain professional school courses with restricted enrollments. These courses apply primarily to law, medicine, and veterinary programs.

Course credit is listed after each course title. The university counts credit in credit hours. Following the credit hours is a brief description of the content, requirements for registration to the course (if any), and other advisory statements. Additional information relating to the course content is available in the Course Explorer *(*http://courses.illinois.edu*)*. For information on credit policies, see the *Student Code*.

A **crosslisted** course refers to a course offered under the same course title by a different department. Courses may be crosslisted with one or more departments and will be noted by the statement: "**Same as**." The description of a crosslisted course is found only in the entry for the controlling department. Reference to the controlling department's course is noted by "See...."

Prerequisites are advisory statements that refer to special requirements for registration in certain courses. These may include one or more courses that must be completed prior to, or in the same term. These statements may also recommend knowledge, skills or standards, or class standing that must be demonstrated prior to registration.

Degree and General Education Requirements

General Education Requirements

The University of Illinois at Urbana-Champaign requires that all undergraduate students take General Education - or "Gen Ed" - courses to gain and use broad knowledge beyond the specialized learning they will do in a major field of study. These Gen Ed requirements cover the kinds of knowledge all students should have: the humanities and arts, social and behavioral sciences, natural sciences and technology, quantitative reasoning, composition/writing, and cultural studies.

General Education courses at Illinois are mindful of our students' diverse backgrounds, needs, and interests, and are an essential component of the transformative learning that prepares our graduates to become alumni who make a significant societal impact. These courses build students' abilities to think critically, solve problems, generate new ideas and create knowledge, make connections between academic disciplines, respect and understand differences, and develop as citizens and leaders.

General Education at Illinois is more than a set of required courses; it is a gateway into the Illinois experience.

Courses are noted as fulfilling one or more of the following categories:

- Composition I
- Advanced Composition
- Humanities and the Arts: Literature & the Arts or Historical & Philosophical Perspectives

- Natural Sciences and Technology: Life Science or Physical Science
- Quantitative Reasoning
- Social and Behavioral Sciences
- Cultural Studies: Western/Comparative Cultures, Non-Western Cultures, and US Minority Cultures

For a list of current courses approved for General Education credit, please visit the Course Explorer (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/).

Written Communication Requirement

Undergraduate Students:

- Satisfactory proficiency in written communication is a requirement for all undergraduate degrees awarded at the University of Illinois at Urbana-Champaign. This proficiency can be certified by the satisfactory completion of the "Composition I" general education requirement via the one-semester, four-hour course Rhetoric 105 (Writing and Research); the two-semester, eight-hour sequence of Rhetoric 101 (Principles of Writing) and 102 (Principles of Research) with Rhetoric 100 tutorials in both semesters; or the two-semester, six-hour sequence Communication 111 and 112 (Oral & Written Communication I and II).
- A student who achieved, prior to enrolling in college-level coursework, a sufficiently high score on either the appropriate college-preparatory English exam (currently ACT, SAT, AP, or IB) will earn course credit that fulfills the general education "Composition I" requirement and thus will satisfy the Written Communication requirement for graduation. More information can be found under "Proficiency Testing" at go.illinois.edu/pnp (http://go.illinois.edu/pnp/).
- Non-native English-speaking students who are mandated to take the English Placement Test (EPT) and given an English as a Second Language (ESL) placement must fulfill their Written Communication requirement by taking the two-semester, six-hour sequence of ESL 111 and 112 or the one-semester, four-hour ESL 115 course. They might also be required to take ESL 110 (Pronunciation). Non-native English-speaking students who are not required to take the EPT due to sufficiently high TOFEL iBT or IELTS scores may elect to satisfy the Written Communication requirement by taking the ESL, or the Rhetoric, or the Communication sequences. Students in this category who wish to take ESL must take the EPT to determine correct placement.
- If the academic credentials of a transfer student do not indicate fulfillment of coursework equivalent to fulfill the Written Communication graduation requirement, the student will need to do additional coursework to satisfy this requirement. Non-native English-speaking transfer students may be required to take the English Placement Test (EPT).

Graduate Students:

- Satisfactory proficiency in academic writing in English is a requirement for all graduate degrees awarded at the University of Illinois at Urbana-Champaign.
- Graduate students who are admitted on limited status because they do not meet this proficiency requirement prior to admission may be placed into mandatory ESL courses based on the results of the EPT exam.
- Proficiency can then be certified by the satisfactory completion of a one-semester course (ESL 515) or the two-semester sequence (ESL 511 and 512). Students may also select equivalent coursework from the "English for specific purposes" tracks available through ESL (e.g., business track ESL 521, 522). International graduate students may also be required to take ESL 510 (Pronunciation).
- Mandatory ESL course assignments must be fulfilled in order to be eligible for graduation.

Kinesiology, Language Other Than English, and Undergraduate Open Seminar Credit

Credit for Kinesiology

Kinesiology courses numbered from 100 through 110 are activity courses. Credit earned in kinesiology activity courses may be included in the grade point average at the discretion of the individual colleges and may, at the discretion of the individual colleges, be included in the total hours required for graduation.

Language Other Than English Credit

- Effective for all entering freshmen in Fall 2000 or later, the following language requirement must be completed for graduation.
- This requirement may be satisfied by:
    1. Successfully completing a third-semester college-level course in a language other than English;
    2. Successful completion, in high school, of the third year of a language other than English; or
    3. Demonstrating proficiency at the third semester level in a language proficiency examination approved by the College of Liberal Arts and Sciences and the appropriate department.
- Generally, one year of high school language study is equivalent to one semester of college study.
- Current list **(**http://fms.registrar.illinois.edu/Report/?file=CatalogInformation%5CLanguage%20Reqs%5CCourses_Approved_Language_Requirements.xml**)** of courses approved to satisfy the language requirement.

- If you enter UIUC without three years of language other than English in high school, or you plan to continue with the language you studied in high school, you must take a language placement test to determine the courses in which you should enroll.
- An exception to the University third-level requirements is for the students in the Gies College of Business (BUS) who matriculated prior to Fall 2021 and all students in the Sciences and Letters Curriculum of the College of Liberal Arts and Sciences (LAS). These students are expected to gain language knowledge equivalent to the completion of the fourth semester of college study in a language. The Language requirement may be met in any of the following ways:
    1. Successfully completing a fourth-semester college-level course in a language other than English;
    2. Successful completion, in high school, of the fourth year of a language other than English;
    3. Successful completion of the third-semester level in each of two different languages other than English by any combination of high school and college work;
    4. Demonstrating proficiency at the fourth-semester level in a language proficiency examination approved by the College of Liberal Arts and Sciences and the appropriate department.
- Students enrolled in the LAS Chemistry and Chemical Engineering Specialized Curricula are exempt from the four semester LAS Language requirement and must instead adhere to the Campus requirement of three semesters or equivalent. Please contact your adviser if you have any further questions.
- Except as prohibited or limited by the established policy of the student's college, credit in University of Illinois at Urbana-Champaign language courses other than English taken to remove high school entrance deficiencies may, at the discretion of the college:
    1. be counted in the total hours required for graduation, or
    2. be accepted in partial or complete satisfaction of the language other than English requirement for the degree.
- Normally no more than ten hours of proficiency credit for the study of a single language other than English at the elementary and intermediate level shall be counted for graduation in the College of Liberal Arts and Sciences. Additional credit may be granted for advanced courses emphasizing literature and language structure rather than communicative competence in the language.
- Students with a verified Seal of Biliteracy will earn 8 hours of credit equivalent to the first two levels of foreign language regardless of the language other than English. The credit will appear as 8.00 Earned hours from Seal of Biliteracy on the official University of Illinois at Urbana-Champaign transcript in the Transfer Credit Accepted by the Institution section.

Credit for Undergraduate Open Seminar Courses

- Credit in each 199 course shall not exceed four credit hours per semester.
- A student may accumulate an unlimited number of credit hours in 199 courses, but no more than 12 such hours listed on the student's transcript may be counted toward fulfilling graduation requirements, except in cases in which a larger number of credit hours in 199 courses is an integral part of a formal, college-approved program of study (e.g., Individual Plans of Study).
- A 199 course appears on a student's transcript with the departmental rubric and the title "Undergraduate Open Seminar" when a specific section title has not been assigned by the department offering the course.

Policy Notes

Illinois Copyright Policy

The University of Illinois at Urbana-Champaign makes every effort to comply with laws and institutional policies on copyright and to encourage awareness within its community of both responsibilities and appropriate actions for compliance.

Copyright law can be a complex topic to navigate, and the issues students, faculty and staff must confront when it comes to copyright are often different. For that reason, the University has compiled a variety of resources to help you navigate your copyright responsibilities.

Copyright Resources (http://copyright.illinois.edu/resources/)

In addition, a variety of laws and regulations shape the specifics of copyright law. The Higher Education Opportunity Act is one of the laws that shapes copyright policies and education efforts at colleges and universities in America. How the University of Illinois at Urbana-Champaign satisfies the requirements of HEOA are outlined on this page (http://copyright.illinois.edu/compliance/).

Religious Observances

The University of Illinois at Urbana-Champaign complies with the University Religious Observances Act (110 ILCS 110/). Details of the Act are available here (http://www.ilga.gov/legislation/ilcs/ilcs3.asp?ActID=1076&ChapterID=18).

Smoke and Tobacco-Free Campus

Smoking and the use of all non-combustible tobacco products and non-FDA approved nicotine delivery devices and products is prohibited on all campus property, both indoors and outdoors, and in university-owned vehicles and in privately owned vehicles parked on campus property. The advertising, sale, and free sampling of tobacco products and non-FDA approved nicotine delivery devices and products are prohibited on campus property. Littering the remains of tobacco and non-FDA approved nicotine delivery devices or products or any other related waste products on campus property is prohibited. The complete policy is available here (http://cam.illinois.edu/v/v-B-2.1.htm).

State Approving Agency Certification

Effective August 1, 2019, the University of Illinois at Urbana-Champaign is in compliance with Title 38, Veterans' Benefits, Part III, Readjustment and Related Benefits, Section 3679, Disapproval of courses, Subsection e. [38 U.S. Code 3679(e) (https://uscode.house.gov/view.xhtml/?path=/prelim@title38/part3/chapter36&edition=prelim)].

Student Code

Policies and procedures applying to all undergraduate, graduate, and professional students enrolled at the University of Illinois at Urbana-Champaign are found in the Student Code (http://studentcode.illinois.edu/).

Student Consumer Information

Information and disclosures regarding institutional accreditation, programs, and services at the University of Illinois at Urbana-Champaign is available on the Office of the Provost's website (http://provost.illinois.edu/student-consumer-information/). This includes a description of the institution's accreditation and state authorization, contact information for filing complaints with the accreditor and the state, financial aid, campus security, intercollegiate athletics, gainful employment programs, and student outcomes. A paper copy of the information on the website can be made available upon request.

U of I System Statement on Sex Discrimination, Sexual Harassment and Other Sexual Misconduct

Please refer to the University of Illinois System website (https://www.hr.uillinois.edu/cms/One.aspx?portalId=4292&pageId=5671) for the most up-to-date statement on Sex Discrimination, Sexual Harassment and Other Sexual Misconduct.

Professional Licensure Disclosures

The University of Illinois at Urbana-Champaign provides public licensure disclosures pursuant to 34 CFR 668.43(a)(5)(v) (https://www.federalregister.gov/d/2019-23129/p-1593/) for educational programs designed to meet or advertised as meeting requirements for professional licensure or certification.

Disclosures by College (http://www.dmi.illinois.edu/ProfLicDis.htm)

GI Bill® [1] Pending Payment Policy

Beginning August 1, 2019, and despite any policy to the contrary, the University of Illinois Urbana-Champaign will not take any of the four following actions toward any student using U.S. Department of Veterans Affairs (VA) Post 9/11 G.I. Bill® (Ch. 33) or Vocational Rehabilitation and Employment (Ch. 31) benefits, while their payment from the United States Department of Veterans Affairs is pending to the educational institution:

- Prevent their enrollment;
- Assess a late penalty fee to;
- Require they secure alternative or additional funding;
- Deny their access to any resources (access to classes, libraries, or other institutional facilities) available to other students who have satisfied their tuition and fee bills to the institution.

However, to qualify for this provision, such students may be required to:

- Produce the VA's Certificate of Eligibility by the first day of class;
- Provide written request to be certified;
- Provide additional information needed to properly certify the enrollment as described in other institutional policies (see our VA School Certifying Official for all requirements).

I hereby certify this addendum to be true and correct in content and policy.
Our institution will adopt this addendum, or one of similar import, in the next revision of our catalog.

[1] GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government Web site at https://www.benefits.va.gov/gibill. (https://urldefense.proofpoint.com/v2/url/?u=https-3A__www.benefits.va.gov_gibill.-2522&d=DwQFAg&c=OCIEmEwdEq_aNlsP4fF3gFqSN-E3mlr2t9JcDdfOZag&r=0O1BuoIzVf_EKxGsnR6C4GHELOQMtS7tEDYeze9kStc&m=cmPTaWhemCt7JTt4tZrjwILwU_9-ZuBOkznSP0smShQ&s=cJbsWj-nMuP32Nz_Be1ebkIzXE7b-1Zuk7_12mcn42U&e=)

Annual Announcement of Copyright Policies

Provided below is the University of Illinois at Urbana-Champaign annual announcement of copyright policies.

Copyright infringement is the act of exercising, without permission or legal authority, one or more of the exclusive rights granted to the copyright owner under Section 106 of the Copyright Act (Title 17 of the United States Code). Infringement may occur when a copyright protected work is reproduced or distributed without authorization, including when it is uploaded or downloaded from the Internet or otherwise published without permission. Protected works may include (among other works) photographic images, music, movies, and television programs. Although there are limited exceptions not requiring permission, such as the doctrine of fair use, sharing substantial portions of such works, including on peer-to-peer networks, without authorization by the rights owner or by meeting the exception requirements is an infringement.

Penalties for copyright infringement include civil and criminal penalties. Copyright compliance enforcement agencies aggressively pursue infringers. If you are infringing, even unknowingly, you can be subject to civil damages per work infringed, and even criminal fines and jail time.

All universities of the University of Illinois System make every effort to comply with laws and institutional policies on copyright. Individuals who receive a copyright infringement notice may face disciplinary or employment actions. These actions may include, but are not limited to, loss of network access, mandatory training about copyright infringement, conduct sanctions, and potential dismissal from the University.

For more information about copyright at the University of Illinois, please visit: http://copyright.illinois.edu.

UNDERGRADUATE PROGRAM INDEX

The undergraduate Colleges and Schools offer over 150 programs of study leading to baccalaureate degrees. Undeclared students begin their college career in the Division of General Studies before transferring to a degree program.

Degree Programs (emphasis)	School/College	Undergraduate
Accountancy	BUS	BS (p. 12)
Acting	FAA	CONC (p. 424)
Actuarial Science	LAS	BSLAS (p. 13)
Adult Development	ACES	Minor (p. 476)
Advertising	MDIA	BS (p. 14)
Aerospace Engineering	ENGR	BS (p. 15), BS-MS (p. 444), BS-MENG (p. 443)
African American Studies	LAS	BALAS (p. 18), Minor (p. 477)
African Studies	LAS	Minor (p. 501)
Aging	AHS	Minor (p. 502)
Agri-Accounting	ACES	CONC (p. 30)
Agribusiness Markets & Management	ACES	CONC (p. 31)
Agricultural & Biological Engineering	ENGR	BS (p. 19), BS-MENG (p. 445)
Agricultural & Biological Engineering Sciences	ACES	BS (p. 20)
Agricultural & Consumer Economics	ACES	BS (p. 30)
Agricultural Communications - Advertising	ACES	CONC (p. 40)
Agricultural Communications - Journalism	ACES	CONC (p. 42)
Agricultural Education	ACES	CONC (p. 45)
Agricultural Leadership, Education, & Communications	ACES	BS (p. 40)
Agricultural Production & Processing	ACES	CONC (p. 179)
Agricultural Safety & Health	ACES	Minor (p. 477)
Agroecology	ACES	CONC (p. 148)
American Indian Studies	LAS	Minor (p. 477)
Animal Sciences	ACES	BS (p. 51), Minor (p. 478)
Anthropology	LAS	BALAS (p. 56), Minor (p. 478)
Applied Mathematics	LAS	CONC (p. 290)
Arabic Studies	LAS	Minor (p. 479)
Archaeology	LAS	CONC (p. 57)
Architectural Studies	FAA	BS (p. 61), Minor (p. 479)
Art & Design	FAA	BFA (http://catalog.illinois.edu/undergraduate/faa/academic-units/school-art-design/foundation/), Minor (p. 480)
Art Education	FAA	BFA (p. 66), Minor (p. 486)
Art History	LAS FAA	BALAS (p. 223), BFA (p. 63), Minor (p. 480)
Arts & Entertainment Technology	FAA	CONC (p. 425)
Asian American Studies	LAS	BALAS (p. 68), Minor (p. 481)
Astronomy	LAS	BSLAS (p. 69), Minor (p. 481)
Atmospheric Sciences	LAS	BSLAS (p. 70), Minor (p. 481)
Audiology	AHS	CONC (p. 383)
Biochemistry	LAS	BS (p. 71)
Bioengineering	ENGR	BS (p. 72), Minor (p. 482)
Biological Sciences (Crop Sciences)	ACES	CONC (p. 149)
Biology	LAS	BS-IB (p. 240), BS-MCB (p. 308)
Biomaterials	ENGR	BS (p. 278)
Biomolecular Engineering	LAS	CONC (p. 82), Minor (p. 482)
Business	BUS	Minor (p. 483)
Ceramics	ENGR, FAA	BS (p. 278)
Chemical Engineering	ENGR, LAS	BS (http://catalog.illinois.edu/und/undergraduate/las/chemical-engineering-bs/), CONC (p. 82)
Chemistry	LAS	BSLAS (p. 87), BS (p. 86), Minor (p. 484)
Chemistry Teaching	LAS	CONC (p. 88)
Child & Adolescent Development	ACES	CONC (p. 228)
Child Health & Well-being	ACES	Minor (http://catalog.illinois.edu/undergraduate/aces/minors/child-health-well-being/)
Choral Music	FAA	CONC (p. 312)
Cinema Studies	MDIA	Minor (p. 484)
Civic Leadership	LAS	Minor (p. 517)
Civil Engineering	ENGR	BS (p. 92)
Classical Civilizations	LAS	CONC (p. 101), Minor (p. 485)
Classical Languages	LAS	CONC (p. 102), Minor (p. 485)
Classics	LAS	BALAS (p. 101)
Communication	LAS	BALAS (p. 103), Minor (p. 486)
Community Based Art Education	FAA	Minor (p. 486)
Community Health	AHS	BS (p. 105)
Companion Animal & Equine Science	ACES	CONC (p. 52)
Comparative & World Literature	LAS	CONC (p. 119)
Comparative Literature	LAS	BALAS (p. 119)
Computational Science & Engineering	ENGR	Minor (p. 487)
Computer Engineering	ENGR	BS (p. 121), BS-MENG (p. 450)
Computer Science	ENGR	BS (p. 141), Minor (p. 488), BS-MS (p. 451), BS-MCS (p. 450)
Computer Science & Advertising	MDIA	BS (p. 129)
Computer Science & Animal Science	ACES	BS (p. 130)
Computer Science & Anthropology	LAS	BSLAS (p. 132)
Computer Science & Astronomy	LAS	BSLAS (p. 133)
Computer Science & Chemistry	LAS	BSLAS (p. 134)
Computer Science & Crop Sciences	ACES	BS (p. 135), BS-MS, BS & Crop Sciences, MS
Computer Science & Economics	LAS	BSLAS (p. 136)
Computer Science & Linguistics	LAS	BSLAS (p. 138)
Computer Science & Music	FAA	BS (p. 321)
Computer Science & Philosophy	LAS	BSLAS (p. 140)

Computer Science + Animal Sciences, BS & Animal Science, MANSC	ACES, ENGR	BS-MANSC (p. 452)
Computer Science + Geography & Geographic Information Science	LAS	BSLAS (p. 137)
Construction Management		CONC (p. 182)
Consumer Economics & Finance	ACES	CONC (p. 32)
Costume Design & Technology	FAA	CONC (p. 427)
Crafts	FAA	BFA (p. 145)
Creative Lyric Theatre	FAA	CONC (p. 270)
Creative Writing	LAS	BALAS (p. 147), Minor (p. 489)
Criminology, Law, & Society	LAS	Minor (p. 489)
Critical Film Production	MDIA	Minor (p. 489)
Crop & Soil Management	ACES	Minor (p. 490)
Crop Agribusiness	ACES	CONC (p. 150)
Crop Sciences	ACES	BS (p. 148)
Crops	ACES	CONC (p. 151)
Cultural-Linguistic Diversity	AHS	CONC (p. 385)
Czech Studies	LAS	CONC (p. 375)
Dance	FAA	BFA (p. 158), BA (p. 156)
Dietetics	ACES	CONC (p. 193)
Digital & Precision Agriculture	ACES	CONC (p. 184)
Disability Studies	AHS	Minor (http://catalog.illinois.edu/undergraduate/ahs/minors/disability-studies/)
Early Childhood Education	EDUC	BS (p. 159)
Earth & Environmental Science	LAS	CONC (p. 215)
Earth Science Teaching	LAS	CONC (p. 215)
Earth, Society, & Environmental Sustainability	LAS	BSLAS (p. 161)
East Asian Languages & Cultures	LAS	BALAS (p. 163), Minor (p. 491)
East Asian Languages Teaching	LAS	CONC (http://catalog.illinois.edu/undergraduate/las/east-asian-languages-cultures-balas/teaching-east-asian-languages/)
Ecology & Conservation Biology	LAS	Minor (p. 491)
Econometrics & Quantitative Economics	LAS	BSLAS (p. 164)
Economics	LAS	BALAS (p. 165), Minor (p. 491)
Ecosystem Stewardship & Restoration Ecology	ACES	CONC (p. 329)
Electrical & Computer Engineering	ENGR	Minor (p. 492)
Electrical Engineering	ENGR	BS (p. 166), BS-MENG (p. 457)
Electronic Materials	ENGR	CONC (p. 278)
Elementary Education	EDUC	BS (p. 173)
Energy & the Environment	ACES	CONC (p. 186)
Engineering Mechanics	ENGR	BS (p. 174)
Engineering Physics	ENGR	BS (p. 343)
Engineering Technology & Management for Agricultural Systems	ACES	BS (p. 178)
English	LAS	BALAS (p. 188), Minor (p. 493)
English Teaching	LAS	CONC (p. 189)
English as a Second Language	LAS	Minor (p. 493), Minor (p. 527)
Environmental Chemistry	LAS	CONC (p. 90)
Environmental Economics & Law	ACES	Minor (p. 493)
Environmental Economics & Policy	ACES	CONC (p. 33)
Environmental Geology	LAS	CONC (p. 212)
Environmental Stewardship & Management	ACES	CONC (p. 330)
Family Studies	ACES	CONC (p. 229)
Farm Management	ACES	CONC (p. 34)
Fashion	FAA	BASA (p. 394), BFASA (p. 401)
Finance	BUS	BS (p. 191)
Finance in Agribusiness	ACES	CONC (p. 35)
Financial Planning	ACES	CONC (p. 36)
Fish, Wildlife & Conservation Biology	ACES	CONC (p. 332)
Food & Agribusiness Management	ACES	Minor (p. 494)
Food & Environmental Systems	ACES	Minor (p. 494)
Food Animal Production & Management		CONC (p. 53)
Food Science	ACES	CONC (p. 195), Minor (p. 495)
Food Science & Human Nutrition	ACES	BS (p. 193)
French	LAS	BALAS (p. 201), Minor (p. 496)
French Commercial Studies	LAS	CONC (p. 201)
French Studies	LAS	CONC (p. 202)
French Teaching	LAS	BA (p. 421)
Gender & Women's Studies	LAS	BALAS (p. 203), Minor (p. 496)
General Geography	LAS	CONC (p. 205)
Geographic Information Science	LAS	CONC (p. 206)
Geography & Geographic Information Science	LAS	BALAS (p. 204), BSLAS (p. 205), CONC (p. 205), CONC (p. 207), Minor (p. 496)
Geology	LAS	BSLAS (p. 214), BS (p. 210), Minor (p. 497)
Geology & Geophysics	LAS	CONC (p. 211)
Geophysics	LAS	CONC (p. 211)
German	LAS	Minor (p. 497)
German Business & Commercial Studies	LAS	CONC (p. 218), Minor (p. 498)
German Teaching	LAS	BA (p. 422)
Germanic Studies	LAS	BALAS (p. 217), CONC (p. 219)
Global Labor Studies	LER	Minor (p. 498)
Global Markets & Society	LAS	Minor (p. 498)
Global Studies	LAS	BALAS (p. 220), Minor (p. 499)
Graduate Preparatory (Math)	LAS	CONC (p. 291)
Graphic Design	FAA	BFA (p. 222)
Health & Aging	AHS	CONC (p. 243)
Health Administration	AHS	Minor (http://catalog.illinois.edu/undergraduate/ahs/minors/health-administration/)
Health Behavior Change	AHS	CONC (p. 244)
Health Diversity	AHS	CONC (p. 245)
Health Education	AHS	CONC (p. 106)
Health Planning & Administration	AHS	CONC (p. 110)

Hindi Studies	LAS	Minor (p. 500)
History	LAS	BALAS (p. 225), Minor (p. 500)
Horticultural Food Systems	ACES	CONC (p. 152)
Horticulture	ACES	Minor (p. 500)
Hospitality Management	ACES	CONC (p. 197)
Human Development & Family Studies	ACES	BS (p. 227)
Human Dimensions of the Environment	ACES	CONC (p. 333)
Human Geography Concentration	LAS	CONC (p. 207)
Human Nutrition	ACES	CONC (p. 198)
Individual Plans of Study	LAS	BALAS (p. 231), BSLAS (p. 231)
Industrial Design	FAA	BFA (p. 232)
Industrial Engineering	ENGR	BS (p. 233), BS-MENG (p. 457)
Informatics	Info	Minor (http://catalog.illinois.edu/undergraduate/informatics-programs/minors/informatics/)
Information Sciences	IS	BS (p. 237)
Information Systems	BUS	BS (p. 238)
Innovation, Leadership, & Engineering Entrepreneurship	ENGR	BS (p. 239)
Instrumental Music	FAA	CONC (p. 316)
Integrative Biology	LAS	BSLAS (p. 240), Minor (p. 501), MS (p. 823)
Integrative Biology Honors	LAS	BSLAS (p. 242)
Interdisciplinary Health Sciences	AHS	BS (p. 243)
Interdisciplinary Studies	LAS	BALAS (p. 246)
International Business	BUS	Minor (p. 503)
International Development Economics	ACES	Minor (p. 504)
International Minor in ACES	ACES	Minor (p. 504)
International Minor in Engineering	ENGR	Minor (p. 505)
Islamic World, Study of the	LAS	Minor (p. 526)
Italian	LAS	BALAS (p. 249), Minor (p. 506)
Jazz Performance	FAA	BM (p. 323)
Jewish Studies	LAS	CONC (p. 247), Minor (p. 502)
Journalism	MDIA	BS (p. 250), Minor (p. 506)
Kinesiology	AHS	BS (p. 251)
LGBT/Queer Studies	LAS	Minor (p. 511)
Landscape Architecture	FAA	BLA (p. 253)
Landscape Studies	FAA	Minor (p. 508)
Language Studies (German)	LAS	CONC (p. 217)
Latin American Studies	LAS	BALAS (p. 257), Minor (p. 509)
Latina/Latino Studies	LAS	BALAS (p. 258), Minor (p. 509)
Leadership Studies	ACES	Minor (p. 509)
Learning & Education Studies	EDUC	BS (p. 259)
Legal Studies	LAW	minor (p. 510)
Lighting Design	FAA	CONC (p. 428)
Linguistics	LAS	BALAS (p. 267), Minor (p. 511)
Linguistics and Teaching English as a Second Language, BALAS (TESL)	LAS	BALAS (p. 268)
Lyric Theatre	FAA	BMA (p. 269)
Management	BUS	BS (p. 272)
Marketing	BUS	BS (p. 276)
Materials Science & Engineering	ENGR	BS (p. 278), Minor (p. 512), BS-MS (p. 467), BS-MENG (p. 466), BS-MENG (p. 467)
Mathematics	LAS	BSLAS (p. 289), Minor (p. 512)
Mathematics & Computer Science	LAS	BSLAS (p. 287)
Mathematics Teaching		CONC (http://catalog.illinois.edu/undergraduate/education/secondary-education-bs/mathematics/)
Mathematics Teaching	LAS	CONC (p. 292)
Mechanical Engineering	ENGR	BS (p. 294)
Media & Cinema Studies	MDIA	BS (p. 301), Minor (p. 513)
Medieval Studies	LAS	CONC (p. 247)
Metropolitan Food & Environmental Systems	ACES	BS (p. 303)
Middle Grades Education	EDUC	BS (p. 305)
Molecular & Cellular Biology	LAS	BSLAS (p. 308), Minor (p. 514)
Molecular & Cellular Biology Honors	LAS	CONC (p. 309)
Music	FAA	BA (p. 320), Minor (p. 514), CONC (p. 312)
Music Composition	FAA	BMUS (p. 310)
Music Education	FAA	BME (p. 312)
Music Education: Technology	FAA	CONC (p. 318)
Musical Theatre	FAA	Minor (p. 515)
Musicology	FAA	BMUS (p. 325)
Natural Resource Conservation	ACES	Minor (p. 516)
Natural Resources & Environmental Sciences	ACES	BS (p. 329)
Neuroscience of Communication	AHS	CONC (p. 387)
New Media	FAA	CONC (p. 396), CONC (p. 404)
Nuclear, Plasma & Radiological Engineering	ENGR	BS (p. 335), BS-MENG (p. 467)
Nutrition	ACES	Minor (p. 516)
Open Studies	FAA	BMUS (p. 326)
Operations Management	BUS	BS (p. 339)
Operations Research	LAS	CONC (p. 293)
Organizational & Community Leadership	ACES	CONC (p. 46)
Painting	FAA	CONC (p. 397), CONC (p. 405)
Performance Concentration	FAA	CONC (p. 271)
Philosophy	LAS	BALAS (p. 341), Minor (p. 516)
Photography	FAA	BFA (p. 342), BASA (p. 397), BFASA (p. 407)
Physical Geography	LAS	CONC (p. 208)
Physics	ENGR	BS (p. 343), BS-MENG (p. 457), Minor (p. 517)
Physics	LAS	BSLAS (p. 348), BS (p. 347)
Physics, Teaching of	LAS	CONC (p. 349)
Plant Biotechnology	ACES	BS (p. 350)
Plant Biotechnology & Molecular Biology	ACES	CONC (p. 153)
Plant Protection	ACES	CONC (p. 155)
Policy, International Trade & Development	ACES	CONC (p. 37)
Polish Studies Concentration	LAS	CONC (p. 375)

Political Science	LAS	BALAS (p. 351), Minor (p. 517)
Polymer Science & Engineering	ENGR	Minor (p. 518)
Portuguese	LAS	BALAS (p. 359), Minor (p. 518)
Printmaking	FAA	CONC (p. 398), CONC (p. 408)
Psychology	LAS	BSLAS (p. 359), Minor (p. 518)
Public Health	AHS	Minor (http://catalog.illinois.edu/undergraduate/ahs/minors/public-health/)
Public Policy & Law	ACES	CONC (p. 38)
Public Relations	Media	Minor (p. 519)
Recreation Management	AHS	CONC (p. 369)
Recreation, Sport & Tourism	AHS	BS (p. 369), Minor (p. 519)
Rehabilitation Studies	AHS	CONC (p. 114)
Religion	LAS	BALAS (p. 372), Minor (p. 520)
Russian & East European Studies	LAS	BALAS (p. 373), Minor (p. 521)
Russian Language & Literature	LAS	CONC (p. 376), Minor (p. 520)
Scandinavian Studies	LAS	CONC (p. 219), Minor (p. 521)
Scenic Design	FAA	CONC (p. 429)
Scenic Technology	FAA	CONC (p. 431)
Science & Technology in Society	LAS	Minor (p. 521)
Science of the Earth System	LAS	CONC (p. 161)
Science, Pre-Veterinary and Medical	ACES	CONC (p. 55)
Sculpture	FAA	CONC (p. 399), CONC (p. 410)
Secondary Education	EDUC	BS (http://catalog.illinois.edu/undergraduate/education/secondary-education-bs/)
Secondary School Teaching	EDUC	Minor (p. 528)
Slavic Language, Literature & Culture	LAS	Minor (p. 522)
Slavic Studies	LAS	BALAS (p. 374)
Social Science: History Teaching	LAS	CONC (p. 225)
Social Work	SOCW	BSW (p. 378), Minor (p. 522)
Society & the Environment	LAS	CONC (p. 162)
Sociocultural & Linguistic Anthropology	LAS	CONC (p. 60)
Sociology	LAS	BALAS (p. 380), Minor (p. 523)
Sound Design & Technology	FAA	CONC (p. 432)
South Asian Studies	LAS	Minor (p. 523)
South Slavic Studies	LAS	CONC (p. 377)
Spanish	LAS	BALAS (p. 381), Minor (p. 524)
Spanish Teaching	LAS	BA (p. 423)
Spatial & Quantitative Methods in Natural Resources & Environmental Sciences	ACES	Minor (p. 524)
Special Education	EDUC	BS (p. 382)
Speech & Hearing Science	AHS	BS (p. 383), Minor (p. 525)
Speech-Language Pathology	AHS	CONC (p. 388)
Sport Management	AHS	CONC (p. 370)
Stage Management	FAA	CONC (p. 433)
Statistics	LAS	BSLAS (p. 391), Minor (p. 525)
Statistics & Computer Science	LAS	BSLAS (p. 390)
Strategic Business Development Entrepreneurship		BS (p. 392)
Studio Art	FAA	BASA (p. 393), BFASA (p. 401), CONC (p. 395), CONC (p. 403)
Sub-Saharan African Languages	LAS	Minor (p. 526)
Supply Chain Management	BUS	BS (p. 411)
Sustainability, Energy, and Environment		Minor (p. 526)
Sustainable Design	FAA	BS (p. 413), BS+MUP (p. 469)
Systems Engineering & Design	ENGR	BS (p. 414), BS-MENG (p. 471)
Technical Systems Management	ACES	Minor (p. 528)
Technology & Management	BUS ENGR	Minor (p. 529)
Theatre	FAA	BFA (p. 423), Minor (p. 530)
Tourism Management	AHS	CONC (p. 371)
Ukrainian Studies	LAS	CONC (p. 378)
Urban Planning	FAA	BA (p. 436), BA+MUP (p. 471), BS+MUP (p. 469)
Urban Studies Planning	FAA	BA (p. 436), BA+MUP (p. 471)
Voice Performance	FAA	CONC (p. 327)
Wildlife & Fisheries Conservation	ACES	Minor (http://catalog.illinois.edu/undergraduate/aces/minors/wildlife-fisheries/)
World Literatures	LAS	CONC (p. 120)

Legend:

School/College

ACES	College of Agricultural, Consumer and Environmental Sciences
AHS	College of Applied Health Sciences
BUS	College of Business
EDUC	College of Education
ENGR	College of Engineering
FAA	College of Fine and Applied Arts
IS	School of Information Science
LAS	College of Liberal Arts and Sciences
LAW	College of Law
LER	School of Labor and Employment Relations
MDIA	College of Media
SOCW	School of Social Work

Programs

BA	Bachelor of Arts
BALAS	Bachelor of Arts in Liberal Arts and Sciences
BFA	Bachelor of Fine Arts
BFASA	Bachelor of Fine Arts in Studio Art
BLA	Bachelor of Landscape Architecture
BMUS	Bachelor of Music
BME	Bachelor of Music Education

BS	Bachelor of Science
BSLAS	Bachelor of Science in Liberal Arts and Sciences
BSW	Bachelor of Social Work
CONC	Undergraduate Concentration
Minor	Undergraduate Minor

Accountancy, BS

for the degree of Bachelor of Science Major in Accountancy

department office: 360 Wohlers Hall, 1206 South Sixth, Champaign, IL 61820
phone: (217) 333-0857
department catalog page: A (http://catalog.illinois.edu/gies_business/accy/)ccountancy (http://catalog.illinois.edu/undergraduate/bus/accountancy-bs/)
department website: https://giesbusiness.illinois.edu/accountancy (https://giesbusiness.illinois.edu/accountancy/)
overview of college admissions & requirements: Gies Catalog (http://catalog.illinois.edu/schools/gies-business/academic-units/)
college website: https://giesbusiness.illinois.edu/

The Gies accountancy major combines technical knowledge in accounting, assurance, taxation, and data analytics with professional competencies in critical thinking, communication, leadership, and strategic decision-making. Accountancy majors will study the principles, concepts, and methods used to record and report the transactions and activities of a business entity, as well as the tools and processes to audit and analyze accounting information. Accountancy majors will also study the role of accounting information in shaping and implementing key business strategies. Career opportunities for accountancy majors include positions in audit and assurance services, corporate accounting, taxation, consulting and advisory services, and in governmental and not-for-profit entities.

In addition to the accountancy major requirements, students in accountancy must meet the University General Education requirements and the College of Business core requirements (for more detail, see the Gies College of Business undergraduate section (p. 1202)).

for the degree of Bachelor of Science Major in Accountancy

Core Curriculum

Normally, students must register for no fewer than 12 hours or more than 18 hours in each semester. Students should take mathematics, economics, and accountancy courses in the semesters indicated in the sample schedule of courses. The computer science course must be taken during the first year. The computer science requirement no longer allows ACE 161 as an equivalent course.

Up to 4 hours of Kinesiology activity courses, numbered 100-110 may be counted toward the 124 hours for the degree. The same section of a course may not be repeated for credit. Credit is limited to a maximum of 12 credit hours for 199 courses. Students may receive foreign language credit for courses only 2 levels below highest level taken in high school. For example: 4 years of high school French-no credit below FR 102.

Credit toward the 124 degree hours is not given for MATH 101. Once the math requirement is completed, lower level math courses cannot be taken for credit.

Any course used to fill a specific degree requirement may not be taken on the credit-no credit grade option. Only free electives may be taken on the credit-no credit option. All finance and accountancy courses must be taken for a grade. It is recommended that all courses taken in the business administration area be taken for a grade.

Minimum hours required for graduation: 124 hours.

University Composition Requirements

Code	Title	Hours
Composition I: Principles of Composition [1]		4-7
Advanced Composition		3

General Education Requirements

Code	Title	Hours
A minimum of six courses is required, as follows:		18
Humanities & the Arts: Literature & the Arts (1-2 courses) [4]		
Humanities & the Arts: Historical & Philosophical Perspectives (1-2 courses) [4]		
Natural Sciences & Technology: Physical Sciences (0-2 courses) [5]		
Natural Sciences & Technology: Life Sciences (0-2 courses) [5]		
Behavioral Sciences (1 course)		
Cultural Studies: Non-Western Cultures (1 course)		
Cultural Studies: U.S. Minorities Cultures (1 course)		
Cultural Studies: Western/Comparative Cultures (1 course)		
Quantitative Reasoning (2 courses) [7]		

Language Other Than English

Code	Title	Hours
Completion of the third semester or equivalent of a language other than English is required. Completion of three years of a single language in high school satisfies this requirement.		0-15

Business Core Requirements

Code	Title	Hours
ACCY 201 & ACCY 202	Accounting and Accountancy I and Accounting and Accountancy II	6
BUS 101	Professional Responsibility and Business [2]	3
BUS 201	Business Dynamics	3
BUS 301	Business in Action	3
BUS 401	Global Business Perspectives	3
BADM 210 & BADM 211	Business Analytics I and Business Analytics II	6
BADM 275	Fundamentals of Operations Management	3
BADM 300	The Legal Environment of Bus	3
BADM 310	Mgmt and Organizational Beh [6]	3
BADM 320	Principles of Marketing	3
BADM 449	Business Policy and Strategy	3
CMN 101	Public Speaking	3
CS 105	Intro Computing: Non-Tech	3
ECON 102 & ECON 103	Microeconomic Principles and Macroeconomic Principles	6
FIN 221	Corporate Finance	3
Total Hours		54

[1] *For a list of the specific courses that meet this requirement, see the college Office of Undergraduate Affairs in 1055 Business Instructional Facility or see the Course Explorer for a list of approved general education courses.*

[2] BUS 101, BUS 201, BUS 301*and*BUS 401*are required for all Gies College of Business students. Students who enter the College their first year take each sequential course every fall.*
Inter-College transfer students take BUS 301 *and* BUS 401 *in their sophomore year. Off-campus transfer students take* BUS 101 *and* BUS 201 *in their junior year.*

[4] *Three courses in the Humanities & the Arts area are required and students must complete at least one course in the Literature & the Arts and Historical & Perspectives subcategories. At least one of the courses must be a 200 or higher level course.*

[5] *Two courses in the Natural Sciences & Technology area are required. It is strongly recommended that students complete one course in the Physical Sciences and Life Sciences subcategories.*

[6] *This course includes limited voluntary participation as a subject in experiments.*

[7] CS 105 *fulfills a Quantitative Reasoning I requirement.*

Minimum requirements in the major for the Bachelor of Science Degree in Accountancy are:

Code	Title	Hours
ACCY 301	Atg Measurement & Disclosure	3
ACCY 302	Decision Making for Atg	3
ACCY 303	Accounting Institutions and Regulation	3
ACCY 304	Accounting Control Systems	3
ACCY 312	Principles of Taxation	3
ACCY 405	Assurance and Attestation	3
or ACCY 415	Auditing Stds and Practice	
Select one of the following:		3
ACCY 410	Advanced Financial Reporting	
ACCY 451	Advanced Income Tax Problems	
Total Hours		21

Accountancy courses (both required and elective) to be applied toward the 124-hour requirement for the Bachelor of Science Degree in Accountancy may not be taken on a credit/no-credit basis. In addition, a limit of 33 hours of accountancy courses (including ACCY 201 and ACCY 202) may be counted toward the 124 total hour requirement. Finally, students must select from **either** ACCY 405 **or** ACCY 415. Both courses cannot count toward the Bachelor of Science degree.

Learning Outcomes: Accountancy, BS

Learning Outcomes for the degree of Bachelor of Science Major in Accountancy

1. Discipline-based competency: Students will acquire sufficient discipline-based competency to address business and accounting problems, both current and future. Such competency will include using accounting knowledge and using research tools to address accounting and business problems.
2. Written and verbal communication competency: Students will be able to effectively communicate, both verbally and in writing. This competency will extend to communication in individual and team settings.
3. Attitude-related Professional Preparation: Students will develop an understanding for and appreciation of an accountant's professional responsibility, and will become aware of society's expectations.

Actuarial Science, BSLAS

for the degree of Bachelor of Science in Liberal Arts and Sciences Major in Actuarial Science

program website: Actuarial Science (https://math.illinois.edu/academics/actuarial-science/)
program faculty: Actuarial Science Faculty (https://math.illinois.edu/research/faculty-research/actuarial-science/)
department website: https://math.illinois.edu/
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: ASRM-advising@illinois.edu

This major is sponsored by the Department of Mathematics, and is an interdisciplinary subject involving mathematics, statistics, and financial economics. It is designed to prepare students to enter the actuarial profession, as well as to provide a background in quantitative finance and risk management.

Undergraduate programs in Mathematics

Actuarial Science, BSLAS (p. 13)

Mathematics, BSLAS (p. 289)

Mathematics & Computer Science, BSLAS (p. 287)

for the degree of Bachelor of Science in Liberal Arts & Sciences, Major in Actuarial Science

Departmental distinction: To qualify for distinction, the student must have a grade point average in ASRM courses of at least 3.25, and pass at least two examinations offered by the professional actuarial societies. To qualify for high or highest distinction, the student must have passed at least three professional exams, with highest distinction going to those whose grade point averages in mathematics are at least 3.75. Finance courses and additional professional exams may also be given consideration in close decisions.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: normally equates to 58-61 hours including 32-33 hours of actuarial courses beyond calculus.
Twelve hours of 300- or 400-level courses in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours. Students will complete 40 hours of upper division coursework (these hours can be drawn from all elements of the degree).

Code	Title	Hours
Calculus through:		11-12
MATH 220	Calculus	
or MATH 221	Calculus I	
MATH 231	Calculus II	

MATH 241	Calculus III (or equivalent)	
Select one of the following:		3
CS 101	Intro Computing: Engrg & Sci	
CS 105	Intro Computing: Non-Tech	
CS 125	Introduction to Computer Science	
ASRM 210	Theory of Interest (formerly MATH 210)	3
ASRM 401	Actuarial Statistics I	4
ASRM 402	Actuarial Statistics II	4
ASRM 406	Linear Algebra with Financial Applications (formerly MATH 410)	3
ASRM 450	Methods of Applied Statistics	3
Select four of the following:		12-13
ASRM 409	Stochastic Processes for Finance and Insurance	
ASRM 410	Investments and Financial Markets (formerly MATH 476)	
ASRM 451	Basics of Statistical Learning	
ASRM 461	Loss Models (formerly MATH 478)	
ASRM 469	Casualty Actuarial Mathematics (formerly MATH 479)	
ASRM 471	Life Contingencies I	
ASRM 472	Life Contingencies II (formerly MATH 472)	
Select an additional course from the above list or ASRM 499		3
FIN 221	Corporate Finance	3
Three additional courses from:		9
ACCY 200	Fundamentals of Accounting	
ECON 302	Inter Microeconomic Theory	
ECON 303	Inter Macroeconomic Theory	
FIN 230	Introduction to Insurance	
FIN 300	Financial Markets	
FIN 321	Advanced Corporate Finance	
FIN 431	Property-Liability Insurance	
FIN 432	Managing Fin Risk for Insurers	
FIN 434	Employee Benefit Plans	
Total Hours minimum		**58**

Learning Outcomes: Actuarial Science, BSLAS

Learning Outcomes for the degree of Bachelor of Science in Liberal Arts and Sciences Major in Actuarial Science

Student Learning Outcomes

1. Have sufficient exposure to actuarial and financial mathematics to be familiar with at least 80% of the material on five of preliminary Society of Actuaries credentialing exams.
2. Be familiar with the role of insurance in society, basic economic theory, and the basics of how insurance and financial markets operate.
3. Have familiarity with several of the technical tools, computer languages or software packages used by actuaries.
4. Develop communication, leadership and teamwork skills, and understand their importance in the actuarial industry.
5. Be able to apply this knowledge and these skills in new combinations and to new problems.

Advertising, BS

for the degree of Bachelor of Science Major in Advertising

department website: https://media.illinois.edu/advertising (https://media.illinois.edu/advertising/)
department faculty: https://media.illinois.edu/advertising/faculty (https://media.illinois.edu/advertising/faculty/)
department email: addept@illinois.edu

overview of college admissions & requirements: College of Media (p. 1198)
college website: https://media.illinois.edu/

ADVERTISING (ADV), offers students the opportunity to learn and think about advertising as a way of modeling the mind, as a material reflection of social structure, as a fundamentally modern phenomenon, as an art form and even as a basis for community, by drawing on insights from psychology, sociology, history, literature, and anthropology. This program will thoroughly infuse the understanding of consumer behavior and message knowledge base and, therefore, provide a long-lasting education for students.

Programs in Advertising

Undergraduate Programs:
- **major:** Advertising, BS (http://catalog.illinois.edu/schools/media/academic-units/advertising/#undergraduatetext)
- **major:** Computer Science & Advertising, BS (http://catalog.illinois.edu/undergraduate/media/departments/advertising/csadv/)
- **minors:** Public Relations (p. 519) | Media (p. 513)

Graduate Programs:
- **degree:** Advertising, MS (p. 549)
- **degree:** Strategic Brand Communication, MS (p. 1030)

for the degree of Bachelor of Science Major in Advertising

To graduate from the advertising curriculum, a student must meet all general University and College requirements for the degree and must complete the following courses, all of which must be taken for a traditional letter grade:

Code	Title	Hours
Required Major Courses		**24**
ADV 150	Introduction to Advertising	3
ADV 281	Advertising Research Methods	3
ADV 283	Advertising and Brand Strategy	3
ADV 284	Consumer Insight	3
ADV 390	Content Creation	3
ADV 460	Innovation in Advertising	3
ADV 483	Audience Analysis	3
ADV 498	The Sandage Project	3
Major Electives		**12**
Any ADV course not already required above		
College of Media Electives [1]		**8-16**
Hours outside the College of Media (72 hours minimum)		**72**

Other Required Supporting Coursework:		
BADM 320	Principles of Marketing [2]	3
ECON 102	Microeconomic Principles	3
ECON 103	Macroeconomic Principles	3
STAT 100	Statistics [3]	3
Select two of the following:		7-8
ANTH 103	Anthro in a Changing World	3
PSYC 100	Intro Psych	4
SOC 100	Introduction to Sociology	4
Advanced Hours Requirement		
At least 20 hours in courses numbered 200 or above. These courses must be outside and not cross-listed with the College of Media. At least 9 of the 20 hours must be in courses numbered 300 or above.		
Please note: Courses used to fulfill University General Education requirements or to fulfill requirements for a minor may count toward these requirements. Courses used to fulfill the College of Media's advanced outside hours requirement may also count toward these requirements.		
Total Hours		**124**

1 *College of Media elective courses offered by or cross-listed with Advertising (ADV), Journalism (JOUR), Media and Cinema Studies (MACS), or the College of Media (MDIA) count toward this number.*

2 *Which may be credited toward the College requirement of advanced hours outside the College.*

3 *Or another approved basic course or course sequence in statistical methods, which currently includes* ECON 202, EPSY 280, PSYC 235, SOC 280, SOCW 225*. Such courses may, if they qualify, also be credited toward the requirement of advanced ours and General Education courses outside the College.*

Learning Outcomes: Advertising, BS

Learning outcomes for the degree of Bachelor of Science Major in Advertising

Students graduating with the BS in Advertising will be able to:

1. Evaluate the ethical, economic, legal, cultural, and historical dimensions of advertising in a global society.
2. Conduct research and analyze data to develop appropriate use metrics for advertising planning.
3. Ethically meet brand objectives and reach diverse audiences by critically evaluating and analyzing media outlets
4. Apply creative concepts and innovative thinking to produce culturally relevant brand storytelling and content creation.
5. Create strategic brand communications built on research and evidence-based strategies appropriate for the intended audience.
6. Effectively collaborate within diverse teams to design and deliver strategic and engaging presentations.

Aerospace Engineering, BS

for the degree of Bachelor of Science in Aerospace Engineering

department website: https://aerospace.illinois.edu
department faculty: Aerospace Engineering Faculty (https://aerospace.illinois.edu/directory/faculty/)
overview of college admissions & requirements: The Grainger College of Engineering (https://grainger.illinois.edu/admissions/)
college website: https://grainger.illinois.edu/

The Aerospace Engineering curriculum provides a strong fundamental background in engineering, mathematics, and science, along with the ability to apply this fundamental knowledge to the analysis and design of future aircraft and spacecraft. It also prepares students for lifelong learning and the attainment of their career goals in the field of aerospace engineering and in a wide range of other areas. The concepts of system design are introduced early in the curriculum and culminate in the yearlong senior capstone design experience (AE 442, AE 443), in which students work in teams to respond to a design challenge from industry, government, or a professional engineering society. A total of 18 hours of technical and free electives allows the student to pursue an individualized program of study.

for the degree of Bachelor of Science in Aerospace Engineering

Graduation Requirements

Minimum Overall GPA: 2.0
Minimum hours required for graduation: 128 hours
General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement. Specific Advanced Composition courses required for this degree are listed below.**

Orientation and Professional Development

Code	Title	Hours
AE 100	Intro to Aerospace Engineering	2
ENG 100	Engineering Orientation [1]	0
Total Hours		2

Foundational Mathematics and Science

Code	Title	Hours
CHEM 102	General Chemistry I	3
CHEM 103	General Chemistry Lab I	1
MATH 221	Calculus I [2]	4
MATH 225	Introductory Matrix Theory	2
MATH 231	Calculus II	3
MATH 241	Calculus III	4
MATH 285	Intro Differential Equations	3
PHYS 211	University Physics: Mechanics	4
PHYS 212	University Physics: Elec & Mag	4
Total Hours		28

Aerospace Engineering Technical Core

Code	Title	Hours
AE 140	Aerospace Computer-Aided Design	2
AE 202	Aerospace Flight Mechanics	3
AE 311	Incompressible Flow	3
AE 312	Compressible Flow	3
AE 321	Mechs of Aerospace Structures	3

AE 323	Applied Aerospace Structures	3
AE 352	Aerospace Dynamical Systems	3
AE 353	Aerospace Control Systems	3
AE 370	Aerospace Numerical Methods	3
AE 433	Aerospace Propulsion	3
AE 442	Aerospace Systems Design I [3]	3
AE 443	Aerospace Systems Design II [3]	3
AE 460	Aerodynamics & Propulsion Lab	2
AE 461	Structures & Control Lab	2
AE 483	Autonomous Systems Lab	2
CS 101	Intro Computing: Engrg & Sci	3
ECE 205	Electrical and Electronic Circuits	3
ME 200	Thermodynamics	3
MSE 280	Engineering Materials	3
TAM 210	Introduction to Statics	2
TAM 212	Introductory Dynamics	3
Total Hours		58

Technical Electives

Code	Title	Hours
Selected from the departmentally approved list of Technical Electives, satisfying these distribution requirements:		
Chosen from AE Technical Electives listed below		**6**
AE 199	Undergraduate Open Seminar	0 to 5
AE 402	Orbital Mechanics	3 or 4
AE 403	Spacecraft Attitude Control	3 or 4
AE 410	Computational Aerodynamics	3 or 4
AE 412	Viscous Flow & Heat Transfer	4
AE 416	Applied Aerodynamics	3 or 4
AE 419	Aircraft Flight Mechanics	3 or 4
AE 420	Finite Element Analysis	3 or 4
AE 427		
AE 428	Mechanics of Composites	3
AE 434	Rocket Propulsion	3 or 4
AE 435	Electric Propulsion	3 or 4
AE 451	Aeroelasticity	3 or 4
AE 454	Systems Dynamics & Control	3 or 4
AE 456	Global Nav Satellite Systems	4
AE 468	Optical Remote Sensing	3
AE 482	Introduction to Robotics	4
AE 497	Independent Study	1 to 4
AE 498	Special Topics	1 to 4
ENG 491	Interdisciplinary Design Proj (CU1 & CU2)	1 to 4
Chosen from AE Technical Electives or Non-AE Technical Electives		**6**
ASTR 404	Stellar Astrophysics	3
ASTR 405	Planetary Systems	3
ASTR 406	Galaxies and the Universe	3
ASTR 414	Astronomical Techniques	4
ATMS 301	Atmospheric Thermodynamics	3
ATMS 302	Atmospheric Dynamics I	3
ATMS 303	Synoptic-Dynamic Wea Analysis	4
ATMS 304	Radiative Transfer-Remote Sens	3
ATMS 305	Computing and Data Analysis	3
ATMS 306	Cloud Physics	3
ATMS 313	Synoptic Weather Forecasting	4
ATMS 406	Tropical Meteorology	4
ATMS 410	Radar Remote Sensing	4
CEE 310	Transportation Engineering	3
CEE 330	Environmental Engineering	3
CEE 360	Structural Engineering	3
CEE 380	Geotechnical Engineering	3
CEE 407	Airport Design	3 or 4
CEE 412	High-Speed Rail Engineering	3 or 4
CEE 451	Environmental Fluid Mechanics	3
CEE 471	Structural Mechanics	3 or 4
CHEM 232	Elementary Organic Chemistry I	3 or 4
CHEM 233	Elementary Organic Chem Lab I	2
CHEM 236	Fundamental Organic Chem I	4
CS 225	Data Structures	4
CS 420	Parallel Progrmg: Sci & Engrg	3 or 4
CS 461	Computer Security I	4
CS 465	User Interface Design	0 to 4
CSE 412	Numerical Thermo-Fluid Mechs	2 to 4
ECE 210	Analog Signal Processing	4
ECE 220	Computer Systems & Programming	4
ECE 310	Digital Signal Processing	3
ECE 311	Digital Signal Processing Lab	1
ECE 329	Fields and Waves I	3
ECE 330	Power Ckts & Electromechanics	3
ECE 342	Electronic Circuits	3
ECE 343	Electronic Circuits Laboratory	1
ECE 385	Digital Systems Laboratory	3
ECE 473	Fund of Engrg Acoustics	3 or 4
ECE 486	Control Systems	4
ENG 491	Interdisciplinary Design Proj (Sections SAE and HYP)	1 to 4
MSE 401	Thermodynamics of Materials	3
MSE 440	Mechanical Behavior of Metals	3
MSE 443	Design of Engineering Alloys	3
MSE 498	Special Topics (Section CM3)	1 to 4
SE 310	Design of Structures and Mechanisms	3
SE 420	Digital Control Systems	4
SE 423	Mechatronics	3
IE 310	Deterministic Models in Optimization	3
MATH 347	Fundamental Mathematics	3
MATH 402	Non Euclidean Geometry	3 or 4
MATH 413	Intro to Combinatorics	3 or 4
MATH 416	Abstract Linear Algebra	3 or 4
MATH 442	Intro Partial Diff Equations	3 or 4
MATH 446	Applied Complex Variables	3 or 4
MATH 461	Probability Theory	3 or 4
MATH 482	Linear Programming	3 or 4
MATH 484	Nonlinear Programming	3 or 4
MATH 489	Dynamics & Differential Eqns	3 or 4

ME 320	Heat Transfer	4
ME 360	Signal Processing	3.5
ME 370	Mechanical Design I	3
ME 400	Energy Conversion Systems	3 or 4
ME 401	Refrigeration and Cryogenics	3 or 4
ME 498	Special Topics	0 to 4
MSE 450	Polymer Science & Engineering	3 or 4
MSE 453	Plastics Engineering	3
MSE 457	Polymer Chemistry	3 or 4
NPRE 201	Energy Systems	2 or 3
NPRE 402	Nuclear Power Engineering	3 or 4
NPRE 470	Fuel Cells & Hydrogen Sources	3
NPRE 475	Wind Power Systems	3 or 4
NPRE 498	Special Topics (Energy Storage and Conveyance)	1 to 4
PHYS 325	Classical Mechanics I	3
PHYS 326	Classical Mechanics II	3
PHYS 435	Electromagnetic Fields I	3
PHYS 485	Atomic Phys & Quantum Theory	3
PHYS 486	Quantum Physics I	4
STAT 428	Statistical Computing	3 or 4
STAT 448	Advanced Data Analysis	4
TAM 324	Behavior of Materials	4
TAM 451	Intermediate Solid Mechanics	4
TAM 456	Experimental Stress Analysis	3
TAM 470	Computational Mechanics	3 or 4
TE 401	Developing Breakthrough Projects	1 to 4
TMGT 461	Tech, Eng, & Mgt Final Project	2

Electives

Code	Title	Hours
The Grainger College of Engineering Liberal Education course list, or additional courses from the campus General Education lists for Social and Behavioral Sciences or Humanities and the Arts [4]		6
Free electives. Additional unrestricted course work, subject to certain exceptions as noted by the College, so that there are at least 128 credit hours earned toward the degree. [5]		6
Total Hours of Curriculum to Graduate		**128**

1. *External transfer students take* ENG 300 *instead.*
2. MATH 220 *may be substituted, with four of the five credit hours applying toward the degree.* MATH 220 *is appropriate for students with no background in calculus.*
3. AE 442 *and* AE 443 *satisfy the General Education Advanced Composition requirement.*
4. *The Grainger College of Engineering approved liberal education course list can be found* here *(*https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-GeneralEducationElectives*). Note that these credit hours could carry the required cultural studies designation required for campus general education requirements.*
5. *The Grainger College of Engineering restrictions to free electives can be found* here *(*https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-FreeElectives*).*

for the degree of Bachelor of Science in Aerospace Engineering

Suggested Sequence

The curriculum sequence below is a suggested sequence, as all Grainger Engineering students work with a department academic advisor to achieve their educational goals, specific to their needs and preparation. Dynamic and Static curricular maps, which include prerequisite sequencing, can be found here (https://grainger.illinois.edu/academics/undergraduate/majors-and-minors/aerospace-map/).

First Year

First Semester		Hours
AE 100	Intro to Aerospace Engineering	2
ENG 100	Engineering Orientation	0
MATH 221[1]	Calculus I	4
CHEM 102	General Chemistry I	3
CHEM 103	General Chemistry Lab I	1
AE 140	Aerospace Computer-Aided Design	2
RHET 105 (or General education elective)[2,3]	Writing and Research	4-3
	Semester Hours	16-15
Second Semester		
MATH 231	Calculus II	3
MATH 225	Introductory Matrix Theory	2
PHYS 211	University Physics: Mechanics	4
CS 101	Intro Computing: Engrg Sci	3
General education elective (or RHET 105)[2,3]		3-4
	Semester Hours	15-16

Second Year

First Semester		
MATH 241	Calculus III	4
PHYS 212	University Physics: Elec Mag	4
TAM 210	Introduction to Statics	2
MSE 280	Engineering Materials	3
General education elective[2]		3
	Semester Hours	16
Second Semester		
MATH 285	Intro Differential Equations	3
ME 200	Thermodynamics	3
AE 202	Aerospace Flight Mechanics	3
TAM 212	Introductory Dynamics	3
General education elective[2]		6
	Semester Hours	18

Third Year

First Semester		
AE 311	Incompressible Flow	3
AE 321	Mechs of Aerospace Structures	3
AE 352	Aerospace Dynamical Systems	3
ECE 205	Electrical and Electronic Circuits	3
General education elective[2]		3
	Semester Hours	15

Second Semester		
AE 312	Compressible Flow	3
AE 323	Applied Aerospace Structures	3
AE 353	Aerospace Control Systems	3
AE 370	Aerospace Numerical Methods	3
General education elective[2]		3
	Semester Hours	15
Fourth Year		
First Semester		
AE 442[4]	Aerospace Systems Design I	3
AE 433	Aerospace Propulsion	3
AE 460	Aerodynamics Propulsion Lab	2
AE 483	Autonomous Systems Lab	2
Technical Elective[5]		3
Free Elective		3
	Semester Hours	16
Second Semester		
AE 443[4]	Aerospace Systems Design II	3
AE 461	Structures Control Lab	2
Technical Electives[5]		9
Free Elective		3
	Semester Hours	17
	Total Hours:	128

1 MATH 220 *(*http://catalog.illinois.edu/search/?P=MATH%20220*) may be substituted with four of the five credit hours applying toward the degree.* MATH 220 *(*http://catalog.illinois.edu/search/?P=MATH%20220*) is appropriate for students with no background in calculus.*

2 *Students must take 6 hours from the campus General Education Social and Behavioral Sciences list, 6 hours from campus General Education Humanities and the Arts list, and 6 hours from a liberal education list approved by the college or from the campus General Education lists for Social and Behavioral Sciences or Humanities and the Arts.*
Students must also complete the campus cultural studies requirement by completing (i) one western/comparative culture(s), (ii) one non-western, and (iii) one U.S. minority culture(s) course from the General Education cultural studies lists. Most students select liberal education courses that simultaneously satisfy the Humanities and the Arts and cultural studies course requirements.

3 RHET 105 *(*http://catalog.illinois.edu/search/?P=RHET%20105*) (or an alternative Composition I sequence) is taken either in the first or second semester of the first year, according to the student's UIN (Spring if UIN is odd). General education elective is taken the other semester. Composition I guidelines can be found at* http://catalog.illinois.edu/general-inforamtion/degree-general-education-requirements/ *under Written Communication Requirement.*

4 *Sequence satisfies the General Education Advanced Composition requirement.*

5 *Technical elective credits totaling twelve hours, selected from a departmentally* approved list of Technical Electives *(*https://aerospace.illinois.edu/academics/undergraduate/undergraduate-tech-electives/*), satisfying these distribution requirements: (i) six hours of AE Technical Electives; (ii) six hours of AE Technical Electives or Non-AE Technical Electives.*

Learning Outcomes: Aerospace Engineering, BS

Learning Outcomes for the degree of Bachelor of Science Major in Aerospace Engineering

Student learning outcomes are based on learning outcomes in line with the ABET accreditation process.

Aerospace Engineering graduates will have:

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. An ability to communicate effectively with a range of audiences.
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

African American Studies, BALAS

for the degree of Bachelor of Arts in Liberal Arts and Sciences Major in African American Studies

department website: https://afro.illinois.edu/
department faculty: African American Studies Faculty (https://afro.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: cmjenki@illinois.edu

African American Studies is a field that systematically explores the life and culture of African American peoples and their African Diaspora relationships, patterns, and ties. Those who major in African American Studies will learn about the historical, political, ideological, legal, social, artistic, and economic issues affecting African Americans. They will learn about the dignity-affirming struggles of African American people to have their humanity acknowledged, valued, and understood.

The major in African American Studies (AAS) is to provide students with a transdiciplinary perspective on the origin, role and policy implications of race in the United States and world political economy, society and culture, over time. AAS students will learn diverse concepts, theories and methodologies for analyzing the experiences and perspectives and the cultural and intellectual production of African Americans and African descended people, largely though not exclusively in the United States. An

African American studies major will be encouraged to achieve excellence in developing vital creative and critical competencies, including oral and written communication, computer and statistical skills. Students majoring in AAS will also be encouraged to join a new generation of leadership grounded in African American studies knowledge and committed to public engagement to meet the continuing challenges of a diverse democratic society; and to foster national discourse to produce public policy aimed at achieving social justice.

This program is designed to serve undergraduate students primarily interested in the social sciences and humanities, though all students are welcome and encouraged to enroll in the program. This program prepares students for graduate study and research in traditional disciplines and interdisciplinary fields and for careers in the private or public sectors such as teaching, social work, human resources, criminal justice, management and administration, city planning, marketing, policy-making, medicine and law.

for the degree of Bachelor of Arts in Liberal Arts and Sciences Major in African American Studies

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A Major Plan of Study Form must be completed and submitted to the LAS Student Academic Affairs Office before the end of the fifth semester (60-75 hours). Please see your adviser.

Departmental distinction:
To graduate with distinction, students must complete the following:

1. 3.3 overall G.P.A
2. 3.6 program G.P.A
3. Complete AFRO 495 Senior Thesis Seminar with a grade of 3.3 or better

1.

Code	Title	Hours
I. Core course requirements		
AFRO 100	Intro to African American St	3
AFRO 220	Intro to Research Methods AfAm	3
AFRO 490	Theory in African American St	3
AFRO 495	Senior Thesis Seminar	3
II. Theory and Methods Requirement		
At least one theory and one methods course beyond the core. The courses must be selected from a list maintained in the Department's advising office.		6
III. Thematic Areas		
Students must take at least one course each from the following five areas. At least 6 of the remaining hours must be taken from only one of any of the five areas. A list of courses is maintained in the Department's advising office.		21
A. Comparative Race, Racialized Communities and Identities		
B. Cultural Production and Cultural Movements		
C. Political Economy, Public Policy and Contemporary Issues		
D. Global Interconnections: Black Transnationalism and the African Diaspora		
E. Black Women, Gender and Sexuality Studies		
IV. Cognate or Supporting Coursework		
Students must complete 9 hours of supporting coursework. Supporting coursework courses consists of a set of courses which are logically grouped, and which reflect or support a student's interests outside of the African American Studies major. Supporting coursework courses must be approved by the Department's undergraduate advisor.		9
Total Hours		**48**

Learning Outcomes: African American Studies, BALAS

Learning outcomes for the degree of Bachelor of Arts in Liberal Arts and Sciences Major in African American Studies

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Upon completion of the major in African American Studies, students will be able to:

- **DESCRIBE** the main stages in the historical development of the African American experience that reflects both continuity and change, and the different component parts of the human experience.
- **ASSESS** the historical development of peoples of African descent in broad global context, emphasizing historical, contemporary, and future implications.
- **ANALYZE** the experiences of Black people using the perspectives, data, and interpretations from two or more disciplinary fields (e.g., historical studies, cultural studies, social studies).
- **EVALUATE** successes and failures as people have used their values to initiate efforts to achieve social justice for African Americans and people of diverse social backgrounds.
- **DESIGN** a strategies and tactics that provide a solution to a major civic or social challenge facing Black communities in various parts of the world, illustrating how "Academic Excellence and Social Responsibility" in Black Studies have contributed to this process.

Agricultural & Biological Engineering, BS

for the degree of Bachelor of Science in Agricultural & Biological Engineering

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department website: https://abe.illinois.edu/undergraduate/
department faculty: Agricultural & Biological Engineering Faculty (https://abe.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/)
college websites: https://aces.illinois.edu/ **and** https://grainger.illinois.edu/
email: abe@illinois.edu

Students pursuing this major select one of two concentrations:

- Agricultural Engineering Concentration (p. 21)
- Biological Engineering Concentration (p. 25)

Agricultural & Biological Engineering, BS and Agricultural & Biological Engineering, BSAG

for the dual degree of Bachelor of Science in Agricultural & Biological Engineering and the Bachelor of Science in Agriculture in Agricultural & Biological Engineering

department website: https://abe.illinois.edu/undergraduate/
department faculty: https://abe.illinois.edu/directory/faculty (https://abe.illinois.edu/directory/faculty/)

College websites: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/) **&** The Grainger College of Engineering (https://grainger.illinois.edu/)

Dual Degree – Five Year Academic Program

Students who successfully complete this five-year academic program receive the Bachelor of Science with a major in Agricultural and Biological Engineering from The Grainger College of Engineering as well as the Bachelor of Science in Agriculture with a major in Agricultural and Biological Engineering from the College of ACES.

Students enroll in the College of ACES and then transfer to The Grainger College of Engineering after two years. Students then complete the ABET-accredited degree program in Agricultural and Biological Engineering in The Grainger College of Engineering while taking additional coursework in ACES to complete the requirements for the Bachelor of Science in Agriculture in Agricultural and Biological Engineering degree program in ACES. The suggested program of study that follows fulfills the additional graduation requirements for the second degree, which requires completion of the Grainger College of Engineering degree.

Agricultural and biological engineering is the application of mathematics, physical and biological science, and engineering to agriculture, food systems, energy, natural resources, the environment, and related biological systems. This program has special emphasis on environmental protection and the biological interface of plants, animals, soils, and microorganisms with the design and performance of environments, machines, mechanisms, processes, and structures. Graduates are employed by industry, consulting firms, and government for research, education, and manufacturing.

for the degree of Bachelor of Science in Agricultural & Biological Engineering

department website: https://abe.illinois.edu/undergraduate/
department faculty: Agricultural & Biological Engineering Faculty (https://abe.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/)
college websites: https://aces.illinois.edu/ **and** https://grainger.illinois.edu/
email: abe@illinois.edu

Students pursuing this major select one of two concentrations:

- Agricultural Engineering Concentration (p. 21)
- Biological Engineering Concentration (p. 25)

for the dual degree of Bachelor of Science in Agricultural & Biological Engineering and the Bachelor of Science in Agriculture in Agricultural & Biological Engineering

While completing the Agricultural & Biological Engineering, B.S. the student takes additional classes in ACES for the BSAG degree. The student is in ACES in years 1 and 2, transferring to The Grainger College of Engineering for years 3 through 5. The curriculum for the additional classes to complete the BSAG degree is as follows:

Agricultural & Biological Engineering, BSAG Requirements in addition to completion of Agricultural & Biological Engineering, B.S.

Code	Title	Hours
Communication		**3**
CMN 101	Public Speaking	
Biological Sciences Coursework; choose 4 hours from: [1]		**4**
ANSC 100	Intro to Animal Sciences	
ANSC 221	Cells, Metabolism and Genetics	
ANSC 350	Cellular Metabolism in Animals	
ANSC 363	Behavior of Domestic Animals	
ANSC 400	Dairy Herd Management	
ANSC 401	Beef Production	
ANSC 402	Sheep and Goat Production	
ANSC 403	Pork Production	
ANSC 404	Poultry Science	
ANSC 406	Zoo Animal Conservation Sci	
ANSC 450	Comparative Immunobiology	
ATMS 201	General Physical Meteorology	
ATMS 307	Climate Processes	
CHEM 232 & CHEM 233	Elementary Organic Chemistry I and Elementary Organic Chem Lab I [2]	
CHEM 312	Inorganic Chemistry	
CHEM 332	Elementary Organic Chem II	
CHEM 360	Chemistry of the Environment	
CHEM 460	Green Chemistry	
CPSC 112	Introduction to Crop Sciences	
CPSC 261	Biotechnology in Agriculture	
CPSC 265	Genetic Engineering Lab	
CPSC 270	Applied Entomology	
CPSC 352	Plant Genetics	
CPSC 414	Forage Crops & Pasture Ecology	
CPSC 415	Bioenergy Crops	
CPSC 418	Crop Growth and Management	
CPSC 431	Plants and Global Change	
CPSC 437	Principles of Agroecology	
CPSC 473	Mgmt of Field Crop Insects	
FSHN 101	The Science of Food and How it Relates to You	
FSHN 414	Food Chemistry	
FSHN 416	Food Chemistry Laboratory	

FSHN 461	
FSHN 471	Food & Industrial Microbiology
GEOL 107	Physical Geology
GEOL 380	Environmental Geology
HORT 100	Introduction to Horticulture
HORT 341	Greenhouse Mgmt and Production
HORT 344	Planting for Biodiversity and Aesthetics
HORT 360	Vegetable Crop Production
HORT 361	Small Fruit Production
HORT 362	Tree Fruit Production
HORT 363	Postharvest Handling Hort Crop
HORT 421	Horticultural Physiology
HORT 435	Urban Food Production
IB 103	Introduction to Plant Biology
IB 150 & IB 151	Organismal & Evolutionary Biol and Organismal & Evol Biol Lab
IB 203	Ecology
IB 329	Animal Behavior
IB 335	Plant Systematics
IB 411	Bioinspiration
IB 420	Plant Physiology
IB 439	Biogeography
IB 444	Insect Ecology
IB 452	Ecosystem Ecology
IB 482	Insect Pest Management
IB 485	Environ Toxicology & Health
IB 486	Pesticide Toxicology
MCB 100 & MCB 101	Introductory Microbiology and Intro Microbiology Laboratory
MCB 150 & MCB 151	Molec & Cellular Basis of Life and Molec & Cellular Laboratory [2]
MCB 244 & MCB 245	Human Anatomy & Physiology I and Human Anat & Physiol Lab I
MCB 250 & MCB 251	Molecular Genetics and Exp Techniqs in Molecular Biol
MCB 252 & MCB 253	Cells, Tissues & Development and Exp Techniqs in Cellular Biol
MCB 300 & MCB 301	Microbiology and Experimental Microbiology
MCB 314	Introduction to Neurobiology
MCB 316	Genetics and Disease
MCB 450	Introductory Biochemistry
NRES 201	Introductory Soils
NRES 219	Applied Ecology
NRES 348	Fish and Wildlife Ecology
NRES 351	Introduction to Environmental Chemistry
NRES 419	Env and Plant Ecosystems
NRES 420	Restoration Ecology
NRES 429	Aquatic Ecosystem Conservation
NRES 439	Env and Sustainable Dev
NRES 471	Pedology
NRES 475	Environmental Microbiology
NRES 487	Soil Chemistry
NRES 488	Soil Fertility and Fertilizers
PLPA 204	
PLPA 405	Plant Disease Diagnosis & Mgmt
PLPA 407	
Agricultural Sciences Coursework [3]	**15**
Free Electives [4]	
Total hours required to receive an Agricultural and Biological Engineering, BS and an Agricultural and Biological Engineering, BSAG	**158**

1 In addition to the Biological and Natural Sciences Elective hours required for Agricultural and Biological Engineering (6 hours), a further 4 hours of biological sciences must be completed to make up a **total of 10 hours.**

2 *CHEM 232 and MCB 150 are required for the BIO concentration.*

3 Fifteen hours of agricultural sciences with courses from at least two subject areas other than Agricultural and Biological Engineering and Technical Systems Management, and approval of advisers are required.

4 Sufficient free electives selected to total minimum curriculum requirement of 158 hours. All requirements of the combined curriculum must be completed to satisfy the requirements for both degrees.

Agricultural & Biological Engineering: Agricultural Engineering, BS

for the degree of Bachelor of Science in Agricultural & Biological Engineering, Agricultural Engineering Concentration

department website: https://abe.illinois.edu/undergraduate/
department faculty: Agricultural & Biological Engineering Faculty (https://abe.illinois.edu/directory/faculty/)
college websites: https://aces.illinois.edu/ **and** https://grainger.illinois.edu/
email: abe@illinois.edu

Agricultural Engineering Concentration

Students pursuing B.S. Degree in Agricultural and Biological Engineering choose from one of two concentrations, one of which is the concentration in *Agricultural Engineering*. This concentration includes the integration of physical and biological sciences as a foundation for engineering applications in agriculture, food systems, energy, natural resources, the environment, and related biological systems. Students pursuing this concentration are involved in the design of systems for renewable energy, off-road equipment, water quality, and the utilization and protection of soil and water resources. Important design constraints are economics, conservation of materials and energy, safety, and environmental quality. Within this concentration, students are strongly encouraged to select a set of coherent courses that constitutes a specialization in their area of career interest either from the following list or a customized area chosen in consultation with an advisor:

- Bioenvironmental Engineering
- Renewable Energy Systems
- Off-Road Equipment Engineering
- Soil and Water Resources Engineering

for the degree of Bachelor of Science in Agricultural & Biological Engineering, Agricultural Engineering Concentration

Graduation Requirements

Minimum Overall GPA: 2.0
Minimum hours required for graduation: 128 hours
General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement. One of the SBS courses must be an introductory economics course (ECON 102 or ECON 103 or ACE 100). Specific Advanced Composition course required for this degree is listed below.**

Orientation and Professional Development

Code	Title	Hours
ABE 100	Intro Agric & Biological Engrg [1]	1
ENG 100	Engineering Orientation [1]	0
Total Orientation Hours:		1

Foundational Mathematics and Science

Code	Title	Hours
CHEM 102	General Chemistry I	3
CHEM 103	General Chemistry Lab I	1
CHEM 104	General Chemistry II	3
CHEM 105	General Chemistry Lab II	1
MATH 221	Calculus I [2]	4
MATH 225	Introductory Matrix Theory	2
MATH 231	Calculus II	3
MATH 241	Calculus III	4
MATH 285	Intro Differential Equations	3
PHYS 211	University Physics: Mechanics	4
PHYS 212	University Physics: Elec & Mag	4
PHYS 213	Univ Physics: Thermal Physics	2
Total Foundational Mathematics and Science Hours:		34

Agricultural and Biological Engineering Technical Core

Code	Title	Hours
For Both Concentrations:		
ABE 141	ABE Principles: Biological	2
ABE 223	ABE Principles: Machine Syst	2
ABE 224	ABE Principles: Soil & Water	2
ABE 225	ABE Principles: Bioenvironment	2
ABE 226	ABE Principles: Bioprocessing	2
ABE 430	Project Management	2
ABE 469	Industry-Linked Design Project [3]	4
CS 101	Intro Computing: Engrg & Sci	3
ECE 205	Electrical and Electronic Circuits	3
SE 101	Engineering Graphics & Design	3
TAM 210	Introduction to Statics [4]	2
or TAM 211	Statics	
TAM 212	Introductory Dynamics	3
Total Agricultural and Biological Engineering Technical Core Hours:		30
Total Hours		60

Electives

Code	Title	Hours
The Grainger College of Engineering Liberal Education course list, or additional courses from the campus General Education lists for Social and Behavioral Sciences or Humanities and the Arts [5]		6
Free electives. Additional unrestricted course work, subject to certain exceptions as noted by the College, so that there are at least 128 credit hours earned toward the degree. [6]		6
Total Hours of Curriculum to Graduate		**128**

1. *External transfer students take* ENG 300 *instead.*
2. MATH 220 *may be substituted, with four of the five credit hours applying toward the degree.* MATH 220 *is appropriate for students with no background in calculus.*
3. ABE 469 *satisfies the general education advanced composition requirement.*
4. *The extra hour of credit for this course may be used to help meet free elective requirements.*
5. *The Grainger College of Engineering approved liberal education course list can be found* here *(*https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-GeneralEducationElectives*).*
6. *The Grainger College of Engineering restrictions to free electives can be found* here *(*https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-FreeElectives*).*

Agricultural Engineering Concentration Requirements

Code	Title	Hours
ECE 206	Electrical and Electronic Circuits Lab	1
ME 200	Thermodynamics	3
TAM 251	Introductory Solid Mechanics	3
Select one of the following:		3
ABE 440	Applied Statistical Methods I [1]	
CEE 202	Engineering Risk & Uncertainty	
IE 300	Analysis of Data	
STAT 400	Statistics and Probability I [1]	
Select one of the following:		4
CHBE 421	Momentum and Heat Transfer	
ME 310	Fundamentals of Fluid Dynamics	
TAM 335	Introductory Fluid Mechanics	
Electives		
This elective course work must be completed to fulfill each Concentration. The subjects build upon the agricultural and biological engineering technical core.		
Biological and Natural Sciences Electives (at least 3 hours at 300 or 400 level)		**6**
ANSC 100	Intro to Animal Sciences	4
ANSC 221	Cells, Metabolism and Genetics	3
ANSC 350	Cellular Metabolism in Animals	3
ANSC 350	Cellular Metabolism in Animals	3
ANSC 363	Behavior of Domestic Animals	4

ANSC 400	Dairy Herd Management	3
ANSC 401	Beef Production	3
ANSC 402	Sheep and Goat Production	3
ANSC 403	Pork Production	3
ANSC 404	Poultry Science	3
ANSC 406	Zoo Animal Conservation Sci	3
ANSC 450	Comparative Immunobiology	4
ATMS 201	General Physical Meteorology	3
ATMS 307	Climate Processes	3
CHEM 232	Elementary Organic Chemistry I	3 or 4
CHEM 233	Elementary Organic Chem Lab I	2
CHEM 312	Inorganic Chemistry	3
CHEM 332	Elementary Organic Chem II	4
CHEM 360	Chemistry of the Environment	3
CHEM 460	Green Chemistry	3 or 4
CPSC 112	Introduction to Crop Sciences	4
CPSC 261	Biotechnology in Agriculture	3
CPSC 265	Genetic Engineering Lab	3
CPSC 270	Applied Entomology	3
CPSC 352	Plant Genetics	4
CPSC 414	Forage Crops & Pasture Ecology	3
CPSC 415	Bioenergy Crops	3
CPSC 418	Crop Growth and Management	3
CPSC 431	Plants and Global Change	3
CPSC 437	Principles of Agroecology	3
CPSC 473	Mgmt of Field Crop Insects	3
FSHN 101	The Science of Food and How it Relates to You	3
FSHN 414	Food Chemistry	3
FSHN 416	Food Chemistry Laboratory	3
FSHN 461		
FSHN 471	Food & Industrial Microbiology	3
GEOL 107	Physical Geology	4
GEOL 380	Environmental Geology	4
HORT 100	Introduction to Horticulture	3
HORT 341	Greenhouse Mgmt and Production	4
HORT 344	Planting for Biodiversity and Aesthetics	3
HORT 360	Vegetable Crop Production	3
HORT 361	Small Fruit Production	2
HORT 362	Tree Fruit Production	2
HORT 363	Postharvest Handling Hort Crop	2
HORT 421	Horticultural Physiology	4
HORT 435	Urban Food Production	3
IB 103	Introduction to Plant Biology	4
IB 150	Organismal & Evolutionary Biol	4
IB 151	Organismal & Evol Biol Lab	1
IB 203	Ecology	4
IB 329	Animal Behavior	3
IB 335	Plant Systematics	4
IB 411	Bioinspiration	3
IB 420	Plant Physiology	3
IB 439	Biogeography	3
IB 444	Insect Ecology	3 or 4
IB 452	Ecosystem Ecology	3
IB 482	Insect Pest Management	3
IB 485	Environ Toxicology & Health	3
IB 486	Pesticide Toxicology	3 or 4
MCB 100	Introductory Microbiology	3
MCB 101	Intro Microbiology Laboratory	2
MCB 150	Molec & Cellular Basis of Life	4
MCB 151	Molec & Cellular Laboratory	1
MCB 244	Human Anatomy & Physiology I	3
MCB 245	Human Anat & Physiol Lab I	2
MCB 250	Molecular Genetics	3
MCB 251	Exp Techniqs in Molecular Biol	2
MCB 252	Cells, Tissues & Development	3
MCB 253	Exp Techniqs in Cellular Biol	2
MCB 300	Microbiology	3
MCB 301	Experimental Microbiology	3
MCB 314	Introduction to Neurobiology	3
MCB 316	Genetics and Disease	4
MCB 450	Introductory Biochemistry	3
NRES 201	Introductory Soils	4
NRES 219	Applied Ecology	3
NRES 348	Fish and Wildlife Ecology	3
NRES 351	Introduction to Environmental Chemistry	3
NRES 419	Env and Plant Ecosystems	3
NRES 420	Restoration Ecology	4
NRES 429	Aquatic Ecosystem Conservation	3
NRES 439	Env and Sustainable Dev	3
NRES 471	Pedology	3
NRES 475	Environmental Microbiology	3
NRES 487	Soil Chemistry	3
NRES 488	Soil Fertility and Fertilizers	3
PLPA 204		
PLPA 405	Plant Disease Diagnosis & Mgmt	3
PLPA 407		
Technical electives chosen in consultation with an advisor. At least 8 hours must be Agricultural and Biological Engineering courses		**15**
ABE 341	Transport Processes in ABE	3
ABE 361	Off-Road Machine Design	3
ABE 425	Engrg Measurement Systems	4
ABE 436	Renewable Energy Systems	3 or 4
ABE 446	Biological Nanoengineering	3 or 4
ABE 454	Environmental Soil Physics	3
ABE 455	Erosion and Sediment Control	2
ABE 456	Land & Water Resources Engrg	3 or 4
ABE 457	NPS Pollution Processes	2
ABE 458	NPS Pollution Modeling	2
ABE 459	Drainage and Water Management	3 or 4
ABE 463	Electrohydraulic Systems	3
ABE 466	Engineering Off-Road Vehicles	3
ABE 474	Indoor Environmental Control	3 or 4

ABE 476	Indoor Air Quality Engineering	4
ABE 482	Package Engineering	3
ABE 483	Engineering Properties of Food Materials	3
ABE 488	Bioprocessing Biomass for Fuel	4
BIOE 301		
BIOE 416	Biosensors	3
BIOE 461	Cellular Biomechanics	4
BIOE 467	Biophotonics	3
BIOE 473		
BIOE 474		
BIOE 476	Tissue Engineering	3
CHBE 221	Principles of CHE	3
CHBE 422	Mass Transfer Operations	4
CHBE 424	Chemical Reaction Engineering	3
CHBE 471	Biochemical Engineering	3 or 4
CHBE 472	Techniques in Biomolecular Eng	3 or 4
CHBE 473	Biomolecular Engineering	3 or 4
CHBE 475	Tissue Engineering	3
CHBE 476	Biotransport	3
CHBE 478	Bioenergy Technology	3
CEE 300	Behavior of Materials	4
CEE 330	Environmental Engineering	3
CEE 350	Water Resources Engineering	3
CEE 360	Structural Engineering	3
CEE 380	Geotechnical Engineering	3
CEE 430	Ecological Quality Engineering	2
CEE 432	Stream Ecology	3 or 4
CEE 434	Environmental Systems I	3
CEE 437	Water Quality Engineering	3
CEE 440	Fate Cleanup Environ Pollutant	4
CEE 442	Environmental Engineering Principles, Physical	4
CEE 443	Env Eng Principles, Chemical	4
CEE 444	Env Eng Principles, Biological	4
CEE 445		
CEE 446	Air Quality Engineering	4
CEE 447	Atmospheric Chemistry	4
CEE 449	Environmental Engineering Lab	3
CEE 450	Surface Hydrology	3
CEE 451	Environmental Fluid Mechanics	3
CEE 452	Hydraulic Analysis and Design	3
CEE 453	Urban Hydrology and Hydraulics	4
CEE 457	Groundwater	3
CEE 458	Water Resources Field Methods	4
CEE 461	Reinforced Concrete I	3
CEE 463	Reinforced Concrete II	3 or 4
CEE 465	Design of Structural Systems	3
CEE 470	Structural Analysis	4
CEE 480		
CEE 483	Soil Mechanics and Behavior	4
CEE 484	Applied Soil Mechanics	3 or 4
CS 466	Introduction to Bioinformatics	3 or 4
ECE 333	Green Electric Energy	3
ECE 468	Optical Remote Sensing	3
ECE 470	Introduction to Robotics	4
ECE 481	Nanotechnology	4
ENG 471	Seminar Energy & Sustain Engrg	1
SE 320	Control Systems	4
SE 423	Mechatronics	3
IE 431	Design for Six Sigma	3
ME 320	Heat Transfer	4
ME 330	Engineering Materials	4
ME 340	Dynamics of Mechanical Systems	3.5
ME 370	Mechanical Design I	3
ME 371	Mechanical Design II	3
ME 400	Energy Conversion Systems	3 or 4
ME 402	Design of Thermal Systems	3 or 4
ME 403	Internal Combustion Engines	3 or 4
ME 461	Computer Cntrl of Mech Systems	3 or 4
ME 483	Mechanobiology	4
MSE 280	Engineering Materials	3
MSE 401	Thermodynamics of Materials	3
MSE 470	Design and Use of Biomaterials	3
MSE 473	Biomolecular Materials Science	3
MSE 474	Biomaterials and Nanomedicine	3
MSE 489	Matl Select for Sustainability	3 or 4
NPRE 201	Energy Systems	2 or 3
NPRE 470	Fuel Cells & Hydrogen Sources	3
NPRE 475	Wind Power Systems	3 or 4

[1] *The extra hour of credit for this course may be used to help meet free elective requirements.*

Suggested Sequence

The curriculum sequence below is a suggested sequence, as all Grainger Engineering students work with a department academic advisor to achieve their educational goals, specific to their needs and preparation. Dynamic and Static curricular maps, which include prerequisite sequencing, can be found here (https://grainger.illinois.edu/academics/undergraduate/majors-and-minors/cee-map/).

First Year

First Semester		Hours
ABE 100	Intro Agric Biological Engrg	1
ENG 100	Engineering Orientation	0
MATH 221[1]	Calculus I	4
CHEM 102	General Chemistry I	3
CHEM 103	General Chemistry Lab I	1
RHET 105 or SE 101[2]	Writing and Research	4-3
General education elective[3,4]		3
	Semester Hours	16-15
Second Semester		
ABE 141	ABE Principles: Biological	2
MATH 231	Calculus II	3

CHEM 104	General Chemistry II	3
CHEM 105	General Chemistry Lab II	1
PHYS 211	University Physics: Mechanics	4
SE 101 or RHET 105[2]	Engineering Graphics Design	3-4
	Semester Hours	16-17

Second Year

First Semester

ABE 223	ABE Principles: Machine Syst	2
ABE 224	ABE Principles: Soil Water	2
MATH 241	Calculus III	4
PHYS 212	University Physics: Elec Mag	4
CS 101	Intro Computing: Engrg Sci	3
TAM 210 or 211[5]	Introduction to Statics	2
	Semester Hours	17

Second Semester

ABE 225	ABE Principles: Bioenvironment	2
ABE 226	ABE Principles: Bioprocessing	2
MATH 225	Introductory Matrix Theory	2
MATH 285	Intro Differential Equations	3
PHYS 213	Univ Physics: Thermal Physics	2
TAM 212	Introductory Dynamics	3
General education elective[3,4]		3
	Semester Hours	17

Third Year

First Semester

CEE 202, IE 300, ABE 440, or STAT 400[5]	Engineering Risk Uncertainty	3
ECE 205	Electrical and Electronic Circuits	3
TAM 335, CHBE 421, or ME 310	Introductory Fluid Mechanics	4
Agricultural and biological engineering technical elective[6]		3
General education elective[3,4]		3
	Semester Hours	16

Second Semester

ECON 103, 102, or ACE 100[3]	Macroeconomic Principles	3
ME 200	Thermodynamics	3
ECE 206	Electrical and Electronic Circuits Lab	1
TAM 251	Introductory Solid Mechanics	3
Agricultural and biological engineering technical elective[6]		3
Biological and Natural Sciences Electives[7]		3
	Semester Hours	16

Fourth Year

First Semester

ABE 430	Project Management	2
Agricultural and biological engineering technical elective[6]		3
Other technical elective[6]		3
General education elective[3,4]		3
Free elective		3
	Semester Hours	14

Second Semester

ABE 469[4]	Industry-Linked Design Project	4
Biological and natural sciences elective[7]		3
Other technical elective[6]		3
General education elective[3,4]		3
Free elective		3
	Semester Hours	16
	Total Hours:	128

1 *MATH 220 may be substituted with four of the five credit hours applying toward the degree. MATH 220 is appropriate for students with no background in calculus.*

2 RHET 105 *(or an alternative Composition I sequence) is taken either in the first or second semester of the first year, according to the student's UIN (Spring if your UIN is Odd).* SE 101 *is taken the other semester. Composition I guidelines can be found at* http://catalog.illinois.edu/general-information/degree-general-education-requirements/ *under Written Communication Requirement.*

3 *Students must take 6 hours from the campus General Education Social and Behavioral Sciences list, 6 hours from campus General Education Humanities and the Arts list, and 6 hours from a liberal education list approved by the college or from the campus General Education lists for Social and Behavioral Sciences or Humanities and the Arts.* ECON 103 *(or* ECON 102 *or* ACE 100 *by permission) must be one of the social & behavioral sciences courses, recommended to be taken early.*
Students must also complete the campus cultural studies requirement by completing (i) one western/comparative culture(s) course, (ii) one non-western culture(s) course, and (iii) one U.S. Minority Culture(s) course from the General Education cultural studies lists. Most students select general education courses that simultaneously satisfy these cultural studies requirements.

4 *ABE 469 satisfies the General Education Advanced Composition requirement.*

5 *The extra hour of credit for this course may be used to help meet free elective requirements.*

6 *Students must complete 15 hours of* Technical Electives (https://abe.illinois.edu/undergraduate/technical-electives/*) chosen in consultation with an advisor. At least 8 hours must be Agricultural and Biological Engineering Technical Electives. Students in the Biological Engineering Concentration must complete at least one course with a laboratory component.*

7 *Students must complete 6 hours from the approved list of* Biological and Natural Sciences Electives (https://abe.illinois.edu/undergraduate/biological-natural-sciences-electives/*). Students in the Biological Engineering Concentration must complete at least one course with a laboratory component.*

Agricultural & Biological Engineering: Biological Engineering, BS

for the degree of Bachelor of Science in Agricultural & Biological Engineering, Biological Engineering Concentration

department website: https://abe.illinois.edu/undergraduate/
department faculty: Agricultural & Biological Engineering Faculty (https://abe.illinois.edu/directory/faculty/)
college websites: https://aces.illinois.edu/ **and** https://grainger.illinois.edu/
email: abe@illinois.edu

Agricultural and biological engineering is the application of mathematics, physical and biological science, and engineering to agriculture, food systems, energy, natural resources, the environment, and related biological systems. This ABET-accredited program has special emphasis on environmental protection and the biological interface of plants, animals, soils, and microorganisms with the design and performance of environments, machines, mechanisms, processes, and structures.

The Department of Agricultural and Biological Engineering offers programs through the College of ACES and The Grainger College of Engineering.

Students pursuing the B.S. Degree in Agricultural and Biological Engineering choose from one of two concentrations, one of which is the concentration in *Biological Engineering*. This concentration integrates biology and engineering to provide solutions to problems related to living systems (plants, animals, and microorganisms). Engineered biological systems vary widely in scale. At the molecular level, nanometer-scale devices consist of a few biomolecules inside individual cells. At the other extreme, regionally-scaled complex ecosystems depend upon multiple species of interacting living organisms. Such systems are becoming increasingly important in areas such as bioenergy, bioprocessing, nanotechnology, biosensing, bio-informatics, and bioenvironment. Within this concentration, students are strongly encouraged to select a set of coherent courses that constitutes a specialization in their area of career interest either from the following list or a customized area chosen in consultation with an advisor:

- Bioenvironmental Engineering
- Ecological Engineering
- Food and Bioprocess Engineering
- Nanoscale Biological Engineering

for the degree of Bachelor of Science in Agricultural & Biological Engineering, Biological Engineering Concentration

Graduation Requirements

Minimum Overall GPA: 2.0
Minimum hours required for graduation: 128 hours
General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement. One of the SBS courses must be an introductory economics course (ECON 102 or ECON 103 or ACE 100). Specific Advanced Composition course required for this degree is listed below.**

Orientation and Professional Development

Code	Title	Hours
ABE 100	Intro Agric & Biological Engrg [1]	1
ENG 100	Engineering Orientation [1]	0
Total Orientation Hours:		1

Foundational Mathematics and Science

Code	Title	Hours
CHEM 102	General Chemistry I	3
CHEM 103	General Chemistry Lab I	1
CHEM 104	General Chemistry II	3
CHEM 105	General Chemistry Lab II	1
MATH 221	Calculus I [2]	4
MATH 225	Introductory Matrix Theory	2
MATH 231	Calculus II	3
MATH 241	Calculus III	4
MATH 285	Intro Differential Equations	3
PHYS 211	University Physics: Mechanics	4
PHYS 212	University Physics: Elec & Mag	4
PHYS 213	Univ Physics: Thermal Physics	2
Total Foundational Mathematics and Science Hours:		34

Agricultural and Biological Engineering Technical Core

Code	Title	Hours
For Both Concentrations:		
ABE 141	ABE Principles: Biological	2
ABE 223	ABE Principles: Machine Syst	2
ABE 224	ABE Principles: Soil & Water	2
ABE 225	ABE Principles: Bioenvironment	2
ABE 226	ABE Principles: Bioprocessing	2
ABE 430	Project Management	2
ABE 469	Industry-Linked Design Project [3]	4
CS 101	Intro Computing: Engrg & Sci	3
ECE 205	Electrical and Electronic Circuits	3
SE 101	Engineering Graphics & Design	3
TAM 210	Introduction to Statics [4]	2
or TAM 211	Statics	
TAM 212	Introductory Dynamics	3
Total Agricultural and Biological Engineering Technical Core Hours:		30
Total Hours		60

Electives

Code	Title	Hours
The Grainger College of Engineering Liberal Education course list, or additional courses from the campus General Education lists for Social and Behavioral Sciences or Humanities and the Arts [5]		6
Free electives. Additional unrestricted course work, subject to certain exceptions as noted by the College, so that there are at least 128 credit hours earned toward the degree. [6]		6
Total Hours of Curriculum to Graduate		**128**

1 *External transfer students take* ENG 300 *instead.*

2 MATH 220 *may be substituted, with four of the five credit hours applying toward the degree.* MATH 220 *is appropriate for students with no background in calculus.*

3 ABE 469 *satisfies the general education advanced composition requirement.*

[4] *The extra hour of credit for this course may be used to help meet free elective requirements.*

[5] *The Grainger College of Engineering approved liberal education course list can be found* here *(*https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-GeneralEducationElectives*).*

[6] *The Grainger College of Engineering restrictions to free electives can be found* here *(*https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-FreeElectives*).*

Biological Engineering Concentration Requirements

Code	Title	Hours
ABE 341	Transport Processes in ABE	3
CHBE 321	Thermodynamics	4
CHEM 232	Elementary Organic Chemistry I [1]	3
MCB 150	Molec & Cellular Basis of Life	4
Electives		
Biological and natural sciences electives chosen from a departmentally approved list of Biological and Natural Sciences Electives. Three of the six credit hours must be at the 300 or 400 level. Must include one course with a lab component.		**6**
ANSC 100	Intro to Animal Sciences	4
ANSC 221	Cells, Metabolism and Genetics	3
ANSC 350	Cellular Metabolism in Animals	3
ANSC 363	Behavior of Domestic Animals	4
ANSC 400	Dairy Herd Management	3
ANSC 401	Beef Production	3
ANSC 402	Sheep and Goat Production	3
ANSC 403	Pork Production	3
ANSC 404	Poultry Science	3
ANSC 406	Zoo Animal Conservation Sci	3
ANSC 450	Comparative Immunobiology	4
ATMS 201	General Physical Meteorology	3
ATMS 307	Climate Processes	3
CHEM 233	Elementary Organic Chem Lab I	2
CHEM 312	Inorganic Chemistry	3
CHEM 332	Elementary Organic Chem II	4
CHEM 360	Chemistry of the Environment	3
CHEM 460	Green Chemistry	3 or 4
CPSC 112	Introduction to Crop Sciences	4
CPSC 261	Biotechnology in Agriculture	3
CPSC 265	Genetic Engineering Lab	3
CPSC 270	Applied Entomology	3
CPSC 352	Plant Genetics	4
CPSC 414	Forage Crops & Pasture Ecology	3
CPSC 415	Bioenergy Crops	3
CPSC 418	Crop Growth and Management	3
CPSC 431	Plants and Global Change	3
CPSC 437	Principles of Agroecology	3
CPSC 473	Mgmt of Field Crop Insects	3
FSHN 101	The Science of Food and How it Relates to You	3
FSHN 414	Food Chemistry	3
FSHN 416	Food Chemistry Laboratory	3
FSHN 461		
FSHN 471	Food & Industrial Microbiology	3
GEOL 107	Physical Geology	4
GEOL 380	Environmental Geology	4
HORT 100	Introduction to Horticulture	3
HORT 341	Greenhouse Mgmt and Production	4
HORT 344	Planting for Biodiversity and Aesthetics	3
HORT 360	Vegetable Crop Production	3
HORT 361	Small Fruit Production	2
HORT 362	Tree Fruit Production	2
HORT 363	Postharvest Handling Hort Crop	2
HORT 421	Horticultural Physiology	4
HORT 435	Urban Food Production	3
IB 103	Introduction to Plant Biology	4
IB 150	Organismal & Evolutionary Biol	4
IB 151	Organismal & Evol Biol Lab	1
IB 203	Ecology	4
IB 329	Animal Behavior	3
IB 335	Plant Systematics	4
IB 411	Bioinspiration	3
IB 420	Plant Physiology	3
IB 439	Biogeography	3
IB 444	Insect Ecology	3 or 4
IB 452	Ecosystem Ecology	3
IB 482	Insect Pest Management	3
IB 485	Environ Toxicology & Health	3
IB 486	Pesticide Toxicology	3 or 4
MCB 100	Introductory Microbiology	3
MCB 101	Intro Microbiology Laboratory	2
MCB 244	Human Anatomy & Physiology I	3
MCB 245	Human Anat & Physiol Lab I	2
MCB 250	Molecular Genetics	3
MCB 251	Exp Techniqs in Molecular Biol	2
MCB 252	Cells, Tissues & Development	3
MCB 253	Exp Techniqs in Cellular Biol	2
MCB 300	Microbiology	3
MCB 301	Experimental Microbiology	3
MCB 314	Introduction to Neurobiology	3
MCB 316	Genetics and Disease	4
MCB 450	Introductory Biochemistry	3
NRES 201	Introductory Soils	4
NRES 219	Applied Ecology	3
NRES 348	Fish and Wildlife Ecology	3
NRES 351	Introduction to Environmental Chemistry	3
NRES 419	Env and Plant Ecosystems	3
NRES 420	Restoration Ecology	4
NRES 429	Aquatic Ecosystem Conservation	3
NRES 439	Env and Sustainable Dev	3
NRES 471	Pedology	3
NRES 475	Environmental Microbiology	3
NRES 487	Soil Chemistry	3

NRES 488	Soil Fertility and Fertilizers	3
PLPA 204		
PLPA 405	Plant Disease Diagnosis & Mgmt	3
PLPA 407		
Technical electives chosen in consultation with an advisor. At least 8 hours must be Agricultural and Biological Engineering Technical Electives. Must include one course with a lab component.		**15**
ABE 361	Off-Road Machine Design	3
ABE 425	Engrg Measurement Systems	4
ABE 436	Renewable Energy Systems	3 or 4
ABE 446	Biological Nanoengineering	3 or 4
ABE 454	Environmental Soil Physics	3
ABE 455	Erosion and Sediment Control	2
ABE 456	Land & Water Resources Engrg	3 or 4
ABE 457	NPS Pollution Processes	2
ABE 458	NPS Pollution Modeling	2
ABE 459	Drainage and Water Management	3 or 4
ABE 463	Electrohydraulic Systems	3
ABE 466	Engineering Off-Road Vehicles	3
ABE 474	Indoor Environmental Control	3 or 4
ABE 476	Indoor Air Quality Engineering	4
ABE 482	Package Engineering	3
ABE 483	Engineering Properties of Food Materials	3
ABE 488	Bioprocessing Biomass for Fuel	3
BIOE 301		
BIOE 416	Biosensors	3
BIOE 461	Cellular Biomechanics	4
BIOE 467	Biophotonics	3
BIOE 473		
BIOE 474		
BIOE 476	Tissue Engineering	3
CHBE 221	Principles of CHE	3
CHBE 422	Mass Transfer Operations	4
CHBE 424	Chemical Reaction Engineering	3
CHBE 471	Biochemical Engineering	3 or 4
CHBE 472	Techniques in Biomolecular Eng	3 or 4
CHBE 473	Biomolecular Engineering	3 or 4
CHBE 475	Tissue Engineering	3
CHBE 476	Biotransport	3
CHBE 478	Bioenergy Technology	3
CEE 300	Behavior of Materials	4
CEE 330	Environmental Engineering	3
CEE 350	Water Resources Engineering	3
CEE 360	Structural Engineering	3
CEE 380	Geotechnical Engineering	3
CEE 430	Ecological Quality Engineering	2
CEE 432	Stream Ecology	3 or 4
CEE 434	Environmental Systems I	3
CEE 437	Water Quality Engineering	3
CEE 440	Fate Cleanup Environ Pollutant	4
CEE 442	Environmental Engineering Principles, Physical	4
CEE 443	Env Eng Principles, Chemical	4
CEE 444	Env Eng Principles, Biological	4
CEE 445		
CEE 446	Air Quality Engineering	4
CEE 447	Atmospheric Chemistry	4
CEE 449	Environmental Engineering Lab	3
CEE 450	Surface Hydrology	3
CEE 451	Environmental Fluid Mechanics	3
CEE 452	Hydraulic Analysis and Design	3
CEE 453	Urban Hydrology and Hydraulics	4
CEE 457	Groundwater	3
CEE 458	Water Resources Field Methods	4
CEE 461	Reinforced Concrete I	3
CEE 463	Reinforced Concrete II	3 or 4
CEE 465	Design of Structural Systems	3
CEE 470	Structural Analysis	4
CEE 480		
CEE 483	Soil Mechanics and Behavior	4
CEE 484	Applied Soil Mechanics	3 or 4
CS 466	Introduction to Bioinformatics	3 or 4
ECE 206	Electrical and Electronic Circuits Lab	1
ECE 333	Green Electric Energy	3
ECE 468	Optical Remote Sensing	3
ECE 470	Introduction to Robotics	4
ECE 481	Nanotechnology	4
ENG 471	Seminar Energy & Sustain Engrg	1
SE 320	Control Systems	4
SE 423	Mechatronics	3
IE 431	Design for Six Sigma	3
ME 320	Heat Transfer	4
ME 330	Engineering Materials	4
ME 340	Dynamics of Mechanical Systems	3.5
ME 370	Mechanical Design I	3
ME 371	Mechanical Design II	3
ME 400	Energy Conversion Systems	3 or 4
ME 402	Design of Thermal Systems	3 or 4
ME 403	Internal Combustion Engines	3 or 4
ME 461	Computer Cntrl of Mech Systems	3 or 4
ME 483	Mechanobiology	4
MSE 280	Engineering Materials	3
MSE 401	Thermodynamics of Materials	3
MSE 470	Design and Use of Biomaterials	3
MSE 473	Biomolecular Materials Science	3
MSE 474	Biomaterials and Nanomedicine	3
MSE 489	Matl Select for Sustainability	3 or 4
NPRE 201	Energy Systems	2 or 3
NPRE 470	Fuel Cells & Hydrogen Sources	3
NPRE 475	Wind Power Systems	3 or 4

[1] *May be taken for 4 credit hours; the extra hour may be used to help meet free elective requirements.*

for the degree of Bachelor of Science in Agricultural & Biological Engineering, Biological Engineering Concentration

The curriculum sequence below is a suggested sequence, as all Grainger Engineering students work with a department academic advisor to achieve their educational goals, specific to their needs and preparation. Dynamic and Static curricular maps, which include prerequisite sequencing, can be found here (https://grainger.illinois.edu/academics/undergraduate/majors-and-minors/abe-bio-engr-map/).

Suggested Sequence

First Year

First Semester		**Hours**
ABE 100	Intro Agric Biological Engrg	1
ENG 100	Engineering Orientation	0
MATH 221[1]	Calculus I	4
CHEM 102	General Chemistry I	3
CHEM 103	General Chemistry Lab I	1
RHET 105 or SE 101[2]	Writing and Research	4-3
General education elective[3,4]		3
	Semester Hours	16-15
Second Semester		
ABE 141	ABE Principles: Biological	2
MATH 231	Calculus II	3
CHEM 104	General Chemistry II	3
CHEM 105	General Chemistry Lab II	1
PHYS 211	University Physics: Mechanics	4
SE 101 or RHET 105[2]	Engineering Graphics Design	3-4
	Semester Hours	16-17

Second Year

First Semester		
ABE 223	ABE Principles: Machine Syst	2
ABE 224	ABE Principles: Soil Water	2
CS 101	Intro Computing: Engrg Sci	3
MATH 241	Calculus III	4
PHYS 212	University Physics: Elec Mag	4
TAM 210 or 211[5]	Introduction to Statics	2-3
	Semester Hours	17-18
Second Semester		
ABE 225	ABE Principles: Bioenvironment	2
ABE 226	ABE Principles: Bioprocessing	2
MATH 225	Introductory Matrix Theory	2
MATH 285	Intro Differential Equations	3
CHEM 232[6]	Elementary Organic Chemistry I	3-4
PHYS 213	Univ Physics: Thermal Physics	2
TAM 212	Introductory Dynamics	3
	Semester Hours	17-18

Third Year

First Semester		
ABE 341	Transport Processes in ABE	3
ECE 205	Electrical and Electronic Circuits	3
MCB 150	Molec Cellular Basis of Life	4
Agricultural and biological engineering technical elective[7]		3
General education elective[3,4]		3
	Semester Hours	16
Second Semester		
ECON 103, 102, or ACE 100[3]	Macroeconomic Principles	3
CHBE 321	Thermodynamics	4
Agricultural and biological engineering technical elective[7]		3
Biological and natural sciences elective[8]		3
General education elective[3,4]		3
	Semester Hours	16

Fourth Year

First Semester		
ABE 430	Project Management	2
Agricultural and biological engineering technical elective[7]		3
Other technical elective[7]		3
General education elective[3,4]		3
Free elective		3
	Semester Hours	14
Second Semester		
ABE 469[4]	Industry-Linked Design Project	4
Biological and natural sciences elective[8]		3
Other technical elective[7]		3
General education elective[3,4]		3
Free elective		3-1
	Semester Hours	16-14
	Total Hours:	128

1 *MATH 220 may be substituted with four of the five credit hours applying toward the degree. MATH 220 is appropriate for students with no background in calculus.*

2 *RHET 105 (or an alternative Composition I sequence) is taken either in the first or second semester of the first year, according to the student's UIN (Spring if your UIN is Odd). SE 101 is taken the other semester. Composition I guidelines can be found at* http://catalog.illinois.edu/general-information/degree-general-education-requirements/ *under Written Communication Requirement.*

[3] *Students must take 6 hours from the campus General Education Social and Behavioral Sciences list, 6 hours from campus General Education Humanities and the Arts list, and 6 hours from a liberal education list approved by the college or from the campus General Education lists for Social and Behavioral Sciences or Humanities and the Arts.* ECON 103 *(or* ECON 102 *or* ACE 100 *by permission) must be one of the social & behavioral sciences courses, recommended to be taken early.*
Students must also complete the campus cultural studies requirement by completing (i) one western/comparative culture(s) course, (ii) one non-western culture(s) course, and (iii) one U.S. Minority Culture(s) course from the General Education cultural studies lists. Most students select general education courses that simultaneously satisfy these cultural studies requirements.

[4] *ABE 469 satisfies the General Education Advanced Composition requirement.*

[5] *The extra hour of credit for this course may be used to help meet free elective requirements.*

[6] *May be taken for 4 credit hours; the extra hour may be used to help meet free elective requirements.*

[7] *Students must complete 15 hours of* Technical Electives *(*https://abe.illinois.edu/undergraduate/technical-electives/*) chosen in consultation with an advisor. At least 8 hours must be Agricultural and Biological Engineering Technical Electives. Students in the Biological Engineering Concentration must complete at least one course with a laboratory component.*

[8] *Students must complete 6 hours from the approved list of* Biological and Natural Sciences Electives *(*https://abe.illinois.edu/undergraduate/biological-natural-sciences-electives/*). Students in the Biological Engineering Concentration must complete at least one course with a laboratory component.*

Learning Outcomes: Agricultural & Biological Engineering, BS

Learning outcomes for the degree of Bachelor of Science Major in Agricultural & Biological Engineering

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Student learning outcomes are based on learning outcomes in line with the ABET accreditation process.

Agricultural & Biological Engineering graduates will have:

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. An ability to communicate effectively with a range of audiences.
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Agricultural & Consumer Economics, BS

for the degree of Bachelor of Science Major in Agricultural & Consumer Economics

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department website: https://ace.illinois.edu/
department faculty: https://ace.illinois.edu/faculty (https://ace.illinois.edu/faculty/)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college website: https://aces.illinois.edu/

Students pursuing this major select one of nine concentrations:

- Agri-Accounting (p. 30)
- Agribusiness Markets and Management (p. 31)
- Consumer Economics & Finance (p. 32)
- Environmental Economics & Policy (p. 33)
- Farm Management (p. 34)
- Finance in Agribusiness (p. 35)
- Financial Planning (p. 36)
- Policy, International Trade & Development (p. 37)
- Public Policy & Law (p. 38)

Agricultural & Consumer Economics: Agri-Accounting, BS

for the degree of Bachelor of Science Major in Agricultural & Consumer Economics, Agri-Accounting concentration

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department website: https://ace.illinois.edu/
department faculty: https://ace.illinois.edu/faculty (https://ace.illinois.edu/faculty/)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/)
college website: https://aces.illinois.edu/

Students in Agri-Accounting complete a comprehensive program that enables them to apply accounting principles in production, processing, or retailing sectors in agribusiness industries. Graduates find professional opportunities as consultants and managerial accountants.

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for the degree of Bachelor of Science Major in Agricultural & Consumer Economics, Agri-Accounting concentration

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Prescribed Core Courses including Campus General Education

Code	Title	Hours
Composition I and Speech [1]		
RHET 105 & CMN 101	Writing and Research and Public Speaking (or equivalent (see College Composition I requirement)	7
Advanced Composition [2]		
Select from campus-approved list		3-4
Foreign Language		
Coursework at or above the third level is required for graduation.		
Quantitative Reasoning I		
Select one of:		7-8
MATH 124	Finite Mathematics	
MATH 125	Elementary Linear Algebra	
MATH 231	Calculus II	
Select one of:		
MATH 220	Calculus	
MATH 221	Calculus I	
MATH 234	Calculus for Business I	
Quantitative Reasoning II		**6**
ACE 262	Applied Statistical Methods and Data Analytics I	
ACE 264	Applied Statistical Methods & Data Analytics 2	
Humanities and the Arts		
Selected from campus approved list.		6
Natural Sciences and Technology		
Selected from campus approved list.		6
Social and Behavioral Sciences		
Selected from campus approved list.		6
Cultural Studies		
Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists.		9
ACES Prescribed		
ACES 101	Contemporary Issues in ACES (for freshmen only)	2
Department Requirements		
Minimum Hours in the College of ACES of which 20 must be in the Department of ACE		35
Minimum of two 400-level courses in ACE		6
ACE 100	Introduction to Applied Microeconomics [1]	4
ACE 161	Microcomputer Applications	3
or CS 105	Intro Computing: Non-Tech	
ACE 300	Intermediate Applied Microeconomics [2]	3
ACE 341	Issues&Careers in Applied Econ	1 or 2
ACCY 201	Accounting and Accountancy I	3
ECON 103	Macroeconomic Principles	3
At least 3 hours of credit for study abroad or one international course selected from:		3-4
ACE 435	Global Agribusiness Management	
ACE 436	International Business Immersion	
ACE 451	Agriculture in Intl Dev	
ACE 452	The Latin American Economies	
ACE 454	Econ Dev of Tropical Africa	
ACE 455	International Trade in Food and Agriculture	
Required Concentration		**15-27**
Concentration prescribed courses. See specific requirements for the concentration listed below.		
Total Hours		**126**

1 *Requirement must be satisfied by end of first year.*

2 *Students are encouraged to complete this requirement prior to the seventh semester.*

Code	Title	Hours
Required for the Agri-Accounting Concentration in Addition to Department Requirements		
ACCY 202	Accounting and Accountancy II	3
ACCY 301	Atg Measurement & Disclosure	3
ACCY 302	Decision Making for Atg	3
ACCY 303	Accounting Institutions and Regulation	3
ACCY 304	Accounting Control Systems	3
ACE 360	Spreadsheet Models and Applications	2
ACE 346	Tax Policy and Finan Planning	3
ACE 444	Financial Services & Investing Planning	3
ACE 447	Case Stud Agr Accy & Fin Plan	3
FIN 221	Corporate Finance	3
Total Hours		29

Agricultural & Consumer Economics: Agribusiness Markets & Management, BS

for the degree of Bachelor of Science Major in Agricultural & Consumer Economics, Agribusiness Markets & Management Concentration

department website: https://ace.illinois.edu/
department faculty: https://ace.illinois.edu/faculty (https://ace.illinois.edu/faculty/)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/)
college website: https://aces.illinois.edu/

Students in Agribusiness Markets and Management obtain management skills; strategy development and implementation; and an awareness of the interaction among agricultural technology, supply, distribution, processing, and marketing firms in the business environment. Graduates are prepared for entry-level management, sales and marketing, and technical analyst positions, and are sought by firms involved in the production, marketing, sales, and financing of farm inputs, agricultural commodities, and food and other retail products.

for the degree of Bachelor of Science Major in Agricultural & Consumer Economics, Agribusiness Markets & Management Concentration

Prescribed Core Courses including Campus General Education

Code	Title	Hours
Composition I and Speech [1]		
RHET 105 & CMN 101	Writing and Research and Public Speaking (or equivalent (see College Composition I requirement)	7
Advanced Composition [2]		
Select from campus-approved list		3-4
Foreign Language		
Coursework at or above the third level is required for graduation.		
Quantitative Reasoning I		
Select one of:		7-8
MATH 124	Finite Mathematics	
MATH 125	Elementary Linear Algebra	
MATH 231	Calculus II	
Select one of:		
MATH 220	Calculus	
MATH 221	Calculus I	
MATH 234	Calculus for Business I	
Quantitative Reasoning II		**6**
ACE 262	Applied Statistical Methods and Data Analytics I	
ACE 264	Applied Statistical Methods & Data Analytics 2	
Humanities and the Arts		
Selected from campus approved list.		6
Natural Sciences and Technology		
Selected from campus approved list.		6
Social and Behavioral Sciences		
Selected from campus approved list.		6
Cultural Studies		
Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists.		9
ACES Prescribed		
ACES 101	Contemporary Issues in ACES (for freshmen only)	2
Department Requirements		
Minimum Hours in the College of ACES of which 20 must be in the Department of ACE		35
Minimum of two 400-level courses in ACE		6
ACE 100	Introduction to Applied Microeconomics [1]	4
ACE 161	Microcomputer Applications	3
or CS 105	Intro Computing: Non-Tech	
ACE 300	Intermediate Applied Microeconomics [2]	3
ACE 341	Issues&Careers in Applied Econ	1 or 2
ACCY 201	Accounting and Accountancy I	3
ECON 103	Macroeconomic Principles	3
At least 3 hours of credit for study abroad or one international course selected from:		3-4
ACE 435	Global Agribusiness Management	
ACE 436	International Business Immersion	
ACE 451	Agriculture in Intl Dev	
ACE 452	The Latin American Economies	
ACE 454	Econ Dev of Tropical Africa	
ACE 455	International Trade in Food and Agriculture	
Required Concentration		**15-27**
Concentration prescribed courses. See specific requirements for the concentration listed below.		
Total Hours		**126**

1 *Requirement must be satisfied by end of first year.*

2 *Students are encouraged to complete this requirement prior to the seventh semester.*

Code	Title	Hours
Required for the Agribusiness, Markets and Management Concentration in Addition to Department Requirements		
ACE 222	Agricultural Marketing	3
ACE 231	Food and Agribusiness Mgt	3
ACCY 202	Accounting and Accountancy II	3
Select three of the following:		9
ACE 427	Commodity Price Analysis	
ACE 428	Commodity Futures and Options	
ACE 430	Food Marketing	
ACE 431	Agri-food Strategic Management	
ACE 435	Global Agribusiness Management	
Total Hours		18

Agricultural & Consumer Economics: Consumer Economics & Finance, BS

for the degree of Bachelor of Science Major in Agricultural & Consumer Economics, Consumer Economics & Finance Concentration

department website: https://ace.illinois.edu/
department faculty: https://ace.illinois.edu/faculty (https://ace.illinois.edu/faculty/)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/)
college website: https://aces.illinois.edu/

Students in Consumer Economics and Finance develop knowledge and skills to help consumers with everyday problems. Coursework in consumer economics, personal finance, and economics gives students a broad-based background and an understanding of the role of consumers in the marketplace. Students can choose an emphasis in consumer economics, family economics, or financial planning and counseling, which leads to career opportunities with government and public agencies, marketing and sales firms, and financial institutions.

for the degree of Bachelor of Science Major in Agricultural & Consumer Economics, Consumer Economics & Finance Concentration

Prescribed Core Courses including Campus General Education

Code	Title	Hours
Composition I and Speech [1]		
RHET 105 & CMN 101	Writing and Research and Public Speaking (or equivalent (see College Composition I requirement)	7
Advanced Composition [2]		
Select from campus-approved list		3-4
Foreign Language		
Coursework at or above the third level is required for graduation.		
Quantitative Reasoning I		
Select one of:		7-8
MATH 124	Finite Mathematics	
MATH 125	Elementary Linear Algebra	
MATH 231	Calculus II	
Select one of:		
MATH 220	Calculus	
MATH 221	Calculus I	
MATH 234	Calculus for Business I	
Quantitative Reasoning II		**6**
ACE 262	Applied Statistical Methods and Data Analytics I	
ACE 264	Applied Statistical Methods & Data Analytics 2	
Humanities and the Arts		
Selected from campus approved list.		6
Natural Sciences and Technology		
Selected from campus approved list.		6
Social and Behavioral Sciences		
Selected from campus approved list.		6
Cultural Studies		
Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists.		9
ACES Prescribed		
ACES 101	Contemporary Issues in ACES (for freshmen only)	2
Department Requirements		
Minimum Hours in the College of ACES of which 20 must be in the Department of ACE		35
Minimum of two 400-level courses in ACE		6
ACE 100	Introduction to Applied Microeconomics [1]	4
ACE 161	Microcomputer Applications	3
or CS 105	Intro Computing: Non-Tech	
ACE 300	Intermediate Applied Microeconomics [2]	3
ACE 341	Issues&Careers in Applied Econ	1 or 2
ACCY 201	Accounting and Accountancy I	3
ECON 103	Macroeconomic Principles	3
At least 3 hours of credit for study abroad or one international course selected from:		3-4
ACE 435	Global Agribusiness Management	
ACE 436	International Business Immersion	
ACE 451	Agriculture in Intl Dev	
ACE 452	The Latin American Economies	
ACE 454	Econ Dev of Tropical Africa	
ACE 455	International Trade in Food and Agriculture	
Required Concentration		**15-27**
Concentration prescribed courses. See specific requirements for the concentration listed below.		
Total Hours		**126**

1 *Requirement must be satisfied by end of first year.*

2 *Students are encouraged to complete this requirement prior to the seventh semester.*

Code	Title	Hours
Required for the Consumer Economics and Finance Concentration in Addition to Department Requirements		
ACE 240	Personal Financial Planning	3
ACE 270	Consumer Economics	3
ACE 474	Economics of Consumption	3
ACE 476	Behavioral Economics and Financial Decision Making	3
Select two of the following:		6
ACE 335	Food Marketing and Behavior	
ACE 345	Finan Decision Indiv Sm Bus	
ACE 346	Tax Policy and Finan Planning	
ACE 444	Financial Services & Investing Planning	
ACE 445	Intermediate Financial and Estate Planning	
ACE 455	International Trade in Food and Agriculture	
ACE 456	Agr and Food Policies	
ACE 471	Consumer Economic Policy	
ECON 418	Health Economics	
ECON 440	Economics of Labor Markets	
FIN 221	Corporate Finance	
Total Hours		18

Agricultural & Consumer Economics: Environmental Economics & Policy, BS

for the degree of Bachelor of Science Major in Agricultural & Consumer Economics, Environmental Economics & Policy Concentration

department website: https://ace.illinois.edu/
department faculty: https://ace.illinois.edu/faculty (https://ace.illinois.edu/faculty/)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/)
college website: https://aces.illinois.edu/

Students in Environmental Economics and Policy study environmental and resource management issues at the local, state, national, and international levels. Graduates are prepared for positions in governmental, environmental, and resource management agencies; interest groups; and the environmental area of private firms. Course

concentrations include law, policy, management, administration, quantitative methods, and sociology, as well as economics.

for the degree of Bachelor of Science Major in Agricultural & Consumer Economics, Environmental Economics & Policy Concentration

Prescribed Core Courses including Campus General Education

Code	Title	Hours
Composition I and Speech [1]		
RHET 105 & CMN 101	Writing and Research and Public Speaking (or equivalent (see College Composition I requirement)	7
Advanced Composition [2]		
Select from campus-approved list		3-4
Foreign Language		
Coursework at or above the third level is required for graduation.		
Quantitative Reasoning I		
Select one of:		7-8
MATH 124	Finite Mathematics	
MATH 125	Elementary Linear Algebra	
MATH 231	Calculus II	
Select one of:		
MATH 220	Calculus	
MATH 221	Calculus I	
MATH 234	Calculus for Business I	
Quantitative Reasoning II		**6**
ACE 262	Applied Statistical Methods and Data Analytics I	
ACE 264	Applied Statistical Methods & Data Analytics 2	
Humanities and the Arts		
Selected from campus approved list.		6
Natural Sciences and Technology		
Selected from campus approved list.		6
Social and Behavioral Sciences		
Selected from campus approved list.		6
Cultural Studies		
Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists.		9
ACES Prescribed		
ACES 101	Contemporary Issues in ACES (for freshmen only)	2
Department Requirements		
Minimum Hours in the College of ACES of which 20 must be in the Department of ACE		35
Minimum of two 400-level courses in ACE		6
ACE 100	Introduction to Applied Microeconomics [1]	4
ACE 161	Microcomputer Applications	3
or CS 105	Intro Computing: Non-Tech	
ACE 300	Intermediate Applied Microeconomics [2]	3
ACE 341	Issues&Careers in Applied Econ	1 or 2
ACCY 201	Accounting and Accountancy I	3
ECON 103	Macroeconomic Principles	3
At least 3 hours of credit for study abroad or one international course selected from:		3-4
ACE 435	Global Agribusiness Management	
ACE 436	International Business Immersion	
ACE 451	Agriculture in Intl Dev	
ACE 452	The Latin American Economies	
ACE 454	Econ Dev of Tropical Africa	
ACE 455	International Trade in Food and Agriculture	
Required Concentration		**15-27**
Concentration prescribed courses. See specific requirements for the concentration listed below.		
Total Hours		**126**

1 *Requirement must be satisfied by end of first year.*

2 *Students are encouraged to complete this requirement prior to the seventh semester.*

Code	Title	Hours
Required for the Environmental Economics and Policy Concentration in Addition to Department Requirements		
ACE 210	Environmental Economics	3
ACE 310	Natural Resource Economics	3
ACE 406	Environmental Law	3
ACE 410	Energy Economics	3
ACE 411	Environment and Development	3
Select one of the following:		3
GEOG 379	Intro to GIS Systems	
NRES 454	GIS in Natural Resource Mgmt	
UP 418	GIS for Planners	
Total Hours		18

Agricultural & Consumer Economics: Farm Management, BS

for the degree of Bachelor of Science Major in Agricultural & Consumer Economics, Farm Management Concentration

department website: https://ace.illinois.edu/
department faculty: https://ace.illinois.edu/faculty (https://ace.illinois.edu/faculty/)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/)
college website: https://aces.illinois.edu/

Students in Farm Management study the principles of economics, finance, risk and the decision-making process - all central to the successful management of a farm enterprise. Students develop skills to combine and manage land, labor, and capital resources for a competitive return. Also, students may learn how to appraise farmland and other assets. Farm (and other asset) appraisal is a growing part of professional farm management and can be pursued as a profession in itself.

for the degree of Bachelor of Science Major in Agricultural & Consumer Economics, Farm Management Concentration

Prescribed Core Courses including Campus General Education

Code	Title	Hours
Composition I and Speech [1]		
RHET 105 & CMN 101	Writing and Research and Public Speaking (or equivalent (see College Composition I requirement)	7
Advanced Composition [2]		
Select from campus-approved list		3-4
Foreign Language		
Coursework at or above the third level is required for graduation.		
Quantitative Reasoning I		
Select one of:		7-8
MATH 124	Finite Mathematics	
MATH 125	Elementary Linear Algebra	
MATH 231	Calculus II	
Select one of:		
MATH 220	Calculus	
MATH 221	Calculus I	
MATH 234	Calculus for Business I	
Quantitative Reasoning II		**6**
ACE 262	Applied Statistical Methods and Data Analytics I	
ACE 264	Applied Statistical Methods & Data Analytics 2	
Humanities and the Arts		
Selected from campus approved list.		6
Natural Sciences and Technology		
Selected from campus approved list.		6
Social and Behavioral Sciences		
Selected from campus approved list.		6
Cultural Studies		
Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists.		9
ACES Prescribed		
ACES 101	Contemporary Issues in ACES (for freshmen only)	2
Department Requirements		
Minimum Hours in the College of ACES of which 20 must be in the Department of ACE		35
Minimum of two 400-level courses in ACE		6
ACE 100	Introduction to Applied Microeconomics [1]	4
ACE 161	Microcomputer Applications	3
or CS 105	Intro Computing: Non-Tech	
ACE 300	Intermediate Applied Microeconomics [2]	3
ACE 341	Issues&Careers in Applied Econ	1 or 2
ACCY 201	Accounting and Accountancy I	3
ECON 103	Macroeconomic Principles	3
At least 3 hours of credit for study abroad or one international course selected from:		3-4
ACE 435	Global Agribusiness Management	
ACE 436	International Business Immersion	
ACE 451	Agriculture in Intl Dev	
ACE 452	The Latin American Economies	
ACE 454	Econ Dev of Tropical Africa	
ACE 455	International Trade in Food and Agriculture	
Required Concentration		**15-27**
Concentration prescribed courses. See specific requirements for the concentration listed below.		
Total Hours		**126**

1 *Requirement must be satisfied by end of first year.*

2 *Students are encouraged to complete this requirement prior to the seventh semester.*

Code	Title	Hours
Required for the Farm Management Concentration in Addition to Department Requirements		
ACE 222	Agricultural Marketing	3
ACE 231	Food and Agribusiness Mgt	3
ACE 232	Farm Management	3
ACE 345	Finan Decision Indiv Sm Bus	3
ACE 360	Spreadsheet Models and Applications	2
ACE 428	Commodity Futures and Options	3
ACE 432	Advanced Farm Management	3
ACE 444	Financial Services & Investing Planning	3
Total Hours		23

Agricultural & Consumer Economics: Finance in Agribusiness, BS

for the degree of Bachelor of Science Major in Agricultural & Consumer Economics, Finance in Agribusiness Concentration

department website: https://ace.illinois.edu/
department faculty: https://ace.illinois.edu/faculty (https://ace.illinois.edu/faculty/)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/)
college website: https://aces.illinois.edu/

Students in Finance in Agribusiness study finance as used in agribusiness, farming, financial institutions, and more broadly, in the financial services industry. In addition to positions as loan officers in banks and other lending institutions, recent graduates are working in trust and other banking operations, investments and securities firms, rural appraisals, financial management, financial planning, insurance, real estate, and related fields.

for the degree of Bachelor of Science Major in Agriculture & Consumer Economics, Finance in Agribusiness Concentration

Prescribed Core Courses including Campus General Education

Code	Title	Hours
Composition I and Speech [1]		
RHET 105 & CMN 101	Writing and Research and Public Speaking (or equivalent (see College Composition I requirement)	7
Advanced Composition [2]		
Select from campus-approved list		3-4
Foreign Language		
Coursework at or above the third level is required for graduation.		
Quantitative Reasoning I		
Select one of:		7-8
MATH 124	Finite Mathematics	
MATH 125	Elementary Linear Algebra	
MATH 231	Calculus II	
Select one of:		
MATH 220	Calculus	
MATH 221	Calculus I	
MATH 234	Calculus for Business I	
Quantitative Reasoning II		**6**
ACE 262	Applied Statistical Methods and Data Analytics I	
ACE 264	Applied Statistical Methods & Data Analytics 2	
Humanities and the Arts		
Selected from campus approved list.		6
Natural Sciences and Technology		
Selected from campus approved list.		6
Social and Behavioral Sciences		
Selected from campus approved list.		6
Cultural Studies		
Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists.		9
ACES Prescribed		
ACES 101	Contemporary Issues in ACES (for freshmen only)	2
Department Requirements		
Minimum Hours in the College of ACES of which 20 must be in the Department of ACE		35
Minimum of two 400-level courses in ACE		6
ACE 100	Introduction to Applied Microeconomics [1]	4
ACE 161	Microcomputer Applications	3
or CS 105	Intro Computing: Non-Tech	
ACE 300	Intermediate Applied Microeconomics [2]	3
ACE 341	Issues&Careers in Applied Econ	1 or 2
ACCY 201	Accounting and Accountancy I	3
ECON 103	Macroeconomic Principles	3
At least 3 hours of credit for study abroad or one international course selected from:		3-4
ACE 435	Global Agribusiness Management	
ACE 436	International Business Immersion	
ACE 451	Agriculture in Intl Dev	
ACE 452	The Latin American Economies	
ACE 454	Econ Dev of Tropical Africa	
ACE 455	International Trade in Food and Agriculture	
Required Concentration		**15-27**
Concentration prescribed courses. See specific requirements for the concentration listed below.		
Total Hours		**126**

1 *Requirement must be satisfied by end of first year.*

2 *Students are encouraged to complete this requirement prior to the seventh semester.*

Code	Title	Hours
Required for the Finance in Agribusiness Concentration in Addition to Department Requirements		
ACE 345	Finan Decision Indiv Sm Bus	3
ACE 360	Spreadsheet Models and Applications	2
ACE 444	Financial Services & Investing Planning	3
ACE 446	Modeling App's Finan Plan	2
ACCY 202	Accounting and Accountancy II	3
FIN 221	Corporate Finance	3
Select two of the following:		6
ACE 427	Commodity Price Analysis	
ACE 428	Commodity Futures and Options	
ACE 447	Case Stud Agr Accy & Fin Plan	
ACE 449	Retirement & Benefit Planning	
FIN 300	Financial Markets [1]	
Total Hours		22

1 *Registration may be restricted by the department offering the course; access cannot be assured.*

Agricultural & Consumer Economics: Financial Planning, BS

for the degree of Bachelor of Science Major in Agricultural & Consumer Economics, Financial Planning Concentration

department website: https://ace.illinois.edu/
department faculty: https://ace.illinois.edu/faculty (https://ace.illinois.edu/faculty/)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/)
college website: https://aces.illinois.edu/

Students in the Financial Planning concentration study finance and economics as they apply to individuals, households, and small businesses in the course of accumulating and using financial resource. Students are introduced to issues of credit management, insurance and other risk management strategies, saving and investing, retirement planning, and estate planning. Students also study the financial marketplace as it relates to the needs of households and small businesses.

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for the degree of Bachelor of Science Major in Agricultural & Consumer Economics, Financial Planning Concentration

Prescribed Core Courses including Campus General Education

Code	Title	Hours
Composition I and Speech [1]		
RHET 105 & CMN 101	Writing and Research and Public Speaking (or equivalent (see College Composition I requirement)	7
Advanced Composition [2]		
Select from campus-approved list		3-4
Foreign Language		
Coursework at or above the third level is required for graduation.		
Quantitative Reasoning I		
Select one of:		7-8
MATH 124	Finite Mathematics	
MATH 125	Elementary Linear Algebra	
MATH 231	Calculus II	
Select one of:		
MATH 220	Calculus	
MATH 221	Calculus I	
MATH 234	Calculus for Business I	
Quantitative Reasoning II		**6**
ACE 262	Applied Statistical Methods and Data Analytics I	
ACE 264	Applied Statistical Methods & Data Analytics 2	
Humanities and the Arts		
Selected from campus approved list.		6
Natural Sciences and Technology		
Selected from campus approved list.		6
Social and Behavioral Sciences		
Selected from campus approved list.		6
Cultural Studies		
Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists.		9
ACES Prescribed		
ACES 101	Contemporary Issues in ACES (for freshmen only)	2
Department Requirements		
Minimum Hours in the College of ACES of which 20 must be in the Department of ACE		35
Minimum of two 400-level courses in ACE		6
ACE 100	Introduction to Applied Microeconomics [1]	4
ACE 161	Microcomputer Applications	3
or CS 105	Intro Computing: Non-Tech	
ACE 300	Intermediate Applied Microeconomics [2]	3
ACE 341	Issues&Careers in Applied Econ	1 or 2
ACCY 201	Accounting and Accountancy I	3
ECON 103	Macroeconomic Principles	3
At least 3 hours of credit for study abroad or one international course selected from:		3-4
ACE 435	Global Agribusiness Management	
ACE 436	International Business Immersion	
ACE 451	Agriculture in Intl Dev	
ACE 452	The Latin American Economies	
ACE 454	Econ Dev of Tropical Africa	
ACE 455	International Trade in Food and Agriculture	
Required Concentration		**15-27**
Concentration prescribed courses. See specific requirements for the concentration listed below.		
Total Hours		**126**

1 *Requirement must be satisfied by end of first year.*

2 *Students are encouraged to complete this requirement prior to the seventh semester.*

Code	Title	Hours
Required for the Financial Planning Concentration in Addition to Department Requirements		
ACE 240	Personal Financial Planning	3
ACE 345	Finan Decision Indiv Sm Bus	3
ACE 346	Tax Policy and Finan Planning	3
ACE 440	Finan Plan for Professionals	3
ACE 444	Financial Services & Investing Planning	3
ACE 445	Intermediate Financial and Estate Planning	4
ACE 449	Retirement & Benefit Planning	3
FIN 230	Introduction to Insurance	3
Total Hours		25

Agricultural & Consumer Economics: Policy, International Trade & Development, BS

for the degree of Bachelor of Science Major in Agricultural & Consumer Economics, Policy, International Trade, & Development Concentration

department website: https://ace.illinois.edu/
department faculty: https://ace.illinois.edu/faculty (https://ace.illinois.edu/faculty/)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/)
college website: https://aces.illinois.edu/

Students in Policy, International Trade, and Development enjoy a broad exposure to policy, international trade, and agricultural development from an economics perspective. The concentration provides a global and societal perspective ideally suited for exploring studies in administration, government, policy analysis, social processes, and international economics. Graduates are prepared for positions in firms with international business; in federal or state government agencies dealing with policy, trade, or development; in trade organizations; and in public interest groups.

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for the degree of Bachelor of Science Major in Agricultural & Consumer Economics, Policy, International Trade, & Development Concentration

Prescribed Core Courses including Campus General Education

Code	Title	Hours
Composition I and Speech [1]		
RHET 105 & CMN 101	Writing and Research and Public Speaking (or equivalent (see College Composition I requirement)	7
Advanced Composition [2]		
Select from campus-approved list		3-4
Foreign Language		
Coursework at or above the third level is required for graduation.		
Quantitative Reasoning I		
Select one of:		7-8
MATH 124	Finite Mathematics	
MATH 125	Elementary Linear Algebra	
MATH 231	Calculus II	
Select one of:		
MATH 220	Calculus	
MATH 221	Calculus I	
MATH 234	Calculus for Business I	
Quantitative Reasoning II		**6**
ACE 262	Applied Statistical Methods and Data Analytics I	
ACE 264	Applied Statistical Methods & Data Analytics 2	
Humanities and the Arts		
Selected from campus approved list.		6
Natural Sciences and Technology		
Selected from campus approved list.		6
Social and Behavioral Sciences		
Selected from campus approved list.		6
Cultural Studies		
Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists.		9
ACES Prescribed		
ACES 101	Contemporary Issues in ACES (for freshmen only)	2
Department Requirements		
Minimum Hours in the College of ACES of which 20 must be in the Department of ACE		35
Minimum of two 400-level courses in ACE		6
ACE 100	Introduction to Applied Microeconomics [1]	4
ACE 161	Microcomputer Applications	3
or CS 105	Intro Computing: Non-Tech	
ACE 300	Intermediate Applied Microeconomics [2]	3
ACE 341	Issues&Careers in Applied Econ	1 or 2
ACCY 201	Accounting and Accountancy I	3
ECON 103	Macroeconomic Principles	3
At least 3 hours of credit for study abroad or one international course selected from:		3-4
ACE 435	Global Agribusiness Management	
ACE 436	International Business Immersion	
ACE 451	Agriculture in Intl Dev	
ACE 452	The Latin American Economies	
ACE 454	Econ Dev of Tropical Africa	
ACE 455	International Trade in Food and Agriculture	
Required Concentration		**15-27**
Concentration prescribed courses. See specific requirements for the concentration listed below.		
Total Hours		**126**

1 *Requirement must be satisfied by end of first year.*

2 *Students are encouraged to complete this requirement prior to the seventh semester.*

Code	Title	Hours
Required for the Policy, International Trade and Development Concentration in Addition to Department Requirements		
ACE 251	The World Food Economy	3
ACE 455	International Trade in Food and Agriculture	3
ACE 456	Agr and Food Policies	3
Select two of the following:		6
ACE 410	Energy Economics	
ACE 411	Environment and Development	
ACE 451	Agriculture in Intl Dev	
ACE 454	Econ Dev of Tropical Africa	
ECON 452	The Latin American Economies	
Total Hours		15

Agricultural & Consumer Economics: Public Policy & Law, BS

for the degree of Bachelor of Science Major in Agricultural & Consumer Economics, Public Policy & Law Concentration

department website: https://ace.illinois.edu/
department faculty: https://ace.illinois.edu/faculty (https://ace.illinois.edu/faculty/)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/)
college website: https://aces.illinois.edu/

Students in Public Policy and Law become expert in the economics of public policy in general and in its application to specific areas of interest. This concentration will expose students to the legal and institutional structures in which policies are developed, the analysis of the economics impacts of policies, and special circumstances of public policy and law pertaining to the environment, consumers, the agricultural sector, international relations, and other.

for the degree of Bachelor of Science Major in Agricultural & Consumer Economics, Public Policy & Law Concentration

Prescribed Core Courses including Campus General Education

Code	Title	Hours
Composition I and Speech [1]		
RHET 105 & CMN 101	Writing and Research and Public Speaking (or equivalent (see College Composition I requirement)	7
Advanced Composition [2]		
Select from campus-approved list		3-4
Foreign Language		
Coursework at or above the third level is required for graduation.		
Quantitative Reasoning I		
Select one of:		7-8
MATH 124	Finite Mathematics	
MATH 125	Elementary Linear Algebra	
MATH 231	Calculus II	
Select one of:		
MATH 220	Calculus	
MATH 221	Calculus I	
MATH 234	Calculus for Business I	
Quantitative Reasoning II		**6**
ACE 262	Applied Statistical Methods and Data Analytics I	
ACE 264	Applied Statistical Methods & Data Analytics 2	
Humanities and the Arts		
Selected from campus approved list.		6
Natural Sciences and Technology		
Selected from campus approved list.		6
Social and Behavioral Sciences		
Selected from campus approved list.		6
Cultural Studies		
Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists.		9
ACES Prescribed		
ACES 101	Contemporary Issues in ACES (for freshmen only)	2
Department Requirements		
Minimum Hours in the College of ACES of which 20 must be in the Department of ACE		35
Minimum of two 400-level courses in ACE		6
ACE 100	Introduction to Applied Microeconomics [1]	4
ACE 161	Microcomputer Applications	3
or CS 105	Intro Computing: Non-Tech	
ACE 300	Intermediate Applied Microeconomics [2]	3
ACE 341	Issues&Careers in Applied Econ	1 or 2
ACCY 201	Accounting and Accountancy I	3
ECON 103	Macroeconomic Principles	3
At least 3 hours of credit for study abroad or one international course selected from:		3-4
ACE 435	Global Agribusiness Management	
ACE 436	International Business Immersion	
ACE 451	Agriculture in Intl Dev	
ACE 452	The Latin American Economies	
ACE 454	Econ Dev of Tropical Africa	
ACE 455	International Trade in Food and Agriculture	
Required Concentration		**15-27**
Concentration prescribed courses. See specific requirements for the concentration listed below.		
Total Hours		**126**

1 *Requirement must be satisfied by end of first year.*

2 *Students are encouraged to complete this requirement prior to the seventh semester.*

Code	Title	Hours
Required for the Public Policy and Law Concentration in Addition to Department Requirements		
PS 220	Intro to Public Policy	3
ECON 411	Public Sector Economics	3
Select one of the following:		3
ACE 210	Environmental Economics	
ACE 251	The World Food Economy	
ACE 255	Economics of Food and Environmental Justice	
ACE 270	Consumer Economics	
Select one of the following:		3
ACE 306	Food Law	
ACE 403	Agricultural Law	
ACE 406	Environmental Law	
ECON 484	Law and Economics	
Select three of the following: (excluding courses taken to meet above “choose one” requirement)		9
ACE 306	Food Law	
ACE 310	Natural Resource Economics	
ACE 403	Agricultural Law	
ACE 406	Environmental Law	
ACE 410	Energy Economics	
ACE 411	Environment and Development	
ACE 451	Agriculture in Intl Dev	
ACE 454	Econ Dev of Tropical Africa	
ACE 455	International Trade in Food and Agriculture	
ACE 456	Agr and Food Policies	
ACE 471	Consumer Economic Policy	
ACE 474	Economics of Consumption	
ACE 476	Behavioral Economics and Financial Decision Making	
Total Hours		21

Learning Outcomes: Agricultural & Consumer Economics, BS

Learning Outcomes for the degree of Bachelor of Science Major in Agricultural & Consumer Economics

1. ACE students will acquire broad and deep knowledge of Agricultural and Consumer Economics.
2. ACE students will develop a critical and reflective orientation toward global systems (such as natural, environmental, social, cultural, economic, and political) and cultural differences (such as race, indigeneity, gender, class, sexuality, language, and disability).
3. ACE students will develop critical thinking and problem solving skills.
4. ACE students will develop their ability to communicate in a variety of settings.
5. ACE students will build and sustain productive relationships to be effective leaders who can respond to civic and social challenges at local, national, and global levels, creating positive change in their communities.

Agricultural Leadership, Education, & Communications, BS

for the degree of Bachelor of Science Major in Agricultural Leadership, Education, & Communications

department website: https://aged.illinois.edu/
department faculty: https://aged.illinois.edu/directory (https://aged.illinois.edu/directory/)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college website: https://aces.illinois.edu/ (https://engineering.illinois.edu/)

Students pursuing the Agricultural Leadership, Education, & Communications, BS (p. 40) select from four concentrations:

- Agricultural Communications - Advertising (p. 40)
- Agricultural Communications - Journalism (p. 42)
- Agricultural Education (p. 45)
- Organizational & Community Leadership (p. 46)

The Bachelor of Science with a Major in Agricultural Leadership, Education, & Communications

Agricultural Leadership, Education, & Communications: Agricultural Communications - Advertising, BS

for the degree of Bachelor of Science Major in Agricultural Leadership, Education, & Communications, Agricultural Communications - Advertising

department website: https://agcomm.illinois.edu/
department faculty: https://agcomm.illinois.edu/faculty-staff (https://agcomm.illinois.edu/faculty-staff/)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college website: https://aces.illinois.edu/ (https://engineering.illinois.edu/)

Students pursuing the Agricultural Leadership, Education, & Communications, BS (p. 40) select from four concentrations:

- Agricultural Communications - Advertising (p. 40)
- Agricultural Communications - Journalism (p. 42)
- Agricultural Education (p. 45)
- Organizational & Community Leadership (p. 46)

The Bachelor of Science with a Major in Agricultural Leadership, Education, & Communications

for the degree of Bachelor of Science Major in Agricultural Leadership, Education, & Communications, Agricultural Communications - Advertising

General Education Requirements

Code	Title	Hours
Composition I and Speech		
Select one of the following:		6-7
RHET 105 & CMN 101	Writing and Research and Public Speaking	
OR		
CMN 111 & CMN 112	Oral & Written Comm I and Oral & Written Comm II	
Advanced Composition		
AGCM 220	Communicating Agriculture	
Western Cultures		
Select from campus approved list.		3
Non-Western Cultures		
Select from campus approved list.		3
US Minority Cultures		
LEAD 340	Leadership Ethics & Society: Addressing Contemporary Challenges	3
Foreign Language		
Coursework at or above the third level is required for graduation.		
Quantitative Reasoning I		
Select one of the following:		3-4
ACE 261	Applied Statistical Methods	
CPSC 241	Intro to Applied Statistics	
ECON 202	Economic Statistics I	
PSYC 235	Intro to Statistics	
SOC 280	Intro to Social Statistics	
SOCW 225	Social Work Statistics	
STAT 100	Statistics	
Quantitative Reasoning II		
AGED Choose from:		3-5
MATH 124	Finite Mathematics	
MATH 220	Calculus	
MATH 221	Calculus I	
MATH 234	Calculus for Business I	
AGCM/LEAD choose from campus QRII list		
Natural Sciences and Technology - Physical Sciences		
Select one from the following:		3-4
ATMS 100	Introduction to Meteorology	

ATMS 120	Severe and Hazardous Weather	
ATMS 140	Climate and Global Change	
CHEM 101	Introductory Chemistry	
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	
ENVS 101	Introduction to Energy Sources	
ESE 117	The Oceans	
ESE 118	Natural Disasters	
GEOL 107	Physical Geology	
PHYS 101	College Physics: Mech & Heat	
Natural Sciences & Technology - Life Sciences		
Select one from the following:		3-4
ANSC 207	The Science of Pets and How to Care for Them	
ANTH 249	Evolution and Human Disease	
CPSC 112	Introduction to Crop Sciences	
CPSC 113	Environment, Agric, & Society	
FSHN 120	Contemporary Nutrition	
IB 103	Introduction to Plant Biology	
IB 105	Environmental Biology	
MCB 100 & MCB 101	Introductory Microbiology and Intro Microbiology Laboratory	
Humanities and the Arts		
Select from campus approved list.		6
Social and Behavioral Sciences		**7**
PSYC 100	Intro Psych	4
And Select one course from the following: [1]		
ACE 100	Introduction to Applied Microeconomics	
ECON 102	Microeconomic Principles	
PS 101	Intro to US Gov & Pol	
ACES Required		
ACES 101	Contemporary Issues in ACES	2
Major Requirements		
ALEC 110	Introduction to Agricultural Leadership, Education and Communications	3
ALEC 451	Professional Development in ALEC	2
Required Concentration (choose one):		
Agricultural Communications - Advertising		
Agricultural Communications - Journalism		
Agricultural Education		
Organizational & Community Leadership		
Electives		
Electives to bring total to 126 hours		
Total Hours:		**126**

[1] *Students in the Agricultural Education Concentration must select from ACE 100 or ECON 102.*

Agricultural Communications - Advertising Concentration:

Code	Title	Hours
AGCM 320	Public Information Campaigns	4
JOUR 200	Introduction to Journalism	3
ADV 150	Introduction to Advertising	3
ADV 281	Advertising Research Methods	3
ADV 283	Advertising and Brand Strategy	3
ADV 284	Consumer Insight	3
Select three of the following:		9
ADV 390	Content Creation	
ADV 409	Media Entrepreneurship	
ADV 460	Innovation in Advertising	
ADV 483	Audience Analysis	
Select three of the following:		8-12
AGCM 230	Agricultural and Environmental Photography	
AGCM 250	Visual Principles for Ag Comm	
AGCM 270	Ag Sales and Persuasive Communication	
AGCM 315	Emerging Media	
AGCM 330	Environmental Communications	
AGCM 398	Undergraduate Seminar [1]	
AGCM 430	Comm in Env Social Movements	
ALEC 293	Communications Internship	
LEAD 260	Foundations of Leadership	
Students must also complete the ACES Minor in Food and Environmental Systems		18

[1] *ALEC 293 and AGCM 398 must be taken at 3 hours to meet this requirement.*

For the ACES Minor in Food & Environmental Systems

Required Courses for the Food and Environmental Systems Minor

Code	Title	Hours
ACES 102	Intro Sustainable Food Systems	3
FSHN 101	The Science of Food and How it Relates to You	3
NRES 100	Fundamentals of Env Sci	3
Select a minimum of three hours from the following introductory level courses:		3
ANSC 100	Intro to Animal Sciences	
ANSC 101	Contemporary Animal Issues	
ANSC 110	Life With Animals and Biotech	
ANSC 223	Animal Nutrition	
ANSC 224	Animal Reproduction and Growth	
ANSC 250	Companion Animals in Society	
ACE 100	Introduction to Applied Microeconomics	
ACE 210	Environmental Economics	
ACE 222	Agricultural Marketing	
ACE 231	Food and Agribusiness Mgt	
ACE 232	Farm Management	
ACE 251	The World Food Economy	
CPSC 112	Introduction to Crop Sciences	
CPSC 116	The Global Food Production Web	
CPSC 226		
FSHN 120 or FSHN 220	Contemporary Nutrition Principles of Nutrition	
FSHN 232	Science of Food Preparation	
FSHN 260	Raw Materials for Processing	
HORT 105	Vegetable Gardening	

HORT 106	The Sustainable Home Garden	
NRES 109	Global Environmental Issues	
NRES 201	Introductory Soils	
NRES 219	Applied Ecology	
NRES 287	Environment and Society	
PLPA 204		
TSM 100	Technical Systems in Agr	
Select a minimum of six hours from the following advanced level courses:		6
ACE 306	Food Law	
ACE 310	Natural Resource Economics	
ACE 346	Tax Policy and Finan Planning	
ACE 403	Agricultural Law	
ACE 406	Environmental Law	
ACE 411	Environment and Development	
ACE 430	Food Marketing	
ACE 431	Agri-food Strategic Management	
ACE 432	Advanced Farm Management	
ACE 435	Global Agribusiness Management	
ACE 436	International Business Immersion	
ACE 451	Agriculture in Intl Dev	
ACE 456	Agr and Food Policies	
ANSC 305	Human Animal Interactions	
ANSC 306	Equine Science	
ANSC 309	Meat Production and Marketing	
ANSC 322	Livestock Feeds and Feeding	
ANSC 363	Behavior of Domestic Animals	
ANSC 400	Dairy Herd Management	
ANSC 401	Beef Production	
ANSC 402	Sheep and Goat Production	
ANSC 403	Pork Production	
ANSC 404	Poultry Science	
ANSC 405	Advanced Dairy Management	
ANSC 406	Zoo Animal Conservation Sci	
ANSC 407	Animal Shelter Management	
ANSC 409	Meat Science	
ANSC 422	Companion Animal Nutrition	
ANSC 423	Advanced Dairy Nutrition	
ANSC 431	Advanced Reproductive Biology	
ANSC 438	Lactation Biology	
ANSC 444	Applied Animal Genetics	
ANSC 446	Population Genetics	
ANSC 450	Comparative Immunobiology	
ANSC 451	Microbes and the Anim Indust	
ANSC 452	Animal Growth and Development	
ANSC 467	Applied Animal Ecology	
CPSC 407	Diseases of Field Crops	
CPSC 418	Crop Growth and Management	
CPSC 431	Plants and Global Change	
FSHN 302	Sensory Evaluation of Foods	
FSHN 322	Nutrition and the Life Cycle	
FSHN 425	Food Marketing	
FSHN 428	Community Nutrition	
NRES 325	Natural Resource Policy Mgmt	
NRES 330	Environmental Communications [1]	
NRES 348	Fish and Wildlife Ecology	
NRES 370	Environmental Sustainability	
NRES 409	Fishery Ecol and Conservation	
NRES 419	Env and Plant Ecosystems	
NRES 420	Restoration Ecology	
NRES 430	Comm in Env Social Movements [1]	
NRES 431	Plants and Global Change	
NRES 474	Soil and Water Conservation	
NRES 488	Soil Fertility and Fertilizers	
PLPA 407		
TSM 311	Humanity in the Food Web	
Total Hours		18

[1] Theses courses may only be used to satisfy the requirements of the major in Ag Communications or the Food and Environmental Systems minor, but not both.

Agricultural Leadership, Education, & Communications: Agricultural Communications - Journalism, BS

for the degree of Bachelor of Science Major in Agricultural Leadership, Education, & Communications, Agricultural Communications - Journalism concentration

department website: https://agcomm.illinois.edu/
department faculty: https://agcomm.illinois.edu/faculty-staff (https://agcomm.illinois.edu/faculty-staff/)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college website: https://aces.illinois.edu/ (https://engineering.illinois.edu/)

Students pursuing the Agricultural Leadership, Education, & Communications, BS (p. 40) select from four concentrations:

- Agricultural Communications - Advertising (p. 40)
- Agricultural Communications - Journalism (p. 42)
- Agricultural Education (p. 45)
- Organizational & Community Leadership (p. 46)

The Bachelor of Science with a Major in Agricultural Leadership, Education, & Communications

for the degree of Bachelor of Science Major in Agricultural Leadership, Education, & Communications, Agricultural Communications - Journalism concentration

General Education Requirements

Code	Title	Hours
Composition I and Speech		
Select one of the following:		6-7
RHET 105 & CMN 101	Writing and Research and Public Speaking	
OR		
CMN 111 & CMN 112	Oral & Written Comm I and Oral & Written Comm II	
Advanced Composition		
AGCM 220	Communicating Agriculture	
Western Cultures		
Select from campus approved list.		3
Non-Western Cultures		
Select from campus approved list.		3
US Minority Cultures		
LEAD 340	Leadership Ethics & Society: Addressing Contemporary Challenges	3
Foreign Language		
Coursework at or above the third level is required for graduation.		
Quantitative Reasoning I		
Select one of the following:		3-4
ACE 261	Applied Statistical Methods	
CPSC 241	Intro to Applied Statistics	
ECON 202	Economic Statistics I	
PSYC 235	Intro to Statistics	
SOC 280	Intro to Social Statistics	
SOCW 225	Social Work Statistics	
STAT 100	Statistics	
Quantitative Reasoning II		
AGED Choose from:		3-5
MATH 124	Finite Mathematics	
MATH 220	Calculus	
MATH 221	Calculus I	
MATH 234	Calculus for Business I	
AGCM/LEAD choose from campus QRII list		
Natural Sciences and Technology - Physical Sciences		
Select one from the following:		3-4
ATMS 100	Introduction to Meteorology	
ATMS 120	Severe and Hazardous Weather	
ATMS 140	Climate and Global Change	
CHEM 101	Introductory Chemistry	
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	
ENVS 101	Introduction to Energy Sources	
ESE 117	The Oceans	
ESE 118	Natural Disasters	
GEOL 107	Physical Geology	
PHYS 101	College Physics: Mech & Heat	
Natural Sciences & Technology - Life Sciences		
Select one from the following:		3-4
ANSC 207	The Science of Pets and How to Care for Them	
ANTH 249	Evolution and Human Disease	
CPSC 112	Introduction to Crop Sciences	
CPSC 113	Environment, Agric, & Society	
FSHN 120	Contemporary Nutrition	
IB 103	Introduction to Plant Biology	
IB 105	Environmental Biology	
MCB 100 & MCB 101	Introductory Microbiology and Intro Microbiology Laboratory	
Humanities and the Arts		
Select from campus approved list.		6
Social and Behavioral Sciences		**7**
PSYC 100	Intro Psych	4
And Select one course from the following: [1]		
ACE 100	Introduction to Applied Microeconomics	
ECON 102	Microeconomic Principles	
PS 101	Intro to US Gov & Pol	
ACES Required		
ACES 101	Contemporary Issues in ACES	2
Major Requirements		
ALEC 110	Introduction to Agricultural Leadership, Education and Communications	3
ALEC 451	Professional Development in ALEC	2
Required Concentration (choose one):		
Agricultural Communications - Advertising		
Agricultural Communications - Journalism		
Agricultural Education		
Organizational & Community Leadership		
Electives		
Electives to bring total to 126 hours		
Total Hours:		**126**

[1] *Students in the Agricultural Education Concentration must select from ACE 100 or ECON 102.*

Code	Title	Hours
AGCM 320	Public Information Campaigns	4
JOUR 200	Introduction to Journalism	3
JOUR 210	Newsgathering Across Platforms	4
JOUR 215	Multimedia Reporting	4
JOUR 311	Media Law	3
Select three of the following:		12
JOUR 315	Adv Public Affairs Reporting	
JOUR 335	Audio Journalism	
JOUR 340	Video Reporting & Storytelling	
JOUR 425	Multimedia Editing and Design	
JOUR 445	Video Storytelling 2-Producing	
Select three of the following:		8-12
AGCM 230	Agricultural and Environmental Photography	
AGCM 250	Visual Principles for Ag Comm	
AGCM 270	Ag Sales and Persuasive Communication	
AGCM 315	Emerging Media	

AGCM 330	Environmental Communications	
AGCM 398	Undergraduate Seminar [1]	
AGCM 430	Comm in Env Social Movements	
ALEC 293	Communications Internship	
Students must also complete the ACES Minor in Food and Environmental Systems		18

[1] ALEC 293 *and* AGCM 398 *must be taken for at least 3 hours to meet this requirement.*

For the ACES Minor in Food & Environmental Systems

Required Courses for the Food and Environmental Systems Minor

Code	Title	Hours
ACES 102	Intro Sustainable Food Systems	3
FSHN 101	The Science of Food and How it Relates to You	3
NRES 100	Fundamentals of Env Sci	3
Select a minimum of three hours from the following introductory level courses:		3
ANSC 100	Intro to Animal Sciences	
ANSC 101	Contemporary Animal Issues	
ANSC 110	Life With Animals and Biotech	
ANSC 223	Animal Nutrition	
ANSC 224	Animal Reproduction and Growth	
ANSC 250	Companion Animals in Society	
ACE 100	Introduction to Applied Microeconomics	
ACE 210	Environmental Economics	
ACE 222	Agricultural Marketing	
ACE 231	Food and Agribusiness Mgt	
ACE 232	Farm Management	
ACE 251	The World Food Economy	
CPSC 112	Introduction to Crop Sciences	
CPSC 116	The Global Food Production Web	
CPSC 226		
FSHN 120	Contemporary Nutrition	
or FSHN 220	Principles of Nutrition	
FSHN 232	Science of Food Preparation	
FSHN 260	Raw Materials for Processing	
HORT 105	Vegetable Gardening	
HORT 106	The Sustainable Home Garden	
NRES 109	Global Environmental Issues	
NRES 201	Introductory Soils	
NRES 219	Applied Ecology	
NRES 287	Environment and Society	
PLPA 204		
TSM 100	Technical Systems in Agr	
Select a minimum of six hours from the following advanced level courses:		6
ACE 306	Food Law	
ACE 310	Natural Resource Economics	
ACE 346	Tax Policy and Finan Planning	
ACE 403	Agricultural Law	
ACE 406	Environmental Law	
ACE 411	Environment and Development	
ACE 430	Food Marketing	
ACE 431	Agri-food Strategic Management	
ACE 432	Advanced Farm Management	
ACE 435	Global Agribusiness Management	
ACE 436	International Business Immersion	
ACE 451	Agriculture in Intl Dev	
ACE 456	Agr and Food Policies	
ANSC 305	Human Animal Interactions	
ANSC 306	Equine Science	
ANSC 309	Meat Production and Marketing	
ANSC 322	Livestock Feeds and Feeding	
ANSC 363	Behavior of Domestic Animals	
ANSC 400	Dairy Herd Management	
ANSC 401	Beef Production	
ANSC 402	Sheep and Goat Production	
ANSC 403	Pork Production	
ANSC 404	Poultry Science	
ANSC 405	Advanced Dairy Management	
ANSC 406	Zoo Animal Conservation Sci	
ANSC 407	Animal Shelter Management	
ANSC 409	Meat Science	
ANSC 422	Companion Animal Nutrition	
ANSC 423	Advanced Dairy Nutrition	
ANSC 431	Advanced Reproductive Biology	
ANSC 438	Lactation Biology	
ANSC 444	Applied Animal Genetics	
ANSC 446	Population Genetics	
ANSC 450	Comparative Immunobiology	
ANSC 451	Microbes and the Anim Indust	
ANSC 452	Animal Growth and Development	
ANSC 467	Applied Animal Ecology	
CPSC 407	Diseases of Field Crops	
CPSC 418	Crop Growth and Management	
CPSC 431	Plants and Global Change	
FSHN 302	Sensory Evaluation of Foods	
FSHN 322	Nutrition and the Life Cycle	
FSHN 425	Food Marketing	
FSHN 428	Community Nutrition	
NRES 325	Natural Resource Policy Mgmt	
NRES 330	Environmental Communications [1]	
NRES 348	Fish and Wildlife Ecology	
NRES 370	Environmental Sustainability	
NRES 409	Fishery Ecol and Conservation	
NRES 419	Env and Plant Ecosystems	
NRES 420	Restoration Ecology	
NRES 430	Comm in Env Social Movements [1]	
NRES 431	Plants and Global Change	
NRES 474	Soil and Water Conservation	
NRES 488	Soil Fertility and Fertilizers	
PLPA 407		

TSM 311	Humanity in the Food Web	
Total Hours		18

[1] Theses courses may only be used to satisfy the requirements of the major in Ag Communications or the Food and Environmental Systems minor, but not both.

Agricultural Leadership, Education, & Communications: Agricultural Education, BS

for the degree of Bachelor of Science Major in Agricultural Leadership, Education, & Communications, Agricultural Education concentration

department website: https://aged.illinois.edu/
department faculty: https://aged.illinois.edu/directory (https://aged.illinois.edu/directory/)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college website: https://aces.illinois.edu/ (https://engineering.illinois.edu/)

Students pursuing the Agricultural Leadership, Education, & Communications, BS (p. 40) select from four concentrations:

- Agricultural Communications - Advertising (p. 40)
- Agricultural Communications - Journalism (p. 42)
- Agricultural Education (p. 45)
- Organizational & Community Leadership (p. 46)

The Bachelor of Science with a Major in Agricultural Leadership, Education, & Communications

for the degree of Bachelor of Science Major in Agricultural Leadership, Education, & Communications, Agricultural Education concentration

General Education Requirements

Code	Title	Hours
Composition I and Speech		
Select one of the following:		6-7
RHET 105 & CMN 101	Writing and Research and Public Speaking	
OR		
CMN 111 & CMN 112	Oral & Written Comm I and Oral & Written Comm II	
Advanced Composition		
AGCM 220	Communicating Agriculture	
Western Cultures		
Select from campus approved list.		3
Non-Western Cultures		
Select from campus approved list.		3
US Minority Cultures		
LEAD 340	Leadership Ethics & Society: Addressing Contemporary Challenges	3
Foreign Language		
Coursework at or above the third level is required for graduation.		
Quantitative Reasoning I		
Select one of the following:		3-4
ACE 261	Applied Statistical Methods	
CPSC 241	Intro to Applied Statistics	
ECON 202	Economic Statistics I	
PSYC 235	Intro to Statistics	
SOC 280	Intro to Social Statistics	
SOCW 225	Social Work Statistics	
STAT 100	Statistics	
Quantitative Reasoning II		
AGED Choose from:		3-5
MATH 124	Finite Mathematics	
MATH 220	Calculus	
MATH 221	Calculus I	
MATH 234	Calculus for Business I	
AGCM/LEAD choose from campus QRII list		
Natural Sciences and Technology - Physical Sciences		
Select one from the following:		3-4
ATMS 100	Introduction to Meteorology	
ATMS 120	Severe and Hazardous Weather	
ATMS 140	Climate and Global Change	
CHEM 101	Introductory Chemistry	
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	
ENVS 101	Introduction to Energy Sources	
ESE 117	The Oceans	
ESE 118	Natural Disasters	
GEOL 107	Physical Geology	
PHYS 101	College Physics: Mech & Heat	
Natural Sciences & Technology - Life Sciences		
Select one from the following:		3-4
ANSC 207	The Science of Pets and How to Care for Them	
ANTH 249	Evolution and Human Disease	
CPSC 112	Introduction to Crop Sciences	
CPSC 113	Environment, Agric, & Society	
FSHN 120	Contemporary Nutrition	
IB 103	Introduction to Plant Biology	
IB 105	Environmental Biology	
MCB 100 & MCB 101	Introductory Microbiology and Intro Microbiology Laboratory	
Humanities and the Arts		
Select from campus approved list.		6
Social and Behavioral Sciences		**7**
PSYC 100	Intro Psych	4
And Select one course from the following: [1]		
ACE 100	Introduction to Applied Microeconomics	
ECON 102	Microeconomic Principles	
PS 101	Intro to US Gov & Pol	
ACES Required		

ACES 101	Contemporary Issues in ACES	2
Major Requirements		
ALEC 110	Introduction to Agricultural Leadership, Education and Communications	3
ALEC 451	Professional Development in ALEC	2
Required Concentration (choose one):		
Agricultural Communications - Advertising		
Agricultural Communications - Journalism		
Agricultural Education		
Organizational & Community Leadership		
Electives		
Electives to bring total to 126 hours		
Total Hours:		**126**

[1] *Students in the Agricultural Education Concentration must select from ACE 100 or ECON 102.*

Agricultural Education concentration:

Code	Title	Hours
AGED 220	Prog Del in Ag & Leadership Ed	3
AGED 250	Observation and Program Analys	4
AGED 350	Early Field Experience	3
AGED 420	Curr Design & Instruction	3
AGED 421	Teaching Strategies in AGED	3
AGED 450	Program Delivery and Eval	4
CI 473	Disciplinary Literacy	3
EPS 201	Foundations of Education	3-4
or EPS 202	Foundations of Education-ACP	
EPSY 201	Educational Psychology	3
SPED 405	General Educator's Role in Special Education	3
EDPR 442	Educational Practice in Secondary Education	8
Technical Subject Matter Required		
ANSC 100	Intro to Animal Sciences	4
ACE 232	Farm Management	3
HORT 100	Introduction to Horticulture	3
FSHN 101	The Science of Food and How it Relates to You	3
TSM 100	Technical Systems in Agr	3
Select one of the following:		3
LEAD 260	Foundations of Leadership	
LEAD 380	Leadership in Groups and Teams	

[1] *Via enrollment in AGED 250, students are concurrently enrolled in EDPR 203.*

Agricultural Leadership, Education, & Communications: Organizational & Community Leadership, BS

for the degree of Bachelor of Science Major in Agricultural Leadership, Education, & Communications, Organizational & Community Leadership concentration

department website: https://aged.illinois.edu/
department faculty: https://aged.illinois.edu/directory (https://aged.illinois.edu/directory/)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college website: https://aces.illinois.edu/ (https://engineering.illinois.edu/)

Students pursuing the Agricultural Leadership, Education, & Communications, BS (p. 40) select from four concentrations:

- Agricultural Communications - Advertising (p. 40)
- Agricultural Communications - Journalism (p. 42)
- Agricultural Education (p. 45)
- Organizational & Community Leadership (p. 46)

The Bachelor of Science with a Major in Agricultural Leadership, Education, & Communications

for the degree of Bachelor of Science Major in Agricultural Leadership, Education, & Communications, Organizational & Community Leadership concentration

General Education Requirements

Code	Title	Hours
Composition I and Speech		
Select one of the following:		6-7
RHET 105 & CMN 101	Writing and Research and Public Speaking	
OR		
CMN 111 & CMN 112	Oral & Written Comm I and Oral & Written Comm II	
Advanced Composition		
AGCM 220	Communicating Agriculture	
Western Cultures		
Select from campus approved list.		3
Non-Western Cultures		
Select from campus approved list.		3
US Minority Cultures		
LEAD 340	Leadership Ethics & Society: Addressing Contemporary Challenges	3
Foreign Language		
Coursework at or above the third level is required for graduation.		
Quantitative Reasoning I		
Select one of the following:		3-4

ACE 261	Applied Statistical Methods	
CPSC 241	Intro to Applied Statistics	
ECON 202	Economic Statistics I	
PSYC 235	Intro to Statistics	
SOC 280	Intro to Social Statistics	
SOCW 225	Social Work Statistics	
STAT 100	Statistics	
Quantitative Reasoning II		
AGED Choose from:		3-5
MATH 124	Finite Mathematics	
MATH 220	Calculus	
MATH 221	Calculus I	
MATH 234	Calculus for Business I	
AGCM/LEAD choose from campus QRII list		
Natural Sciences and Technology - Physical Sciences		
Select one from the following:		3-4
ATMS 100	Introduction to Meteorology	
ATMS 120	Severe and Hazardous Weather	
ATMS 140	Climate and Global Change	
CHEM 101	Introductory Chemistry	
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	
ENVS 101	Introduction to Energy Sources	
ESE 117	The Oceans	
ESE 118	Natural Disasters	
GEOL 107	Physical Geology	
PHYS 101	College Physics: Mech & Heat	
Natural Sciences & Technology - Life Sciences		
Select one from the following:		3-4
ANSC 207	The Science of Pets and How to Care for Them	
ANTH 249	Evolution and Human Disease	
CPSC 112	Introduction to Crop Sciences	
CPSC 113	Environment, Agric, & Society	
FSHN 120	Contemporary Nutrition	
IB 103	Introduction to Plant Biology	
IB 105	Environmental Biology	
MCB 100 & MCB 101	Introductory Microbiology and Intro Microbiology Laboratory	
Humanities and the Arts		
Select from campus approved list.		6
Social and Behavioral Sciences		**7**
PSYC 100	Intro Psych	4
And Select one course from the following: [1]		
ACE 100	Introduction to Applied Microeconomics	
ECON 102	Microeconomic Principles	
PS 101	Intro to US Gov & Pol	
ACES Required		
ACES 101	Contemporary Issues in ACES	2
Major Requirements		
ALEC 110	Introduction to Agricultural Leadership, Education and Communications	3
ALEC 451	Professional Development in ALEC	2
Required Concentration (choose one):		
Agricultural Communications - Advertising		
Agricultural Communications - Journalism		
Agricultural Education		
Organizational & Community Leadership		
Electives		
Electives to bring total to 126 hours		
Total Hours:		**126**

[1] *Students in the Agricultural Education Concentration must select from ACE 100 or ECON 102.*

Organizational & Community Leadership concentration

Code	Title	Hours
ALEC 393	Internship in Agricultural Leadership, Education and Communications	6
EPSY 201	Educational Psychology	3
LEAD 230	Leadership Communications	3
LEAD 260	Foundations of Leadership	3
LEAD 320	Training Needs Assessment	3
LEAD 321	Training and Development	3
LEAD 380	Leadership in Groups and Teams	3
LEAD 360	Advanced Leadership Studies	3
LEAD 480	Collaborative Leadership	3
Select four from the following:		12-16
ACE 222	Agricultural Marketing	
ACE 231	Food and Agribusiness Mgt	
ACE 255	Economics of Food and Environmental Justice	
AGCM 270	Ag Sales and Persuasive Communication	
ANSC 100	Intro to Animal Sciences	
CMN 250	Social Movement Communication	
EPSY 202	Exploring Cultural Diversity	
FSHN 101	The Science of Food and How it Relates to You	
FSHN 120	Contemporary Nutrition	
HDFS 105	Intro to Human Development	
HDFS 310	Adult Development	
HDFS 405	Adolescent Development	
HORT 100	Introduction to Horticulture	
PSYC 245	Industrial Org Psych	
SOCW 321	Social Entre & Social Change	

Learning Outcomes: Agricultural Leadership, Education, & Communications, BS

Learning Outcomes for the degree of Bachelor of Science Major in Agricultural Leadership, Education, & Communications

Communications

The faculty identified three major categories of student learning outcomes that entail awareness, understanding, and application of the

following: (A) food and environmental systems, (B) the role, nature, and context of agricultural journalism and communications, and (C) practices and skills in agricultural journalism and communications.

A1: Awareness, understanding, and application of knowledge about food and environmental systems (achieved through courses required in the mandatory Food and Environmental Systems minor)

1. Contemporary issues in the human, food, and natural resource systems
2. Introduction to the fundamentals of modern crop, livestock and other agricultural production systems, including future challenges and opportunities for addressing world food needs
3. Critical systems thinking and collaborative analysis across multiple disciplines involved in the food, feed, fiber, renewable energy, and rural complex
4. Evolution of the food system and overview of food in relation to nutrition, health, safety, processing, regulations, and other dimensions
5. Introduction to the environmental sciences and current environmental issues in relation to population growth, world food supplies, agriculture, water use, conservation, climate change, and other aspects
6. Relationships between humans and the natural systems that contain our air, water, energy, and biotic and food sources.

B1: Awareness, understanding, and application of knowledge about the role, nature, and context of agricultural journalism and communications (achieved through Agricultural Communications courses)

1. Scope, scale, mission/role, and impacts of communications within agriculture, including the rural-urban dimensions of it, locally to internationally
2. History and development of agricultural information systems and services in the U.S. and beyond
3. Current agricultural communications systems and services in the U.S., including those involving new and emerging media
4. Availability and sources of agricultural communications research, including current types of research issues being addressed in various sectors of this field
5. Concept of information flow and knowledge management for decision making that involves agriculture, broadly defined
6. Audiences/publics for agricultural journalism and communications within the food complex and beyond
7. Theories and conceptual foundations for agricultural journalism and communications
8. Trends, forces for change, and opportunities in agricultural journalism and communications, including fronts for innovation
9. Contemporary issues in agricultural journalism and communications in the U.S. and beyond
10. International and intercultural dimensions of communications in agricultural/rural development and sustainability, including elements of intercultural sensitivity
11. Legal and ethical issues in agricultural journalism and communications
12. Role of the agricultural communicator, including emphasis on the concepts of joint problem solving and the honest broker perspective. Also, current and emerging fields of professional activity in agricultural communications, broadly defined.

B2: Awareness, understanding, and application of knowledge about the role, nature, and context of agricultural journalism and communications (achieved through College of Media courses)

1. Conceptual frameworks for creating multimedia journalism content
2. Theories of freedom of expression, the legal doctrines of greatest concern to mass communicators, and contemporary issues related to free speech and press, including libel, copyright, and news gathering in the digital age
3. Introduction to the profession of advertising
4. How advertising and journalism relate to society in cultural, social, ethical, and regulatory contexts
5. Theories of persuasion, advertising, and marketing

C1: Awareness, understanding, and application of practices and skills in agricultural journalism and communications (achieved through Agricultural Communications courses)

1. Writing and editing in varied settings and for varied purposes, including science writing related to the dimensions of agriculture
2. Coverage and reporting of news, features, and research related to agriculture in print, broadcast, and online media, including risk and crisis communications
3. Communication materials related to agriculture—planning and management, editing, design, layout, production, distribution, and evaluation in print and electronic formats
4. Media analysis and selection in settings related to agriculture, encompassing all means by which humans interact and including all channels and media, earliest to newest
5. Communications planning and management in non-commercial settings (such as Extension and social marketing) related to agriculture
6. Marketing communications related to agriculture— settings, roles, principles, and skills in advertising, promotion, public relations, and sales
7. Visual communications (photography, graphic design, videography) related to agriculture —skills in planning, selection, composition, digital editing, and design
8. Production and presentation of programming in agriculture-related radio and television broadcasting, and other audio/video channels
9. Use of current information and communications technologies (ICT) and software being employed in relation to the varied dimensions of agriculture

C2: Awareness, understanding, and application of practices and skills in agricultural journalism and communications (achieved through College of Media courses)

1. Introductory journalism reporting and writing across print, broadcast, and digital platforms
2. Fundamentals of digital photography, video, audio, and multimedia production as applied in journalism.
3. Introductory practices in advertising and integrated promotion—account planning, creatives, audience analysis, consumer behavior, sales promotion, media research, and interactive advertising
4. Research methods in advertising, including qualitative and quantitative techniques commonly used in the advertising industry
5. Insights about consumer knowledge, interests, attitudes, and decision making

6. Developing and applying brand strategies using theories of advertising and marketing, as well as techniques for persuasive presentation

Leadership & Education

1. Communicate in-depth understanding of agricultural systems to provide meaningful educational experiences for learners ranging from PreK through adult.
2. Assess the human capital needs of a group, organization, or community and engage with stakeholders to formulate a solution to an identified need.
3. Apply theories of leadership and learning to plan and deliver positive educational experiences in diverse instructional settings.
4. Demonstrate principles of transformative leadership in the context of a diverse group.

Agricultural Leadership & Science Education, BS

for the degree of Bachelor of Science Major in Agricultural Leadership & Science Education

program website: https://aged.illinois.edu/
program faculty: Agricultural Education Faculty (https://aged.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college website: https://aces.illinois.edu/ (https://engineering.illinois.edu/)

Students pursuing this major select from two concentrations:

- Agricultural Leadership Education (p. 49)
- Agricultural Science Education (p. 50)

The Bachelor of Science with a Major in Agricultural Leadership & Science Education curriculum prepares students for positions requiring expertise in formal and non-formal education. Examples include teaching agriculture in the public schools; cooperative extension work; training and program development; and other education-related positions in agricultural and environmental agencies and businesses.

A minimum of 126 hours is required for graduation.

Agricultural Leadership & Science Education: Agricultural Leadership Education, BS

for the degree of Bachelor of Science Major in Agricultural Leadership & Science Education, Agricultural Leadership Education concentration

program website: https://aged.illinois.edu/
program faculty: Agricultural Education Faculty (https://aged.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college website: https://aces.illinois.edu/ (https://engineering.illinois.edu/)

The Bachelor of Science with a Major in Agricultural Leadership & Science Education curriculum prepares students for positions requiring expertise in formal and non-formal education. Examples include teaching agriculture in the public schools; cooperative extension work; training and program development; and other education-related positions in agricultural and environmental agencies and businesses.

A minimum of 126 hours is required for graduation. Students pursuing this major select from two concentrations: agricultural leadership education or agricultural science education. Students completing the agricultural science education concentration will be eligible for Illinois teacher certification in agricultural education, and will have instruction in key pedagogical areas as well as agriculture. For teacher education requirements applicable to all curricula, see the Council on Teacher Education (www.cote.illinois.edu/ (http://www.cote.illinois.edu/)).

The **Agricultural Leadership Education concentration** prepares students for educational leadership, training and outreach positions in agricultural, extension, community and governmental agencies. Coursework focuses on designing educational/training programs, making professional presentations, leadership development, teaching/training methods and interpersonal communications. A 4 to 12-week business/agency summer internship is required. The curriculum provides the flexibility for students to specialize in a chosen area of agriculture.

for the degree of Bachelor of Science Major in Agricultural Leadership & Science Education, Agricultural Leadership Education concentration

Prescribed Courses including Campus General Education

Code	Title	Hours
Composition I and Speech		
Select one of the following:		6-7
RHET 105 & CMN 101	Writing and Research and Public Speaking (or equivalent (see college Composition I requirement))	
CMN 111 & CMN 112	Oral & Written Comm I and Oral & Written Comm II	
Advanced Composition		
Select from campus approved list. AGED 230 is recommended.		3-4
Cultural Studies		
Select one Western cultures course, one non-Western cultures course and one U.S. minority cultures course from campus approved lists.		9
Quantitative Reasoning I		
Select one of the following:		3-5
MATH 124	Finite Mathematics	
MATH 220	Calculus	
MATH 221	Calculus I	
MATH 234	Calculus for Business I	

Quantitative Reasoning II		
Select one of the following:		3-4
ACE 261	Applied Statistical Methods	
CPSC 241	Intro to Applied Statistics	
ECON 202	Economic Statistics I	
PSYC 235	Intro to Statistics	
SOC 280	Intro to Social Statistics	
STAT 100	Statistics	
Natural Sciences and Technology		
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	4
Physical science - select from campus approved list.		3-4
CPSC 112	Introduction to Crop Sciences	4
Humanities and the Arts		
Select from campus approved list.		6
Social and Behavioral Sciences		
ACE 100	Introduction to Applied Microeconomics	4
PSYC 100	Intro Psych	4
ACES Required		
ACES 101	Contemporary Issues in ACES	2
Agricultural Leadership and Science Education Required		
AGED 100	Intro to Ag & Leadership Ed [1]	2
AGED 220	Prog Del in Ag & Leadership Ed	3
AGED 230		3
AGED 421	Teaching Strategies in AGED	3
Required Concentration		**42-55**
Total Hours		**126**

[1] *Not required for transfer students.*

Code	Title	Hours
Agricultural Leadership Education Concentration Required Hours:		**42-49**
ACE 231	Food and Agribusiness Mgt	3
ANSC 100	Intro to Animal Sciences	4
FSHN 101	The Science of Food and How it Relates to You	3
or FSHN 120	Contemporary Nutrition	
HORT 100	Introduction to Horticulture	3
AGED 260		3
AGED 280		2
AGED 293	Ag Leadership Internship	1-6
AGED 300		4
AGED 310		2
AGED 340		3
AGED 380		
AGED 451		2
AGED 480		3-4
EPSY 201	Educational Psychology	3
Select one of the following:		3-4
AGED 360	Advanced Leadership Studies	
AGED 400		
AGED 430	Youth Development Programs	
AGED 490	Adult Learning Principles	
BADM 310	Mgmt and Organizational Beh	
PSYC 245	Industrial Org Psych	

Agricultural Leadership & Science Education: Agricultural Science Education, BS

for the degree of Bachelor of Science Major in Agricultural Leadership & Science Education, Agricultural Science Education concentration

program website: https://aged.illinois.edu/
program faculty: Agricultural Education Faculty (https://aged.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college website: https://aces.illinois.edu/ (https://engineering.illinois.edu/)

The Bachelor of Science with a Major in Agricultural Leadership & Science Education curriculum prepares students for positions requiring expertise in formal and non-formal education. Examples include teaching agriculture in the public schools; cooperative extension work; training and program development; and other education-related positions in agricultural and environmental agencies and businesses.

A minimum of 126 hours is required for graduation. Students pursuing this major select from two concentrations: agricultural leadership education or agricultural science education. Students completing the agricultural science education concentration will be eligible for Illinois teacher certification in agricultural education, and will have instruction in key pedagogical areas as well as agriculture. For teacher education requirements applicable to all curricula, see the Council on Teacher Education (www.cote.illinois.edu/ (http://www.cote.illinois.edu/)).

The **Agricultural Science Education** concentration prepares students to teach agricultural science, agribusiness, agricultural mechanics and horticulture in Illinois high schools. State of Illinois certification requirements include a minimum of 2,000 hours of employment experience in agriculture. Teacher certification students must maintain a 2.5 GPA or above to remain in good standing. Review procedures are provided by the Council on Teacher Education.

for the degree of Bachelor of Science Major in Agricultural Leadership & Science Education, Agricultural Science Education concentration

Prescribed Courses including Campus General Education

Code	Title	Hours
Composition I and Speech		
Select one of the following:		6-7
RHET 105 & CMN 101	Writing and Research and Public Speaking (or equivalent (see college Composition I requirement))	
CMN 111 & CMN 112	Oral & Written Comm I and Oral & Written Comm II	
Advanced Composition		

Select from campus approved list. AGED 230 is recommended.		3-4
Cultural Studies		
Select one Western cultures course, one non-Western cultures course and one U.S. minority cultures course from campus approved lists.		9
Quantitative Reasoning I		
Select one of the following:		3-5
MATH 124	Finite Mathematics	
MATH 220	Calculus	
MATH 221	Calculus I	
MATH 234	Calculus for Business I	
Quantitative Reasoning II		
Select one of the following:		3-4
ACE 261	Applied Statistical Methods	
CPSC 241	Intro to Applied Statistics	
ECON 202	Economic Statistics I	
PSYC 235	Intro to Statistics	
SOC 280	Intro to Social Statistics	
STAT 100	Statistics	
Natural Sciences and Technology		
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	4
Physical science - select from campus approved list.		3-4
CPSC 112	Introduction to Crop Sciences	4
Humanities and the Arts		
Select from campus approved list.		6
Social and Behavioral Sciences		
ACE 100	Introduction to Applied Microeconomics	4
PSYC 100	Intro Psych	4
ACES Required		
ACES 101	Contemporary Issues in ACES	2
Agricultural Leadership and Science Education Required		
AGED 100	Intro to Ag & Leadership Ed [1]	2
AGED 220	Prog Del in Ag & Leadership Ed	3
AGED 230		3
AGED 421	Teaching Strategies in AGED	3
Required Concentration		**42-55**
Total Hours		**126**

[1] *Not required for transfer students.*

Code	Title	Hours
Agricultural Science Education Concentration Required		**53-55**
AGED 250	Observation and Program Analys [2]	4
AGED 350	Early Field Experience	3
AGED 420	Curr Design & Instruction	3
AGED 450	Program Delivery and Eval	4
CI 473	Disciplinary Literacy	3
EPS 201	Foundations of Education	3-4
or EPS 202	Foundations of Education-ACP	
EPSY 201	Educational Psychology	3
SPED 405	General Educator's Role in Special Education	3
EDPR 442	Educational Practice in Secondary Education	8
Technical Subject Matter Required		
ANSC 100	Intro to Animal Sciences	4
ACE 232	Farm Management	3
HORT 100	Introduction to Horticulture	3
FSHN 101	The Science of Food and How it Relates to You	3
TSM 100	Technical Systems in Agr	3
Select one of the following:		3
AGED 260		
AGED 280		
AGED 340		
AGED 360	Advanced Leadership Studies	
AGED 380		
AGED 400		
AGED 430	Youth Development Programs	
AGED 490	Adult Learning Principles	

Learning Outcomes: Agricultural Leadership & Science Education, BS

Learning outcomes for the degree of Bachelor of Science Major in Agricultural Leadership & Science Education

1. Communicate in-depth understanding of agricultural systems to provide meaningful educational experiences for learners ranging from PreK through adult.
2. Assess the human capital needs of a group, organization, or community and engage with stakeholders to formulate a solution to an identified need.
3. Apply theories of leadership and learning to plan and deliver positive educational experiences in diverse instructional settings.
4. Demonstrate principles of transformative leadership in the context of a diverse group.

Animal Sciences, BS

for the degree of Bachelor of Science Major in Animal Sciences

department website: https://ansc.illinois.edu/
department faculty: Animal Sciences Faculty (https://ansc.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college website: https://aces.illinois.edu/

Students pursuing this major select one of three concentrations:

- Companion Animal and Equine Science Concentration (p. 52)
- Food Animal Production and Management Concentration (p. 53)
- Science, Pre-Veterinary and Medical Concentration (p. 55)

Animal Sciences: Companion & Equine Science, BS

for the degree of Bachelor of Science Major in Animal Sciences, Companion & Equine Science Concentration

department website: https://ansc.illinois.edu/
department faculty: Animal Sciences Faculty (https://ansc.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college website: https://aces.illinois.edu/

The companion animal and equine science concentration is designed for students intending to pursue a career in those industries generally not associated with traditional meat animal or dairy production. Students will take courses that prepare them for careers in specialized fields of animal care, animal health and animal well-being associated with zoos, kennels, research laboratories, and the racing industry.

for the degree of Bachelor of Science Major in Animal Sciences, Companion & Equine Science Concentration

Prescribed Courses including Campus General Education

Code	Title	Hours
Composition I and Speech		
RHET 105	Writing and Research (or equivalent) (see college Composition I requirement)	4
CMN 101	Public Speaking	3
Advanced Composition		
Select from campus approved list.		3-4
Cultural Studies		
Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists.		9
Foreign Language		
Coursework at or above the third level is required for graduation.		
Quantitative Reasoning I		
Select one of the following:		4-5
MATH 220	Calculus	
MATH 221	Calculus I	
MATH 234	Calculus for Business I	
Quantitative Reasoning II		
Select one of the following:		3-4
ACE 261	Applied Statistical Methods	
CPSC 241	Intro to Applied Statistics	
ECON 202	Economic Statistics I	
PSYC 235	Intro to Statistics	
STAT 100	Statistics	
SOC 280	Intro to Social Statistics	
Natural Sciences and Technology		
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	4
CHEM 104 & CHEM 105	General Chemistry II and General Chemistry Lab II	4
MCB 100 & MCB 101	Introductory Microbiology and Intro Microbiology Laboratory	5
Humanities and the Arts		
Courses selected from campus approved list		6
Social Sciences		
ECON 102	Microeconomic Principles	3
or ACE 100	Introduction to Applied Microeconomics	
Additional social or behavioral science course; cannot be an economics course.		3-4
ACES Required		
ACES 101	Contemporary Issues in ACES	2
Animal Sciences Required		
ANSC 100	Intro to Animal Sciences	4
ANSC 101	Contemporary Animal Issues	3
ANSC 103	Working With Farm Animals	2
ANSC 221	Cells, Metabolism and Genetics	3
ANSC 222	Anatomy and Physiology	3
ANSC 223	Animal Nutrition	3
ANSC 224	Animal Reproduction and Growth	4
ANSC 298	Undergraduate Seminar	1
ANSC 398	UG Experiential Learning [1]	1
ANSC 498	Integrating Animal Sciences	2

[1] ANSC 398 only fulfills the degree requirement when taken for a standard letter grade.

Code	Title	Hours
Companion Animal and Equine Science Concentration Required		
Choose one group: [1]		6
ANSC 250 & ANSC 307	Companion Animals in Society and Companion Animal Management	
or		
ANSC 206 & ANSC 306	Horse Management and Equine Science	
Select two of the following Applied Sciences courses: [1]		6
ANSC 201	Principles of Dairy Production	
ANSC 204	Intro Dairy Cattle Evaluation	
ANSC 205	World Animal Resources	
ANSC 206	Horse Management [1]	
ANSC 211	Breeding Animal Evaluation	
ANSC 219	Meat Technology	
ANSC 250	Companion Animals in Society [1]	
ANSC 301	Food Animal Production, Management, and Evaluation	
ANSC 305	Human Animal Interactions	
ANSC 306	Equine Science	
ANSC 307	Companion Animal Management [1]	
ANSC 309	Meat Production and Marketing	
ANSC 310	Meat Selection and Grading	
ANSC 312	Advanced Livestock Evaluation	
ANSC 313	Horse Appraisal	

ANSC 314	Adv Dairy Cattle Evaluation	
ANSC 322	Livestock Feeds and Feeding	
ANSC 370	Companion Animal Policy	
ANSC 400	Dairy Herd Management	
ANSC 401	Beef Production	
ANSC 402	Sheep and Goat Production	
ANSC 403	Pork Production	
ANSC 404	Poultry Science	
ANSC 405	Advanced Dairy Management	
ANSC 407	Animal Shelter Management	
ANSC 424	Pet Food & Feed Manufacturing	
ANSC 435	Milk Quality and Udder Health	
ANSC 437	Adv Reproductive Management	
ANSC 471	ANSC Leaders & Entrepreneurs	
Select two of the following Basic Sciences courses:		6
ANSC 251	Epidemics and Infectious Diseases	
ANSC 331	Biology of Reproduction	
ANSC 350	Cellular Metabolism in Animals	
ANSC 363	Behavior of Domestic Animals	
ANSC 366	Animal Behavior	
ANSC 406	Zoo Animal Conservation Sci	
ANSC 409	Meat Science	
ANSC 420	Ruminant Nutrition	
ANSC 421	Minerals and Vitamins	
ANSC 422	Companion Animal Nutrition	
ANSC 431	Advanced Reproductive Biology	
ANSC 438	Lactation Biology	
ANSC 440	Applied Statistical Methods I	
ANSC 441	Human Genetics	
ANSC 444	Applied Animal Genetics	
ANSC 445	Statistical Methods	
ANSC 446	Population Genetics	
ANSC 447	Advanced Genetics and Genomics	
ANSC 448	Math Modeling in Life Sciences	
ANSC 449	Biological Modeling	
ANSC 450	Comparative Immunobiology	
ANSC 451	Microbes and the Anim Indust	
ANSC 452	Animal Growth and Development	
ANSC 453	Stem Cell Biology	
ANSC 467	Applied Animal Ecology	
ANSC 509	Muscle Biology	
ANSC 520	Protein and Energy Nutrition	
ANSC 521	Regulation of Metabolism	
ANSC 522	Advanced Ruminant Nutrition	
ANSC 523	Techniques in Animal Nutrition	
ANSC 524	Nonruminant Nutrition Concepts	
ANSC 525	Topics in Nutrition Research	
ANSC 526	Adv Companion Animal Nutrition	
ANSC 533	Repro Physiology Lab Methods	
ANSC 541	Regression Analysis	
ANSC 542	Applied Bioinformatics	
ANSC 543	Bioinformatics	
ANSC 545	Statistical Genomics	
ANSC 554	Immunobiological Methods	
ANSC 561	Animal Stress Physiology	
Additional elective courses must be completed to yield at least 126 total Hours for graduation.		25-29
Total Hours		**126**

[1] ANSC 206, 250, 306 and 307 may NOT be used to meet more than one requirement.

Animal Sciences: Food Animal Production & Management, BS

for the degree of Bachelor of Science Major in Animal Sciences, Food Animal Production & Management concentration

department website: https://ansc.illinois.edu/
department faculty: Animal Sciences Faculty (https://ansc.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college website: https://aces.illinois.edu/

The Food Animal Production and Management Concentration is designed for students intending to pursue a career in animal care and management or one of the associated food production industries. It emphasizes the scientific disciplines and the application of technology involved in animal production and animal products, as well as providing the opportunity to enhance a student's practical knowledge through business courses.

for the degree of Bachelor of Science Major in Animal Sciences, Food Animal Production & Management concentration

Code	Title	Hours
Composition I and Speech		
RHET 105	Writing and Research (or equivalent) (see college Composition I requirement)	4
CMN 101	Public Speaking	3
Advanced Composition		
Select from campus approved list.		3-4
Cultural Studies		
Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists.		9
Foreign Language		
Coursework at or above the third level is required for graduation.		
Quantitative Reasoning I		
Select one of the following:		4-5
MATH 220	Calculus	
MATH 221	Calculus I	
MATH 234	Calculus for Business I	
Quantitative Reasoning II		
Select one of the following:		3-4
ACE 261	Applied Statistical Methods	

CPSC 241	Intro to Applied Statistics	
ECON 202	Economic Statistics I	
PSYC 235	Intro to Statistics	
STAT 100	Statistics	
SOC 280	Intro to Social Statistics	
Natural Sciences and Technology		
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	4
CHEM 104 & CHEM 105	General Chemistry II and General Chemistry Lab II	4
MCB 100 & MCB 101	Introductory Microbiology and Intro Microbiology Laboratory	5
Humanities and the Arts		
Courses selected from campus approved list		6
Social Sciences		
ECON 102	Microeconomic Principles	3
or ACE 100	Introduction to Applied Microeconomics	
Additional social or behavioral science course; cannot be an economics course.		3-4
ACES Required		
ACES 101	Contemporary Issues in ACES	2
Animal Sciences Required		
ANSC 100	Intro to Animal Sciences	4
ANSC 101	Contemporary Animal Issues	3
ANSC 103	Working With Farm Animals	2
ANSC 221	Cells, Metabolism and Genetics	3
ANSC 222	Anatomy and Physiology	3
ANSC 223	Animal Nutrition	3
ANSC 224	Animal Reproduction and Growth	4
ANSC 298	Undergraduate Seminar	1
ANSC 398	UG Experiential Learning [1]	1
ANSC 498	Integrating Animal Sciences	2

[1] ANSC 398 only fulfills the degree requirement when taken for a standard letter grade.

Code	Title	Hours
Food Animal Production and Management Concentration Required		
Select four of the following Applied Sciences courses:		12
ANSC 201	Principles of Dairy Production	
ANSC 204	Intro Dairy Cattle Evaluation	
ANSC 205	World Animal Resources	
ANSC 206	Horse Management	
ANSC 211	Breeding Animal Evaluation	
ANSC 219	Meat Technology	
ANSC 250	Companion Animals in Society	
ANSC 301	Food Animal Production, Management, and Evaluation	
ANSC 305	Human Animal Interactions	
ANSC 306	Equine Science	
ANSC 307	Companion Animal Management	
ANSC 309	Meat Production and Marketing	
ANSC 310	Meat Selection and Grading	
ANSC 312	Advanced Livestock Evaluation	
ANSC 313	Horse Appraisal	
ANSC 314	Adv Dairy Cattle Evaluation	
ANSC 322	Livestock Feeds and Feeding	
ANSC 370	Companion Animal Policy	
ANSC 400	Dairy Herd Management	
ANSC 401	Beef Production	
ANSC 402	Sheep and Goat Production	
ANSC 403	Pork Production	
ANSC 404	Poultry Science	
ANSC 405	Advanced Dairy Management	
ANSC 407	Animal Shelter Management	
ANSC 424	Pet Food & Feed Manufacturing	
ANSC 435	Milk Quality and Udder Health	
ANSC 437	Adv Reproductive Management	
ANSC 471	ANSC Leaders & Entrepreneurs	
Select two of the following Basic Sciences courses:		6
ANSC 251	Epidemics and Infectious Diseases	
ANSC 331	Biology of Reproduction	
ANSC 350	Cellular Metabolism in Animals	
ANSC 363	Behavior of Domestic Animals	
ANSC 366	Animal Behavior	
ANSC 406	Zoo Animal Conservation Sci	
ANSC 409	Meat Science	
ANSC 420	Ruminant Nutrition	
ANSC 421	Minerals and Vitamins	
ANSC 422	Companion Animal Nutrition	
ANSC 431	Advanced Reproductive Biology	
ANSC 438	Lactation Biology	
ANSC 440	Applied Statistical Methods I	
ANSC 441	Human Genetics	
ANSC 444	Applied Animal Genetics	
ANSC 445	Statistical Methods	
ANSC 446	Population Genetics	
ANSC 447	Advanced Genetics and Genomics	
ANSC 448	Math Modeling in Life Sciences	
ANSC 449	Biological Modeling	
ANSC 450	Comparative Immunobiology	
ANSC 451	Microbes and the Anim Indust	
ANSC 452	Animal Growth and Development	
ANSC 453	Stem Cell Biology	
ANSC 467	Applied Animal Ecology	
ANSC 509	Muscle Biology	
ANSC 520	Protein and Energy Nutrition	
ANSC 521	Regulation of Metabolism	
ANSC 522	Advanced Ruminant Nutrition	
ANSC 523	Techniques in Animal Nutrition	
ANSC 524	Nonruminant Nutrition Concepts	
ANSC 525	Topics in Nutrition Research	
ANSC 526	Adv Companion Animal Nutrition	
ANSC 533	Repro Physiology Lab Methods	
ANSC 541	Regression Analysis	

ANSC 542	Applied Bioinformatics	
ANSC 543	Bioinformatics	
ANSC 545	Statistical Genomics	
ANSC 554	Immunobiological Methods	
ANSC 561	Animal Stress Physiology	
Additional elective courses must be completed to yield at least 126 total Hours for graduation.		20-29
Total Hours		**126**

Animal Sciences: Science, Pre-Veterinary & Medical, BS

for the degree of Bachelor of Science Major in Animal Sciences, Science, Pre-Veterinary & Medical concentration

department website: https://ansc.illinois.edu/
department faculty: Animal Sciences Faculty (https://ansc.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college website: https://aces.illinois.edu/

The science and pre-veterinary medical concentration is specifically designed for students interested in graduate school, professional training, or technical positions after the undergraduate degree. It is intended to satisfy most entrance requirements to post-graduate programs and emphasizes basic science courses. The concentration enables a student to complete all of the pre-veterinary science requirements while working towards a B.S. degree.

for the degree of Bachelor of Science Major in Animal Sciences, Science, Pre-Veterinary & Medical concentration

Prescribed Courses including Campus General Education

Code	Title	Hours
Composition I and Speech		
RHET 105	Writing and Research (or equivalent) (see college Composition I requirement)	4
CMN 101	Public Speaking	3
Advanced Composition		
Select from campus approved list.		3-4
Cultural Studies		
Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists.		9
Foreign Language		
Coursework at or above the third level is required for graduation.		
Quantitative Reasoning I		
Select one of the following:		4-5
MATH 220	Calculus	
MATH 221	Calculus I	
MATH 234	Calculus for Business I	
Quantitative Reasoning II		
Select one of the following:		3-4
ACE 261	Applied Statistical Methods	
CPSC 241	Intro to Applied Statistics	
ECON 202	Economic Statistics I	
PSYC 235	Intro to Statistics	
STAT 100	Statistics	
SOC 280	Intro to Social Statistics	
Natural Sciences and Technology		
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	4
CHEM 104 & CHEM 105	General Chemistry II and General Chemistry Lab II	4
MCB 100 & MCB 101	Introductory Microbiology and Intro Microbiology Laboratory	5
Humanities and the Arts		
Courses selected from campus approved list		6
Social Sciences		
ECON 102	Microeconomic Principles	3
or ACE 100	Introduction to Applied Microeconomics	
Additional social or behavioral science course; cannot be an economics course.		3-4
ACES Required		
ACES 101	Contemporary Issues in ACES	2
Animal Sciences Required		
ANSC 100	Intro to Animal Sciences	4
ANSC 101	Contemporary Animal Issues	3
ANSC 103	Working With Farm Animals	2
ANSC 221	Cells, Metabolism and Genetics	3
ANSC 222	Anatomy and Physiology	3
ANSC 223	Animal Nutrition	3
ANSC 224	Animal Reproduction and Growth	4
ANSC 298	Undergraduate Seminar	1
ANSC 398	UG Experiential Learning [1]	1
ANSC 498	Integrating Animal Sciences	2

[1] ANSC 398 only fulfills the degree requirement when taken for a standard letter grade.

Code	Title	Hours
Science, Pre-Veterinary and Medical Concentration Required		
Select two of the following Applied Sciences courses:		6
ANSC 201	Principles of Dairy Production	
ANSC 204	Intro Dairy Cattle Evaluation	
ANSC 205	World Animal Resources	
ANSC 206	Horse Management	
ANSC 211	Breeding Animal Evaluation	
ANSC 219	Meat Technology	
ANSC 250	Companion Animals in Society	
ANSC 301	Food Animal Production, Management, and Evaluation	
ANSC 305	Human Animal Interactions	
ANSC 306	Equine Science	
ANSC 307	Companion Animal Management	
ANSC 309	Meat Production and Marketing	
ANSC 310	Meat Selection and Grading	

ANSC 312	Advanced Livestock Evaluation	
ANSC 313	Horse Appraisal	
ANSC 314	Adv Dairy Cattle Evaluation	
ANSC 322	Livestock Feeds and Feeding	
ANSC 370	Companion Animal Policy	
ANSC 400	Dairy Herd Management	
ANSC 401	Beef Production	
ANSC 402	Sheep and Goat Production	
ANSC 403	Pork Production	
ANSC 404	Poultry Science	
ANSC 405	Advanced Dairy Management	
ANSC 407	Animal Shelter Management	
ANSC 424	Pet Food & Feed Manufacturing	
ANSC 435	Milk Quality and Udder Health	
ANSC 437	Adv Reproductive Management	
ANSC 471	ANSC Leaders & Entrepreneurs	
Select four of the following Basic Sciences courses:		12
ANSC 251	Epidemics and Infectious Diseases	
ANSC 331	Biology of Reproduction	
ANSC 350	Cellular Metabolism in Animals	
ANSC 363	Behavior of Domestic Animals	
ANSC 366	Animal Behavior	
ANSC 406	Zoo Animal Conservation Sci	
ANSC 409	Meat Science	
ANSC 420	Ruminant Nutrition	
ANSC 421	Minerals and Vitamins	
ANSC 422	Companion Animal Nutrition	
ANSC 431	Advanced Reproductive Biology	
ANSC 438	Lactation Biology	
ANSC 440	Applied Statistical Methods I	
ANSC 441	Human Genetics	
ANSC 444	Applied Animal Genetics	
ANSC 445	Statistical Methods	
ANSC 446	Population Genetics	
ANSC 447	Advanced Genetics and Genomics	
ANSC 448	Math Modeling in Life Sciences	
ANSC 449	Biological Modeling	
ANSC 450	Comparative Immunobiology	
ANSC 451	Microbes and the Anim Indust	
ANSC 452	Animal Growth and Development	
ANSC 453	Stem Cell Biology	
ANSC 467	Applied Animal Ecology	
ANSC 509	Muscle Biology	
ANSC 520	Protein and Energy Nutrition	
ANSC 521	Regulation of Metabolism	
ANSC 522	Advanced Ruminant Nutrition	
ANSC 523	Techniques in Animal Nutrition	
ANSC 524	Nonruminant Nutrition Concepts	
ANSC 525	Topics in Nutrition Research	
ANSC 526	Adv Companion Animal Nutrition	
ANSC 533	Repro Physiology Lab Methods	
ANSC 541	Regression Analysis	
ANSC 542	Applied Bioinformatics	
ANSC 543	Bioinformatics	
ANSC 545	Statistical Genomics	
ANSC 554	Immunobiological Methods	
ANSC 561	Animal Stress Physiology	
Additional elective courses must be completed to yield at least 126 total Hours for graduation.		20-29
Total Hours		**126**

[1] ANSC 398 only fulfills the degree requirement when taken for a standard letter grade.

Learning Outcomes: Animal Sciences, BS

Learning outcomes for the degree of Bachelor of Science Major in Animal Sciences

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Upon successful completion of a degree in Animal Sciences, students will:

1. Demonstrate a mastery of the basic principles of animal genetics, nutrition, reproduction and physiology
2. Apply knowledge of animal husbandry, behavior and handling techniques to effectively interact with animals in a safe and humane manner
3. Appreciate the breadth of animal sciences in terms of the variety of career paths, the diversity of the animal industries, and the many roles of animals in society
4. Communicate effectively, both written and orally, and demonstrate confidence in attaining transferable job or post-graduate skills
5. Practice the scientific method in solving 'real-world' problems including collecting and evaluating information, forming predictions, collecting and interpreting data and implementing actions
6. Build and sustain productive relationships to create positive change in response to challenging issues with animals and the agriculture industry at the local, national and international levels

Anthropology, BALAS

for the degree of Bachelor of Arts in Liberal Arts and Sciences Major in Anthropology

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department website: https://anthro.illinois.edu/
department faculty: Anthropology Faculty (https://anthro.illinois.edu/directory/faculty/)
overview of college admissions & requirements: LAS admissions information (https://www.las.illinois.edu/prospective/)
college website: https://las.illinois.edu/
email: anthro@illinois.edu

Students pursuing this major must select one of the following in consultation with an advisor:

Major in Anthropology (p. 57)
Archaeology Concentration (p. 57)
Human Evolutionary Biology Concentration (p. 59)
Sociocultural & Linguistic Anthropology Concentration (p. 60)
for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Anthropology

A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office before the end of the fifth semester (60- 75 hours). Please see your adviser.

Departmental distinction: The department may award distinction, high distinction, or highest distinction to any Anthropology major whose overall and major grade point averages are 3.25 or higher; and who successfully completes 33 hours of anthropology courses, including 4-6 hours of ANTH 494 and ANTH 495 resulting in an Honors Thesis. The level of distinction is based on evaluation of the honors thesis. See the departmental academic advisor for details.All students must discuss their selection of anthropology courses and supporting course work with a departmental adviser.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Twelve hours of 300- and 400-level Anthropology courses must be taken on this campus.
Minimum hours required for graduation: 120 hours

Code	Title	Hours
When a course is listed under two or more categories, the student may decide which of the requirements the course should fulfill; however, it may not be used to fulfill more than one of those requirements.		
Anthropology Core Courses		**9**
Choose 3 of the following core courses. Students may make one substitution for 1 of the 3 required courses, choosing from the option listed.		
ANTH 220	Introduction to Archaeology	
or ANTH 105	World Archaeology	
ANTH 230	Sociocultural Anthropology	
or ANTH 103	Anthro in a Changing World	
ANTH 240	Biological Anthropology	
or ANTH 102	Human Origins and Culture	
ANTH 270/271	Language in Culture	
or ANTH 104	Talking Culture	
Thematic Area Courses		**21**
Choose courses in Thematic Areas within the Department of Anthropology. Students must meet with the departmental advisor to discuss selection of courses. Thematic Areas:		
Anthropology of North, Central and South America		
Anthropology of Africa, Asia, Europe		
Criminality, Law and Social Justice		
Environment, Landscape and Sustainability		
Family, Community and Social Life		
Health, Wellness and Society		
Heritage, Museums and Tourism		
Human Evolution and Culture		
Identity: Race, Class, Gender, Sexuality, Disability		
Immigration, Transnationalism and Diaspora		
Language, Culture and Communication		
Performance, Body, Arts and Media		
Science and Technology		
Additional courses within Anthropology or closely related departments that complement the student's thematic area of study		**9**
Research and Service Learning Coursework		**3**
Choose one of the following areas in consultation with the departmental advisor:		
Archaeology		
ANTH 454	Archaeological Field School	
or ANTH 455	Lab Analysis in Archaeology	
Biological Anthropology		
ANTH 444	Methods in Bioanthropology	
or ANTH 445	Research in Bioanthropology	
Sociocultural/Linguistic Anthropology		
ANTH 411	Research Methods in Socio-Cultural Anthropology (or ANTH 499- Research Methods in Linguistic Anthropology section)	
Museum Anthropology		
ANTH 462	Museum Theory and Practice	
or MUSE 390	Museum Internship	
Senior Capstone Project		**3-6**
Choose one option below (Honors Thesis, Senior Capstone Seminar, Internship, Study Abroad, Field School or Research) in consultation with the departmental advisor:		
Honors Thesis- 6 hours. Two consecutive semesters of research resulting in a written thesis		
ANTH 494	Honors Senior Thesis I	
ANTH 495	Honors Senior Thesis II	
Senior Capstone Seminar (Independent Research)- 3 hours		
ANTH 498	Senior Capstone Seminar	
Internship- 3 hours. A portfolio and report associated with an approved departmental internship		
ANTH 390	Individual Study	
Study Abroad- 3 hours. A portfolio and report associated with an approved Study Abroad experience		
ANTH 390	Individual Study	
Research and/or Field School- 3-6 hours. Data analysis and a research report associated with one of the following:		
ANTH 454 & ANTH 455	Archaeological Field School and Lab Analysis in Archaeology	
ANTH 444 & ANTH 445	Methods in Bioanthropology and Research in Bioanthropology	
Total Hours		**45**

Anthropology: Archaeology, BALAS

for the degree of Bachelor of Arts in Liberal Arts and Sciences Major in Anthropology, Archaeology Concentration

department website: https://anthro.illinois.edu/
department faculty: Anthropology Faculty (https://anthro.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: anthro@illinois.edu

The Archaeology Concentration offers students a program to explore the human past through its material remains to understand cultural and societal change through time, and the role of heritage in the present. We offer many opportunities for students to conduct research with faculty in our archaeology labs, field schools, and in our extensive research collections.

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for the degree of Bachelor of Arts in Liberal Arts and Sciences Major in Anthropology, Archaeology Concentration

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A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office before the end of the fifth semester (60- 75 hours). Please see your adviser.
Departmental distinction: The department may award distinction, high distinction, or highest distinction to any Anthropology major whose overall and major grade point averages are 3.25 or higher; and who successfully completes 33 hours of anthropology courses, including 4-6 hours of ANTH 494 and ANTH 495 resulting in an Honors Thesis. The level of distinction is based on evaluation of the honors thesis. See the departmental academic advisor for details.
All students must discuss their selection of coursework with a departmental adviser.
General education: Students must complete the Campus General Education (https://courses.illinois.edu/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Twelve hours of 300- and 400-level Anthropology courses must be taken on this campus.
Minimum hours required for graduation: 120 hours

Code	Title	Hours
When a course is listed under two or more categories, the student may decide which of the requirements the course should fulfill; however, it may not be used to fulfill more than one of those requirements.		
Anthropology Core Courses		**9**
Choose 3 of the following core courses. Students may make one substitution for 1 of the 3 required courses, choosing from the option listed.		
ANTH 220	Introduction to Archaeology	
or ANTH 105	World Archaeology	
ANTH 230	Sociocultural Anthropology	
or ANTH 103	Anthro in a Changing World	
ANTH 240	Biological Anthropology	
or ANTH 102	Human Origins and Culture	
ANTH 270/271	Language in Culture	
or ANTH 104	Talking Culture	
Archaeology Courses (18 hours distributed as follows):		
One course in Cultural archaeology history chosen from the following:		3
ANTH 358	People of the Ice Age	
ANTH 448	The Prehistory of Africa	
ANTH 449	North American Archeology	
ANTH 459	The Ancient Maya	
Two courses in Methods/Materials analysis chosen from the following:		6
ANTH 358	People of the Ice Age	
ANTH 420	Case Studies Global Heritage	
ANTH 451	Archaeological Surveying	
ANTH 452	Stone Tool Technology Analysis	
ANTH 453	Landscape Archaeology	
ANTH 460	Heritage Management	
ANTH 462	Museum Theory and Practice	
ANTH 477	Pottery Analysis	
Three Archaeology courses chosen from the following:		9
ANTH 358	People of the Ice Age	
ANTH 420	Case Studies Global Heritage	
ANTH 448	The Prehistory of Africa	
ANTH 449	North American Archeology	
ANTH 451	Archaeological Surveying	
ANTH 452	Stone Tool Technology Analysis	
ANTH 453	Landscape Archaeology	
ANTH 459	The Ancient Maya	
ANTH 460	Heritage Management	
ANTH 461	Hist of Archaeological Theory	
ANTH 462	Museum Theory and Practice	
ANTH 477	Pottery Analysis	
Additional Archaeology Anthropology coursework (9 hours distributed as follows):		
One course in Biological Anthropology		3
Two courses related to the student's area of emphasis and approved by the departmental advisor		6
Research and Service Learning Coursework		
ANTH 454	Archaeological Field School	3
ANTH 455	Lab Analysis in Archaeology	3
Senior Capstone Project		**3-6**
Choose one option below (Honors Thesis or Senior Capstone Seminar or Research) in consultation with the departmental advisor:		
Honors Thesis- 6 hours. Two consecutive semesters of research resulting in a written thesis		
ANTH 494	Honors Senior Thesis I	
ANTH 495	Honors Senior Thesis II	
Senior Capstone Seminar (Independent Research)- 3 hours		
ANTH 498	Senior Capstone Seminar	
Research and/or Additional Field School- 3-6 hours. Further data analysis and a research report associated with ANTH 455 or an additional approved ANTH 454-Archaeology Field School and ANTH 455- Lab Analysis in Archaeology)		
Total Hours		**45**

Anthropology: Human Evolutionary Biology, BALAS

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Anthropology, Human Evolutionary Biology Concentration

department website: https://anthro.illinois.edu/
department faculty: Anthropology Faculty (https://anthro.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: anthro@illinois.edu

The Human Evolutionary Biology Concentration offers students a program to examine the interconnections between genetics, environment and culture to address issues from human origins and morphology to forensics and modern health.

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Anthropology, Human Evolutionary Biology Concentration

A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office before the end of the fifth semester (60- 75 hours). Please see your adviser.

Departmental distinction: The department may award distinction, high distinction, or highest distinction to any Anthropology major whose overall and major grade point averages are 3.25 or higher; and who successfully completes 33 hours of anthropology courses, including 4-6 hours of ANTH 494 and ANTH 495 resulting in an Honors Thesis. The level of distinction is based on evaluation of the honors thesis. See the departmental academic advisor for details.

All students must discuss their selection of anthropology courses and supporting course work with a departmental adviser.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Twelve hours of 300- and 400-level Anthropology courses must be taken on this campus.
Minimum hours required for graduation: 120 hours

Code	Title	Hours
When a course is listed under two or more categories, the student may decide which of the requirements the course should fulfill; however, it may not be used to fulfill more than one of those requirements.		
Anthropology Core Courses		**9**
Choose 3 of the following core courses. Students may make one substitution for 1 of the 3 required courses, choosing from the option listed.		
ANTH 220	Introduction to Archaeology	
or ANTH 105	World Archaeology	
ANTH 230	Sociocultural Anthropology	
or ANTH 103	Anthro in a Changing World	
ANTH 240	Biological Anthropology	
or ANTH 102	Human Origins and Culture	
ANTH 270/271	Language in Culture	
or ANTH 104	Talking Culture	
Human Evolutionary Biology Courses		**18**
Students take courses from 4 different categories: 2 courses from each of 2 categories, plus 1 course in each of the 2 remaining categories.		
Evolution and Genetics		
ANTH 241	Human Biological Variation	
ANTH 242	History of Human Evolution	
ANTH 249	Evolution and Human Disease	
ANTH 408	Human Evolutionary Anatomy	
ANTH 435	The Neandertal Debate	
ANTH 438	Primate Life History Evolution	
ANTH 440	Human Paleontology	
ANTH 441	Human Genetics	
Health		
ANTH 258	Sex in Nature and Culture	
ANTH 343	Behavior and Biology of Women	
ANTH 347	Human Osteology	
ANTH 437	Primate Behav Endocrinology	
ANTH 438	Primate Life History Evolution	
ANTH 447	Advanced Skeletal Biology	
Behavior		
ANTH 243	Sociality of the Great Apes	
ANTH 258	Sex in Nature and Culture	
ANTH 343	Behavior and Biology of Women	
ANTH 347	Human Osteology	
ANTH 435	The Neandertal Debate	
ANTH 437	Primate Behav Endocrinology	
ANTH 438	Primate Life History Evolution	
ANTH 440	Human Paleontology	
ANTH 443	Primate Form and Behavior	
ANTH 446	Behavioral Inference & Fossils	
ANTH 447	Advanced Skeletal Biology	
Comparative Anatomy		
ANTH 243	Sociality of the Great Apes	
ANTH 346	Forensic Anthropology	
ANTH 347	Human Osteology	
ANTH 408	Human Evolutionary Anatomy	
ANTH 435	The Neandertal Debate	
ANTH 443	Primate Form and Behavior	
ANTH 446	Behavioral Inference & Fossils	
ANTH 447	Advanced Skeletal Biology	
3 additional courses from any of the 4 elective categories, or another field of anthropology, or a related field such as statistics, psychology, chemistry etc. Course selection should complement the student's Human Evolutionary Biology focus. Meet with the departmental advisor to discuss course selection.		9
Research and Service Learning Coursework		**3**
Choose one of the following:		
ANTH 444	Methods in Bioanthropology	
ANTH 445	Research in Bioanthropology	

Senior Capstone Project		**3-6**
Choose one option below (Honors Thesis, Senior Seminar, Internship, or Research) in consultation with the departmental advisor:		
Honors Thesis- 6 hours. Two consecutive semesters of research resulting in a written thesis		
ANTH 494	Honors Senior Thesis I	
ANTH 495	Honors Senior Thesis II	
Senior Capstone Seminar (Independent Research)- 3 hours		
ANTH 498	Senior Capstone Seminar	
Internship- 3 hours. A portfolio and report associated with an approved departmental internship		
ANTH 390	Individual Study	
Research and/or Additional Field School- 3-6 hours. If not taken to meet the Research and Service Learning Coursework requirement above choose one of the following:		
ANTH 444	Methods in Bioanthropology	
ANTH 445	Research in Bioanthropology	
Further data analysis- ANTH 445 or an additional approved biological anthropology research project- ANTH 444.		
Total Hours		**42**

Anthropology: Sociocultural & Linguistic Anthropology, BALAS

for the degree of Bachelor of Arts in Liberal Arts and Sciences Major in Anthropology, Sociocultural and Linguistic Anthropology Concentration

department website: https://anthro.illinois.edu/
department faculty: Anthropology Faculty (https://anthro.illinois.edu/directory/faculty/)
overview of college admissions & requirements: LAS admissions information (https://www.las.illinois.edu/prospective/)
college website: https://las.illinois.edu/
email: anthro@illinois.edu

The Sociocultural and Linguistic Anthropology Concentration offers students a program of more focused coursework in these closely related fields. Sociocultural anthropologists study the daily lives of people around the world, both at home and abroad. They conduct field research to get a hands-on feel for people's lives and passions and examine everything from beauty pageants to political protest marches, from Disney films to the lab practices of nuclear scientists. Sociocultural anthropology distinguishes itself from other disciplines by its conviction that these local and personal details offer a crucial window on the largest processes and problems of our time, from globalization to race relations and violence.

Linguistic anthropology complements sociocultural anthropology with detailed attention to spoken and signed languages—their structure and use in the daily lives of people around the world, both at home and abroad. Linguistic anthropologists examine such things as the "English Only" movement in the United States, the persuasive language of advertising and politics, racism and hate speech, oral/gestural storytelling traditions around the world, communication in the classroom, on social media, or at the United Nations, as well as how the way we talk creates our sense of self and reality.

for the degree of Bachelor of Arts in Liberal Arts and Sciences Major in Anthropology, Sociocultural and Linguistic Anthropology Concentration

A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office before the end of the fifth semester (60- 75 hours). Please see your adviser.
Departmental Distinction: The department may award distinction, high distinction, or highest distinction to any Anthropology major whose overall and major grade point averages are 3.25 or higher; and who successfully completes 33 hours of anthropology courses, including 4-6 hours of ANTH 494 and ANTH 495 resulting in an Honors Thesis. The level of distinction is based on evaluation of the honors thesis. See the departmental academic advisor for details.
All students must discuss their selection of coursework with a departmental adviser.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Twelve hours of 300- and 400-level Anthropology courses must be taken on this campus.
Minimum hours required for graduation: 120 hour

Code	Title	Hours
When a course is listed under two or more categories, the student may decide which of the requirements the course should fulfill; however, it may not be used to fulfill more than one of those requirements.		
Anthropology Core Courses		**9**
Choose 3 of the following core courses. Students may make one substitution for 1 of the 3 required courses, choosing from the option listed.		
ANTH 220	Introduction to Archaeology	
or ANTH 105	World Archaeology	
ANTH 230	Sociocultural Anthropology	
or ANTH 103	Anthro in a Changing World	
ANTH 240	Biological Anthropology	
or ANTH 102	Human Origins and Culture	
ANTH 270/271	Language in Culture	
or ANTH 104	Talking Culture	
Socio-cultural and Linguistic Anthropology Courses		
7 courses selected from the list maintained in the advisor's office. Students select 3 courses from locations across at least 2 regions of the world and 4 courses from theoretical or topical areas course offerings in socio-cultural and linguistic anthropology chosen in consultation with the departmental advisor. Four courses must be at the 300- or 400-level.		21
Additional socio-cultural and linguistics anthropology courses or courses in related fields such as Sociology, Linguistics, Psychology, Education, History, Gender and Women's Studies, African American Studies, Latina/Latino Studies, Asian American Studies, African Studies, Jewish Studies that complement the student's sociocultural/linguistic focus. Meet with the departmental advisor to discuss the selection of courses.		9
Research and Service Learning Coursework		**3**
Choose one of the following:		

Research Methods in Cultural Anthropology - ANTH 411 Methods of Cultural Anth		
Research Methods in Linguistic Anthropology - ANTH 499		
Senior Capstone Project		**3-6**
Choose one option below (Honors Thesis, Senior Seminar, Internship, or Study Abroad) in consultation with the departmental advisor:		
Honors Thesis- 6 hours. Two consecutive semesters of research resulting in a written thesis		
ANTH 494	Honors Senior Thesis I	
ANTH 495	Honors Senior Thesis II	
Senior Capstone Seminar (Independent Research)- 3 hours		
ANTH 498	Senior Capstone Seminar	
Internship- 3 hours. A portfolio and report associated with an approved departmental internship		
ANTH 390	Individual Study	
Study Abroad- 3 hours. A portfolio and report associated with an approved Study Abroad experience		
ANTH 390	Individual Study	
Total Hours		**45**

Architectural Studies, BS

for the Bachelor of Science Major in Architectural Studies

Director of the School: Francisco Javier Rodríguez-Suárez
School website: https://arch.illinois.edu/
Overview of college admissions & requirements: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
College website: https://faa.illinois.edu/
Email: architecture@illinois.edu

The Bachelor of Science in Architectural Studies BSAS is a pre-professional degree that prepares students to enter a professional 2-year M ARCH degree. The program provides a strong foundation in design, technology and history as they relate to architectural practice. The degree also provides students with a broad liberal arts foundation that can lead to many other career options.

In this curriculum, normal progress is imperative. A student failing to complete any required course more than one semester later than the time designated in the curriculum is prohibited from progressive registration in architectural courses until the deficiency is corrected. To continue at the sophomore level and beyond, a student must have a cumulative grade point average of 2.00 (A = 4.0) for all University course work attempted. For the Bachelor of Science in Architectural Studies degree, a total of 120 semester hours are required.

for the Bachelor of Science Major in Architectural Studies

General Education Requirements

Code	Title	Hours
Some courses may fulfill multiple General Education categories. Courses may also fulfill both major requirements and Gen Ed categories.		
Composition I		4
Advanced Composition (ARCH 314 can fulfill)		3
Quantitative Reasoning I and II (specific courses required):		7-10
MATH 220	Calculus	
or MATH 221	Calculus I	
MATH 231	Calculus II (MATH 231 required for concentration in Building Structures and Structural Engineering)	
or PHYS 101	College Physics: Mech & Heat	
Humanities and the Arts (ARCH 222 and ARCH 314 can fulfill)		6
Cultural Studies: Western Comparative Cultures (ARCH 314 can fulfill)		3
Cultural Studies: U.S. Minority Culture(s)		3
Cultural Studies: Non-Western Cultures (ARCH 222 can fulfill)		3
Natural Sciences and Technology		6
Social and Behavioral Sciences		6
Total		**26-44**
Language Other than English [1]		0-12

Architecture Curriculum

Code	Title	Hours
College Orientation		**1**
FAA 101	Arts at Illinois	1
Design		**12-13**
ARCH 171	Concepts and Theories of Architectural Design	3
ARCH 172	Drawing and Modeling	3
ARCH 273	Strategies of Architectural Design	3
ARCH 274	Representation	3 or 4
Health & Wellbeing		**3**
ARCH 321	Environment, Architecture, and Global Health	3
Urbanism (select one)		**3**
ARCH 418	History of the Urban Environment	
ARCH 468	Overseas Architectural Studies	
GEOG 204	Cities of the World	
GEOG 210	Social & Environmental Issues	
GEOG 483	Urban Geography	
UP 101	Introduction to City Planning	
Architectural History		**6**
ARCH 210	Introduction to the History of World Architecture	3
Select one additional from the following:		3
ARCH 222	Islamic Gardens & Architecture (Humanities and the Arts & Cultural Studies: Non-West)	
ARCH 314	History of World Landscapes (Advanced Composition, Humanities and the Arts, & Cultural Studies: West)	
ARCH 402	Introduction to the History of Architectural Theory	
ARCH 403	Special Topics in Architectural History	
ARCH 407	Rome: City of Visible History	
ARCH 409	Special Topics in Spanish Arch (Section B, Barcelona only)	
ARCH 410	Ancient Egyptian & Greek Arch	
ARCH 411	Ancient Roman Architecture	

ARCH 412	Medieval Architecture	
ARCH 413	Renaissance Architecture	
ARCH 414	Baroque & Rococo Arch	
ARCH 415	Modernity's Mirror: Nineteenth-Century Architecture 1750-1900	
ARCH 416	The Architecture of the United States, c.1650 to Present	
ARCH 417	Modern and Contemporary Global Architecture	
ARCH 418	History of the Urban Environment	
Performance		**21**
ARCH 231	Anatomy of Buildings	4
ARCH 232	Structural Fundamentals	4
ARCH 433	Design of Steel and Reinforced Concrete Structures I	4
ARCH 434	Environmental Control Systems I	5
ARCH 435	Structural Systems and Construction Methods	4
Studio		**24**
ARCH 371	Architectural Design and Urbanism	6
ARCH 372	Designing for Human Well-being	6
ARCH 473	Architectural Design and Performance	6
ARCH 474	Architectural Design and Making	6

Code	Title	Hours
Total Credits for BS Architectural Studies		
General Education		26-44
Language Other than English [1]		0-12
Architecture Curriculum		70-71
Free Electives [2]		0-18
Total		**120**

1 *General Education Language Requirement: Options to satisfy this requirement are noted in the* Course Explorer. *(*https://courses.illinois.edu/gened/DEFAULT/DEFAULT/*)*

2 *A maximum of nine hours may be taken as professional electives.*

for the Bachelor of Science Major in Architectural Studies

First Year

First Semester		**Hours**
ARCH 171	Concepts and Theories of Architectural Design	3
MATH 220 or 221	Calculus	5-4
General Education[1]		6
FAA 101	Arts at Illinois	1
	Semester Hours	14
Second Semester		
ARCH 172	Drawing and Modeling	3
MATH 231 or PHYS 101	Calculus II	3-5
Composition I[2]		4
General Education[1]		6
	Semester Hours	16

Second Year

First Semester		
ARCH 273	Strategies of Architectural Design	3
ARCH 231	Anatomy of Buildings	4
UP 101 (or approved urban studies substitute)[5]	Introduction to City Planning	3
General Education or Electives[1,3]		3
ARCH 210	Introduction to the History of World Architecture	3
	Semester Hours	16
Second Semester		
ARCH 274	Representation	3
ARCH 232	Structural Fundamentals	4
General Education or Electives[1,3]		9
	Semester Hours	16

Third Year

First Semester		
ARCH 371	Architectural Design and Urbanism	6
ARCH 321	Environment, Architecture, and Global Health	3
Electives[3]		3
ARCH 433	Design of Steel and Reinforced Concrete Structures I	4
	Semester Hours	16
Second Semester		
ARCH 372 (Electives)	Designing for Human Well-being	6
ARCH 435	Structural Systems and Construction Methods	4
Electives		6
	Semester Hours	16

Fourth Year

First Semester		
ARCH 473	Architectural Design and Performance	6
Architectural History[4]		3
ARCH 434	Environmental Control Systems I	5
	Semester Hours	14
Second Semester		
ARCH 474	Architectural Design and Making	6
Electives[3]		6
	Semester Hours	12
	Total Hours:	120

[1] *See current University of Illinois* General Education requirements. (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/*)*
The General Education quantitative reasoning requirement I is satisfied by the required MATH 220 or MATH 221 course; the quantitative reasoning II requirement is satisfied by the MATH 231 or PHYS 101 course. Students considering a concentration in Building Structures or Structural Engineering should take MATH 231. The Advanced Composition requirement may be fulfilled by either a separate, approved Advanced Composition course or by an Advanced Composition course which also satisfies one of the general education distribution list requirements. If by the latter, electives would be taken to make up the credit deficiency.
General Education foreign language requirement 0-12 hours: Students entering the University of Illinois as freshmen in fall 2000 or later need to complete the foreign language requirement in order to graduate. To satisfy this requirement, students must complete a third semester level college foreign language course. This requirement may also be satisfied by three years of the same foreign language in high school. Students entering the University of Illinois without three years of the same foreign language in high school must take a foreign language placement test to determine the courses in which to enroll.

[2] *The Composition I requirement may be fulfilled by any of the following courses or course sequences (placement is determined by examination): ESL 111 and ESL 112; ESL 115; RHET 101, and RHET 102; or RHET 105; or CMN 111 and CMN 112.*

[3] *For information about electives, see the Undergraduate Handbook at the* FAA website (https://faa.illinois.edu/*). A maximum of nine hours may be taken as professional electives.*

[4] *Architectural history: All students in the undergraduate program in architecture must fulfill the architectural history requirement: one course in addition to ARCH 210. Select from: ARCH 222, ARCH 314, ARCH 402, ARCH 403, ARCH 407, ARCH 409, Section B (Barcelona only), ARCH 410, ARCH 411, ARCH 412, ARCH 413, ARCH 414, ARCH 415, ARCH 416, ARCH 417, or ARCH 418.*

[5] *The UP 101 requirement can be fulfilled by substituting one of the following approved courses: ARCH 418, ARCH 468, GEOG 204, GEOG 210, and GEOG 483.*

Learning Outcomes: Architectural Studies, BS

Learning outcomes for the Bachelor of Science Major in Architectural Studies

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The Bachelor of Science in Architectural Studies (BSAS) curriculum combines a comprehensive design education with the broad perspective necessary to become active and engaged global citizens. Students learn to address and solve tomorrow's complex problems at the intersection of the social, political, economic and environmental realms. Two- and three-dimensional design form the foundation of the four-year BSAS degree. Technology, history, and structures courses complete the curriculum, preparing students to enter a two-year NAAB-accredited Master of Architecture degree program, or to pursue a graduate degree or career in an allied discipline.

When students complete the BSAS degree they will be able to:

1. Employ Specialized Knowledge

- Apply design thinking approaches to address environmental and societal challenges.
- Implement design processes--documentation, research, analysis and application--intervening to improve a set of environmental conditions.
- Communicate ideas and concepts through verbal and graphic, physical and digital, means.

2. Put Broad and Integrative Knowledge to Use

- Identify complex problems and approaches to addressing them.
- Understand diverse community dynamics and social relationships.
- Explore the intersections among environmental, social, cultural, political and economic aspects.

3. Exercise Intellectual Skills:

- Evaluate and apply theories of the built environment's impact on human wellbeing.
- Differentiate and assess various means of manufacture and their suitability for use in a number of diverse contexts.
- Acknowledge different theories for analyzing and intervening in urban contexts.
- Evidence proficiency integrating technological systems to improve environmental performance.
- Critically examine humanistic perspectives in architecture, urban and landscape throughout time.

4. Demonstrate Proficiency in Applied and Collaborative Learning:

- Apply skills needed for successful teamwork and consensus decision making.
- Employ leadership skills.
- Recognize the value of multidisciplinary contributions in the realm of environmental design.

5. Illustrate Civic and Global Understanding:

- Demonstrate empathic and ethical decision making.
- Apply sustainable practices across a variety of scales and contexts.
- Cultivate self-learning skills and curiosity to learn and broaden cultural perspectives.
- Utilize contemporary and historical perspectives in design thinking processes.

Art & Art History, BFA

for the degree of Bachelor of Fine Arts Major in Art & Art History

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school office: 143 Art and Design Building, Champaign, IL 61820
academic advisor: Bryan VanGinhoven
email: bvanginh@illinois.edu
phone: (217) 300-2520
director of undergraduate studies: Professor Kristin Romberg
email: kromberg@illinois.edu
school website: School of Art & Design (https://art.illinois.edu/)
school faculty: Art & Design Faculty (https://art.illinois.edu/index.php/people/faculty-staff/)
overview of college admissions & requirements: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: Fine & Applied Arts (https://faa.illinois.edu/)

The Program in Art and Art History at the University of Illinois, Urbana-Champaign is unique. Housed in the School of Art and Design in the College of Fine and Applied Arts, the Program in Art History offers a Bachelor of Fine Arts degree in a combined Art History and Studio/Design course of study, providing a broad cultural education that unites academic and studio training. Students who earn this degree will be qualified to pursue a range of careers, museum work, or graduate study in either art history or studio practice.

A portfolio review is required for admission to the School of Art and Design.

Departmental Distinction: a student must earn a 3.25 overall GPA, and 3.50 GPA in Art History. The Student will complete at least 4 semester hours of independent research to write a senior research paper. See the undergraduate adviser for further details.
for the degree of Bachelor of Fine Arts Major in Art & Art History

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Students in the School of Art and Design must complete the Campus General Education requirements. Some Art and Design courses will also apply toward the General Education requirements.

A portfolio review is required for admission to the School of Art and Design.

First Year Curriculum

Code	Title	Hours
FAA 101	Arts at Illinois	1
ARTF 101	Contemporary Issues in Art	2
ARTE 101	Art, Design, and Society	2
ARTH 110	Introduction to the History of Art and Visual Culture	3
Select one Drawing course:		3
ARTF 102	Observational Drawing	
ARTF 104	Expressive Drawing	
ARTF 106	Visualization Drawing	
Select one course in 2D Category:		3
ARTD 151	Introduction to Graphic Design	
ARTS 205	Introduction to Printmaking (required for Studio Art: Printmaking)	
ARTS 221	Fashion Illustration (required for Studio Art: Fashion)	
ARTS 251	Beginning Painting (required for Studio Art: Painting)	
ARTS 264	Basic Photography (required for Studio Art: Photography)	
Select one course in 3D Category:		3
ARTD 101	Introduction to Industrial Design	
ARTS 210	Ceramics Sculpture I	
ARTS 230	Jewelry/Metals I	
ARTS 280	Beginning Sculpture (required for Studio Art: Sculpture)	
Select one course in 4D Category:		3
ARTS 241	Image Practice	
ARTS 243	Time Arts I	
ARTS 244	Interaction I	
Total Hours		**20**

Minimum required major and supporting course work: A minimum of 40 hours of upper-division coursework is required. Twelve (12) hours of 300- and 400-level courses in the major must be taken on this campus.

Art History Requirements

Code	Title	Hours
6 courses at the 200-400 level (3 credit hours each)		**18**
Students must take at least one course in three of the following areas: 1) Africa and the Middle East; 2) Asia; 3) the Americas; 4) Europe; Students must also take at least one course that covers material before 1700 and one course must cover material after 1700.		
Though students must take a total of 6 courses, some courses may count toward the fulfillment of more than one area and period requirement. For instance, a course in 20th century African art could count as a class covering both Africa and the Middle East and material after 1700.		
1. Africa and the Middle East		
ARTH 310	African Art and Society I	
ARTH 312	Central African Art	
ARTH 313	Modern and Contemp African Art	
ARTH 410	West African Art and Ideas	
ARTH 413	Sacred African Diaspora Arts	
ARCH 222	Islamic Gardens & Architecture *	
LA 220	Exploring African Cities *	
2. Asia		
ARTH 214	Art in China	
ARTH 402	Ways of Seeing in Edo Japan	
ARTH 403	Word and Image in Chinese Art	
ARTH 404	China through Film	
LA 218	S Asian Cultural Landscapes *	
3. The Americas		
ARTH 242	Art Since 1940	
ARTH 250	American Art	
ARTH 260	Graffiti and Murals	
ARTH 342	Arts of Colonial Latin America	
ARTH 343	Arts of Modern Latin America	
4. Europe		
ARTH 215	Greek Art	
ARTH 217	Development of Ancient Cities	
ARTH 218	Ancient Greek Sanctuaries	
ARTH 222	Medieval Art	
ARTH 230	Italian Renaissance Art	

ARTH 231	Northern Renaissance Art
ARTH 235	Art, Power and Culture in 17th-Century Europe
ARTH 241	Modern Art, 1880-1940
ARTH 242	Art Since 1940
ARTH 344	Spanish Modern Art
ARTH 415	The Archaeology of Greece
ARTH 416	The Archaeology of Italy
ARTH 423	Romanesque Art
ARTH 424	Gothic Art
ARTH 430	Topics: Italian Art 1300-1500
ARTH 431	Topics: Northern Art 1300-1500
ARTH 432	Sixteenth-Century Italian Art
ARTH 433	Fifteenth-Century Italian Art
ARTH 435	Italian Baroque Art
ARTH 436	17th-Century Dutch & Flemish Art
ARTH 440	Romantic Art
ARTH 443	The Russian Avant-Garde: Revolutionary Forms and Socialist Norms
ARTH 445	European Art Between the Wars
ARTH 447	France and Its Others
At least one course must cover material before 1700	
ARTH 215	Greek Art
ARTH 217	Development of Ancient Cities
ARTH 218	Ancient Greek Sanctuaries
ARTH 222	Medieval Art
ARTH 230	Italian Renaissance Art
ARTH 231	Northern Renaissance Art
ARTH 235	Art, Power and Culture in 17th-Century Europe
ARTH 342	Arts of Colonial Latin America
ARTH 360	Women and the Visual Arts
ARTH 415	The Archaeology of Greece
ARTH 416	The Archaeology of Italy
ARTH 423	Romanesque Art
ARTH 424	Gothic Art
ARTH 430	Topics: Italian Art 1300-1500
ARTH 431	Topics: Northern Art 1300-1500
ARTH 432	Sixteenth-Century Italian Art
ARTH 433	Fifteenth-Century Italian Art
ARTH 435	Italian Baroque Art
ARTH 436	17th-Century Dutch & Flemish Art
ARCH 412	Medieval Architecture *
ARCH 413	Renaissance Architecture *
ARCH 414	Baroque & Rococo Arch *
At least one course must cover material after 1700	
ARTH 211	Design History Survey
ARTH 240	Art of the Nineteenth Century
ARTH 242	Art Since 1940
ARTH 257	History of Photography
ARTH 260	Graffiti and Murals
ARTH 300	Art Criticism and Writing
ARTH 343	Arts of Modern Latin America
ARTH 344	Spanish Modern Art
ARTH 345	Realism to Postimpressionism
ARTH 350	American Art 1750-1900
ARTH 351	Early American Modernism
ARTH 361	Contemporary Art
ARTH 440	Romantic Art
ARTH 443	The Russian Avant-Garde: Revolutionary Forms and Socialist Norms
ARTH 445	European Art Between the Wars
ARTH 447	France and Its Others
ARCH 415	Modernity's Mirror: Nineteenth-Century Architecture 1750-1900 *
ARCH 416	The Architecture of the United States, c.1650 to Present *
ARCH 417	Modern and Contemporary Global Architecture *
ARTH 450	Institutional Critique

*With an advisor's approval, up to 6 credit hours of courses in the history of architecture or landscape architecture at the 200-400 may be taken towards the fulfillment of these required hours

One Advanced art history course (300 or 400 level) not used elsewhere	
ARTH 342	Arts of Colonial Latin America
ARTH 343	Arts of Modern Latin America
ARTH 344	Spanish Modern Art
ARTH 345	Realism to Postimpressionism
ARTH 350	American Art 1750-1900
ARTH 351	Early American Modernism
ARTH 360	Women and the Visual Arts
ARTH 415	The Archaeology of Greece
ARTH 416	The Archaeology of Italy
ARTH 423	Romanesque Art
ARTH 424	Gothic Art
ARTH 430	Topics: Italian Art 1300-1500
ARTH 431	Topics: Northern Art 1300-1500
ARTH 432	Sixteenth-Century Italian Art
ARTH 433	Fifteenth-Century Italian Art
ARTH 435	Italian Baroque Art
ARTH 436	17th-Century Dutch & Flemish Art
ARTH 440	Romantic Art
ARTH 445	European Art Between the Wars
ARTH 447	France and Its Others
Total Hours	18

Code	Title	Hours
Two (2) seminars in Art History at the 400-level, chosen in consultation with the art history advisor.		**6**

Art & Design Requirements

Code	Title	Hours
4 ARTS or ARTD courses (at any level)		12
Seven (7) additional courses in the School of Art and Design (at any level), including courses with the following rubrics: ARTE, ARTD, ARTH, or ARTS		21
Total Hours		33

Open Electives

Code	Title	Hours
Open electives as needed to total 122 hour degree.		

Code	Title	Hours
Total Hours required for graduation		**122**

Learning Outcomes: Art History, BFA

Learning outcomes for the degree of Bachelor of Fine Arts Major in Art & Art History

1. Students will be able to demonstrate familiarity with key artistic monuments and modes of art production from various global contexts.
2. Students will be able to analyze and interpret works of art and architecture situated in a variety of historical and social contexts, and in comparative perspective.
3. Students will be able to use visual and verbal primary sources, secondary sources, and core critical frameworks of art historical analysis to develop and articulate persuasive arguments about works of art and the cultures that produced them.

Art Education, BFA

for the Bachelor of Fine Arts Major in Art Education

school office: 143 Art and Design Building, Champaign, IL 61820
contact: coordinator of undergraduate academic affairs: Mark Avery
email: mavery@illinois.edu
phone: (217) 333-6632

school website: School of Art & Design (https://art.illinois.edu/)
school faculty: Art & Design Faculty (https://art.illinois.edu/index.php/people/faculty-staff/)
overview of college admissions & requirements: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: Fine & Applied Arts (https://faa.illinois.edu/)

The curriculum in art education requires 130 credit hours and prepares students for positions as teachers of art in the public and private schools, grades kindergarten through twelve. The program places emphasis on theory, methods, materials, processes, and practice teaching in Illinois schools. For teacher education requirements applicable to all curricula, see the Council on Teacher Education (https://cte-s.education.illinois.edu/dotnet/webpages/webpage.aspx).

In order to be recommended for licensure, candidates are required to maintain a UIUC cumulative grade-point average of 2.5, content area course GPA of 3.0, and professional education course GPA of 3.0 (A=4.0). Candidates should consult their art education advisor or the Council on Teacher Education for the list of courses used to compute these grade-point averages.

for the Bachelor of Fine Arts Major in Art Education

Students in the School of Art and Design must complete the Campus General Education requirements. Some Art and Design courses will also apply toward the General Education requirements.

A portfolio review is required for admission to the School of Art and Design.

First Year Curriculum

Code	Title	Hours
FAA 101	Arts at Illinois	1
ARTF 101	Contemporary Issues in Art	2
ARTE 101	Art, Design, and Society	2
ARTH 110	Introduction to the History of Art and Visual Culture	3
Select one Drawing course:		3
ARTF 102	Observational Drawing	
ARTF 104	Expressive Drawing	
ARTF 106	Visualization Drawing	
Select one course in 2D Category:		3
ARTD 151	Introduction to Graphic Design	
ARTS 205	Introduction to Printmaking (required for Studio Art: Printmaking)	
ARTS 221	Fashion Illustration (required for Studio Art: Fashion)	
ARTS 251	Beginning Painting (required for Studio Art: Painting)	
ARTS 264	Basic Photography (required for Studio Art: Photography)	
Select one course in 3D Category:		3
ARTD 101	Introduction to Industrial Design	
ARTS 210	Ceramics Sculpture I	
ARTS 230	Jewelry/Metals I	
ARTS 280	Beginning Sculpture (required for Studio Art: Sculpture)	
Select one course in 4D Category:		3
ARTS 241	Image Practice	
ARTS 243	Time Arts I	
ARTS 244	Interaction I	
Total Hours		**20**

Art Education Requirements

Art education courses are applicable to professional education requirements for teacher certification.

Code	Title	Hours
Art Education Requirements [1]		
ARTE 202	Facilitating the Art Experience	3
ARTE 203	Everyday Arts Lab	3
ARTE 204	Practicum Teaching Experience	2
ARTE 301	Curriculum, Assessment, and Art Education	3
ARTE 302	Art-Centered Learning at the Secondary Level	3

ARTE 393	Teachers as Researchers	3
Total Hours		17

Code	Title	Hours
Professional Education		
PSYC 100	Intro Psych	4
EPS 201	Foundations of Education	3
EPSY 201	Educational Psychology	3
SPED 405	General Educator's Role in Special Education	3
CI 473	Disciplinary Literacy	3
Total Hours		16

Code	Title	Hours
Student Teaching		
ARTE 401	Teaching Seminar	4
EDPR 438	Educational Practice in Special Fields	5
EDPR 442	Educational Practice in Secondary Education	5
Total Hours		14

Code	Title	Hours
Art and Design Requirements		
ARTS 251	Beginning Painting	3
ARTS 354	Intermediate Painting	3
or ARTS 252	Making and Meaning	
One Additional 3D Course (200 level or above)		3
One Additional 4D Course (200 level or above)		3
Total Hours		12

Code	Title	Hours
Art History		
Advanced art history (200-level or above)		9
Total Hours		9

Code	Title	Hours
Electives		
Art and Design electives (Art and Design courses not in Art Education requirements or used in Art and Design requirements)		9
Open electives as needed to total 130 hour degree in consultation with advisor		
Total Hours		9

[1] *Must be completed prior to Student Teaching.*

Learning Outcomes: Art Education, BFA

for the Bachelor of Fine Arts Major in Art Education

Students graduating with the BFA in Art Education should be able to:

1. Understand the diverse characteristics and abilities of their students and how individuals develop and learn within the context of their social, economic, cultural, linguistic, and academic experiences. Our graduates are prepared to use these experiences to create instructional opportunities that maximize student learning in diverse art education settings such as schools, museums, and community centers.
2. Understand content area knowledge in fine art and visual culture that includes central concepts, methods of inquiry, structures of the disciplines, and content area literacy. Our graduates are prepared to create meaningful learning experiences for students through both content area and pedagogical knowledge.
3. Plan and design instruction for diverse art education settings based upon content area knowledge, diverse student characteristics, student performance data, curriculum goals, and the community context.
4. Create safe and healthy art education learning environments that facilitate cultural and linguistic responsiveness, emotional well-being, self-efficacy, positive social interaction, mutual respect, active engagement, academic risk-taking, self-motivation, and personal goal-setting.
5. Differentiate instruction by using a variety of strategies that support critical and creative thinking, problem-solving, and continuous growth and learning. Our graduates understand that art education settings are dynamic, thus requiring ongoing modification of instruction to enhance learning for each student.
6. Enact critical and humanizing expressions of art education that redress and challenge systemic injustices that relate to social identities associated with race, class, gender, sexuality, immigrant origin, religion, age, mental and physical disabilities, and mental and physical illnesses.
7. Possess foundational knowledge of reading, writing, and oral communication within art education (e.g. curriculum and lesson planning, assessment tools, etc.) and recognizes and addresses how student reading, writing, and oral communication facilitate the acquisition of knowledge in art education.
8. Understand the purposes, characteristics, and limitations of different types of assessments in art education, including standardized assessments, universal screening, curriculum-based assessment, and progress monitoring tools.
9. Build and maintain collaborative relationships with colleagues, students, parents, and community members to foster cognitive, linguistic, physical, and social and emotional development of their students.
10. Exhibit ethical, reflective, and professional practices, while providing leadership in their educational settings and advocating for students, parents or guardians, and the profession.

Art Undeclared

coordinator of undergraduate academic affairs: Mark Avery
email: mavery@illinois.edu
phone: (217) 333-6632
school website: School of Art + Design (https://art.illinois.edu/)
school faculty: Art + Design Faculty (https://art.illinois.edu/index.php/people/faculty-staff/)
overview of college admissions & requirements: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: Fine & Applied Arts (https://faa.illinois.edu/)
school office: 143 Art and Design Building, Champaign, IL 61820

First Year Curricula for All Art + Design Majors

The School of Art + Design offers bachelor of fine arts degrees in art education, graphic design, art & art history, industrial design, photography, and studio art (with concentrations in general studio, new media, painting, printmaking, and sculpture), and a bachelor of arts degree in studio art (with the same concentrations). All majors' first year curriculum will include courses in drawing, 2D, 3D, and 4D practices. Undeclared students will declare their Art + Design major March 1 of their first year of study.

This first year curriculum is shared across all majors and serves as the temporary major declaration for those who enter as "undeclared."

Courses in the history and appreciation of art and certain courses in studio work are open to students from other colleges of the University. A field of concentration in history of art is also offered in the College of Liberal Arts and Sciences. The school has studios, computing labs, workshops, classrooms, and offices in several different University buildings.

Students in the School of Art and Design must complete the Campus General Education requirements. Some Art and Design courses will also apply toward the General Education requirements.

A portfolio review is required for admission to the School of Art and Design.

First Year Curriculum

Code	Title	Hours
FAA 101	Arts at Illinois	1
ARTF 101	Contemporary Issues in Art	2
ARTE 101	Art, Design, and Society	2
ARTH 110	Introduction to the History of Art and Visual Culture	3
Select one Drawing course:		3
ARTF 102	Observational Drawing	
ARTF 104	Expressive Drawing	
ARTF 106	Visualization Drawing	
Select one course in 2D Category:		3
ARTD 151	Introduction to Graphic Design	
ARTS 205	Introduction to Printmaking (required for Studio Art: Printmaking)	
ARTS 221	Fashion Illustration (required for Studio Art: Fashion)	
ARTS 251	Beginning Painting (required for Studio Art: Painting)	
ARTS 264	Basic Photography (required for Studio Art: Photography)	
Select one course in 3D Category:		3
ARTD 101	Introduction to Industrial Design	
ARTS 210	Ceramics Sculpture I	
ARTS 230	Jewelry/Metals I	
ARTS 280	Beginning Sculpture (required for Studio Art: Sculpture)	
Select one course in 4D Category:		3
ARTS 241	Image Practice	
ARTS 243	Time Arts I	
ARTS 244	Interaction I	
Total Hours		**20**

Asian American Studies, BALAS

for the degree of Bachelor of Arts in Liberal Arts and Sciences Major in Asian American Studies

department website: http://www.asianam.illinois.edu/
department faculty: Asian American Studies Faculty (http://www.asianam.illinois.edu/people/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: aas@illinois.edu

for the degree of Bachelor of Arts in Liberal Arts and Sciences Major in Asian American Studies

Advising: The Department of Asian American Studies provides advising for students. Students must officially declare their major by registering with the Associate Head of Asian American Studies. Students will work with their advisor to choose appropriate courses from the Additional Coursework List and the Approved Elective List to help plan a coherent program of study. A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office before the end of the fifth semester (60-75 hours). Please see your advisor.
General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: 33 hours. Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
AAS 100	Intro Asian American Studies	3
AAS 200	U.S. Race and Empire	3
AAS 215	US Citizenship Comparatively	3
AAS 300	Theories of Race, Gender, and Sexuality	3
Additional Coursework		15
Complete at least 15 additional hours of substantive coursework offered by Department of Asian American Studies listed on the Approved Additional Coursework List.		
Electives		6
Choose 6 hours from the Approved Elective Course List.		
Total Hours		33

Approved Additional Coursework List and Approved Elective List are maintained in the department office and with the AAS advisor.

Learning Outcomes: Asian American Studies, BALAS

Learning outcomes for the degree of Bachelor of Arts in Liberal Arts and Sciences Major in Asian American Studies

1) Intellectual Reasoning and Knowledge

Students acquire proficiency in the field and area of Asian American Studies. This includes, for example, knowledge based in intersectional, comparative, and interdisciplinary approaches. While largely based in an area approach to the United States, Asian American Studies is also deeply concerned with transnational, diasporic, and global studies. Students learn the history of Asian Americans and theories and methods of the social sciences and humanistic approaches to understand the Asian American experience. The conceptual rubrics broadly include migration, social movements, US imperialism and racism, and ideas of citizenship and belonging.

2) Critical Inquiry and Discovery

Applying theories in Asian American Studies students develop skills of critical inquiry that draw on intersectional and comparative approaches. As a mode of discovery students exercise their skills using methods of the social sciences and humanities through verbal communication in the classroom and written research projects. Students are asked to apply their critical modes of learning in original and unique projects of discovery through research.

3) Effective Leadership and Community Engagement

Students study models of community leadership and engagement through the histories of Asian American social movements, political culture, and community activism. Reflection based on these approaches provides a context from which to understand the role of classroom learning and the application of theories of social change in communities.

4) Social Awareness and Cultural Understanding

Students learn the dimensions of intersectional analysis of social, cultural, economic, and political issues concerning the Asian Americans. Social theories of power inform how students are taught to understand a number of categories of analysis including race, gender, sexuality, class, ethnicity, religion, and disability, to name a few.

5) Global Consciousness

Students gain an understanding of the global dimensions of intersectional approaches in a broad range of fields and disciplines including literary, historical, cultural and ethnographic approaches. Through the study of migration and diaspora, the broad understanding of individual and collective dynamics are observed, analyzed, and theorized. Students are also asked to think in terms of a comparative framework to understand how race, gender, and sexuality, for example, are thought of from a number of vantage points.

Astronomy, BSLAS

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Astronomy

department website: https://astro.illinois.edu/
department faculty: Astronomy Faculty (https://astro.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: astronomy@illinois.edu

The Department of Astronomy also offers a BSLAS in Computer Science & Astronomy (p. 133)

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Astronomy

Departmental distinction: A student majoring in astronomy may earn distinction or high distinction by attaining a minimum grade point average of 3.4 or 3.75, respectively, in required major courses (defined in the table below) taken at UIUC. For highest distinction, in addition to meeting the minimum requirements for high distinction, a senior thesis (ASTR 490) must be completed with strong endorsement by the research supervisor. Questions about eligibility for distinction status should be directed to an astronomy advisor before the senior year.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 47-48 hours. Twelve hours of 300- and 400-level in the major must be taken on this campus.

Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Astronomy Core		
ASTR 210	Introduction to Astrophysics [1]	3
Select three of the following:		9-10
ASTR 404	Stellar Astrophysics	
ASTR 405	Planetary Systems	
ASTR 406	Galaxies and the Universe	
ASTR 414	Astronomical Techniques	
Select at least 12 hours of 300- or 400-level ASTR or PHYS courses [2, 3]		12
Supporting Technical Courses		
Physics		12
PHYS 211	University Physics: Mechanics	
PHYS 212	University Physics: Elec & Mag	
PHYS 213	Univ Physics: Thermal Physics	
PHYS 214	Univ Physics: Quantum Physics	
Mathematics		11
MATH 221	Calculus I [4]	
MATH 231	Calculus II	
MATH 241	Calculus III	

[1] *Students without a background in physics or astronomy are encouraged to take* ASTR 121 *and* ASTR 122 *during their freshman year.*

[2] *Other 300- or 400-level technical classes, e.g. chemistry, computer science engineering, or statistics can be substituted with academic adviser approval.*

[3] *A maximum of 4 hours of credit in* ASTR 390 *(or equivalent "Independent Study" course, such as* PHYS 497*) can be counted towards this requirement.*

[4] MATH 220 *may be substituted for* MATH 221. MATH 220 *is appropriate for students with no background in calculus.*

Learning Outcomes: Astronomy, BSLAS

Learning outcomes for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Astronomy

Undergraduate Astronomy majors will graduate with a demonstrated ability to:

LO1. Understand the hierarchical architecture of the cosmos, increasing in scale from the Solar System to the Galaxy to the Universe, and decreasing in scale to atoms and their nuclei. Understand the interplay among these scales.

LO2. Define and use fundamental principles and techniques of astronomy and astrophysics.

- Identify which principles should be applied to a specified situation
- Show familiarity with astronomical observables and their physical origin.
- Understand and apply basic physics and computational techniques to solve problems in astrophysics, and interpret the results.

LO3. Analyze astronomical data, and quantitative data generally.

- Demonstrate the ability to link observation and theory.
- Demonstrate the ability to draw qualitative conclusions from quantitative information, and vice versa.
- Demonstrate the ability to plan observational programs, use astronomical telescopes and instrumentation, and to analyze and present astronomical data.

LO4. Plan and perform guided research, or attain an advanced-level understanding of a topic of contemporary interest in astronomy and astrophysics.

LO5. Demonstrate the ability to communicate effectively both verbally and in writing.

Atmospheric Sciences, BSLAS

for the degree of Bachelor of Science in Liberal Arts and Sciences Major in Atmospheric Sciences

department website: https://atmos.illinois.edu/
department faculty: Atmospheric Sciences Faculty (https://atmos.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: atmos-sci@illinois.edu

for the degree of Bachelor of Science in Liberal Arts and Sciences Major in Atmospheric Sciences

Departmental distinction: Students majoring in Atmospheric Sciences can earn distinction, high distinction, and highest distinction upon graduation. The requirements for these awards are:

For distinction: A minimum cumulative grade point average of 3.3 and have also completed an approved independent study project, approved senior thesis, or approved capstone.
For high distinction: A minimum cumulative grade point average of 3.5 and have also completed an approved independent study project, approved senior thesis, or approved capstone.
For highest distinction: A minimum cumulative grade point average of 3.7 and also completed an approved senior thesis or approved research capstone.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: normally equates to 58-59 hours including at least 32 hours in Atmospheric Sciences.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
PHYS 211	University Physics: Mechanics	4
PHYS 212	University Physics: Elec & Mag	4
CHEM 102	General Chemistry I	3
CHEM 103	General Chemistry Lab I	1
MATH 220	Calculus	4-5
or MATH 221	Calculus I	
MATH 231	Calculus II	3
MATH 241	Calculus III	4
MATH 285	Intro Differential Equations	3
ATMS 201	General Physical Meteorology	3
ATMS 301	Atmospheric Thermodynamics	3
ATMS 302	Atmospheric Dynamics I	3
ATMS 303	Synoptic-Dynamic Wea Analysis	4
ATMS 304	Radiative Transfer-Remote Sens	3
ATMS 305	Computing and Data Analysis	3
ATMS 306	Cloud Physics	3
ATMS 307	Climate Processes	3
ATMS 313	Synoptic Weather Forecasting	4
ATMS 314	Mesoscale Dynamics	3
Total Hours		58-59

Learning Outcomes: Atmospheric Sciences, BSLAS

Learning outcomes for the degree of Bachelor of Science in Liberal Arts and Sciences Major in Atmospheric Sciences

1. All students will have a fundamental understanding of the atmosphere and the dynamical and physical processes that control weather and climate.

2. All students will have demonstrable computational problem solving skills, and have the opportunity to participate in scientific research.
3. All students will understand practical applications of weather analysis and forecasting, and the impact of weather analysis and forecasting on public safety and the economy.
4. All students will develop competency in clear scientific written and oral communication.
5. All students will develop an understanding of the natural and anthropogenic processes that control climate and global change, their impact on human livelihood, and ways that individuals can contribute to the reduction of societal risk from weather and climate events and impacts.

Biochemistry, BS

for the degree of Bachelor of Science Major in Biochemistry (Specialized Curriculum)

department website: http://mcb.illinois.edu/departments/biochemistry (http://mcb.illinois.edu/departments/biochemistry/)
department faculty: Biochemistry Faculty (http://mcb.illinois.edu/faculty/biochemistry/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: biocug@mcb.uiuc.edu

Undergraduate degree programs in Molecular & Cellular Biology
Biochemistry, BS (p. 71)

Molecular & Cellular Biology, BSLAS (p. 308)

for the degree of Bachelor of Science Major in Biochemistry (Specialized Curriculum)

The typical program of courses required to satisfy this degree totals 126-131 hours as outlined below including up to 12 hours of non-primary language (if not completed in high school); in no case will a program totaling less than 120 hours qualify for graduation. In addition, in order to graduate there is a minimum 2.0 cumulative academic grade point average and student must attain a 2.5 academic grade point average in the chemistry, biochemistry, biology, mathematics, physics and advanced electives in science/engineering courses specified in this curriculum. All proposals for course substitutions must be approved by the academic advisor. This curriculum is intended for those students who desire a rigorous education in chemistry, biochemistry, and biology, who have definite research-oriented goals, and whose career objectives include graduate school, MD/PhD programs, or industry.

Students earning the Biochemistry degree automatically complete the Chemistry minor. Students earning a degree in the Specialized Curriculum in Biochemistry may not earn a second degree in the Science and Letters Curriculum in Molecular and Cellular Biology.

Departmental distinction: A student seeking distinction must satisfy the following:

- Complete a minimum of 6 credit hours of undergraduate research (BIOC 290 and BIOC 492) with a minimum of 4 credit hours of BIOC 492.
- Earn at least a 3.25 grade-point average.
- Present a senior thesis to the department.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Select one of the following:		8-10
CHEM 202 & CHEM 203 & CHEM 204 & CHEM 205	Accelerated Chemistry I and Accelerated Chemistry Lab I and Accelerated Chemistry II and Accelerated Chemistry Lab II (preferred sequence)	
CHEM 102 & CHEM 103 & CHEM 104 & CHEM 105	General Chemistry I and General Chemistry Lab I and General Chemistry II and General Chemistry Lab II (with advisor approval)	
Organic chemistry, select from:		9-10
CHEM 236 & CHEM 237 & CHEM 436	Fundamental Organic Chem I and Structure and Synthesis and Fundamental Organic Chem II (preferred sequence)	
CHEM 232 & CHEM 233 & CHEM 332	Elementary Organic Chemistry I and Elementary Organic Chem Lab I and Elementary Organic Chem II (with advisor approval)	
Molecular and Cellular Biology		17
MCB 150	Molec & Cellular Basis of Life	
MCB 250	Molecular Genetics	
MCB 251	Exp Techniqs in Molecular Biol	
MCB 252	Cells, Tissues & Development	
MCB 253	Exp Techniqs in Cellular Biol	
MCB 354	Biochem & Phys Basis of Life	
or equivalent as approved by academic advisor		
Physical chemistry, select one group of courses:		7-8
CHEM 440	Physical Chemistry Principles (Biological Perspective Section)	
BIOC 446	Physical Biochemistry (preferred sequence)	
or		
CHEM 442	Physical Chemistry I	
CHEM 444	Physical Chemistry II (with advisor approval)	
Mathematics & Statistics		14-15
STAT 212	Biostatistics	
MATH 220	Calculus	
or MATH 221	Calculus I	
MATH 231	Calculus II	
MATH 241	Calculus III	
Physics, select from: [3]		10
PHYS 211 & PHYS 212 & PHYS 213	University Physics: Mechanics and University Physics: Elec & Mag and Univ Physics: Thermal Physics (preferred sequence)	
or		

PHYS 101 & PHYS 102	College Physics: Mech & Heat and College Physics: E&M & Modern (or equivalent as approved by academic advisor (with advisor approval)	
Biochemistry: [4]		13
BIOC 455	Technqs Biochem & Biotech	
BIOC 460	Biochemistry Senior Seminar	
BIOC 406	Gene Expression & Regulation	
BIOP 401	Introduction to Biophysics	
Select 10 hours of Advanced Science/Technical Electives (may include up to 7 hours of BIOC 492, Senior Thesis) from approved list. [5]		10
Nontechnical Requirements: [6]		variable
General education:		
Foreign language - three semesters of college study (or three years of high school study) in a single foreign language to satisfy the campus foreign language requirement		
Composition I writing requirement to satisfy the campus Composition I requirement		
Advanced Composition writing requirement (BIOC 460 is required)		
Humanities/Arts to satisfy the campus general education requirements		
Social/Behavioral sciences to satisfy the campus general education requirements		
Cultural Studies to satisfy the campus general education requirement		
Electives (not including any credit in satisfaction of the above requirements)		variable

1 *Transfer credit must be approved by an advisor in biochemistry in order to be used to satisfy degree requirements.*

2 *A more detailed description of the requirements is listed in the Biochemistry Curriculum Handbook, available in room 419A of Roger Adams Laboratory.*

3 PHYS 213 *is not required if* CHEM 442/CHEM 444 *sequence is taken.*

4 *Freshman orientation course is under development and will be required. See advisor for details.*

5 *An approved list of current courses will be updated annually in January/February for the coming year. Contact advisor.*

6 *The requirements for the Campus General Education categories of Natural Sciences and Technology and Quantitative Reasoning I are fulfilled through coursework in the curriculum.*

Learning Outcomes: Biochemistry, BS

Learning outcomes for the degree of Bachelor of Science Major in Biochemistry (Specialized Curriculum)

Upon successful completion of the Biochemistry Specialized Curriculum, students will be able to:

1. Understand and appreciate that the diversity of life evolved over time by biomolecular processes of mutation, selection, genetic change, and epigenetics.
2. Explain that molecular and macromolecular structure as well as supramolecular architecture determine function and regulation.
3. Explain that information storage and flow are molecular-based, dynamic, and interactive.
4. Understand and appreciate that biochemical mechanisms and kinetics ensure relative cellular stability and function under external or internal changing condition.
5. Explain that energy is required by and transformed in biochemical systems as governed by the laws of thermodynamics.
6. Illustrate that living organisms and biological systems interact via molecular connections.
7. Design a scientific process and employ the scientific method, demonstrating that biochemistry is evidence-based and grounded in the formal practices of observation, objective measurement, and hypothesis testing.
8. Execute quantitative analysis and mathematical reasoning to interpret biochemical data.
9. Construct and utilize predictive models and simulations that define chemical relationships, as well as molecular interactions of complex systems.
10. Apply concepts from other sciences that span biology, chemistry, physics, mathematics, computation, and engineering to interpret biochemical phenomena.
11. Communicate biochemical concepts and understanding to members of a diverse scientific community, as well as to the general public.
12. Identify social and health-related dimensions of biochemical investigations.

Bioengineering, BS

for the degree of Bachelor of Science in Bioengineering

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department website: https://bioengineering.illinois.edu/
department faculty: Bioengineering Faculty (https://bioengineering.illinois.edu/people/faculty/)
overview of college admissions & requirements: The Grainger College of Engineering (https://grainger.illinois.edu/admissions/)
college website: https://grainger.illinois.edu/
Current Program Educational Objectives: https://bioengineering.illinois.edu/academics/undergraduate/education-objectives (https://bioengineering.illinois.edu/academics/undergraduate/education-objectives/)

Bioengineers use engineering principles to solve problems in the life sciences, human health and medicine, and related industries. At the undergraduate level, the goal of bioengineering education is to instill a fundamental understanding of biology while developing core skills to design technologies relevant to human health and disease.

The Bioengineering department at the University of Illinois at Urbana-Champaign provides a rigorous engineering education that prepares graduates to:

secure and excel in jobs as engineers in industries of biotechnology, health care equipment and technology, life science tools, and pharmaceuticals,
pursue graduate studies in bioengineering-related fields, and
pursue professional degrees in the health sciences, law, and business.

During the first and second years of the curriculum, fundamental courses in biology, chemistry, computing, mathematics, and physics introduce

students to the multidisciplinary principles underlying bioengineering as a field. Throughout the curriculum, core coursework becomes progressively more integrative across the disciplines and in years three and four, students specialize in a chosen bioengineering subdiscipline. The program is distinguished by laboratory courses that provide diverse experiences and hands-on skills as well as a capstone design course in which students practice the rigorous application of engineering fundamentals to biological problems identified by faculty, clinicians, and industrial partners.

for the degree of Bachelor of Science in Bioengineering

Graduation Requirements

Minimum Overall GPA: 2.0
Minimum hours required for graduation: 128 hours
General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**

Orientation and Professional Development

Code	Title	Hours
ENG 100	Engineering Orientation	0
BIOE 100	Bioengineering Freshman Seminar	1
BIOE 120	Introduction to Bioengineering	1
Total Hours		2

Foundational Mathematics and Science

Code	Title	Hours
CHEM 102	General Chemistry I	3
CHEM 103	General Chemistry Lab I	1
CHEM 104	General Chemistry II	3
CHEM 105	General Chemistry Lab II	1
MATH 221	Calculus I [1]	4
MATH 231	Calculus II	3
MATH 241	Calculus III	4
MATH 285	Intro Differential Equations	3
PHYS 211	University Physics: Mechanics	4
PHYS 212	University Physics: Elec & Mag	4
Total Hours		30

Bioengineering Technical Core

Code	Title	Hours
BIOE 201	Conservation Principles Bioeng	3
BIOE 202	Cell & Tissue Engineering Lab	2
BIOE 205	Signals & Systems in Bioengrg	3
BIOE 206	Cellular Bioengineering	3
BIOE 210	Linear Algebra for Biomedical Data Science	3
BIOE 302	Modeling Human Physiology	3
BIOE 303	Quantitative Physiology Lab	2
BIOE 310	Comp Tools Bio Data	3
BIOE 360	Transport & Flow in Bioengrg	3
BIOE 414	Biomedical Instrumentation	3
BIOE 415	Biomedical Instrumentation Lab	2
BIOE 420	Intro Bio Control Systems	3
BIOE 435	Senior Design I	2
BIOE 436	Senior Design II	2
BIOE 476	Tissue Engineering	3
CHEM 232	Elementary Organic Chemistry I [2]	4
CS 101	Intro Computing: Engrg & Sci	3
MCB 150	Molec & Cellular Basis of Life	4
Total Hours		51

Track Electives

Code	Title	Hours
Track electives selected from a departmentally approved list of track elective courses below. Alternately a student may devise a special track and set of courses which must be approved by the Bioengineering Department. Students are required to complete one track.		15
Biomechanics Track		
List of Pre-Approved Biomechanics Track Required Courses		
TAM 211	Statics	3
TAM 212	Introductory Dynamics	3
TAM 251	Introductory Solid Mechanics	3
List of Pre-Approved Biomechanics Electives to choose remaining hours from:		
BIOE 461	Cellular Biomechanics [5]	4
BIOE 498	Special Topics (Experimental Design in Automation) [5]	3
BIOE 498	Special Topics (Finite Element Methods in Biomedicine) [5]	3
BIOE 498	Special Topics (Quantitative Pharmacology) [5]	3
BIOE 498	Special Topics (Regulatory Safety Issues in Bioengineering) [5]	3
BIOE 498	Special Topics (Surgical Techniques) [5]	3
ME 330	Engineering Materials	4
ME 481	Whole-Body Musculoskel Biomech	3
ME 482	Musculoskel Tissue Mechanics	3
ME 483	Mechanobiology	4
SE 402	Comp-Aided Product Realization	3
NPRE 461	Probabilistic Risk Assessment [5]	3
SE 423	Mechatronics	3
TAM 445	Continuum Mechanics [5]	4
TMGT 461	Tech, Eng, & Mgt Final Project [5]	2
Pre-Approved Biomechanics Track recommended free elective		
SE 101	Engineering Graphics & Design	3
Cell and Tissue Engineering Track		
BIOE 306	Biofabrication Lab [5]	3
BIOE 416	Biosensors [5]	3
BIOE 430	Intro Synthetic Biology [5]	3
BIOE 460	Gene Editing Lab [5]	3
BIOE 461	Cellular Biomechanics [5]	4
BIOE 487	Stem Cell Bioengineering [5]	3
BIOE 498	Special Topics (Experimental Design in Automation) [5]	3
BIOE 498	Special Topics (Finite Element Methods in Biomedicine) [5]	3
BIOE 498	Special Topics (Immunoengineering) [5]	3

BIOE 498	Special Topics (Preclinical Molecular Imaging) [5]	3
BIOE 498	Special Topics (Quantitative Pharmacology) [5]	3
BIOE 498	Special Topics (Regulatory Safety Issues in Bioengineering) [5]	3
BIOE 498	Special Topics (Systems Biology) [5]	3
CHBE 471	Biochemical Engineering	3
CHBE 472	Techniques in Biomolecular Eng [5]	3
IE 330	Industrial Quality Control	3
MSE 404	Laboratory Studies in Materials Science and Engineering [5]	1.5
MSE 470	Design and Use of Biomaterials [5]	3
MSE 474	Biomaterials and Nanomedicine [5]	3
ME 483	Mechanobiology [5]	4
TMGT 461	Tech, Eng, & Mgt Final Project [5]	2
Recommended Free Elective		
MCB 450	Introductory Biochemistry	3
Therapeutics Engineering Track		
ABE 446	Biological Nanoengineering	3
BIOE 306	Biofabrication Lab [5]	3
BIOE 430	Intro Synthetic Biology [5]	3
BIOE 460	Gene Editing Lab [5]	3
BIOE 479	Cancer Nanotechnology [5]	3
BIOE 498	Special Topics (Experimental Design in Automation) [5]	3
BIOE 498	Special Topics (Immunoengineering) [5]	3
BIOE 498	Special Topics (Preclinical Molecular Imaging) [5]	3
BIOE 498	Special Topics (Quantitative Pharmacology) [5]	3
BIOE 498	Special Topics (Regulatory Safety Issues in Bioengineering) [5]	3
BIOE 498	Special Topics (Surgical Technologies) [5]	3
BIOE 498	Special Topics (Systems Biology) [5]	3
BIOE 498	Special Topics (Technologies for Cancer Diagnosis and Therapy) [5]	3
CHBE 472	Techniques in Biomolecular Eng [5]	3
ECE 481	Nanotechnology [5]	4
MSE 403	Synthesis of Materials	3
MSE 404	Laboratory Studies in Materials Science and Engineering [5]	1.5
MSE 450	Polymer Science & Engineering	3
MSE 457	Polymer Chemistry	3 or 4
MSE 470	Design and Use of Biomaterials [5]	3
MSE 473	Biomolecular Materials Science	3
MSE 474	Biomaterials and Nanomedicine [5]	3
MSE 480	Surfaces and Colloids	3
TMGT 461	Tech, Eng, & Mgt Final Project [5]	2
Computational and Systems Biology Track		
CS 101	Intro Computing: Engrg & Sci (CS 125 may be taken instead of CS 101. Student must complete curriculum modification form with department advisor)	3
ABE 440	Applied Statistical Methods I	4
BIOE 430	Intro Synthetic Biology [5]	3
BIOE 498	Special Topics (Experimental Design in Automation) [5]	3
BIOE 498	Special Topics (Finite Element Methods in Biomedicine) [5]	3
BIOE 498	Special Topics (Regulatory Safety Issues in Bioengineering) [5]	3
BIOE 498	Special Topics (Systems Biology) [5]	3
CS 225	Data Structures	4
CS 411	Database Systems	3
CS 412	Introduction to Data Mining	3
CS 440	Artificial Intelligence	3
CS 446	Machine Learning	3 or 4
CS 465	User Interface Design	3
CS 466	Introduction to Bioinformatics	3
CS 498	Special Topics (Intro to Deep Learning)	3
ECE 490	Introduction to Optimization	3
ECE 498	Special Topics in ECE (Deep Learning in Hardware)	3
IE 310	Deterministic Models in Optimization	3
IE 370	Stochastic Processes and Applications	3
NPRE 461	Probabilistic Risk Assessment [5]	3 or 4
SE 423	Mechatronics [5]	3
TMGT 461	Tech, Eng, & Mgt Final Project [5]	2
Imaging and Sensing Track		
ECE 210	Analog Signal Processing	4
ECE 329	Fields and Waves I	3
and select remaining hours from:		
BIOE 498	Special Topics (Experimental Design in Automation) [5]	3
BIOE 498	Special Topics (Immunoengineering) [5]	3
BIOE 498	Special Topics (Preclinical Molecular Imaging) [5]	3
BIOE 498	Special Topics (Quantitative Pharmacology) [5]	3
BIOE 498	Special Topics (Regulatory Safety Issues in Bioengineering) [5]	3
BIOE 498	Special Topics (Surgical Techniques) [5]	3
BIOE 498	Special Topics (Systems Biology) [5]	3
BIOE 498	Special Topics (Technologies for Cancer Diagnosis and Therapy) [5]	3
ECE 310	Digital Signal Processing	3
ECE 311	Digital Signal Processing Lab	1
ECE 365	Data Science and Engineering	3
ECE 380	Biomedical Imaging	3
ECE 416	Biosensors [5]	3
ECE 417	Multimedia Signal Processing	4
ECE 418	Image & Video Processing	4
ECE 437	Sensors and Instrumentation	3
ECE 365	Data Science and Engineering	3
ECE 460	Optical Imaging	4
ECE 467	Biophotonics	3
ECE 472	Biomedical Ultrasound Imaging	3

ECE 473	Fund of Engrg Acoustics	3
ECE 480	Magnetic Resonance Imaging	3
ME 487	MEMS-NEMS Theory & Fabrication	4
NPRE 461	Probabilistic Risk Assessment [5]	3
SE 423	Mechatronics [5]	3
TMGT 461	Tech, Eng, & Mgt Final Project [5]	2
Recommended Free Elective		
CHEM 442	Physical Chemistry I	4

Electives

Code	Title	Hours
The Grainger College of Engineering Liberal Education course list, or additional courses from the campus General Education lists for Social and Behavioral Sciences or Humanities and the Arts. [3]		6
Free electives. Additional unrestricted course work, subject to certain exceptions as noted by the College, so that there are at least 128 credit hours earned toward the degree. [4]		8
Total Hours of Curriculum to Graduate		**128**

1. MATH 220 *may be substituted, with four of the five credit hours applying toward the degree.* MATH 220 *is appropriate for students with no background in calculus.*
2. *May be taken for 3 or 4 credit hours; the extra hour may be used to help meet free elective requirements.*
3. *The Grainger College of Engineering approved liberal education course list can be found* here *(*https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-GeneralEducationElectives*). Note that these credit hours could carry the required cultural studies designation required for campus general education requirements.*
4. *The Grainger College of Engineering restrictions to free electives can be found* here *(*https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-FreeElectives*).*
5. Students select one track option to complete; this course can only be applied in the specific track area where the course is listed.

for the degree of Bachelor of Science in Bioengineering

Suggested Sequence

The curriculum sequence below is a suggested sequence, as all Grainger Engineering students work with a department academic advisor to achieve their educational goals, specific to their needs and preparation. Dynamic and Static curricular maps, which include prerequisite sequencing, can be found here (https://grainger.illinois.edu/academics/undergraduate/majors-and-minors/bioengineering-map/).

First Year

First Semester		Hours
BIOE 100	Bioengineering Freshman Seminar	1
ENG 100	Engineering Orientation	0
MATH 221[1]	Calculus I	4
CHEM 102	General Chemistry I	3
CHEM 103	General Chemistry Lab I	1
RHET 105 or MCB 150[2]	Writing and Research	4
General education elective[3]		3
	Semester Hours	16

Second Semester

BIOE 120	Introduction to Bioengineering	1
MATH 231	Calculus II	3
CHEM 104	General Chemistry II	3
CHEM 105	General Chemistry Lab II	1
PHYS 211	University Physics: Mechanics	4
MCB 150 or RHET 105[2]	Molec Cellular Basis of Life	4
	Semester Hours	16

Second Year

First Semester

BIOE 201	Conservation Principles Bioeng	3
BIOE 206	Cellular Bioengineering	3
MATH 241	Calculus III	4
PHYS 212	University Physics: Elec Mag	4
CS 101	Intro Computing: Engrg Sci	3
	Semester Hours	17

Second Semester

BIOE 202	Cell Tissue Engineering Lab	2
BIOE 205	Signals Systems in Bioengrg	3
BIOE 210	Linear Algebra for Biomedical Data Science	3
CHEM 232[4]	Elementary Organic Chemistry I	4
MATH 285	Intro Differential Equations	3
	Semester Hours	15

Third Year

First Semester

BIOE 302	Modeling Human Physiology	3
BIOE 303	Quantitative Physiology Lab	2
BIOE 476	Tissue Engineering	3
Track elective[5]		3
Free elective		2
General education elective[3]		3
	Semester Hours	16

Second Semester

BIOE 310	Comp Tools Bio Data	3
BIOE 360	Transport Flow in Bioengrg	3
BIOE 414	Biomedical Instrumentation	3
BIOE 415	Biomedical Instrumentation Lab	2
Track elective[5]		3
General education elective[3]		3
	Semester Hours	17

Fourth Year

First Semester

BIOE 435	Senior Design I	2
Track electives[5]		6
General education elective[3]		6
Free elective		3
	Semester Hours	17

Second Semester

BIOE 436	Senior Design II	2
BIOE 420	Intro Bio Control Systems	3
Track elective[5]		3
General education elective[3]		3
Free electives		3
	Semester Hours	14
	Total Hours:	128

[1] *MATH 220 may be substituted, with four of the five credit hours applying toward the degree. MATH 220 is appropriate for students with no background in calculus.*

[2] *RHET 105 (or an alternative Composition I sequence) is taken either in the first or second semester of the first year, according to the student's UIN (Spring if your UIN is Odd). MCB 150 is taken the other semester. Composition I guidelines can be found at* http://catalog.illinois.edu/general-information/degree-general-education-requirements/ *under Written Communication Requirement.*

[3] *Students must take 6 hours from the campus General Education Social and Behavioral Sciences list, 6 hours from campus General Education Humanities and the Arts list, and 6 hours from a liberal education list approved by the college or from the campus General Education lists for Social and Behavioral Sciences or Humanities and the Arts.*
Students must also complete the campus cultural studies requirement by completing (i) one western/comparative culture(s) course, (ii) one non-western culture(s) course, and (iii) one U.S. Minority Culture(s) course from the General Education cultural studies lists. Most students select general education courses that simultaneously satisfy these cultural studies requirements.

[4] *May be taken for 3 or 4 credit hours; the extra hour may be used to help meet free elective requirements.*

[5] *To be selected from a departmentally approved* list of track elective courses *(*http://bioengineering.illinois.edu/undergraduate-programs/track-electives/*) if a pre-approved track is chosen. Alternately a student may devise a special track which must be approved by the Bioengineering Department.*

Learning Outcomes: Bioengineering, BS

Learning Outcomes for the degree of Bachelor of Science Major in Bioengineering

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Student learning outcomes are based on learning outcomes in line with the ABET accreditation process.

Bioengineering graduates will have:

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. An ability to communicate effectively with a range of audiences.
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Biology

Students interested in applying to either school of biology should simply choose Biology as their major. After taking two introductory courses, students will choose a major in either Integrative Biology or Molecular and Cellular Biology.

Integrative Biology, School of **(**http://www.life.uiuc.edu/sib/**)**

Director of School: Carla Cáceres

School Office: 286 Morrill Hall, 505 South Goodwin Avenue, Urbana, (217) 333-3044

Molecular and Cellular Biology, School of **(**http://mcb.illinois.edu/**)**

Director of School: Milan Bagchi

School Office: 393 Morrill Hall, 505 South Goodwin Avenue, Urbana, (217) 333-3166

An interschool option in Teaching of Biology (http://catalog.illinois.edu/undergraduate/las/biology-teacher-education-bslas/) is sponsored by the School of Integrative Biology and the School of Molecular and Cellular Biology.

Also, see majors in Integrative Biology (http://catalog.illinois.edu/undergraduate/las/academic-units/integrative-bio/#majorstext) and Molecular and Cellular Biology (p. 308).

Brain & Cognitive Science, BSLAS

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Brain & Cognitive Science

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department website: http://www.psychology.illinois.edu/undergrad/
department faculty: Psychology Faculty **(**https://psychology.illinois.edu/directory/faculty/**)**
advising: Psychology advising **(**https://psychology.illinois.edu/academics/undergraduate-program/advising-services/**)**
overview of college admissions & requirements: Liberal Arts & Sciences **(**http://catalog.illinois.edu/schools/las/academic-units/**)**
college website: https://las.illinois.edu/
email: psych-advising@illinois.edu **(**bcog-advising@illinois.edu**)**

The **Brain and Cognitive Science major** introduces the student to a simple question: How do intelligent systems work? Our world provides two examples of complex intelligent systems—human beings (and possibly some other animals) and intelligent computer systems. Brain and Cognitive Science majors investigate the brain and behavior of intelligent biological systems (e.g. people) from the perspective that the brain is a kind of computer. Consequently, students must learn about how brains

and computers work, and how these can explain what we know about mental functions including perception, learning, memory, and language. Brain and Cognitive Science majors make use of discoveries from a number of different disciplines, including psychology, neuroscience, computer science, linguistics, philosophy, and anthropology, and has applications to the development of technology in education, health, language sciences, and design.

The Brain and Cognitive Science major provides fundamental training in psychology, neuroscience, and computation, and it allows a great deal of flexibility with regard to more advanced courses. The major requires training in statistics, a laboratory course, and the capstone course. Students should contact our Undergraduate Advising Office for help in creating a plan of study and research that best meets their goals and interests.

Academic Advising

The Psychology Undergraduate Advising Office is open to help students choose patterns of courses relevant to their interests, as well as to help students explore graduate school, professional school, and career options. Advising is done by an award-winning staff of academic professionals along with mentoring by faculty for students with research interests. Peer registration assistants are also available to help with the registration process.

Undergraduate Degree Programs in Psychology

BSLAS in Brain & Cognitive Science (p. 76)

BSLAS in Psychology (p.) with the following concentrations:

- Behavioral Neuroscience (p. 361)
- Clinical/Community Psychology (p. 361)
- Cognitive Neuroscience (p. 362)
- Cognitive Psychology (p. 363)
- Developmental Psychology (p. 364)
- Diversity Science (p. 365)
- Intradisciplinary Psychology (p. 365)
- Organizational Psychology (p. 366)
- Personality Psychology (p. 367)
- Social Psychology (p. 367)

For the Degree of Bachelor of Science in Liberal Arts and Sciences Major in Brain and Cognitive Science

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A Major Plan of Study Form must be completed and submitted to the LAS Student Academic Affairs Office before the end of the fifth semester (60-75 hours).
Departmental distinction: To be eligible for graduation with Distinction in Psychology, a student must complete a two-semester research sequence in PSYC 494, submit a Senior Thesis that must be approved by the department, and maintain an overall 3.0 GPA at the time of submission. A student can also enroll in PSYC 492 to facilitate the preparation of a Bachelor's thesis.
To be eligible for High or Highest Distinction, a student must first be admitted to the Honors Program (requirements: junior standing, 3.5 GPA in Psychology overall, and completion of the statistics an laboratory requirements). The student then has to complete the three semester Honors sequence (PSYC 398, PSYC 498, PSYC 499), submit a Senior Thesis that must be approved by the department, and maintain an overall GPA of at least 3.0 to be awarded High Distinction or a GPA of 3.5 for Highest Distinction.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 42 hours of coursework, including at least 12 hours of advanced coursework.
Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
BCOG 100	Introduction to the Brain and Cognitive Science	3
BCOG 200	Introduction to Programming for the Brain and Cognitive Sciences	4
Statistics Course		4
PSYC 235	Intro to Statistics (or equivalent)	
Multi-disciplinary Breadth Courses	**Select two of the following:**	**6-7**
ANTH 101	Introduction to Anthropology	
or ANTH 102	Human Origins and Culture	
or ANTH 104	Talking Culture	
or ANTH 143	Biology of Human Behavior	
INFO 102	Little Bits to Big Ideas	
or CS 125	Introduction to Computer Science	
LING 100	Intro to Language Science	
MCB 170	Society and the Brain	
PHIL 100	Intro to Philosophy-ACP	
or PHIL 101	Introduction to Philosophy	
PHIL 102	Logic and Reasoning	
or PHIL 103	Logic and Reasoning QR II	
PSYC 100	Intro Psych	
or PSYC 103	Intro Experimental Psych	
Intermediate Required Courses	**Select one of the following:**	**3**
PSYC 220	Images of Mind	
PSYC 204	Intro to Brain and Cognition	
PSYC 210	Behavioral Neuroscience	

Intermediate Elective Courses	**Select one of the following:**	**3**
ANTH 240	Biological Anthropology	
ANTH 243	Sociality of the Great Apes	
ANTH 270	Language in Culture	
CS 173	Discrete Structures	
or MATH 213	Basic Discrete Mathematics	
CS 225	Data Structures	
PSYC 216	Child Psych	
PSYC 224	Cognitive Psych	
PSYC 230	Perception & Sensory Processes	
PSYC 248	Learning and Memory	
LING 225	Language, Mind, and Brain	
LING 270	Language, Technology & Society	
PHIL 202	Symbolic Logic	
PHIL 250	Conceptions of Human Nature	
PHIL 270	Philosophy of Science	
BCOG 458	Advances in Brain and Cognitive Science	3
Required Lab	**Select one of the following:**	**4**
PSYC 311	Behavioral Neuroscience Lab	
PSYC 331	Cognitive Psych Lab	
PSYC 334	Perception Lab	
PSYC 363	Developmental Child Psych Lab	
PSYC 445	Cognitive Neuroscience Lab	
PSYC 489	Neural Network Modeling Lab	
Advanced Electives	**Select four of the following:**	**12**
ANTH 372	Topics in Lang & Culture	
BCOG 492	Capstone Undergraduate Research (Cognitive Science Capstone)	
CS 361	Probability & Statistics for Computer Science	
CS 440	Artificial Intelligence	
IB 329	Animal Behavior	
IB 432	Genes and Behavior	
IE 340	Human Factors	
LING 301	Elements of Syntax	
LING 302	Elements of Phonology	
LING 304	Elements of Morphology	
LING 307	Elmnts Semantics & Pragmatics	
LING 425	Intro to Psycholinguistics	
MCB 419	Brain, Behavior & Info Process	
MCB 462	Integrative Neuroscience	
PHIL 407	Logic and Linguistic Analysis	
PHIL 425	Philosophy of Mind	
PHIL 430	Theory of Knowledge	
PHIL 443	Phenomenology	
PHIL 453	Formal Logic and Philosophy	
PHIL 454	Advanced Symbolic Logic	
PHIL 471	Contemporary Phil of Science	
PHIL 477	Philosophy of Psychology	
PSYC 302	Applied Neuroscience	
PSYC 351	Thinking and Reasoning	
PSYC 361	The Psychology of Aging	
PSYC 402	Intro Clin Neuropsych	
PSYC 403	Memory and Amnesia	
PSYC 404	Cognitive Neuroscience	
PSYC 408	Human Behavior Genetics	
PSYC 413	Advanced Neuropsychopharmacology	
PSYC 414	Brain, Learning, and Memory	
PSYC 421	Principles of Psychophysiology	
PSYC 423	Language Acquisition	
PSYC 433	Evolutionary Neuroscience	
PSYC 450	Cognitive Psychophysiology	
PSYC 451	Neurobio of Aging	
PSYC 453	Cog Neuroscience of Vision	
SHS 301	General Speech Science	
SHS 427	Language and the Brain	
Total Hours		**42-43**

Chemical Engineering, BS

for the degree of Bachelor of Science in Chemical Engineering (Specialized Curriculum)

department website: https://chbe.illinois.edu/
department faculty: Chemical & Biomolecular Engineering Faculty (https://chbe.illinois.edu/directory/)
advising: SCS Academic Advising (https://scs.illinois.edu/academics/advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/

The first two years of the Chemical Engineering curriculum provide a strong foundation in basic sciences through Physics, Mathematics, Chemistry, an introduction to what Chemical Engineers do, and the fundamental basis of Chemical Engineering (Mass and Energy Balances and Thermodynamics.) In the third year, students delve deeper into more specialized Chemistry courses such as Physical and Analytical Chemistry, while exploring fundamental Chemical Engineering courses such as Momentum Transfer, Separations, and Reactor Design. The Senior year incorporates all of this learning through high level technical electives, Process Control, Capstone Lab, and Capstone Design courses. It is through the lab and design class that students apply everything they have learned in previous Chemical Engineering courses to real-world team projects and presentations.

The Chemical Engineering specialized curriculum provides two areas of concentration: Chemical Engineering and Biomolecular Engineering. Each area is based on a strong fundamental understanding of Chemical Engineering, however the Biomolecular concentration's technical electives focus more on bio-applied processing and technology.

Areas of Concentration

- Chemical Engineering (p. 79): The chemical engineering concentration is designed to prepare students for careers in the energy, chemical, food, energy, pharmaceutical, semiconductor processing, personal care, fiber and materials industries.
- Biomolecular Engineering (p. 82): The Biomolecular Engineering concentration builds upon the traditional principles of chemical

engineering, but specializes in biological and biotechnological systems in order to better prepare students who are interested in or seek employment in the food, pharmaceutical, and biotechnology industries.

for the degree of Bachelor of Science in Chemical Engineering (Specialized Curriculum)

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: A grade point average of 2.5 or higher in all courses required for the major earned on the UIUC campus is required in order to be accepted by the department as juniors and seniors.
Minimum hours required for graduation: The curriculum requires 129 hours for graduation and is organized as shown below.

Orientation and Professional Development

These courses introduce opportunities and resources the college, department, and curriculum offers students. They also provide background on the Chemical Engineering curriculum, what chemical engineers do, and the skills to work effectively and successfully in the engineering profession.

Code	Title	Hours
CHBE 121	CHBE Profession [1]	1
ENG 100	Engineering Orientation [1]	0
Total Hours		1

Foundational Mathematics and Science

These courses stress the basic mathematical and scientific principles upon which the engineering discipline is based.

Code	Title	Hours
CHEM 202	Accelerated Chemistry I [2]	3
CHEM 203	Accelerated Chemistry Lab I	2
CHEM 204	Accelerated Chemistry II	3
CHEM 205	Accelerated Chemistry Lab II	2
MATH 221	Calculus I [3]	4
MATH 231	Calculus II	3
MATH 241	Calculus III	4
MATH 285	Intro Differential Equations [4]	3
MATH 415	Applied Linear Algebra	3
PHYS 211	University Physics: Mechanics	4
PHYS 212	University Physics: Elec & Mag	4
PHYS 214	Univ Physics: Quantum Physics	2
Total Hours		37

Chemical and Biomolecular Engineering Technical Core

These courses stress fundamental concepts and basic laboratory techniques that comprise the common intellectual understanding of chemical engineering and chemical science.

Code	Title	Hours
CHBE 221	Principles of CHE	3
CHBE 321	Thermodynamics	4
CHBE 421	Momentum and Heat Transfer	4
CHBE 422	Mass Transfer Operations	4
CHBE 424	Chemical Reaction Engineering	3
CHBE 430	Unit Operations Laboratory	4
CHBE 431	Process Design	4
CHBE 440	Process Control and Dynamics	3
CHEM 236	Fundamental Organic Chem I	4
CHEM 237	Structure and Synthesis	2
CHEM 315	Instrumental Chem Systems Lab [5]	2
CHEM 420	Instrumental Characterization	2
CHEM 442	Physical Chemistry I	4
CS 101	Intro Computing: Engrg & Sci	3
IE 300	Analysis of Data	3
Total Hours		49

For Chemical Engineering

Code	Title	Hours
Technical Core		49
CHEM 436	Fundamental Organic Chem II	3
or MCB 450	Introductory Biochemistry	
Total Hours		52

Technical Electives

These courses stress the rigorous analysis and design principles practiced in the major subdisciplines of chemical engineering embodied in the chemical engineering and biomolecular engineering concentrations.

For Chemical Engineering

Code	Title	Hours
Selected from the departmentally approved List of Approved Chemical Engineering Technical Electives, satisfying these distribution requirements: [6]		
400-level ChBE courses, with not more than 3 hours being CHBE 497 or CHBE 499 [7]		6
Any 400-level course from List 1 [7]		3
Any courses from List 1 [7]		6
Any 400-level course from List 2		4
Total Hours		19

Social Sciences and Humanities

The social sciences and humanities courses ensure that students have exposure in breadth and depth to areas of intellectual activity that are essential to the general education of any college graduate.

Code	Title	Hours
General education courses to satisfy the university requirements for social & behavioral sciences, humanities & the arts, and cultural studies (Non-Western, U.S. Minority, and Western Cultures).		16

Composition

These courses teach fundamentals of expository writing.

Code	Title	Hours
RHET 105	Writing and Research	4
Advanced Composition (satisfied by completing the sequence CHBE 430 and CHBE 431 in the Chemical Engineering Technical Core).		
Total Hours		4

1 *For students entering the curriculum after the freshman year, 1 additional hour of credit from the list of approved engineering technical electives may be substituted in place of CHBE 121.*

2 *Students who do not place into* CHEM 202*, or who do not satisfy the mathematics prerequisite for* CHEM 202*, may substitute the sequence* CHEM 102*,* CHEM 103*,* CHEM 104*,* CHEM 105*,* CHEM 222*, and* CHEM 223 *for* CHEM 202*,* CHEM 203*,* CHEM 204*, and* CHEM 205*.*

3 MATH 220 *may be substituted, with four of the five credit hours applying toward the degree.* MATH 220 *is appropriate for students with no background in calculus.*

4 MATH 441 *may be substituted for* MATH 285*.* MATH 286 *(4 hours) may be substituted for* MATH 285 *(3 hours).*

5 *Students must register in one of the Chemical Engineering-specific* CHEM 315 *lab sections.*

6 List of Approved Chemical Engineering Technical Electives. (http://chbe.illinois.edu/wp-content/uploads/2015/11/Technical.Electives.Current.pdf)

7 *A maximum of 10 total hours of undergraduate research may be counted toward Technical Elective credit.*

for the degree of Bachelor of Science Major in Chemical Engineering

The schedule that follows is illustrative, showing the typical sequence in which courses would be taken by a student with no college course credit already earned and who intends to graduate in four years. Each individual's case may vary, but the position of required named courses is generally indicative of the order in which they should be taken. The first three semesters of the Suggested Sequence is the same for all chemical engineering students. The fifth through eights semesters vary with the area of concentration chosen. Refer to the appropriate sequence continuation below.

First Year

First Semester		Hours
CHEM 202[1]	Accelerated Chemistry I	3
CHEM 203	Accelerated Chemistry Lab I	2
ENG 100[2]	Engineering Orientation	0
MATH 221[3]	Calculus I	4
RHET 105	Writing and Research	4
Elective in Social Sciences or Humanities[4,5]		3
	Semester Hours	16
Second Semester		
CHBE 121[2]	CHBE Profession	1
CHEM 204	Accelerated Chemistry II	3
CHEM 205	Accelerated Chemistry Lab II	2
CS 101	Intro Computing: Engrg Sci	3
MATH 231	Calculus II	3
PHYS 211[6]	University Physics: Mechanics	4
	Semester Hours	16

Second Year

First Semester		
CHBE 221	Principles of CHE	3
CHEM 236	Fundamental Organic Chem I	4
CHEM 237	Structure and Synthesis	2
MATH 241	Calculus III	4
PHYS 212[6]	University Physics: Elec Mag	4
	Semester Hours	17
	Total Hours:	49

Major in Chemical Engineering

For the Concentration in Biomolecular Engineering, see below (p. 81)

Second Year

First Semester		Hours
Second Year First Semester course information is above in the Suggested Sequence that is common for all students		17
	Semester Hours	17
Second Semester		
CHBE 321	Thermodynamics	4
CHEM 436 or MCB 450	Fundamental Organic Chem II	3
MATH 285[7a]	Intro Differential Equations	3
MATH 415	Applied Linear Algebra	3
PHYS 214[6]	Univ Physics: Quantum Physics	2
Elective in Social Sciences or Humanities or Technical Elective[4,5,8a]		3
	Semester Hours	18
Third Year		
First Semester		
CHBE 421	Momentum and Heat Transfer	4
CHEM 315[9]	Instrumental Chem Systems Lab	2
CHEM 420	Instrumental Characterization	2
CHEM 442	Physical Chemistry I	4
Elective in Social Sciences or Humanities or Technical Elective[4,5,8a]		3
	Semester Hours	15
Second Semester		
CHBE 422	Mass Transfer Operations	4
CHBE 424	Chemical Reaction Engineering	3
IE 300	Analysis of Data	3
Elective in Social Sciences or Humanities or Technical Elective[4,5,8a]		7
	Semester Hours	17
Fourth Year		
First Semester		
CHBE 430[10,11]	Unit Operations Laboratory	4
CHBE 440	Process Control and Dynamics	3
Elective in Social Sciences or Humanities or Technical Elective[4,5,8a]		9
	Semester Hours	16
Second Semester		

CHBE 431[10,11] Process Design	4
Elective in Social Sciences or Humanities or Technical Elective[4,5,8a]	10
Semester Hours	14
Total Hours:	97

Concentration in Biomolecular Engineering

Second Year

First Semester	Hours
Second Year First Semester course information is above in the Suggested Sequence that is common for all students	17
Semester Hours	17
Second Semester	
CHBE 321 Thermodynamics	4
MCB 450 Introductory Biochemistry	3
MATH 285[7b] Intro Differential Equations	3
MATH 415 Applied Linear Algebra	3
PHYS 214[6] Univ Physics: Quantum Physics	2
Elective in Social Sciences or Humanities or Technical Elective[4,5,8a]	3
Semester Hours	18

Third Year

First Semester	
CHBE 421 Momentum and Heat Transfer	4
CHEM 315 Instrumental Chem Systems Lab	2
CHEM 420 Instrumental Characterization	2
CHEM 442 Physical Chemistry I	4
Elective in Social Sciences or Humanities or Technical Elective[4,5,8a]	3
Semester Hours	15
Second Semester	
CHBE 422 Mass Transfer Operations	4
CHBE 424 Chemical Reaction Engineering	3
IE 300 Analysis of Data	3
Elective in Social Sciences or Humanities or Technical Elective[4,5,8a]	7
Semester Hours	17

Fourth Year

First Semester	
CHBE 430[10,11] Unit Operations Laboratory	4
CHBE 440 Process Control and Dynamics	3
Elective in Social Sciences or Humanities or Technical Elective[4,5,8a]	9
Semester Hours	16
Second Semester	
CHBE 431[10,11] Process Design	4
Elective in Social Sciences or Humanities or Technical Elective[4,5,8a]	10
Semester Hours	14
Total Hours:	97

1 *Students who do not place into CHEM 202, or who do not satisfy the mathematics prerequisite for CHEM 202, may substitute the sequence CHEM 102, CHEM 103, CHEM 104, CHEM 105, CHEM 222, and CHEM 223 for CHEM 202, CHEM 203, CHEM 204, and CHEM 205.*

2 *For students entering the curriculum after the freshman year, 1 additional hr of credit from the list of approved engineering technical electives (List 1) may be substituted in place of CHBE 121. The ENG 100 requirement will be waived. Under no circumstances will these requirements be waived for students who are in the chemical engineering curriculum during their freshman year.*

3 *MATH 220 may be substituted, with four of the five credit hours applying toward the degree. MATH 220 is appropriate for students with no background in calculus.*

4 *At least 16 hours must be taken. All Campus General Education requirements must be satisfied, including those in approved course work in the Humanities/Arts, Social/Behavioral Sciences, and Cultural Studies, including the Western, Non-Western and/or U.S. Minorities components. The requirements for the Campus General Education categories Natural Sciences/Technology, Quantitative Reasoning I and II, Composition I, and Advanced Composition are fulfilled through required course work in the curriculum.*

5 *Three semesters of college credit in one foreign language is required. Three years of high school credit in one foreign language are equivalent to three semesters of college credit and satisfy the requirement.*

6 *Under no circumstances will PHYS 101-PHYS 102 be accepted as a substitute for any part of the Physics sequence.*

7a *MATH 441 may be substituted for MATH 285. MATH 286 may be substituted for MATH 285.*

7b *MATH 441 may be substituted for MATH 285. MATH 286 may be substituted for MATH 285.*

8a *At least 19 hours must be selected from the departmentally approved* List of Approved Chemical Engineering Technical Electives *(*http://chbe.illinois.edu/wp-content/uploads/2015/11/Technical.Electives.Current.pdf*), satisfying these distribution requirements:*
a) 6 hours must be 400-level ChBE courses, with not more than 3 hours being CHBE 497 or 499.
b) 3 hours any 400-level course from List 1.
c) 6 hours any courses from List 1.
d) 4 hours any 400-level courses from List 2.
A maximum of 10 total hours of undergraduate research may be counted toward Technical Elective credit. The List of Approved Chemical Engineering Technical Electives may be obtained in 99 RAL or from the department Web site. *(*http://chbe.illinois.edu/undergraduate/explore-chbe-at-illinois/curriculum-academic-advising/*)*

8b *At least 19 hours must be selected from the departmentally approved* List of Approved Biomolecular Engineering Technical Electives Categories *(*http://chbe.illinois.edu/wp-content/uploads/2015/11/Technical.Electives.Current.pdf*), satisfying these distribution requirements:*
a) 9 hours must be from Category A
b) 6 hours must be from Category B
c) 4 hours must be 400-level courses from List 2.
A maximum of 3 hours from Category A may be undergraduate research credit. A maximum of 9 total hours of undergraduate research may be counted toward Technical Elective credit. The List of Approved Biomolecular Engineering Technical Electives may be obtained in Room 99 RAL or from the department Web site. *(*http://chbe.illinois.edu/undergraduate/explore-chbe-at-illinois/curriculum-academic-advising/*)*

[9] *Students must register in one of the Chemical Engineering-specific CHEM 315 lab sections.*

[10] *Enrollment in CHBE 430 is limited. Thus CHBE 430 may need to be taken in the second semester and CHBE 431 and/or additional electives taken in the first semester instead. Students in their final semester will have priority for getting into CHBE 430 and CHBE 431.*

[11] *The sequence CHBE 430 and CHBE 431 satisfies the General Education Advanced Composition requirement.*

Chemical Engineering: Biomolecular Engineering, BS

for the degree of Bachelor of Science in Chemical Engineering, Biomolecular Engineering Concentration (Specialized Curriculum)

department website: https://chbe.illinois.edu/
department faculty: Chemical & Biomolecular Engineering Faculty (https://chbe.illinois.edu/directory/)
advising: SCS Academic Advising (https://scs.illinois.edu/academics/advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/

The first two years of the Chemical Engineering curriculum provide a strong foundation in basic sciences through Physics, Mathematics, Chemistry, an introduction to what Chemical Engineers do, and the fundamental basis of Chemical Engineering (Mass and Energy Balances and Thermodynamics.) In the third year, students delve deeper into more specialized Chemistry courses such as Physical and Analytical Chemistry, while exploring fundamental Chemical Engineering courses such as Momentum Transfer, Separations, and Reactor Design. The Senior year incorporates all of this learning through high level technical electives, Process Control, Capstone Lab, and Capstone Design courses. It is through the lab and design class that students apply everything they have learned in previous Chemical Engineering courses to real-world team projects and presentations.

The Chemical Engineering specialized curriculum provides two areas of concentration: Chemical Engineering and Biomolecular Engineering. Each area is based on a strong fundamental understanding of Chemical Engineering, however the Biomolecular concentration's technical electives focus more on bio-applied processing and technology.

Areas of Concentration

- Chemical Engineering (p. 79): The chemical engineering concentration is designed to prepare students for careers in the energy, chemical, food, energy, pharmaceutical, semiconductor processing, personal care, fiber and materials industries.
- Biomolecular Engineering (p. 82): The Biomolecular Engineering concentration builds upon the traditional principles of chemical engineering, but specializes in biological and biotechnological systems in order to better prepare students who are interested in or seek employment in the food, pharmaceutical, and biotechnology industries.

for the degree of Bachelor of Science in Chemical Engineering, Biomolecular Engineering Concentration (Specialized Curriculum)

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: A grade point average of 2.5 or higher in all courses required for the major earned on the UIUC campus is required in order to be accepted by the department as juniors and seniors.
Minimum hours required for graduation: The curriculum requires 129 hours for graduation and is organized as shown below.

Orientation and Professional Development

These courses introduce opportunities and resources the college, department, and curriculum offers students. They also provide background on the Chemical Engineering curriculum, what chemical engineers do, and the skills to work effectively and successfully in the engineering profession.

Code	Title	Hours
CHBE 121	CHBE Profession [1]	1
ENG 100	Engineering Orientation [1]	0
Total Hours		1

Foundational Mathematics and Science

These courses stress the basic mathematical and scientific principles upon which the engineering discipline is based.

Code	Title	Hours
CHEM 202	Accelerated Chemistry I [2]	3
CHEM 203	Accelerated Chemistry Lab I	2
CHEM 204	Accelerated Chemistry II	3
CHEM 205	Accelerated Chemistry Lab II	2
MATH 221	Calculus I [3]	4
MATH 231	Calculus II	3
MATH 241	Calculus III	4
MATH 285	Intro Differential Equations [4]	3
MATH 415	Applied Linear Algebra	3
PHYS 211	University Physics: Mechanics	4
PHYS 212	University Physics: Elec & Mag	4
PHYS 214	Univ Physics: Quantum Physics	2
Total Hours		37

Chemical and Biomolecular Engineering Technical Core

These courses stress fundamental concepts and basic laboratory techniques that comprise the common intellectual understanding of chemical engineering and chemical science.

Code	Title	Hours
CHBE 221	Principles of CHE	3
CHBE 321	Thermodynamics	4
CHBE 421	Momentum and Heat Transfer	4
CHBE 422	Mass Transfer Operations	4
CHBE 424	Chemical Reaction Engineering	3
CHBE 430	Unit Operations Laboratory	4
CHBE 431	Process Design	4
CHBE 440	Process Control and Dynamics	3
CHEM 236	Fundamental Organic Chem I	4
CHEM 237	Structure and Synthesis	2

CHEM 315	Instrumental Chem Systems Lab [5]	2
CHEM 420	Instrumental Characterization	2
CHEM 442	Physical Chemistry I	4
CS 101	Intro Computing: Engrg & Sci	3
IE 300	Analysis of Data	3
Total Hours		49

For Biomolecular Engineering

Code	Title	Hours
Technical Core		49
MCB 450	Introductory Biochemistry	3
Total Hours		52

Technical Electives

These courses stress the rigorous analysis and design principles practiced in the major subdisciplines of chemical engineering embodied in the chemical engineering and biomolecular engineering concentrations.

For Biomolecular Engineering

Code	Title	Hours
Selected from the departmentally approved List of Approved Biomolecular Engineering Technical Electives Categories A and B, satisfying these distribution requirements: [6]		
Any courses from Category A [7, 8]		9
Any courses from Category B [8]		6
Any 400-level course from List [8]		4
Total Hours		19

Social Sciences and Humanities

The social sciences and humanities courses ensure that students have exposure in breadth and depth to areas of intellectual activity that are essential to the general education of any college graduate.

Code	Title	Hours
General education courses to satisfy the university requirements for social & behavioral sciences, humanities & the arts, and cultural studies (Non-Western, U.S. Minority, and Western Cultures).		16

Composition

These courses teach fundamentals of expository writing.

Code	Title	Hours
RHET 105	Writing and Research	4
Advanced Composition (satisfied by completing the sequence CHBE 430 and CHBE 431 in the Chemical Engineering Technical Core).		
Total Hours		4

1 *For students entering the curriculum after the freshman year, 1 additional hour of credit from the list of approved engineering technical electives may be substituted in place of CHBE 121.*

2 *Students who do not place into* CHEM 202*, or who do not satisfy the mathematics prerequisite for* CHEM 202*, may substitute the sequence* CHEM 102*,* CHEM 103*,* CHEM 104*,* CHEM 105*,* CHEM 222*, and* CHEM 223 *for* CHEM 202*,* CHEM 203*,* CHEM 204*, and* CHEM 205*.*

3 MATH 220 *may be substituted, with four of the five credit hours applying toward the degree.* MATH 220 *is appropriate for students with no background in calculus.*

4 MATH 441 *may be substituted for* MATH 285*.* MATH 286 *(4 hours) may be substituted for* MATH 285 *(3 hours).*

5 *Students must register in one of the Chemical Engineering-specific* CHEM 315 *lab sections.*

6 List of Approved Biomolecular Engineering Technical Electives Categories A and B (http://chbe.illinois.edu/wp-content/uploads/2015/11/Technical.Electives.Current.pdf)

7 *A maximum of 3 hours from this Category may be undergraduate research credit.*

8 *A maximum of 9 total hours of undergraduate research may be counted toward Technical Elective credit.*

for the degree of Bachelor of Science Major in Chemical Engineering, Biomolecular Engineering Concentration

The schedule that follows is illustrative, showing the typical sequence in which courses would be taken by a student with no college course credit already earned and who intends to graduate in four years. Each individual's case may vary, but the position of required named courses is generally indicative of the order in which they should be taken. The first three semesters of the Suggested Sequence is the same for all chemical engineering students. The fifth through eights semesters vary with the area of concentration chosen. Refer to the appropriate sequence continuation below.

First Year

First Semester		Hours
CHEM 202[1]	Accelerated Chemistry I	3
CHEM 203	Accelerated Chemistry Lab I	2
ENG 100[2]	Engineering Orientation	0
MATH 221[3]	Calculus I	4
RHET 105	Writing and Research	4
Elective in Social Sciences or Humanities[4,5]		3
	Semester Hours	16
Second Semester		
CHBE 121[2]	CHBE Profession	1
CHEM 204	Accelerated Chemistry II	3
CHEM 205	Accelerated Chemistry Lab II	2
CS 101	Intro Computing: Engrg Sci	3
MATH 231	Calculus II	3
PHYS 211[6]	University Physics: Mechanics	4
	Semester Hours	16

Second Year

First Semester		
CHBE 221	Principles of CHE	3
CHEM 236	Fundamental Organic Chem I	4
CHEM 237	Structure and Synthesis	2
MATH 241	Calculus III	4
PHYS 212[6]	University Physics: Elec Mag	4
	Semester Hours	17
	Total Hours:	49

Major in Chemical Engineering

For the Concentration in Biomolecular Engineering, see below (p. 84)

Second Year

First Semester	Hours
Second Year First Semester course information is above in the Suggested Sequence that is common for all students	17
Semester Hours	17
Second Semester	
CHBE 321 Thermodynamics	4
CHEM 436 Fundamental Organic Chem II or MCB 450	3
MATH 285[7a] Intro Differential Equations	3
MATH 415 Applied Linear Algebra	3
PHYS 214[6] Univ Physics: Quantum Physics	2
Elective in Social Sciences or Humanities or Technical Elective[4,5,8a]	3
Semester Hours	18

Third Year

First Semester	
CHBE 421 Momentum and Heat Transfer	4
CHEM 315[9] Instrumental Chem Systems Lab	2
CHEM 420 Instrumental Characterization	2
CHEM 442 Physical Chemistry I	4
Elective in Social Sciences or Humanities or Technical Elective[4,5,8a]	3
Semester Hours	15
Second Semester	
CHBE 422 Mass Transfer Operations	4
CHBE 424 Chemical Reaction Engineering	3
IE 300 Analysis of Data	3
Elective in Social Sciences or Humanities or Technical Elective[4,5,8a]	7
Semester Hours	17

Fourth Year

First Semester	
CHBE 430[10,11] Unit Operations Laboratory	4
CHBE 440 Process Control and Dynamics	3
Elective in Social Sciences or Humanities or Technical Elective[4,5,8a]	9
Semester Hours	16
Second Semester	
CHBE 431[10,11] Process Design	4
Elective in Social Sciences or Humanities or Technical Elective[4,5,8a]	10
Semester Hours	14
Total Hours:	97

Concentration in Biomolecular Engineering

Second Year

First Semester	Hours
Second Year First Semester course information is above in the Suggested Sequence that is common for all students	17
Semester Hours	17
Second Semester	
CHBE 321 Thermodynamics	4
MCB 450 Introductory Biochemistry	3
MATH 285[7b] Intro Differential Equations	3
MATH 415 Applied Linear Algebra	3
PHYS 214[6] Univ Physics: Quantum Physics	2
Elective in Social Sciences or Humanities or Technical Elective[4,5,8a]	3
Semester Hours	18

Third Year

First Semester	
CHBE 421 Momentum and Heat Transfer	4
CHEM 315 Instrumental Chem Systems Lab	2
CHEM 420 Instrumental Characterization	2
CHEM 442 Physical Chemistry I	4
Elective in Social Sciences or Humanities or Technical Elective[4,5,8a]	3
Semester Hours	15
Second Semester	
CHBE 422 Mass Transfer Operations	4
CHBE 424 Chemical Reaction Engineering	3
IE 300 Analysis of Data	3
Elective in Social Sciences or Humanities or Technical Elective[4,5,8a]	7
Semester Hours	17

Fourth Year

First Semester	
CHBE 430[10,11] Unit Operations Laboratory	4
CHBE 440 Process Control and Dynamics	3
Elective in Social Sciences or Humanities or Technical Elective[4,5,8a]	9
Semester Hours	16
Second Semester	
CHBE 431[10,11] Process Design	4
Elective in Social Sciences or Humanities or Technical Elective[4,5,8a]	10
Semester Hours	14
Total Hours:	97

[1] *Students who do not place into CHEM 202, or who do not satisfy the mathematics prerequisite for CHEM 202, may substitute the sequence CHEM 102, CHEM 103, CHEM 104, CHEM 105, CHEM 222, and CHEM 223 for CHEM 202, CHEM 203, CHEM 204, and CHEM 205.*

[2] *For students entering the curriculum after the freshman year, 1 additional hr of credit from the list of approved engineering technical electives (List 1) may be substituted in place of CHBE 121. The ENG 100 requirement will be waived. Under no circumstances will these requirements be waived for students who are in the chemical engineering curriculum during their freshman year.*

[3] *MATH 220 may be substituted, with four of the five credit hours applying toward the degree. MATH 220 is appropriate for students with no background in calculus.*

[4] *At least 16 hours must be taken. All Campus General Education requirements must be satisfied, including those in approved course work in the Humanities/Arts, Social/Behavioral Sciences, and Cultural Studies, including the Western, Non-Western and/or U.S. Minorities components. The requirements for the Campus General Education categories Natural Sciences/Technology, Quantitative Reasoning I and II, Composition I, and Advanced Composition are fulfilled through required course work in the curriculum.*

[5] *Three semesters of college credit in one foreign language is required. Three years of high school credit in one foreign language are equivalent to three semesters of college credit and satisfy the requirement.*

[6] *Under no circumstances will PHYS 101-PHYS 102 be accepted as a substitute for any part of the Physics sequence.*

[7a] *MATH 441 may be substituted for MATH 285. MATH 286 may be substituted for MATH 285.*

[7b] *MATH 441 may be substituted for MATH 285. MATH 286 may be substituted for MATH 285.*

[8a] *At least 19 hours must be selected from the departmentally approved* List of Approved Chemical Engineering Technical Electives *(*http://chbe.illinois.edu/wp-content/uploads/2015/11/Technical.Electives.Current.pdf*), satisfying these distribution requirements:*
a) 6 hours must be 400-level ChBE courses, with not more than 3 hours being CHBE 497 or 499.
b) 3 hours any 400-level course from List 1.
c) 6 hours any courses from List 1.
d) 4 hours any 400-level courses from List 2.
A maximum of 10 total hours of undergraduate research may be counted toward Technical Elective credit. The List of Approved Chemical Engineering Technical Electives may be obtained in 99 RAL or from the department Web site. *(*http://chbe.illinois.edu/undergraduate/explore-chbe-at-illinois/curriculum-academic-advising/*)*

[8b] *At least 19 hours must be selected from the departmentally approved* List of Approved Biomolecular Engineering Technical Electives Categories *(*http://chbe.illinois.edu/wp-content/uploads/2015/11/Technical.Electives.Current.pdf*), satisfying these distribution requirements:*
a) 9 hours must be from Category A
b) 6 hours must be from Category B
c) 4 hours must be 400-level courses from List 2.
A maximum of 3 hours from Category A may be undergraduate research credit. A maximum of 9 total hours of undergraduate research may be counted toward Technical Elective credit. The List of Approved Biomolecular Engineering Technical Electives may be obtained in Room 99 RAL or from the department Web site. *(*http://chbe.illinois.edu/undergraduate/explore-chbe-at-illinois/curriculum-academic-advising/*)*

[9] *Students must register in one of the Chemical Engineering-specific CHEM 315 lab sections.*

[10] *Enrollment in CHBE 430 is limited. Thus CHBE 430 may need to be taken in the second semester and CHBE 431 and/or additional electives taken in the first semester instead. Students in their final semester will have priority for getting into CHBE 430 and CHBE 431.*

[11] *The sequence CHBE 430 and CHBE 431 satisfies the General Education Advanced Composition requirement.*

Learning Outcomes: Chemical Engineering, BS

Learning outcomes for the degree of Bachelor of Science in Chemical Engineering (Specialized Curriculum)

Student learning outcomes are based on learning outcomes in line with the ABET accreditation process.

Chemical Engineering graduates will have:

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. An ability to communicate effectively with a range of audiences.
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Chemistry

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department website: https://chemistry.illinois.edu
department faculty: Chemistry Faculty (https://chemistry.illinois.edu/directory/faculty-by-type/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
advising contact: SCS Academic Advising (http://advising.scs.illinois.edu/)

Students interested in majoring in chemistry may choose the Specialized Curriculum in Chemistry (http://catalog.illinois.edu/undergraduate/las/chemistry-bs/), leading to the Bachelor of Science Major in Chemistry, or the Chemistry Major (http://catalog.illinois.edu/undergraduate/las/chemistry-bslas/#requirementstext), leading to the Bachelor of Science in Liberal Arts and Sciences.

The Specialized Curriculum in Chemistry is a rigorous, specialized program suitable for those planning careers in chemistry. The Chemistry

Major in the Sciences and Letters Curriculum is used by some students planning chemistry careers, but it is more often chosen by students wishing to obtain chemistry backgrounds for use in related fields.

Chemistry, BS

for the degree of Bachelor of Science in Chemistry (Specialized Curriculum)

department website: https://chemistry.illinois.edu
department faculty: Chemistry Faculty (https://chemistry.illinois.edu/directory/faculty-by-type/)
advising: SCS Academic Advising (http://advising.scs.illinois.edu/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/

Undergraduate Degree Programs in Chemistry

For the Degree of Bachelor of Science in Liberal Arts and Sciences

- Major in Computer Science & Chemistry, BSLAS (p. 134)
- Major in Chemistry (Sciences and Letters) (p. 87)
- Major in Chemistry (Sciences and Letters), Chemistry Teaching Concentration (p. 88)

For the Degree of Bachelor of Science in Chemistry

- Major in Chemistry (Specialized Curriculum) (p. 86)
- Major in Chemistry (Specialized Curriculum), Environmental Chemistry Concentration (p. 90)

for the degree of Bachelor of Science in Chemistry (Specialized Curriculum)

Specialized Curriculum

The typical program of courses required to satisfy this degree totals 128-134 hours; in no case will a program totaling less than 120 hours qualify for graduation. Graduation requires grade point averages of at least 2.0 overall and 2.0 in chemistry, mathematics, and physics courses. The Department of Chemistry will supply, upon request, a brochure showing recommended semester-by-semester programs for the completion of the curriculum.

Students in the specialized curriculum in Chemistry must include a course in Biochemistry in the Advanced Hours area or the Technical Elective area to be certified by the American Chemical Society as having met its specifications.

Departmental distinction: Students qualify for graduation with distinction by exhibiting superior performance in both course work and in senior thesis research. To be eligible, a student must have a UIUC coursework major grade point average of 3.25, must take CHEM 499 (normally for two semesters) and submit a senior thesis for evaluation, and must have their undergraduate research advisor submit to the department Head a letter of support attesting to the effort invested by the student. The minimum major GPAs for Distinction, High Distinction, and Highest Distinction are 3.25, 3.5, and 3.75, respectively. Final decisions on awarding Distinction honors will be made by the Head or designee.

Requirements

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Core Chemistry [1]		37
CHEM 150	First Semester Success in Chemistry [2]	
CHEM 202	Accelerated Chemistry I	
CHEM 203	Accelerated Chemistry Lab I	
CHEM 204	Accelerated Chemistry II	
CHEM 205	Accelerated Chemistry Lab II [3]	
CHEM 236	Fundamental Organic Chem I	
CHEM 237	Structure and Synthesis	
CHEM 312	Inorganic Chemistry	
CHEM 315	Instrumental Chem Systems Lab	
CHEM 420	Instrumental Characterization	
CHEM 436	Fundamental Organic Chem II	
CHEM 442	Physical Chemistry I	
CHEM 444	Physical Chemistry II	
CHEM 445	Physical Principles Lab I	
Advanced Chemistry		11
Chemistry/Biochemistry courses numbered 300 or higher, which must include one from the following:		
CHEM 317	Inorganic Chemistry Lab	
CHEM 437	Organic Chemistry Lab	
CHEM 447	Physical Principles Lab II [4]	
Additional laboratory work:		
BIOC 455	Technqs Biochem & Biotech	
CHEM 317	Inorganic Chemistry Lab	
CHEM 437	Organic Chemistry Lab	
CHEM 447	Physical Principles Lab II	
CHEM 483	Solid State Structural Anlys [5]	
Additional chemistry/biochemistry courses to complete the 11-hour requirement in advanced chemistry		
Mathematics:		11-12
MATH 220	Calculus	
or MATH 221	Calculus I	
MATH 231	Calculus II	
MATH 241	Calculus III	
Physics: [1]		10
PHYS 211	University Physics: Mechanics	
PHYS 212	University Physics: Elec & Mag	
PHYS 214	Univ Physics: Quantum Physics	
Technical Electives, including the following		14
Required Mathematics:		
MATH 225	Introductory Matrix Theory [6]	
or MATH 415	Applied Linear Algebra	
MATH 285 or equivalent		
Strongly Recommended:		
CHEM 499	Senior Thesis (maximum of 10 hours)	
Recommended: basic computer science		

Other technical courses chosen from:	14
Chemistry (300 or higher), biochemistry, chemical engineering (200 or higher)	
Courses in life sciences (all courses at 200 or higher)	
Mathematics or computer science above the basic level	
Other courses in the physical and biological sciences and engineering including CHEM 199 [7]	
Nontechnical Requirements [8]	Variable
General education:	
Foreign language - three semesters of college study (or three years of high school study) in a single foreign language	
Composition I	
Advanced Composition [9]	
Humanities/Arts to satisfy the campus general education requirements	
Social/Behavioral sciences to satisfy the campus general education requirements	
Cultural Studies to satisfy the campus general education requirement [10]	
Free electives [11]	30

[1] *Hours given are those typical to meet requirement.*

[2] *On and off-campus transfer students in the BS curriculum may substitute 1 additional hour of 200 level or higher Chemistry (including CHEM 297, CHEM 397, CHEM 496, CHEM 497, or CHEM 499) for CHEM 150. This may not include CHEM 222 or CHEM 223 for students who took the* CHEM 102, CHEM 103, CHEM 104 *and* CHEM 105 *sequence instead of CHEM 202, CHEM 203, CHEM 204, and CHEM 205.*

[3] *If necessary, CHEM 102 and CHEM 103, CHEM 104 and CHEM 105, CHEM 222, and CHEM 223 may be substituted for CHEM 202, CHEM 203, CHEM 204, and CHEM 205. Warning: CHEM 222 and CHEM 223 are offered only in the fall semester.*

[4] *The course chosen from CHEM 317, CHEM 437, or CHEM 447 cannot be used to satisfy the additional chemistry lab requirement.*

[5] *Students who present less than 6 semester hours credit in a combination of CHEM 397, CHEM 497 and/or CHEM 499 for graduation must complete two additional courses chosen from the list. Students who will present at least 6 semester hours credit in a combination of CHEM 397, CHEM 497 and/or CHEM 499 for graduation are required to complete only one laboratory course from the list.*

[6] *Students contemplating transfer to the chemical engineering curriculum should choose MATH 415.*

[7] *Three hours maximum credit in CHEM 199. Additional courses in the sciences and engineering can be taken upon the approval of the chair of the chemistry department advising committee. Most approved courses must have a strong technical prerequisite, such as one year of college-level math or science.*

[8] *The requirements for the Campus General Education categories Natural Sciences and Technology and Quantitative Reasoning I and II are fulfilled through required coursework in the curriculum.*

[9] *The courses taken to satisfy Advanced Composition requirement may also be used to partially satisfy one of the core chemistry, advanced chemistry, mathematics, physics, or technical electives requirements (if appropriate), or may be used to partially satisfy the free electives requirements.*

[10] *The courses taken to satisfy Western and/or Non-Western Civilization requirements may also be used to satisfy nontechnical and/or free elective categories.*

[11] *Restrictions: (1) Courses preparatory to or used to satisfy the minimum requirements specified in the above requirements may not be included as free electives. (2) No first-year foreign language course (e.g., 101, 102, or equivalent) may be included unless it is a different language than used to satisfy the foreign language nontechnical requirement.*

Chemistry, BSLAS

for the degree of Bachelor of Science in Liberal Arts and Sciences Major in Chemistry

department website: https://chemistry.illinois.edu
department faculty: Chemistry Faculty (https://chemistry.illinois.edu/directory/faculty-by-type/)
advising: SCS Academic Advising (http://advising.scs.illinois.edu/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/

Undergraduate Degree Programs in Chemistry

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For the Degree of Bachelor of Science in Chemistry

- Major in Chemistry (Specialized Curriculum) (p. 86)
- Major in Chemistry (Specialized Curriculum), Environmental Chemistry Concentration (p. 90)

for the degree of Bachelor of Science in Liberal Arts and Sciences Major in Chemistry

The Department of Chemistry will supply, upon request, a brochure showing recommended semester-by-semester programs for the completion of the curriculum.

Departmental distinction: Students qualify for graduation with distinction by exhibiting superior performance in both course work and in senior thesis research. To be eligible, a student must have a UIUC coursework major grade point average of 3.25, must take CHEM 499 (normally for two semesters) and submit a senior thesis for evaluation, and must have their undergraduate research advisor submit to the department Head a letter of support attesting to the effort invested by the student. The minimum major GPAs for Distinction, High Distinction, and Highest Distinction are 3.25, 3.5, and 3.75 respectively. Final decisions on awarding Distinction honors will be made by the Head or designee.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Minimum required major and supporting course work normally equates to 48-51 hours including at least 30 hours in Chemistry or Biochemistry courses. Twelve hours of 300- and 400-level in in Chemistry and/or Biochemistry must be taken on this campus. Transfer credit in chemistry must be approved by an adviser in chemistry in order to be included in the 30 hours.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Chemistry and biochemistry courses including: [1, 2]		22-26
CHEM 150	First Semester Success in Chemistry [3]	
CHEM 440	Physical Chemistry Principles	
or CHEM 442	Physical Chemistry I	
Two other 300- or 400-level courses, at least one of which must be outside physical chemistry.		4-8
MATH 220	Calculus	4-5
or MATH 221	Calculus I	
MATH 231	Calculus II	3
MATH 241	Calculus III	4
Select one of the following:		8-10
PHYS 101 & PHYS 102	College Physics: Mech & Heat and College Physics: E&M & Modern	
PHYS 211 & PHYS 212	University Physics: Mechanics and University Physics: Elec & Mag	

1 *Excluding* CHEM 101, CHEM 108*, and* CHEM 199.

2 *No more than 10 hours of the following courses may count toward the 22-26 hours in Chemistry:* CHEM 197, CHEM 199, CHEM 297, CHEM 397, CHEM 496, CHEM 497, *and* CHEM 499.

3 On- and off-campus transfer students in the BSLAS curriculum may substitute CHEM 152 for CHEM 150. Alternatively, transfer students may elect to take an additional 1 hour of 200 level or higher Chemistry, including CHEM 297, CHEM 397, CHEM 496, CHEM 497, or CHEM 499 as long as no more than 10 total hours of the total 22-26 required Chemistry hours come from CHEM 297, CHEM 397, CHEM 496, CHEM 497, CHEM 499.

Chemistry: Chemistry Teaching, BSLAS

for the degree of Bachelor of Science in Liberal Arts and Sciences Major in Chemistry, Chemistry Teaching Concentration

department website: https://chemistry.illinois.edu
department faculty: Chemistry Faculty (https://chemistry.illinois.edu/directory/faculty-by-type/)
advising: SCS Academic Advising (http://advising.scs.illinois.edu/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/

This concentration fulfills state certification requirements to teach high school (grades 9-12) chemistry through the AP/honors level and biology, earth and space science, environmental science and physics up to but not including the AP/honors level.

Students in this concentration must complete the Teacher Education Minor in Secondary School Teaching (39 hours). See the College of Education section for requirements of the minor (p. 528).

Time to degree completion varies. Minimum time to completion is 8 semesters. Some students require 10 semesters. Transfer students may need 10 total semesters combined to complete the program. Please see the LAS section in the transfer handbook (https://admissions.illinois.edu/Content/docs/Handbook_LAS.pdf) for more information.

To remain in good standing in this program and be recommended for certification, candidates are required to maintain UIUC, cumulative, content area, and professional education, grade-point averages of 2.5 (A= 4.0). Candidates should consult their advisor or the Council on Teacher Education for the list of courses used to compute these grade-point averages.

Undergraduate Degree Programs in Chemistry

For the Degree of Bachelor of Science in Liberal Arts and Sciences

- Major in Computer Science & Chemistry, BSLAS (p. 134)
- Major in Chemistry (Sciences and Letters) (p. 87)
- Major in Chemistry (Sciences and Letters), Chemistry Teaching Concentration (p. 88)

For the Degree of Bachelor of Science in Chemistry

- Major in Chemistry (Specialized Curriculum) (p. 86)
- Major in Chemistry (Specialized Curriculum), Environmental Chemistry Concentration (p. 90)

for the degree of Bachelor of Science in Liberal Arts and Sciences Major in Chemistry, Chemistry Teaching Concentration

This concentration fulfills state certification requirements to teach high school (grades 9-12) chemistry through the AP/honors level and biology, earth and space science, environmental science and physics up to but not including the AP/honors level.

Students in this concentration must complete the Teacher Education Minor in Secondary School Teaching (39 hours). See the College of Education section for requirements of the minor (p. 528).

Time to degree completion varies. Minimum time to completion is 8 semesters. Some students require 10 semesters. Transfer students may need 10 total semesters combined to complete the program. Please see the LAS section in the transfer handbook (https://admissions.illinois.edu/Content/docs/Handbook_LAS.pdf) for more information.

To remain in good standing in this program and be recommended for certification, candidates are required to maintain UIUC, cumulative, content area, and professional education, grade-point averages of 2.5 (A= 4.0). Candidates should consult their advisor or the Council on Teacher Education for the list of courses used to compute these grade-point averages.

Departmental distinction: Students qualify for graduation with distinction by exhibiting superior performance in both course work and in senior thesis research. To be eligible, a student must have a UIUC coursework

major grade point average of 3.25, must take CHEM 499 (normally for two semesters) and submit a senior thesis for evaluation, and must have their undergraduate research advisor submit to the department Head a letter of support attesting to the effort invested by the student. The minimum major GPAs for Distinction, High Distinction, and Highest Distinction are 3.25, 3.5, and 3.75, respectively. Students in the Chemistry Teaching Concentration may submit their final teaching portfolio for evaluation in lieu of taking CHEM 499 and submitting a senior thesis. Final decisions on awarding Distinction honors will be made by the Head or designee.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Minimum required major and supporting course work normally equates to 48-51 hours including at least 30 hours in Chemistry or Biochemistry courses. Twelve hours of 300- and 400-level in in Chemistry and/or Biochemistry must be taken on this campus. Transfer credit in chemistry must be approved by an adviser in chemistry in order to be included in the 30 hours.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Chemistry and biochemistry courses including: [1, 2]		22-26
CHEM 150	First Semester Success in Chemistry [3]	
CHEM 440	Physical Chemistry Principles	
or CHEM 442	Physical Chemistry I	
Two other 300- or 400-level courses, at least one of which must be outside physical chemistry.		4-8
MATH 220	Calculus	4-5
or MATH 221	Calculus I	
MATH 231	Calculus II	3
MATH 241	Calculus III	4
Select one of the following:		8-10
PHYS 101 & PHYS 102	College Physics: Mech & Heat and College Physics: E&M & Modern	
PHYS 211 & PHYS 212	University Physics: Mechanics and University Physics: Elec & Mag	

1 *Excluding* CHEM 101, CHEM 108*, and* CHEM 199.

2 *No more than 10 hours of the following courses may count toward the 22-26 hours in Chemistry:* CHEM 197, CHEM 199, CHEM 297, CHEM 397, CHEM 496, CHEM 497*, and* CHEM 499.

3 On- and off-campus transfer students in the BSLAS curriculum may substitute CHEM 152 for CHEM 150. Alternatively, transfer students may elect to take an additional 1 hour of 200 level or higher Chemistry, including CHEM 297, CHEM 397, CHEM 496, CHEM 497, or CHEM 499 as long as no more than 10 total hours of the total 22-26 required Chemistry hours come from CHEM 297, CHEM 397, CHEM 496, CHEM 497, CHEM 499.

Chemistry Teaching Option Concentration

Code	Title	Hours
Foundation Courses		
The following courses must be completed or in progress when students apply to the Secondary Education minor.		
Select one group of courses (Accelerated or General Chemistry):		10-12
CHEM 202 & CHEM 203 & CHEM 204 & CHEM 205	Accelerated Chemistry I and Accelerated Chemistry Lab I and Accelerated Chemistry II and Accelerated Chemistry Lab II	
or		
CHEM 102 & CHEM 103 & CHEM 104 & CHEM 105 & CHEM 222 & CHEM 223	General Chemistry I and General Chemistry Lab I and General Chemistry II and General Chemistry Lab II and Quantitative Analysis Lecture and Quantitative Analysis Lab	
Select one of the following Organic Chemistry course groups:		5-6
CHEM 236 & CHEM 237	Fundamental Organic Chem I and Structure and Synthesis	
or		
CHEM 232 & CHEM 233	Elementary Organic Chemistry I and Elementary Organic Chem Lab I	
MATH 220	Calculus	4-5
or MATH 221	Calculus I	
MATH 231	Calculus II	3
Additional Required Coursework		
Teacher Education Minor in Secondary School Teaching (http://catalog.illinois.edu/undergraduate/education/secondary/)		39
CHEM 495	Teaching Secondary Chemistry	4
CHEM 150	First Semester Success in Chemistry [1]	1
CHEM 440	Physical Chemistry Principles	4
or CHEM 442	Physical Chemistry I	
At least four additional hours of 300- or 400-level chemistry and/or biochemistry course work.		4
ASTR 100	Introduction to Astronomy	3
GEOL 107	Physical Geology	4
IB 100	Biology in Today's World	3
MATH 241	Calculus III	4
PHYS 211	University Physics: Mechanics	4
PHYS 212	University Physics: Elec & Mag	4
PHYS 214	Univ Physics: Quantum Physics	2

1 On- and off-campus transfer students in the BSLAS curriculum may substitute CHEM 152 for CHEM 150. Alternatively, transfer students may elect to take an additional 1 hour of 200 level or higher Chemistry, including CHEM 297, 397, 496, 497, or 499 as long as no more than 10 total hours of the total 22-26 required Chemistry hours come from CHEM 297, CHEM 397, CHEM 496, CHEM 497, CHEM 499.

Requirements for the Teacher Education in Secondary School Teaching Minor

Code	Title	Hours
Professional Education Required Courses		
EDUC 201	Identity and Difference in Education [1]	3
EDUC 202	Social Justice, School and Society [1]	3
CI 401	Introductory Teaching in a Diverse Society	3
CI 403	Teaching a Diverse High School Student Population	3
CI 404	Teaching and Assessing Secondary School Students	3

CI 473	Disciplinary Literacy	3
EPSY 201	Educational Psychology [1, 2]	3
EPSY 485	Assessing Student Performance	3
SPED 405	General Educator's Role in Special Education	3
EDPR 442	Educational Practice in Secondary Education	12
Total Hours		39-40

[1] EDUC 201, EDUC 202 and EPSY 201 can be completed at any time during the degree and are not pre-requisites to apply for the minor.

[2] PSYC 100 is a pre-requisite for EPSY 201.

Chemistry: Environmental Chemistry, BS

For the Degree of Bachelor of Science in Chemistry, Environmental Chemistry Concentration

department website: https://chemistry.illinois.edu
department faculty: Chemistry Faculty (https://chemistry.illinois.edu/directory/faculty-by-type/)
advising: SCS Academic Advising (http://advising.scs.illinois.edu/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/

This concentration is designed to provide a background in environmental chemistry that is sufficient in breadth and depth to prepare a person to work as an environmental chemist in the public or private sectors and/or to pursue an advanced degree in the field. Students who complete this concentration will be certified in environmental chemistry by the American Chemical Society (ACS). The Environmental Chemistry Concentration is based on the Specialized Curriculum in Chemistry. Students will take a 3-hour, 300-level course in environmental chemistry and three 3-hour, upper level technical courses in environmental areas. These courses can be used as part of the required 14 hours of technical electives for the Specialized Curriculum in Chemistry.

Undergraduate Degree Programs in Chemistry

For the Degree of Bachelor of Science in Liberal Arts and Sciences

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- Major in Chemistry (Sciences and Letters), Chemistry Teaching Concentration (p. 88)

For the Degree of Bachelor of Science in Chemistry

- Major in Chemistry (Specialized Curriculum) (p. 86)
- Major in Chemistry (Specialized Curriculum), Environmental Chemistry Concentration (p. 90)

For the Degree of Bachelor of Science in Chemistry, Environmental Chemistry Concentration

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Core Chemistry [1]		37
CHEM 150	First Semester Success in Chemistry [2]	
CHEM 202	Accelerated Chemistry I	
CHEM 203	Accelerated Chemistry Lab I	
CHEM 204	Accelerated Chemistry II	
CHEM 205	Accelerated Chemistry Lab II [3]	
CHEM 236	Fundamental Organic Chem I	
CHEM 237	Structure and Synthesis	
CHEM 312	Inorganic Chemistry	
CHEM 315	Instrumental Chem Systems Lab	
CHEM 420	Instrumental Characterization	
CHEM 436	Fundamental Organic Chem II	
CHEM 442	Physical Chemistry I	
CHEM 444	Physical Chemistry II	
CHEM 445	Physical Principles Lab I	
Advanced Chemistry		11
Chemistry/Biochemistry courses numbered 300 or higher, which must include one from the following:		
CHEM 317	Inorganic Chemistry Lab	
CHEM 437	Organic Chemistry Lab	
CHEM 447	Physical Principles Lab II [4]	
Additional laboratory work:		
BIOC 455	Technqs Biochem & Biotech	
CHEM 317	Inorganic Chemistry Lab	
CHEM 437	Organic Chemistry Lab	
CHEM 447	Physical Principles Lab II	
CHEM 483	Solid State Structural Anlys [5]	
Additional chemistry/biochemistry courses to complete the 11-hour requirement in advanced chemistry		
Mathematics:		11-12
MATH 220	Calculus	
or MATH 221	Calculus I	
MATH 231	Calculus II	
MATH 241	Calculus III	
Physics: [1]		10
PHYS 211	University Physics: Mechanics	
PHYS 212	University Physics: Elec & Mag	
PHYS 214	Univ Physics: Quantum Physics	
Technical Electives, including the following		14
Required Mathematics:		
MATH 225	Introductory Matrix Theory [6]	
or MATH 415	Applied Linear Algebra	
MATH 285 or equivalent		
Strongly Recommended:		
CHEM 499	Senior Thesis (maximum of 10 hours)	
Recommended: basic computer science		
Other technical courses chosen from:		14

Chemistry (300 or higher), biochemistry, chemical engineering (200 or higher)	
Courses in life sciences (all courses at 200 or higher)	
Mathematics or computer science above the basic level	
Other courses in the physical and biological sciences and engineering including CHEM 199 [7]	
Nontechnical Requirements [8]	Variable
General education:	
Foreign language - three semesters of college study (or three years of high school study) in a single foreign language	
Composition I	
Advanced Composition [9]	
Humanities/Arts to satisfy the campus general education requirements	
Social/Behavioral sciences to satisfy the campus general education requirements	
Cultural Studies to satisfy the campus general education requirement [10]	
Free electives [11]	30

[1] *Hours given are those typical to meet requirement.*

[2] *On and off-campus transfer students in the BS curriculum may substitute 1 additional hour of 200 level or higher Chemistry (including CHEM 297, CHEM 397, CHEM 496, CHEM 497, or CHEM 499) for CHEM 150. This may not include CHEM 222 or CHEM 223 for students who took the* CHEM 102*,* CHEM 103*,* CHEM 104 *and* CHEM 105 *sequence instead of CHEM 202, CHEM 203, CHEM 204, and CHEM 205.*

[3] *If necessary, CHEM 102 and CHEM 103, CHEM 104 and CHEM 105, CHEM 222, and CHEM 223 may be substituted for CHEM 202, CHEM 203, CHEM 204, and CHEM 205. Warning: CHEM 222 and CHEM 223 are offered only in the fall semester.*

[4] *The course chosen from CHEM 317, CHEM 437, or CHEM 447 cannot be used to satisfy the additional chemistry lab requirement.*

[5] *Students who present less than 6 semester hours credit in a combination of CHEM 397, CHEM 497 and/or CHEM 499 for graduation must complete two additional courses chosen from the list. Students who will present at least 6 semester hours credit in a combination of CHEM 397, CHEM 497 and/or CHEM 499 for graduation are required to complete only one laboratory course from the list.*

[6] *Students contemplating transfer to the chemical engineering curriculum should choose MATH 415.*

[7] *Three hours maximum credit in CHEM 199. Additional courses in the sciences and engineering can be taken upon the approval of the chair of the chemistry department advising committee. Most approved courses must have a strong technical prerequisite, such as one year of college-level math or science.*

[8] *The requirements for the Campus General Education categories Natural Sciences and Technology and Quantitative Reasoning I and II are fulfilled through required coursework in the curriculum.*

[9] *The courses taken to satisfy Advanced Composition requirement may also be used to partially satisfy one of the core chemistry, advanced chemistry, mathematics, physics, or technical electives requirements (if appropriate), or may be used to partially satisfy the free electives requirements.*

[10] *The courses taken to satisfy Western and/or Non-Western Civilization requirements may also be used to satisfy nontechnical and/or free elective categories.*

[11] *Restrictions: (1) Courses preparatory to or used to satisfy the minimum requirements specified in the above requirements may not be included as free electives. (2) No first-year foreign language course (e.g., 101, 102, or equivalent) may be included unless it is a different language than used to satisfy the foreign language nontechnical requirement.*

Code	Title	Hours
Required Technical Elective Courses for the Environmental Chemistry Concentration		
Basic Courses		
CHEM 360	Chemistry of the Environment	3
or CEE 330	Environmental Engineering	
Advanced Courses: Select three courses from the following:		9
CHEM 460	Green Chemistry	
CEE 443	Env Eng Principles, Chemical	
GEOL 380	Environmental Geology	
IB 485	Environ Toxicology & Health	
CHEM 397	Individual Study Junior	
CHEM 497	Individual Study Senior	
CHEM 499	Senior Thesis	
Other 400-level courses dealing with economic, engineering, biological aspects of environmental chemistry upon consultation with the faculty advisor.		

Learning Outcomes: Chemistry, BS

Learning outcomes for the degree of Bachelor of Science Major in Chemistry

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Students graduating with the BS in Chemistry will have:

1. A thorough knowledge of the basic principles of chemistry, including atomic and molecular structure, chemical dynamics and the chemical and physical properties of substances.
2. An exposure to the subfields of chemistry, such as analytical, organic, physical, materials, inorganic, as well as chemical biology.
3. The ability to read, evaluate, interpret, and present (via oral and written communication) numerical, chemical and general scientific data, information and literature.
4. The ability to carry out experiments, use appropriate experimental apparatus effectively, and demonstrate proper laboratory safety skills.

Learning Outcomes: Chemistry, BSLAS

Learning outcomes for the degree of Bachelor of Science in Liberal Arts and Sciences Major in Chemistry (Sciences & Letters)

Students graduating with the BSLAS in Chemistry (Sciences & Letters) will have:

1. A thorough knowledge of the basic principles of chemistry, including atomic and molecular structure, chemical dynamics and the chemical and physical properties of substances.
2. An exposure to the subfields of chemistry, such as analytical, organic, physical, materials, inorganic, as well as chemical biology.

3. The ability to read, evaluate, interpret, and present (via oral and written communication) numerical, chemical and general scientific data, information and literature.
4. The ability to carry out experiments, use appropriate experimental apparatus effectively, and demonstrate proper laboratory safety skills.

Civil Engineering, BS

for the degree of Bachelor of Science in Civil Engineering

department website: Department of Civil & Environmental Engineering (https://cee.illinois.edu/)
department faculty: Department of Civil & Environmental Engineering Faculty (https://cee.illinois.edu/directory/faculty/)
overview of college admissions & requirements: The Grainger College of Engineering (https://grainger.illinois.edu/admissions/)
college website: https://grainger.illinois.edu/

Civil and environmental engineers apply basic principles of science, supported by mathematical and computational tools, to address the biggest challenges facing society: ensuring clean air, safe drinking water and sanitation; addressing our changing environment; protecting the population from natural and man-made hazards; designing a sustainable infrastructure that serves everyone; re-imagining human and commodity traffic for an automated future; and of course designing and constructing the world's tallest buildings and most iconic bridges.

The civil engineering program comprises seven focus areas (construction engineering and management, construction materials, environmental engineering and science, geotechnical engineering, water resources engineering and science, structural engineering, and transportation engineering) and three interdisciplinary programs (sustainable and resilient infrastructure systems; energy-water-environment sustainability; and societal risk and hazard mitigation). Although each area and program has its own special body of knowledge and engineering tools, civil and environmental engineering projects often use knowledge and data from many of these topical areas together in order to address societal challenges.

CEE's Program Education Objectives are to educate CEE students to:

1. Successfully enter the civil and environmental engineering profession as practicing engineers and consultants with prominent companies and organizations in diverse topic areas it comprises;
2. Pursue graduate education and research at major research universities and national laboratories;
3. Pursue professional licensure;
4. Advance to leadership positions in the profession;
5. Engage in continued learning through professional development;
6. Participate in and contribute to professional societies and community services.

Program Review and Approval

To qualify for the degree of Bachelor of Science in Civil Engineering, each student's academic program plan must be reviewed by a standing committee of the faculty (the Program Review Committee) and approved by the Associate Head of Civil and Environmental Engineering in charge of undergraduate programs. This review and approval process ensures that individual programs satisfy the educational objectives and all of the requirements of the civil and environmental engineering program, that those programs do not abuse the substantial degree of flexibility that is present in the curriculum, and that the career interests of each student are cultivated and served.

for the degree of Bachelor of Science in Civil Engineering

Graduation Requirements

Minimum Overall GPA: 2.0
Minimum hours required for graduation: 128 hours
General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement. One of the SBS courses must be an introductory economics course (ECON 102 or ECON 103). Specific Advanced Composition course required for this degree is listed below.**

Orientation and Professional Development

Code	Title	Hours
CEE 190	Project-Based Introduction to CEE [1]	4
CEE 495	Professional Practice [2]	0
ENG 100	Engineering Orientation [3]	0
Total Hours		4

Foundational Mathematics and Science

Code	Title	Hours
CHEM 102	General Chemistry I	3
CHEM 103	General Chemistry Lab I	1
CHEM 104	General Chemistry II	3
CHEM 105	General Chemistry Lab II	1
MATH 221	Calculus I [4]	4
MATH 225	Introductory Matrix Theory	2
MATH 231	Calculus II	3
MATH 241	Calculus III	4
MATH 285	Intro Differential Equations [5]	3
PHYS 211	University Physics: Mechanics	4
PHYS 212	University Physics: Elec & Mag	4
PHYS 213	Univ Physics: Thermal Physics	2
Total Hours		34

Civil Engineering Technical Core

Code	Title	Hours
CEE 201	Systems Engrg & Economics	3
CEE 202	Engineering Risk & Uncertainty	3
CS 101	Intro Computing: Engrg & Sci	3
SE 101	Engineering Graphics & Design	3
TAM 211	Statics	3
TAM 212	Introductory Dynamics	3
TAM 251	Introductory Solid Mechanics	3
TAM 335	Introductory Fluid Mechanics	4
Total Hours		25

Science Elective

Code	Title	Hours
Science elective, selected in accord with recommendations for the chosen primary field in civil engineering.		**3**

ATMS 120	Severe and Hazardous Weather	3
CHBE 321	Thermodynamics	4
CHEM 222	Quantitative Analysis Lecture	2
CS 357	Numerical Methods I	3
ECE 205	Electrical and Electronic Circuits	3
GEOL 107	Physical Geology	4
GEOL 118	Natural Disasters	3
ME 200	Thermodynamics	3
STAT 420	Methods of Applied Statistics	3 or 4

Civil Engineering Technical Electives

Students choose primary and secondary fields, of which there are seven traditional areas of study and three interdisciplinary programs. The specific choices of courses in this category are made through the submission of a Plan of Study, which is subject to approval by the faculty Program Review Committee.

Code	Title	Hours
Civil engineering technical courses, selected as follows, to at least include:		**34**
Civil Engineering Core Courses		
The courses that are required and recommended for the primary and secondary fields are listed below. Select at least 5 courses from the following list:		15-16
CEE 300	Behavior of Materials [6]	4
CEE 310	Transportation Engineering	3
CEE 320	Construction Engineering	3
CEE 330	Environmental Engineering	3
CEE 340	Energy and Global Environment	3
CEE 350	Water Resources Engineering	3
CEE 360	Structural Engineering	3
CEE 380	Geotechnical Engineering	3
Primary Field Advanced Technical Electives. Select courses from approved lists for appropriate programs of study within the seven areas or three interdisciplinary programs of civil engineering. Design experience is distributed in 200-level, 300-level, and 400-level CEE courses including integrated design courses. See list below:		**12-13**
Construction Engineering and Management		
Science Electives Required - NONE		
Science Electives Recommended - See below:		
ATMS 120	Severe and Hazardous Weather	3
ATMS 303	Synoptic-Dynamic Wea Analysis	4
ECE 205	Electrical and Electronic Circuits	3
FIN 221	Corporate Finance	3
GEOL 107	Physical Geology	4
GEOL 118	Natural Disasters	3
GEOL 333	Earth Materials and the Env	4
GEOL 380	Environmental Geology	4
ME 200	Thermodynamics	3
NPRE 201	Energy Systems	2 or 3
SE 400	Engineering Law	3 or 4
STAT 420	Methods of Applied Statistics	3 or 4
UP 205	Ecology & Environmental Sustainability	3
Civil Engineering Core Courses:		
CEE 300	Behavior of Materials	4
CEE 320	Construction Engineering	3
CEE 360	Structural Engineering	3
CEE 380	Geotechnical Engineering	3
Civil Engineering Core Courses Recommended- None		
Advanced Technical Courses - Required:		
CEE 420	Construction Productivity	3 or 4
CEE 421	Construction Planning (Required Integrated Design Course)	3 or 4
CEE 422	Construction Cost Analysis	3 or 4
CEE 461	Reinforced Concrete I	3
Advanced Technical Courses - Recommended:		
CEE 401	Concrete Materials	4
CEE 424	Sustainable Const Methods	4
CEE 460	Steel Structures I	3
CEE 469	Wood Structures	3 or 4
Construction Materials Engineering		
Science Electives Required - None		
Science Electives Recommended:		
GEOL 107	Physical Geology	4
ME 430	Failure of Engrg Materials	3 or 4
MSE 201	Phases and Phase Relations	3
TAM 428	Mechanics of Composites	3
Civil Engineering Core Courses Required:		
CEE 300	Behavior of Materials	4
CEE 310	Transportation Engineering	3
Civil Engineering Core Courses Recommended:		
CEE 360	Structural Engineering	3
CEE 380	Geotechnical Engineering	3
Advanced Technical Courses Required:		
CEE 401	Concrete Materials (Required Integrated Design Course)	4
CEE 405	Asphalt Materials I	3 or 4
Advanced Technical Courses Recommended:		
CEE 406	Pavement Design I	3 or 4
CEE 460	Steel Structures I	3
CEE 461	Reinforced Concrete I	3
CEE 469	Wood Structures	3 or 4
CEE 483	Soil Mechanics and Behavior	4
MSE 401	Thermodynamics of Materials	3
MSE 402	Kinetic Processes in Materials	3
MSE 406	Thermal-Mech Behavior of Matls	3
MSE 420	Ceramic Materials & Properties	3
MSE 450	Polymer Science & Engineering	3 or 4
Environmental Engineering		
Science Electives Required - None		
Science Electives Recommended:		
CHEM 222	Quantitative Analysis Lecture	2
CHEM 232	Elementary Organic Chemistry I	3 or 4
CS 357	Numerical Methods I	3
GEOL 107	Physical Geology	4
MCB 300	Microbiology	3

ME 200	Thermodynamics	3
MSE 401	Thermodynamics of Materials	3
STAT 420	Methods of Applied Statistics	3 or 4
Civil Engineering Core Courses Required:		
CEE 330	Environmental Engineering	3
Civil Engineering Core Courses Recommended:		
CEE 350	Water Resources Engineering	3
CEE 380	Geotechnical Engineering	3
Advanced Technical Courses Required - At least one of:		
CEE 437	Water Quality Engineering	3
CEE 440	Fate Cleanup Environ Pollutant	4
CEE 445		
CEE 446	Air Quality Engineering	4
Advanced Technical Course Recommended:		
CEE 430	Ecological Quality Engineering	2
CEE 434	Environmental Systems I	3
CEE 435	Public Health Engineering	3 or 4
CEE 438	Science & Environmental Policy	3
CEE 442	Environmental Engineering Principles, Physical	4
CEE 443	Env Eng Principles, Chemical	4
CEE 444	Env Eng Principles, Biological	4
CEE 445		
CEE 447	Atmospheric Chemistry	4
CEE 449	Environmental Engineering Lab (Required Integrated Design Course)	3
CEE 452	Hydraulic Analysis and Design	3
CEE 453	Urban Hydrology and Hydraulics	4
CEE 457	Groundwater	3
Geotechnical Engineering		
Science Electives Required:		
GEOL 107	Physical Geology	4
Science Electives Recommended:		
GEOL 333	Earth Materials and the Env	4
GEOL 380	Environmental Geology	4
GEOL 401	Geomorphology	4
GEOL 411	Structural Geol and Tectonics	4
GEOL 440	Sedimentology and Stratigraphy	4
GEOL 470	Introduction to Hydrogeology	4
Civil Engineering Core Courses Required:		
CEE 360	Structural Engineering	3
CEE 380	Geotechnical Engineering	3
Civil Engineering Core Courses Recommended:		
CEE 300	Behavior of Materials	4
CEE 310	Transportation Engineering	3
CEE 320	Construction Engineering	3
CEE 330	Environmental Engineering	3
CEE 350	Water Resources Engineering	3
Advanced Technical Courses Required:		
CEE 483	Soil Mechanics and Behavior	4
CEE 484	Applied Soil Mechanics (Required Integrated Design Course)	3 or 4
Advanced Technical Courses Recommended:		
CEE 457	Groundwater	3
CEE 460	Steel Structures I	3
CEE 461	Reinforced Concrete I	3
CEE 463	Reinforced Concrete II	3 or 4
Structural Engineering		
Science Electives Required - None		
Science Electives Recommended:		
CS 357	Numerical Methods I	3
ECE 205	Electrical and Electronic Circuits	3
GEOL 107	Physical Geology	4
GEOL 118	Natural Disasters	3
ME 200	Thermodynamics	3
Civil Engineering Core Courses:		
CEE 300	Behavior of Materials	4
CEE 360	Structural Engineering	3
CEE 380	Geotechnical Engineering	3
Civil Engineering Core Courses Recommended:		
CEE 320	Construction Engineering	3
Advanced Technical Courses Required:		
CEE 460	Steel Structures I	3
CEE 461	Reinforced Concrete I	3
CEE 465	Design of Structural Systems (Required Integrated Design Course)	3
CEE 470	Structural Analysis	4
Advanced Technical Courses Recommended - None		
Transportation Engineering		
Science Electives Required - None		
Science Electives Recommended:		
CS 357	Numerical Methods I	3
ECE 205	Electrical and Electronic Circuits	3
GEOL 107	Physical Geology	4
ME 200	Thermodynamics	3
ME 340	Dynamics of Mechanical Systems	3.5
MSE 401	Thermodynamics of Materials	3
SE 320	Control Systems	4
STAT 420	Methods of Applied Statistics	3 or 4
Civil Engineering Core Courses Required:		
CEE 300	Behavior of Materials	4
CEE 310	Transportation Engineering	3
Civil Engineering Core Courses Recommended:		
CEE 320	Construction Engineering	3
CEE 330	Environmental Engineering	3
CEE 350	Water Resources Engineering	3
CEE 360	Structural Engineering	3
CEE 380	Geotechnical Engineering	3
Advanced Technical Courses: You must select one course from each of the three Areas below and one course from the recommended list.		
Area 1 - Facilities		
CEE 405	Asphalt Materials I	3 or 4
CEE 406	Pavement Design I	3 or 4
CEE 407	Airport Design	3 or 4
Area 2 - Systems:		

CEE 407	Airport Design	3 or 4
CEE 415	Geometric Design of Roads (Required Integrated Design Course)	4
CEE 416	Traffic Capacity Analysis	3 or 4
CEE 418	Public Transportation Systems	3 or 4
Area 3 - Railroad:		
CEE 408	Railroad Transportation Engrg	3 or 4
CEE 409	Railroad Track Engineering	3 or 4
CEE 410	Railway Signaling & Control	3 or 4
CEE 411	RR Project Design & Constr	3 or 4
CEE 412	High-Speed Rail Engineering	3 or 4
Recommended:		
CEE 401	Concrete Materials	4
CEE 405	Asphalt Materials I	3 or 4
CEE 406	Pavement Design I	3 or 4
CEE 407	Airport Design	3 or 4
CEE 408	Railroad Transportation Engrg	3 or 4
CEE 409	Railroad Track Engineering	3 or 4
CEE 410	Railway Signaling & Control	3 or 4
CEE 411	RR Project Design & Constr	3 or 4
CEE 412	High-Speed Rail Engineering	3 or 4
CEE 415	Geometric Design of Roads	4
CEE 416	Traffic Capacity Analysis	3 or 4
CEE 417	Urban Transportation Planning	4
CEE 418	Public Transportation Systems	3 or 4
Water Resources Engineering and Science		
Science Electives Required - None		
Science Electives Recommended:		
CS 357	Numerical Methods I	3
GEOL 107	Physical Geology	4
ME 200	Thermodynamics	3
Civil Engineering Core Courses Required:		
CEE 350	Water Resources Engineering	3
Civil Engineering Core Courses Recommended:		
CEE 300	Behavior of Materials	4
CEE 320	Construction Engineering	3
CEE 330	Environmental Engineering	3
CEE 360	Structural Engineering	3
CEE 380	Geotechnical Engineering	3
Advanced Technical Courses Required (Choose one):		
CEE 452	Hydraulic Analysis and Design	3
CEE 453	Urban Hydrology and Hydraulics (Required Integrated Design Course)	4
Advanced Technical Courses Recommended:		
CEE 432	Stream Ecology	3 or 4
CEE 433	Water Technology and Policy	3 or 4
CEE 434	Environmental Systems I	3
CEE 437	Water Quality Engineering	3
CEE 450	Surface Hydrology	3
CEE 451	Environmental Fluid Mechanics	3
CEE 452	Hydraulic Analysis and Design	3
CEE 453	Urban Hydrology and Hydraulics	4
CEE 457	Groundwater	3
CEE 458	Water Resources Field Methods	4
CEE 498	Special Topics (Section EH)	1 to 4
Energy-Water-Environment Sustainability		
Science Electives Required:		
ME 200	Thermodynamics	3-4
or CHBE 321	Thermodynamics	
Science Electives Recommended - None		
Civil Engineering Core Courses Required:		
CEE 340	Energy and Global Environment	3
Civil Engineering Core Courses Recommended:		
CEE 330	Environmental Engineering	3
CEE 350	Water Resources Engineering	3
Advanced Technical Courses Required:		
CEE 493	Sustainable Design Eng Tech (Must also select 3 courses from recommended list below)	4
Advanced Technical Courses Recommended:		
ABE 436	Renewable Energy Systems	3 or 4
ARCH 441	Heat and Moisture in Buildings	3
CEE 424	Sustainable Const Methods	4
CEE 433	Water Technology and Policy	3 or 4
CEE 434	Environmental Systems I	3
CEE 437	Water Quality Engineering	3
CEE 446	Air Quality Engineering	4
CEE 449	Environmental Engineering Lab	3
CEE 450	Surface Hydrology	3
CEE 452	Hydraulic Analysis and Design	3
CEE 453	Urban Hydrology and Hydraulics	4
CEE 457	Groundwater	3
CEE 498	Special Topics (Section EH)	1 to 4
ENG 471	Seminar Energy & Sustain Engrg	1
ME 400	Energy Conversion Systems	3 or 4
NPRE 402	Nuclear Power Engineering	3 or 4
NPRE 475	Wind Power Systems	3 or 4
Societal Risk and Hazard Mitigation		
Science Electives Required - None		
Science Electives Recommended:		
FIN 230	Introduction to Insurance	3
GEOL 118	Natural Disasters	3
LAW 301	Introduction to Law	2 or 3
NRES 287	Environment and Society	3
STAT 420	Methods of Applied Statistics	3 or 4
Civil Engineering Core Courses Required:		
CEE 340	Energy and Global Environment	3
Civil Engineering Core Courses Recommended:		
CEE 300	Behavior of Materials	4
CEE 310	Transportation Engineering	3
CEE 320	Construction Engineering	3
CEE 330	Environmental Engineering	3
CEE 350	Water Resources Engineering	3
CEE 360	Structural Engineering	3

CEE 380	Geotechnical Engineering	3
Advanced Technical Courses Required:		
CEE 491	Decision and Risk Analysis (and select 3 from the recommended list below)	3 or 4
Advanced Technical Courses Recommended:		
CEE 406	Pavement Design I	3 or 4
CEE 416	Traffic Capacity Analysis	3 or 4
CEE 417	Urban Transportation Planning	4
CEE 437	Water Quality Engineering	3
CEE 440	Fate Cleanup Environ Pollutant	4
CEE 449	Environmental Engineering Lab	3
CEE 460	Steel Structures I	3
CEE 461	Reinforced Concrete I	3
CEE 465	Design of Structural Systems	3
CEE 472	Structural Dynamics I	3 or 4
CEE 473	Wind Effects on Structures	4
IE 410	Advanced Topics in Stochastic Processes & Applications	3 or 4
NPRE 442	Radioactive Waste Management	3
SE 450	Decision Analysis I	3 or 4
STAT 425	Statistical Modeling I	3 or 4
STAT 429	Time Series Analysis	3 or 4
STAT 430	Topics in Applied Statistics	3 or 4
UP 438	Disasters and Urban Planning	4
Sustainable and Resilient Infrastructure Systems		
Science Electives Required - None		
Science Electives Recommended:		
ATMS 120	Severe and Hazardous Weather	3
CS 357	Numerical Methods I	3
ENSU 300	Environmental Sustainability	3
ESE 140	Climate and Global Change	3
ESE 320	Water Planet, Water Crisis	3
ESE 482	Challenges of Sustainability	3
FIN 221	Corporate Finance	3
GEOG 103	Earth's Physical Systems	4
NPRE 201	Energy Systems	2 or 3
NRES 439	Env and Sustainable Dev	3
SE 320	Control Systems	4
STAT 420	Methods of Applied Statistics	3 or 4
UP 406	Urban Ecology	4
Civil Engineering Core Courses Required:		
CEE 340	Energy and Global Environment	3
Civil Engineering Core Courses Recommended:		
CEE 300	Behavior of Materials	4
CEE 310	Transportation Engineering	3
CEE 320	Construction Engineering	3
CEE 330	Environmental Engineering	3
CEE 350	Water Resources Engineering	3
CEE 360	Structural Engineering	3
CEE 380	Geotechnical Engineering	3
Advanced Technical Courses Required:		
CEE 491	Decision and Risk Analysis (And select 3 courses from the recommended list below)	3 or 4
Advanced Technical Courses Recommended:		
ABE 436	Renewable Energy Systems	3 or 4
CEE 401	Concrete Materials	4
CEE 406	Pavement Design I	3 or 4
CEE 408	Railroad Transportation Engrg	3 or 4
CEE 409	Railroad Track Engineering	3 or 4
CEE 416	Traffic Capacity Analysis	3 or 4
CEE 417	Urban Transportation Planning	4
CEE 418	Public Transportation Systems	3 or 4
CEE 421	Construction Planning	3 or 4
CEE 424	Sustainable Const Methods	4
CEE 434	Environmental Systems I	3
CEE 453	Urban Hydrology and Hydraulics	4
CEE 458	Water Resources Field Methods	4
CEE 465	Design of Structural Systems	3
CEE 493	Sustainable Design Eng Tech	4
CEE 498	Special Topics (Section PS)	1 to 4
MSE 489	Matl Select for Sustainability	3 or 4
UP 466	Energy & the Built Environment	4
UP 480	Sustainable Design Principles	2
General Civil Engineering		
Science Electives Required - Choose one course from recommended list below:		
Science Electives Recommended:		
GEOL 107	Physical Geology	4
CHEM 222	Quantitative Analysis Lecture	2
CHEM 232	Elementary Organic Chemistry I	3 or 4
ME 200	Thermodynamics	3
STAT 400	Statistics and Probability I	4
Civil Engineering Core Courses Required - Should take 7 courses from list below:		
CEE 300	Behavior of Materials	4
CEE 310	Transportation Engineering	3
CEE 320	Construction Engineering	3
CEE 330	Environmental Engineering	3
CEE 340	Energy and Global Environment	3
CEE 350	Water Resources Engineering	3
CEE 360	Structural Engineering	3
CEE 380	Geotechnical Engineering	3
Advanced Technical Courses Required - Option I: Pick no more than one course from each area below such that the sum of the core and advanced courses is at least 34 credit hours. Option II: Pick 2 courses from one area and no more than one course from each of the remaining areas to total 34 credit hours.		
Construction:		
CEE 420	Construction Productivity	3 or 4
CEE 421	Construction Planning	3 or 4
CEE 422	Construction Cost Analysis	3 or 4
Environmental:		
CEE 437	Water Quality Engineering	3
CEE 440	Fate Cleanup Environ Pollutant	4
CEE 446	Air Quality Engineering	4

Geotechnical:		
CEE 483	Soil Mechanics and Behavior	4
CEE 484	Applied Soil Mechanics	3 or 4
Materials:		
CEE 401	Concrete Materials	4
Structures:		
CEE 460	Steel Structures I	3
CEE 461	Reinforced Concrete I	3
Transportation:		
CEE 405	Asphalt Materials I	3 or 4
CEE 406	Pavement Design I	3 or 4
CEE 407	Airport Design	3 or 4
CEE 408	Railroad Transportation Engrg	3 or 4
CEE 409	Railroad Track Engineering	3 or 4
CEE 410	Railway Signaling & Control	3 or 4
CEE 411	RR Project Design & Constr	3 or 4
CEE 412	High-Speed Rail Engineering	3 or 4
CEE 415	Geometric Design of Roads	4
CEE 416	Traffic Capacity Analysis	3 or 4
CEE 417	Urban Transportation Planning	4
CEE 418	Public Transportation Systems	3 or 4
Water Resources:		
CEE 452	Hydraulic Analysis and Design	3
CEE 453	Urban Hydrology and Hydraulics	4
Secondary Field Advanced Technical Electives. Select courses from approved lists to complement the primary area and add breadth to the program of study. See list below:		**6**
Construction Engineering and Management		
Civil Engineering Core Courses Required:		
CEE 320	Construction Engineering	3
Advanced Technical Courses Required:		
CEE 421	Construction Planning	3 or 4
CEE 420	Construction Productivity	3-4
or CEE 422	Construction Cost Analysis	
Advanced Technical Courses Recommended:		
CEE 424	Sustainable Const Methods	4
Construction Materials Engineering		
Civil Engineering Core Courses Required:		
CEE 300	Behavior of Materials	4
Advanced Technical Courses Required - Pick 2 courses from the recommended list below:		
Advanced Technical Courses Recommended:		
CEE 401	Concrete Materials	4
CEE 405	Asphalt Materials I	3 or 4
CEE 406	Pavement Design I	3 or 4
Environmental Engineering		
Civil Engineering Core Courses Required:		
CEE 330	Environmental Engineering	3
Advanced Technical Courses Required - Choose 2 courses from the recommended list below:		
CEE 430	Ecological Quality Engineering	2
CEE 434	Environmental Systems I	3
CEE 435	Public Health Engineering	3 or 4
CEE 437	Water Quality Engineering	3
CEE 438	Science & Environmental Policy	3
CEE 445		
CEE 442	Environmental Engineering Principles, Physical	4
CEE 443	Env Eng Principles, Chemical	4
CEE 444	Env Eng Principles, Biological	4
CEE 446	Air Quality Engineering	4
CEE 447	Atmospheric Chemistry	4
CEE 449	Environmental Engineering Lab	3
Geotechnical Engineering		
Civil Engineering Core Courses Required:		
CEE 380	Geotechnical Engineering	3
Advanced Technical Courses Required:		
CEE 483	Soil Mechanics and Behavior	4
CEE 484	Applied Soil Mechanics	3 or 4
Advanced Technical Courses Recommended - NONE		
Structural Engineering		
Civil Engineering Core Courses Required:		
CEE 360	Structural Engineering	3
Advanced Technical Courses Required:		
CEE 460	Steel Structures I	3
CEE 461	Reinforced Concrete I	3
Transportation Engineering		
Civil Engineering Core Courses Required:		
CEE 310	Transportation Engineering	3
Advanced Technical Courses Required: Select 2 courses, each from a different Area		
Area 1 - Facilities:		
CEE 405	Asphalt Materials I	3 or 4
CEE 406	Pavement Design I	3 or 4
CEE 407	Airport Design	3 or 4
Area 2 - Systems:		
CEE 407	Airport Design	3 or 4
CEE 415	Geometric Design of Roads	4
CEE 416	Traffic Capacity Analysis	3 or 4
CEE 418	Public Transportation Systems	3 or 4
Area 3 - Railroad:		
CEE 408	Railroad Transportation Engrg	3 or 4
CEE 409	Railroad Track Engineering	3 or 4
CEE 410	Railway Signaling & Control	3 or 4
CEE 411	RR Project Design & Constr	3 or 4
CEE 412	High-Speed Rail Engineering	3 or 4
Water Resources Engineering and Science		
Civil Engineering Core Courses Required:		
CEE 350	Water Resources Engineering	3
Advanced Technical Courses Required: 2 courses from the recommended list below:		
Advanced Technical Courses Recommended:		
CEE 432	Stream Ecology	3 or 4
CEE 433	Water Technology and Policy	3 or 4
CEE 450	Surface Hydrology	3
CEE 451	Environmental Fluid Mechanics	3

CEE 452	Hydraulic Analysis and Design	3
CEE 453	Urban Hydrology and Hydraulics	4
CEE 457	Groundwater	3
CEE 458	Water Resources Field Methods	4
CEE 498	Special Topics (Section EH)	1 to 4
Energy-Water-Environment Sustainability		
Civil Engineering Core Courses Required:		
CEE 340	Energy and Global Environment	3
Advanced Technical Courses Required:		
CEE 493	Sustainable Design Eng Tech (and select one course from the recommended list below:)	4
Advanced Technical Courses Recommended:		
ABE 436	Renewable Energy Systems	3 or 4
ARCH 441	Heat and Moisture in Buildings	3
CEE 424	Sustainable Const Methods	4
CEE 433	Water Technology and Policy	3 or 4
CEE 434	Environmental Systems I	3
CEE 437	Water Quality Engineering	3
CEE 446	Air Quality Engineering	4
CEE 449	Environmental Engineering Lab	3
CEE 450	Surface Hydrology	3
CEE 452	Hydraulic Analysis and Design	3
CEE 453	Urban Hydrology and Hydraulics	4
CEE 457	Groundwater	3
CEE 498	Special Topics (Section EH)	1 to 4
ENG 471	Seminar Energy & Sustain Engrg	1
ME 400	Energy Conversion Systems	3 or 4
NPRE 402	Nuclear Power Engineering	3 or 4
NPRE 475	Wind Power Systems	3 or 4
Societal Risk and Hazard Mitigation		
Civil Engineering Core Courses Required - None		
Advanced Technical Courses Required:		
CEE 491	Decision and Risk Analysis (and select one from the recommended list below:)	3 or 4
Advanced Technical Courses Recommended:		
CEE 406	Pavement Design I	3 or 4
CEE 416	Traffic Capacity Analysis	3 or 4
CEE 417	Urban Transportation Planning	4
CEE 437	Water Quality Engineering	3
CEE 440	Fate Cleanup Environ Pollutant	4
CEE 449	Environmental Engineering Lab	3
CEE 460	Steel Structures I	3
CEE 461	Reinforced Concrete I	3
CEE 465	Design of Structural Systems	3
CEE 472	Structural Dynamics I	3 or 4
CEE 473	Wind Effects on Structures	4
IE 410	Advanced Topics in Stochastic Processes & Applications	3 or 4
NPRE 442	Radioactive Waste Management	3
SE 450	Decision Analysis I	3 or 4
STAT 425	Statistical Modeling I	3 or 4
STAT 429	Time Series Analysis	3 or 4
STAT 430	Topics in Applied Statistics	3 or 4
UP 438	Disasters and Urban Planning	4
Sustainable and Resilient Infrastructure Systems		
Civil Engineering Core Courses Required:		
CEE 340	Energy and Global Environment	3
Civil Engineering Core Courses Recommended:		
CEE 300	Behavior of Materials	4
CEE 310	Transportation Engineering	3
CEE 320	Construction Engineering	3
CEE 330	Environmental Engineering	3
CEE 350	Water Resources Engineering	3
CEE 380	Geotechnical Engineering	3
Advanced Technical Courses Required:		
CEE 491	Decision and Risk Analysis (And select one course from the recommended list below:)	3 or 4
Advanced Technical Courses Recommended:		
ABE 436	Renewable Energy Systems	3 or 4
CEE 401	Concrete Materials	4
CEE 406	Pavement Design I	3 or 4
CEE 408	Railroad Transportation Engrg	3 or 4
CEE 409	Railroad Track Engineering	3 or 4
CEE 416	Traffic Capacity Analysis	3 or 4
CEE 417	Urban Transportation Planning	4
CEE 418	Public Transportation Systems	3 or 4
CEE 421	Construction Planning	3 or 4
CEE 424	Sustainable Const Methods	4
CEE 434	Environmental Systems I	3
CEE 453	Urban Hydrology and Hydraulics	4
CEE 458	Water Resources Field Methods	4
CEE 465	Design of Structural Systems	3
CEE 493	Sustainable Design Eng Tech	4
CEE 498	Special Topics (Section PS)	1 to 4
MSE 489	Matl Select for Sustainability	3 or 4
UP 466	Energy & the Built Environment	4
UP 480	Sustainable Design Principles	2
Global Context		
Science Electives Recommended:		
CPSC 116	The Global Food Production Web	3
ESE 140	Climate and Global Change	3
ESE 320	Water Planet, Water Crisis	3
ESE 482	Challenges of Sustainability	3
Civil Engineering Core Courses Recommended:		
CEE 330	Environmental Engineering	3
or CEE 350	Water Resources Engineering	
CEE 340	Energy and Global Environment	3
Advanced Technical Courses Recommended: Must take at least 3 credit hours in each of the 2 areas below:		
Knowledge and Skills Needed to Effectively Address Global Issues:		
ACE 451	Agriculture in Intl Dev	3 to 4
ATMS 421	Earth Systems Modeling	4
CEE 438	Science & Environmental Policy	3
CEE 445		

CEE 447	Atmospheric Chemistry	4
CEE 450	Surface Hydrology	3
ECON 420	International Economics	2 to 4
Global CEE Design:		
CEE 408	Railroad Transportation Engrg	3 or 4
CEE 417	Urban Transportation Planning	4
CEE 437	Water Quality Engineering	3
CEE 449	Environmental Engineering Lab	3
CEE 465	Design of Structural Systems	3
CEE Multidisciplinary		
Science Electives Recommended: Any recommended science electives from existing CEE Primary and Secondary listed above		
Civil Engineering Core Courses Recommended: Core courses relevant to the student's interests		
Advanced Technical Courses: Students work with CEE Academic Advisors		
Atmosphere Science (Primary Field: Environmental Engineering)		
Civil Engineering Core Courses Required:		
CEE 330	Environmental Engineering	3
Advanced Technical Courses Recommended:		
ATMS 302	Atmospheric Dynamics I	3
ATMS 410	Radar Remote Sensing	4
ATMS 411	Satellite Remote Sensing	4
ATMS 421	Earth Systems Modeling	4
CEE 445		
CEE 447	Atmospheric Chemistry	4
Chemistry (Primary Field: Environmental Engineering)		
Civil Engineering Core Courses Required:		
CEE 330	Environmental Engineering	3
Advanced Technical Courses Recommended:		
CHEM 232	Elementary Organic Chemistry I	3 or 4
CHEM 315	Instrumental Chem Systems Lab	2
CHEM 332	Elementary Organic Chem II	4
CHEM 420	Instrumental Characterization	2
CHEM 440	Physical Chemistry Principles	4
Chemical Engineering (Primary Field: Environmental Engineering)		
Civil Engineering Core Courses Required:		
CEE 330	Environmental Engineering	3
CEE 350	Water Resources Engineering	3
Advanced Technical Courses Recommended:		
CHBE 321	Thermodynamics	4
CHBE 421	Momentum and Heat Transfer	4
CHBE 422	Mass Transfer Operations	4
CHBE 424	Chemical Reaction Engineering	3
Microbiology (Primary Field: Environmental Engineering)		
Civil Engineering Core Courses Required:		
CEE 330	Environmental Engineering	3
Advanced Technical Courses Recommended:		
MCB 301	Experimental Microbiology	3
MCB 431	Microbial Physiology	3
MCB 450	Introductory Biochemistry	3
CEE 444	Env Eng Principles, Biological	4
Toxicology (Primary Field: Environmental Engineering)		
Civil Engineering Core Courses Required:		
CEE 330	Environmental Engineering	3
Advanced Technical Courses Recommended:		
CHEM 332	Elementary Organic Chem II	4
ENVS 431	Environ Toxicology & Health	3
ENVS 480	Basic Toxicology	3
MCB 450	Introductory Biochemistry	3

Electives

Code	Title	Hours
The Grainger College of Engineering Liberal Education course list, or additional courses from the campus General Education lists for Social and Behavioral Sciences or Humanities and the Arts [7]		6
Free electives. Additional unrestricted course work, subject to certain exceptions as noted by the College, so that there are at least 128 credit hours earned toward the degree. [8]		6
Total Hours of Curriculum to Graduate		**128**

1 *CEE 190 is offered in the fall semester.*

2 *CEE 495 is offered in the fall and spring semesters.*

3 *External transfer students take ENG 300.*

4 MATH 220 *may be substituted, with four of the five credit hours applying toward the degree.* MATH 220 *is appropriate for students with no background in calculus.*

5 *Math 284 or Math 286 (4 hours) are acceptable substitutes for MATH 285 (3 hours).*

6 *CEE 300 satisfies the General Education Advanced Composition requirement.*

7 *The Grainger College of Engineering approved liberal education course list can be found* here *(*https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-GeneralEducationElectives*). Note that these credit hours could carry the required cultural studies designation required for campus general education requirements.*

8 *The Grainger College of Engineering restrictions to free electives can be found* here *(*https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-FreeElectives*).*

Suggested Sequence

The curriculum sequence below is a suggested sequence, as all Grainger Engineering students work with a department academic advisor to achieve their educational goals, specific to their needs and preparation. Dynamic and Static curricular maps, which include prerequisite sequencing, can be found here (https://grainger.illinois.edu/academics/undergraduate/majors-and-minors/cee-map/).

First Year

First Semester		Hours
CEE 190[1]	Project-Based Introduction to CEE	4
ENG 100	Engineering Orientation	0
MATH 221[2]	Calculus I	4
CHEM 102	General Chemistry I	3

CHEM 103	General Chemistry Lab I	1
RHET 105 or SE 101[3]	Writing and Research	4-3
	Semester Hours	16-15
Second Semester		
MATH 231	Calculus II	3
CHEM 104	General Chemistry II	3
CHEM 105	General Chemistry Lab II	1
PHYS 211	University Physics: Mechanics	4
CS 101	Intro Computing: Engrg Sci	3
SE 101 or RHET 105[3]	Engineering Graphics Design	3-4
	Semester Hours	17-18
Second Year		
First Semester		
CEE 201	Systems Engrg Economics	3
MATH 241	Calculus III	4
PHYS 212	University Physics: Elec Mag	4
TAM 211	Statics	3
MATH 225	Introductory Matrix Theory	2
	Semester Hours	16
Second Semester		
CEE 202	Engineering Risk Uncertainty	3
PHYS 213	Univ Physics: Thermal Physics	2
TAM 212	Introductory Dynamics	3
TAM 251	Introductory Solid Mechanics	3
General education elective[4]		3
Free elective		3
	Semester Hours	17
Third Year		
First Semester		
TAM 335	Introductory Fluid Mechanics	4
Civil engineering technical courses[5]		6
Science elective[6]		3
General education elective[4]		3
	Semester Hours	16
Second Semester		
CEE 300[7]	Behavior of Materials	4
MATH 285	Intro Differential Equations	3
Civil engineering technical courses[5]		6
General education elective[4]		3
	Semester Hours	16
Fourth Year		
First Semester		
CEE 495	Professional Practice	0
Civil engineering technical courses[5]		9
General education electives[4]		6
	Semester Hours	15
Second Semester		
Civil engineering technical courses[5]		9
General education elective[4]		3
Free elective		3
	Semester Hours	15
	Total Hours:	128

1 *Offered in the fall semester, student should take in the first or second semester of enrollment in Civil Engineering.*

2 *MATH 220 may be substituted, with four of the five credit hours applying toward the degree. MATH 220 is appropriate for students with no background in calculus.*

3 *RHET 105 (or an alternative Composition I sequence) is taken either in the first or second semester of the first year, according to the student's UIN (Spring if your UIN is Odd). SE 101 is taken the other semester. Composition I guidelines can be found at* http://catalog.illinois.edu/general-information/degree-general-education-requirements/ *under Written Communication Requirement.*

4 *Students must take 6 hours from the campus General Education Social and Behavioral Sciences list, 6 hours from campus General Education Humanities and the Arts list, and 6 hours from a liberal education list approved by the college or from the campus General Education lists for Social and Behavioral Sciences or Humanities and the Arts. ECON 102 or ECON 103 must be one of the Social and Behavioral Sciences courses. Students must also complete the campus cultural studies requirement by completing (i) one western/comparative culture(s) course, (ii) one non-western culture(s) course, and (iii) one U.S. Minority Culture(s) course from the General Education cultural studies lists. Most students select general education courses that simultaneously satisfy these cultural studies requirements.*

5 *Civil engineering technical courses are defined as core courses and advanced technical electives and must total 34 hours of credit. Five courses and a minimum of fifteen hours must be core courses as outlined in the* Civil Engineering Undergraduate Handbook. *(*http://cee.illinois.edu/handbooks/*) Advanced technical electives are selected to correspond with chosen primary and secondary areas of emphasis in civil engineering as outlined in the* Civil Engineering Undergraduate Handbook. *(*http://cee.illinois.edu/handbooks/*) A minimum of twelve and six hours must be taken for the primary and secondary areas, respectively.*

6 *The science elective is selected in accord with recommendations for the chosen primary area of emphasis in civil engineering as outlined in the* Civil Engineering Undergraduate Handbook *(*http://cee.illinois.edu/handbooks/*).*

7 CEE 300 *satisfies the general education advanced composition requirement.*

Learning Outcomes: Civil Engineering

Learning Outcomes for the degree of Bachelor of Science Major in Civil Engineering

Student learning outcomes are based on learning outcomes in line with the ABET accreditation process.

Civil Engineering graduates will have:

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.

2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. An ability to communicate effectively with a range of audiences.
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Classics, BALAS

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Classics

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department website: http://www.classics.illinois.edu/
department faculty: Classics Faculty (https://classics.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: classics@illinois.edu

Students choose from the following concentrations:

Classical Civilizations (p. 101)

Classical Languages (p. 102)

For students interested in adding licensure to the BALAS in Classics, please visit the Department of the Classics academics page: https://classics.illinois.edu/academics/undergraduate-program/teaching-latin (https://classics.illinois.edu/academics/undergraduate-program/teaching-latin/)

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Classics

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A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office before the end of the fifth semester (60-75 hours). Please see your adviser.

Majors choosing the Classical Civilization and Classical Archaeology concentrations are advised, but not required, to satisfy the campus general education language requirement with one of the classical languages.
Departmental distinction: Students seeking departmental distinction must have at least a 3.5 average in relevant courses and should consult a member of the department's honors committee at the earliest opportunity.

Students choose from the following concentrations:

Classical Civilizations (p. 101)

Classical Languages (p. 102)

Learning Outcomes: Classics, BALAS

Learning outcomes for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Classics

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1. Acquire and retain a detailed knowledge of Greek and Latin grammar, syntax, vocabulary, and modes of expression so as to be able to read literary and subliterary texts composed in Greek and Latin between roughly 800 BCE and 500 CE.
2. Situate knowledge of the languages within the cultural contexts in which they were used in order to understand the crucial role of language in social dynamics and cross-cultural communication.
3. Acquire facility with contemporary methods of literary and historical analysis sufficient to carry out original, self-directed research into cultures that made use of the Greek and Latin languages.
4. Acquire critical awareness of the place of Greek and Latin in western literary history in order to appreciate the powerful role of tradition in interpreting the texts and events of the past.
5. Acquire a detailed knowledge of the culture of Ancient Greek and Roman civilizations, especially the broader historical, social, and cultural contexts and their development.

Classics: Classical Civilizations, BALAS

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Classics, Classical Civilizations Concentration

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department website: http://www.classics.illinois.edu/
department faculty: Classics Faculty (https://classics.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: classics@illinois.edu

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for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Classics, Classical Civilizations Concentration

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A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office before the end of the fifth semester (60 - 75 hours). Please see your adviser.

Departmental distinction: Students seeking departmental distinction must have at least a 3.5 average in relevant courses and should consult the Director of Undergraduate Studies at the earliest opportunity.
General education: Students must complete the Campus General Education (https://courses.illinois.edu/) **requirements including the campus general education language requirement.**
Minimum required major and supporting coursework: Normally equates to 44 hours. Twelve (12) hours of 300- and 400-level courses in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Classical Civilization and Archaeology courses chosen from the following courses. 12 hours must be at the advanced level (300 or 400 level).		32
CLCV 114	Introduction to Greek Culture	
CLCV 115	Mythology of Greece and Rome	
CLCV 116	The Roman Achievement	
CLCV 120	The Classical Tradition	
CLCV 131	Classical Archaeology, Greece	
CLCV 132	Class Archaeology, Rome-Italy	
CLCV 133	Archaeology of Israel	
CLCV 160	Ancient Greek & Roman Religion	
CLCV 206	Classical Allusions in Cinema	
CLCV 220	Origins of Western Literature	
CLCV 221	Odysseus and Other Heroes	
CLCV 222	Introduction to Greek and Roman Theater	
CLCV 223	Myth,History,Fiction,Tradition	
CLCV 224	American Race and Ethnicity in the Classical Tradition	
CLCV 225	Greco-Roman Demo, Econ, Cult	
CLCV 230	Ancient Engineering	
CLCV 231	Development of Ancient Cities	
CLCV 232	Ancient Greek Sanctuaries	
CLCV 240	Gender & Sexuality in Greco-Roman Antiquity	
CLCV 323	The Comic Imagination	
CLCV 443	The Archaeology of Greece	
CLCV 444	The Archaeology of Italy	
CLCV 490	Topics in Classical Literature	
CLCV 491	Topics Classic Arch & Civ	
Supporting coursework, a minor or a second major in an area of study chosen by the student and approved by the Department of the Classics Director of Undergraduate Studies		12
Total Hours		44

Classics: Classical Languages, BALAS

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Classics, Classical Languages Concentration

department website: http://www.classics.illinois.edu/
department faculty: Classics Faculty (https://classics.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: classics@illinois.edu

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Classics, Classical Languages Concentration

A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office before the end of the fifth semester (60 - 75 hours). Please see your adviser.

Departmental distinction: Students seeking departmental distinction must have at least a 3.5 average in relevant courses and should consult the Director of Undergraduate Studies at the earliest opportunity.
General education: Students must complete the Campus General Education (https://courses.illinois.edu/) **requirements including the campus general education language requirement.**
Minimum required major and supporting coursework: Normally equates to 44 hours. Twelve (12) hours of 300- and 400-level courses in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.
Students choose one of three tracks: Ancient Greek, Latin, or Ancient Greek & Latin

Ancient Greek Track

GRK 101, Elementary Greek I, is a prerequisite for subsequent GRK courses; does not count toward the 32 hours for the concentration.

Code	Title	Hours
Ancient Greek Track		
GRK 102	Elementary Greek II	4
GRK 201	Classical & Koine Greek I	4
GRK 202	Classical & Koine Greek II	4
GRK 411	Greek Prose Composition	3
CLCV 114	Introduction to Greek Culture	3
11 hours of Greek courses, at least 6 hours of which must be at the 300-400 level, from the following:		11
GRK 251	Elementary Modern Greek I	
GRK 252	Elementary Modern Greek II	
GRK 401	Survey of Greek Literature	
GRK 403	Intermediate Modern Greek I	
GRK 404	Intermediate Modern Greek II	
GRK 491	Readings in Greek Literature	
GRK 492	Senior Thesis	
GRK 493	Independent Reading	
One additional CLCV course (3 hours)		3
Supporting coursework, a minor or a second major in an area of study chosen by the student and approved by the Department of Classics Director of Undergraduate Studies		12
Total Hours		44

Latin Track

LAT 101,Elementary Latin I, is a prerequisite for subsequent LAT courses and does not count toward the 32 hours for the concentration.

Code	Title	Hours
Latin Track		
LAT 102	Elementary Latin II	4
LAT 201	Intermediate Latin	4
LAT 202	Intro to Latin Literature	4
LAT 411	Intermediate Prose Composition	3
CLCV 116	The Roman Achievement	3
11 hours of latin courses, at least 6 hours of which must be at the 300-400 level, chosen from the following:		11
LAT 401	Survey of Latin Literature	
LAT 460	Medieval Latin	
LAT 491	Readings in Latin Literature	
LAT 492	Senior Thesis	
LAT 493	Independent Reading	
One additional CLCV course		3
Supporting coursework, a minor or a second major in an area of study chosen by the student and approved by the Department of the CLassics Director of Undergraduate Studies		12
Total Hours		44

Ancient Greek & Latin Track

LAT 101, Elementary Latin I (a prerequisite for subsequent LAT courses) and GRK 101, Elementary Greek I (a prerequisite for subsequent GRK courses) and do not count toward the 32 hours for the concentration.

Code	Title	Hours
Ancient Greek & Latin Track		
GRK 102	Elementary Greek II	4
GRK 201	Classical & Koine Greek I	4
GRK 202	Classical & Koine Greek II	4
LAT 102	Elementary Latin II	4
LAT 201	Intermediate Latin	4
LAT 202	Intro to Latin Literature	4
GRK 411	Greek Prose Composition	3
or LAT 411	Intermediate Prose Composition	
Additional GRK or LAT coursework at 400-level		2
One CLCV course		3
Supporting coursework, a minor or a second major in an area of study chosen by the student and approved by the Department of the Classics Director of Undergraduate Studies		12
Total Hours		44

Communication, BALAS

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Communication

department website: https://communication.illinois.edu/
department faculty: Communication Faculty (https://communication.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: communication@illinois.edu

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Communication

Departmental distinction: Superior students are encouraged to consult the departmental honors adviser about requirements and opportunities for participation in the departmental honors program.
General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: At least 15 hours of the required 37 hours in Communication must be at the 300 level or above. Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Introduction to Public Speaking (choose one):		3
CMN 101	Public Speaking	
OR		
CMN 112	Oral & Written Comm II [1]	
CMN 102	Introduction to Communication	4
Communication Courses: Students will select an option (A or B) and a specialization (if Option B is chosen) in consultation with an undergraduate advisor in Communication.		30
OPTION A: Students who wish a general course of study will take at least one course from five of the following six areas and the remaining hours will be selected in consultation with an advisor.		
OPTION B: Students who choose to concentrate within an area must take four courses from one of the six areas listed below and the remaining hours will be selected in consultation with an advisor. Students may complete more than one specialization by completing four courses in each area desired; however, individual courses may not be counted toward more than one specialization.		
Communication & Culture Area		
CMN 232	Intro to Intercultural Comm	
CMN 250	Social Movement Communication	
CMN 275	Media, Money and Power	
CMN 280	Comm Technology & Society	
CMN 320	Comm Controversy Public Policy	
CMN 326	Mass Media and the Audience	
CMN 357	Intro to Conversation Analysis	
CMN 361	Storytelling as Oral Communication	
CMN 375	Popular Media and Culture	
CMN 429	Race and the Mass Media	
CMN 432	Gender Communication	
CMN 450	Topics in Public Communication	
Communication & Health Area:		

CMN 220	Communicating Public Policy
CMN 230	Intro to Interpersonal Comm
CMN 260	Intro to Health Communication
CMN 321	Strategies of Persuasion
CMN 323	Argumentation
CMN 368	Sexual Communication
CMN 421	Persuasion Theory & Research
CMN 467	Communication & Health Equity
CMN 435	Adv Interpersonal Comm
CMN 462	Interpersonal Health Comm
CMN 463	Organizational Health Comm
CMN 464	Health Communication Campaigns
CMN 465	Social Marketing
Communication & Organizations Area:	
CMN 211	Business and Professional Communication
CMN 212	Intro to Organizational Comm
CMN 213	Small Group Communication
CMN 215	Interviewing: The Art and Science of Effective Questioning
CMN 232	Intro to Intercultural Comm
CMN 280	Comm Technology & Society
CMN 312	Communicating for Innovation
CMN 323	Argumentation
CMN 370	Political Economy of Communication
CMN 377	Propaganda and Modern Society
CMN 410	Workplace Comm Technology
CMN 411	Organizational Comm Assessment
CMN 412	Adv Organizational Comm
CMN 413	Adv Small Group Communication
CMN 463	Organizational Health Comm
CMN 464	Health Communication Campaigns
CMN 476	Commercialism and the Public
Interpersonal Communication Area:	
CMN 213	Small Group Communication
CMN 230	Intro to Interpersonal Comm
CMN 232	Intro to Intercultural Comm
CMN 260	Intro to Health Communication
CMN 321	Strategies of Persuasion
CMN 323	Argumentation
CMN 336	Family Communication
CMN 338	Relationships and Technologies
CMN 357	Intro to Conversation Analysis
CMN 368	Sexual Communication
CMN 413	Adv Small Group Communication
CMN 421	Persuasion Theory & Research
CMN 432	Gender Communication
CMN 435	Adv Interpersonal Comm
CMN 437	Comm in Personal Relationships
CMN 462	Interpersonal Health Comm
Mediated Communication & Techonology Area:	
CMN 275	Media, Money and Power
CMN 277	Introduction to Mediated Communication
CMN 280	Comm Technology & Society
CMN 312	Communicating for Innovation
CMN 325	Politics and the Media
CMN 326	Mass Media and the Audience
CMN 338	Relationships and Technologies
CMN 340	Visual Politics
CMN 345	Visual Media Effects
CMN 370	Political Economy of Communication
CMN 375	Popular Media and Culture
CMN 410	Workplace Comm Technology
CMN 424	Campaigning to Win
CMN 429	Race and the Mass Media
Rhetoric & Public Discourse Area:	
CMN 210	Public Comm in Everyday Life
CMN 220	Communicating Public Policy
CMN 250	Social Movement Communication
CMN 310	The Rhetorical Tradition
CMN 320	Comm Controversy Public Policy
CMN 321	Strategies of Persuasion
CMN 323	Argumentation
CMN 325	Politics and the Media
CMN 326	Mass Media and the Audience
CMN 340	Visual Politics
CMN 345	Visual Media Effects
CMN 370	Political Economy of Communication
CMN 415	Classical Rhetorics
CMN 416	Early Modern Rhetorics
CMN 417	Contemporary Rhetorics
CMN 421	Persuasion Theory & Research
CMN 423	Rhetorical Criticism
CMN 424	Campaigning to Win
CMN 450	Topics in Public Communication
CMN 464	Health Communication Campaigns
CMN 476	Commercialism and the Public
Total Hours	37

[1] CMN 111 *is a prerequisite for* CMN 112. *Credit in* CMN 111 *will not count towards the minimum of 37 hours of Communication courses required for the major.*

Learning Outcomes: Communication, BALAS

Learning Outcomes for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Communication

1. Students will demonstrate competence in oral and written communication, including public speaking, argumentation and reasoning, deliberation, and media analysis and critique.
2. Students will have broad knowledge of communication research and theory and understand how to apply theoretical concepts in practical settings.

3. Students will understand the political and social import of communication and develop competencies required to engage productively with discourses related to all aspects of public and private life.
4. Students will understand the communicative implications of human diversity, including issues related to race, culture, class, religion, gender, sexual identity, and disability.
5. Students will gain communication competencies that afford them rewarding opportunities, such as satisfying employment or post-graduate study.

Community Health, BS

for the Bachelor of Science Major in Community Health

Department Website: http://kch.illinois.edu/
Department Faculty: Kinesiology & Community Health Faculty (http://kch.illinois.edu/faculty/)
College Catalog Page: Applied Health Sciences (http://catalog.illinois.edu/schools/ahs/academic-units/)
College Website: http://ahs.illinois.edu/

Students pursuing this major select one of three concentrations:

Health Education & Promotion (p. 106)
Health Planning & Administration (p. 110)
Rehabilitation Studies (p. 114)

Programs in Community Health and Kinesiology

Undergraduate Programs:

- **major:** Community Health, BS (p. 105)
  - **concentration:** Community Health: Health Education & Promotion, BS (p. 106)
  - **concentration:** Community Health: Health Planning & Administration, BS (p. 110)
  - **concentration:** Community Health: Rehabilitation Studies, BS (p. 114)
- **major:** Kinesiology, BS (p. 251)
  - **concentration:** Kinesiology: Teacher Certification, BS (p. 253)
- **minor:** Kinesiology (p. 507)
- **minor:** Disability Studies (http://catalog.illinois.edu/undergraduate/ahs/minors/disability-studies/)
- **joint degree:** Community Health, BS and Public Health, MPH (p. 118)
- **joint degree:** Community Health, BS and Epidemiology, MPH (p. 462)
- **joint degree:** Kinesiology, BS and Public Health, MPH (p. 465)
- **joint degree:** Kinesiology, BS and Epidemiology, MPH (p. 463)
- **joint degree:** Interdisciplinary Health Sciences, BS & Epidemiology, MPH (p. 458)

Graduate Programs:

- **degree:** Kinesiology, MS (http://catalog.illinois.edu/graduate/ms_kines/)
- **degree:** Kinesiology, PhD (http://catalog.illinois.edu/graduate/graduate-majors/kinesiology/#doctoratestext)
- **degree:** Community Health, MS (http://catalog.illinois.edu/graduate/graduate-majors/community-health/ms-comm-health/)
- **degree:** Rehabilitation, MS (http://catalog.illinois.edu/graduate/graduate-majors/community-health/ms-rehab/)
- **degree:** Public Health, MPH (http://catalog.illinois.edu/graduate/graduate-majors/community-health/master-pub-health/)
- **joint degree:** Community Health, BS and Public Health, MPH (p. 118)
- **joint degree:** Kinesiology, BS and Public Health, MPH (p. 465)

The Community Health Program at the University of Illinois prepares students in the ever changing world of health care and health behavior as practitioners and offers three concentrations at the undergraduate level: Health Education & Promotion (p. 106), Health Planning & Administration (p. 110), and Rehabilitation Studies (p. 114). All curricula are built on a foundation of general education courses which emphasize communication skills and critical thinking. The Professional Core courses are designed to help students develop skills in planning, implementation, and evaluation in the context of health services and programs. Students must complete an internship during their senior year in a setting related to the degree and their interests. Recent internship sites have included the American Heart Association, the American Red Cross, hospitals, nursing homes, fitness centers, work site health education programs, and substance abuse prevention centers.

Further information is available from the Academic Affairs Office, Department of Kinesiology & Community Health, University of Illinois at Urbana-Champaign, 1206 S. Fourth Street, 2021 Khan Annex, Huff Hall, Champaign, IL 61820, (217) 333-2307.

A 5 year BS MPH joint degree program is available for students majoring in Community Health, I-Health, or Kinesiology. Students apply for

the program in the latter part of their third year (junior year) of study. Students accepted into the BS MPH joint degree program take 12 credit hours of coursework in their senior year that apply to both BS and MPH degrees. In the 5th year of study, students complete the remaining requirements for the MPH degree, and graduate simultaneously with both BS and MPH degrees. A summary of the requirements for the MPH degree is provided here (http://catalog.illinois.edu/graduate/graduate-majors/community-health/master-pub-health/#degreerequirementstext). The requirements are explained in more detail on the MPH program website: http://www.mph.illinois.edu/Program/.

Community Health: Health Education & Promotion, BS

for the Bachelor of Science Major in Community Health, Health Education & Promotion Concentration

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department website: http://kch.illinois.edu/
department faculty: Kinesiology & Community Health Faculty (http://kch.illinois.edu/faculty/)
college catalog page: Applied Health Sciences (http://catalog.illinois.edu/schools/ahs/academic-units/)
college website: http://ahs.illinois.edu/

Programs in Community Health and Kinesiology

Undergraduate Programs:

- **major:** Community Health, BS (p. 105)
  - **concentration:** Community Health: Health Education & Promotion, BS (p. 106)
  - **concentration:** Community Health: Health Planning & Administration, BS (p. 110)
  - **concentration:** Community Health: Rehabilitation Studies, BS (p. 114)
- **major:** Kinesiology, BS (p. 251)
  - **concentration:** Kinesiology: Teacher Certification, BS (p. 253)
- **minor:** Kinesiology (p. 507)
- **minor:** Disability Studies (http://catalog.illinois.edu/undergraduate/ahs/minors/disability-studies/)
- **joint degree:** Community Health, BS and Public Health, MPH (p. 118)
- **joint degree:** Community Health, BS and Epidemiology, MPH (p. 462)
- **joint degree:** Kinesiology, BS and Public Health, MPH (p. 465)
- **joint degree:** Kinesiology, BS and Epidemiology, MPH (p. 463)
- **joint degree:** Interdisciplinary Health Sciences, BS & Epidemiology, MPH (p. 458)

Graduate Programs:

- **degree:** Kinesiology, MS (http://catalog.illinois.edu/graduate/ms_kines/)
- **degree:** Kinesiology, PhD (http://catalog.illinois.edu/graduate/graduate-majors/kinesiology/#doctoratestext)
- **degree:** Community Health, MS (http://catalog.illinois.edu/graduate/graduate-majors/community-health/ms-comm-health/)
- **degree:** Rehabilitation, MS (http://catalog.illinois.edu/graduate/graduate-majors/community-health/ms-rehab/)
- **degree:** Public Health, MPH (http://catalog.illinois.edu/graduate/graduate-majors/community-health/master-pub-health/)
- **joint degree:** Community Health, BS and Public Health, MPH (p. 118)
- **joint degree:** Kinesiology, BS and Public Health, MPH (p. 465)

The Community Health Program at the University of Illinois prepares students in the ever changing world of health care and health behavior as practitioners and offers three concentrations at the undergraduate level: Health Education & Promotion (p. 106), Health Planning & Administration (p. 110), and Rehabilitation Studies (p. 114). All curricula are built on a foundation of general education courses which emphasize communication skills and critical thinking. The Professional Core courses are designed to help students develop skills in planning, implementation, and evaluation in the context of health services and programs. Students must complete an internship during their senior year in a setting related to the degree and their interests. Recent internship sites have included the American Heart Association, the American Red Cross, hospitals, nursing homes, fitness centers, work site health education programs, and substance abuse prevention centers.

Further information is available from the Academic Affairs Office, Department of Kinesiology and Community Health, University of Illinois at Urbana-Champaign, 1206 S. Fourth Street, 2021 Khan Annex, Huff Hall, Champaign, IL 61820, (217) 333-2307.

A 5 year BS MPH joint degree program is available for students majoring in Community Health, I-Health, or Kinesiology. Students apply for

the program in the latter part of their third year (junior year) of study. Students accepted into the BS MPH joint degree program take 12 credit hours of coursework in their senior year that apply to both BS and MPH degrees. In the 5th year of study, students complete the remaining requirements for the MPH degree, and graduate simultaneously with both BS and MPH degrees. A summary of the requirements for the MPH degree is provided here (http://catalog.illinois.edu/graduate/graduate-majors/community-health/master-pub-health/). The requirements are explained in more detail on the MPH program website: http://www.mph.illinois.edu/Program/.

for the Bachelor of Science Major in Community Health, Health Education & Promotion Concentration

Correlates

The Community Health Program requires certain courses from the approved lists be taken as noted below. The prescribed courses prepare the student for upper division study and may be used to satisfy General Education Requirements provided they are on the appropriate General Education List.

A total of 128 hours is required for a degree in Community Health with all the above requirements met. There will be range of electives a student will be able to take depending on the general education number of hours.

General Education

Code	Title	Hours
Communication Arts		
Composition I and an approved speech performance course; or CMN 111 and CMN 112		6-7
Advanced Composition (CHLH 304 fulfills requirement)		3-4
Quantitative Reasoning I & II		
From approved campus list (must include a course in statistics from approved campus list) (CHLH 244 and CHLH 421 fulfills requirement)		6
Humanities and the Arts		
From approved campus list (CHLH 260 fulfills 3 hours of requirement)		9
Social and Behavioral Sciences		
From approved campus list		9
Natural Sciences and Technology		
From approved campus list		9
Cultural Studies [1]		
One course from Non-Western Cultures approved campus list.		3
One course from U.S. Minority Cultures approved campus list		3
One course from Western Cultures approved campus list		3
Foreign Language: Completion through the third level of the same language in high school or college		
Total Hours		51-53

Code	Title	Hours
Community Health Program Core Requirements		
CHLH 100	Contemporary Health	3
CHLH 125	Orientation KIN & Comm Health	1
CHLH 201	Public Health Research Methods	3
CHLH 210	Community Health Organizations	2
CHLH 250	Health Care Systems	3
CHLH 274	Introduction to Epidemiology	3
CHLH 304	Foundations of Health Behavior	4
CHLH 410	Public Health Practice	4
CHLH 421	Health Data Analysis	3
Kinesiology and Community Health Department Core Requirements		
CHLH 101	Introduction to Public Health	3
KIN 122	Physical Activity and Health	3
Correlate Areas (see Correlates List Tab)		**18**
Each student completes correlates that are planned with the assigned advisor. These courses are designed to enhance and support career goals.		
Electives		**9-11**
Concentration Requirements		**18**
Total Hours		**128**

[1] *Courses in cultural studies may be completed through other categories where appropriate.*

Concentration Requirements

Code	Title	Hours
FSHN 120	Contemporary Nutrition	3
CHLH 200	Mental Health	2
CHLH 206	Human Sexuality	2
CHLH 243	Drug Use and Abuse	2
CHLH 380	Orientation to Internship	1
CHLH 485	Community Health Internship	8

Correlates Choices

Community Health Correlates Core

Code	Title	Hours
CHLH 199	Undergraduate Open Seminar	
CHLH 199	Undergraduate Open Seminar (Campus Acquaintance Rape Education)	
CHLH 199	Undergraduate Open Seminar (Intro to the Health Services)	
CHLH 260	Introduction to Medical Ethics	
CHLH 314	Introduction to Aging	
CHLH 330	Disability in American Society	
CHLH 336	Tomorrow's Environment	
CHLH 340	Health Promotion Practicum	
CHLH 365	Civic Engagement in Wellness	
CHLH 393	Special Projects	
CHLH 404	Gerontology	
CHLH 407	Disability, Culture & Society	
CHLH 409	Women's Health	
CHLH 415	International Health	
CHLH 448	Exercise & Health Psychology	
CHLH 456	Organization of Health Care	
CHLH 469	Environmental Health	

CHLH 473	Immigration, Health & Society
CHLH 494	Special Topics

If you are a Health Education or Rehabilitation and Disability Studies, these count:

Code	Title	Hours
CHLH 455	Health Services Financing	
CHLH 457	Health Planning	
CHLH 458	Health Administration	

AHS Courses
Communications, Aging, Disability Studies, Experience Learning, Diversity and Administration

Code	Title	Hours
AHS 399	Advanced Open Seminar	1 to 6
KIN 230	Diversity in Recreation, Sport, and Tourism	3
KIN 247	Intro to Sport Psychology	3
KIN 249	Sport & Modern Society	3
KIN 268	Children's Movement	3
KIN 340	Social & Psychological Aspects of Physical Activity	3
KIN 345	Sport and Society	3
KIN 375	Comm Partners & Health	3
KIN 385	Exper in Kinesiology Research	3
KIN 386	Exercise Instruction & Elderly	3
KIN 387	Exper in the Agency Setting	3
KIN 442	Body, Culture & Society	3 or 4
KIN 448	Exercise & Health Psychology	3 or 4
KIN 459	Physical Activity & Aging	3 or 4
RST 200	Leadership in Recreation, Sport and Tourism	2
RST 218	Entrepreneurship	3
RST 225	Environmental Politics & Policy	3
RST 230	Diversity in Recreation, Sport, and Tourism	3
RST 255	Ethical Issues in Recreation, Sport and Tourism	2
RST 316	Human Development and Recreation, Sport and Tourism	3
RST 325	Marketing in Recreation, Sport and Tourism	3
RST 340	Facility Management in Recreation, Sport and Tourism	3
REHB 330	Disability in American Society	3
REHB 401	Introduction to Rehabilitation	4
REHB 407	Disability, Culture & Society	3 or 4
REHB 402	Medical Aspects of Disability	4
REHB 419	Counseling Psychology Pre-Practicum	2 to 4
REHB 435	Work and Disability	2
SOC 270	Global Demography	3
SHS 120	Child, Comm, & Lang Ability	3
SHS 121	American Sign Language I	4
SHS 170	Intro Hum Comm Sys & Disorders	3
SHS 221	American Sign Language II	4
SHS 222	Language & Culture of Deaf Communities	3
SHS 270	Comm Disability in the Media	4
SHS 271	Communication and Aging	3
SHS 321	American Sign Language III	4
SHS 352	Hearing Health and Society	3

Pre Health: M.D., O.D., O.T., P.T., P.A., Dentistry, Optometry, Chiropractor, Etc.

Code	Title	Hours
IB 104	Animal Biology	4
IB 204	Genetics	3 or 4
MCB 100	Introductory Microbiology	3
MCB 244	Human Anatomy & Physiology I	3
MCB 245	Human Anat & Physiol Lab I	2
MCB 246	Human Anatomy & Physiology II	3
MCB 247	Human Anat & Physiol Lab II	2
MCB 250	Molecular Genetics	3
MCB 300	Microbiology	3
MCB 450	Introductory Biochemistry	3
CHEM 232	Elementary Organic Chemistry I	3 or 4
CHEM 233	Elementary Organic Chem Lab I	2
CHEM 332	Elementary Organic Chem II	4
CHEM 360	Chemistry of the Environment	3
PHYS 101	College Physics: Mech & Heat	5
PHYS 101	College Physics: Mech & Heat	5
PHYS 102	College Physics: E&M & Modern	5
CLCV 102	Medical Terms-GRK & LAT Roots	3

Communications, Promotions, Public Relations & Leadership

Code	Title	Hours
ADV 150	Introduction to Advertising	3
ADV 310	Intro to Public Relations	3
ADV 410	Public Relations Strategies	3
AGCM 270	Ag Sales and Persuasive Communication	3
AGCM 320	Public Information Campaigns	4
AGED 220	Prog Del in Ag & Leadership Ed	3
AGED 230		
AGED 260		
AGED 380		
AGED 430	Youth Development Programs	3 or 4
BTW 250	Principles Bus Comm	3
CMN 211	Business and Professional Communication	3
CMN 212	Intro to Organizational Comm	3
CMN 213	Small Group Communication	3
CMN 220	Communicating Public Policy	3
CMN 230	Intro to Interpersonal Comm	3
CMN 232	Intro to Intercultural Comm	3
CMN 260	Intro to Health Communication	3
CMN 280	Comm Technology & Society	3
CMN 336	Family Communication	3
CMN 368	Sexual Communication	3
CMN 377	Propaganda and Modern Society	3
CMN 410	Workplace Comm Technology	3 or 4

CMN 424	Campaigning to Win	3 or 4
CMN 435	Adv Interpersonal Comm	3 or 4
CMN 462	Interpersonal Health Comm	3 or 4
CMN 463	Organizational Health Comm	3 or 4
CMN 464	Health Communication Campaigns	3 or 4
CMN 465	Social Marketing	3 or 4
CMN 467	Communication & Health Equity	3 or 4
EDPR 250	School & Community Experiences	0 to 4
ENG 315	Learning in Community	3
IHLT 230	Leadership in Health	3
IHLT 232	Health Disparities in the U.S.	3
IHLT 240	Aging and Health Policy	3
IHLT 375	Interdis Collab in Health Serv	4
LAW 199	Undergraduate Open Seminar	1 to 3
LAW 301	Introduction to Law	2 or 3
LAW 302	Transitional Justice	3
PS 220	Intro to Public Policy	3

Accounting, Economics & Human Resources

Code	Title	Hours
ACCY 200	Fundamentals of Accounting	
ACCY 201	Accounting and Accountancy I	
ACCY 202	Accounting and Accountancy II	
ACE 210	Environmental Economics	
ACE 240	Personal Financial Planning	
ACE 255	Economics of Food and Environmental Justice	
BADM 300	The Legal Environment of Bus	
BADM 310	Mgmt and Organizational Beh	
BADM 320	Principles of Marketing	
CS 105	Intro Computing: Non-Tech	
ECON 302	Inter Microeconomic Theory	
FIN 221	Corporate Finance	
FIN 232	Intro to Wealth Management	
HRD 415	Diversity in the Workplace	
HRD 492	Supervised Internship	

Human Factors

Code	Title	Hours
ACE 255	Economics of Food and Environmental Justice	
AFRO 310	Race and Cultural Diversity	
AFRO 466	Race, Science, and Medicine	
AFRO 481	Urban Communities & Public Pol	
ANSC 205	World Animal Resources	
ANSC 207	The Science of Pets and How to Care for Them	
ANSC 250	Companion Animals in Society	
ANSC 251	Epidemics and Infectious Diseases	
ANSC 305	Human Animal Interactions	
ANSC 307	Companion Animal Management	
ANTH 104	Talking Culture	
ANTH 246	Forensic Science	
CI 260	Serving Children in Schools and the Community	
EPS 201	Foundations of Education	
EPS 310	Race and Cultural Diversity	
EPS 421	Racial and Ethnic Families	
EDPR 250	School & Community Experiences	
EPSY 201	Educational Psychology	
EPSY 202	Exploring Cultural Diversity	
EPSY 220	Career Theory and Practice	
EPSY 222	Language & Culture of Deaf Communities	
EPSY 236	Child Development in Education	
EPSY 402	Sociocultural Influence on Learning	
FSHN 101	The Science of Food and How it Relates to You	
FSHN 220	Principles of Nutrition	
FSHN 274	NonMajors Food Microbiology	
GEOG 438	Geography of Health Care	
GLBL 240	Global Health	
GLBL 260	Global Human Rights	
GLBL 340	Global Health: Policy & Governance	
GLBL 357	Ethnic Conflict	
GLBL 440	Global Health: Interventions & Evaluations	
GWS 340	Gender, Relationshps & Society	
GWS 363	Gender, Health & Pop Culture	
GWS 366	Feminist Disability Studies	3
HDFS 120	Intro to Family Studies	3
HDFS 140	Intro Gender & Women's Studies	3
HDFS 208	Child Fam with Special Needs	3
HDFS 220	Families in Global Perspective	3
HDFS 221	Asian Families in America	3
HDFS 225	Close Relationships	3
HDFS 259	Motor Development and Control	3
HDFS 261	Self-Help Group Dev & Process	3
HDFS 262	Motor Develop, Growth & Form	3
HDFS 290	Intro to Research Methods	4
HDFS 301	Infancy & Early Childhood	4
HDFS 408	Hospitalized Children	3 or 4
HDFS 420	Inequality, Public Policy, and U.S. Families	3 or 4
HDFS 424	Racial and Ethnic Families	2 to 4
HDFS 426	Family Conflict Management	3 or 4
HIST 483	Race, Science, and Medicine	3 or 4
INFO 202	Social Aspects Info Tech	3
IS 418	Community Engagement	3 or 4
LLS 473	Immigration, Health & Society	3 or 4
PSYC 201	Intro to Social Psych	3
PSYC 210	Behavioral Neuroscience	3
PSYC 216	Child Psych	3
PSYC 238	Psychopathology and Problems in Living	3
PSYC 239	Community Psych	3
PSYC 340	Community Projects	4
PSYC 361	The Psychology of Aging	3
PSYC 451	Neurobio of Aging	0 to 4

PSYC 455	Organizational Psych	2 to 4
PSYC 465	Personality and Soc Dev	3 or 4
SOC 162	Intro to Intl Health Policy	3
SOC 179	Social Organization	3
SOC 196	Issues in Sociology	3
SOC 202	Sexualities	3
SOC 270	Global Demography	3
SOC 274	Health, Illness and Society	3
SOC 275	Criminology	3
SOC 310	Sociology of Deviance	3
SOC 373	Social Inequality	3
SOC 473	Immigration, Health & Society	3 or 4
SOC 478	Geography of Health Care	3 or 4
SOCW 200	Introduction to Social Work	3
SOCW 240	Death & Dying	3
SOCW 297	Asian Families in America	3
SOCW 300	Diversity: Identities & Issues	3
SOCW 315	Social Work Services for Older Adults	3
SOCW 321	Social Entre & Social Change	3
SOCW 360	Social Work and the Military	3
SOCW 420	Subst Use in Social Context	3
SOCW 473	Immigration, Health & Society	3 or 4
SPED 117	The Culture of Disability	3
SPED 322	Introduction to Intellectual Disability	3
SPED 432	Multiple Disabilities	3
SPED 438	Collaborating with Families	3 or 4
TSM 422	Ag Health-Illnesses Prevention	3
UP 260	Social Inequality and Planning	3
UP 340	Planning for Healthy Cities	3
UP 423	Community Development in the Global South	4
UP 438	Disasters and Urban Planning	4

Technology Skills

Code	Title	Hours
ACE 161	Microcomputer Applications	3
BTW 220	Desktop Publishing and Design	2

Community Health: Health Planning & Administration, BS

for the Bachelor of Science Major in Community Health, Health Planning & Administration Concentration

department website: http://kch.illinois.edu/
department faculty: Kinesiology & Community Health Faculty (http://kch.illinois.edu/faculty/)
college catalog page: Applied Health Sciences (http://catalog.illinois.edu/schools/ahs/academic-units/)
college website: http://ahs.illinois.edu/

Programs in Community Health and Kinesiology

Undergraduate Programs:

- **major:** Community Health, BS (p. 105)
  - **concentration:** Community Health: Health Education & Promotion, BS (p. 106)
  - **concentration:** Community Health: Health Planning & Administration, BS (p. 110)
  - **concentration:** Community Health: Rehabilitation Studies, BS (p. 114)
- **major:** Kinesiology, BS (p. 251)
  - **concentration:** Kinesiology: Teacher Certification, BS (p. 253)
- **minor:** Kinesiology (p. 507)
- **minor:** Disability Studies (http://catalog.illinois.edu/undergraduate/ahs/minors/disability-studies/)
- **joint degree:** Community Health, BS and Public Health, MPH (p. 118)
- **joint degree:** Community Health, BS and Epidemiology, MPH (p. 462)
- **joint degree:** Kinesiology, BS and Public Health, MPH (p. 465)
- **joint degree:** Kinesiology, BS and Epidemiology, MPH (p. 463)
- **joint degree:** Interdisciplinary Health Sciences, BS & Epidemiology, MPH (p. 458)

Graduate Programs:

- **degree:** Kinesiology, MS (http://catalog.illinois.edu/graduate/ms_kines/)
- **degree:** Kinesiology, PhD (http://catalog.illinois.edu/graduate/graduate-majors/kinesiology/#doctoratestext)
- **degree:** Community Health, MS (http://catalog.illinois.edu/graduate/graduate-majors/community-health/ms-comm-health/)
- **degree:** Rehabilitation, MS (http://catalog.illinois.edu/graduate/graduate-majors/community-health/ms-rehab/)
- **degree:** Public Health, MPH (http://catalog.illinois.edu/graduate/graduate-majors/community-health/master-pub-health/)
- **joint degree:** Community Health, BS and Public Health, MPH (p. 118)
- **joint degree:** Kinesiology, BS and Public Health, MPH (p. 465)

The Community Health Program at the University of Illinois prepares students in the ever changing world of health care and health behavior as practitioners and offers three concentrations at the undergraduate level: Health Education & Promotion (p. 106), Health Planning & Administration (p. 110), and Rehabilitation Studies (p. 114). All curricula are built on a foundation of general education courses which emphasize communication skills and critical thinking. The Professional Core courses are designed to help students develop skills in planning, implementation, and evaluation in the context of health services and programs. Students must complete an internship during their senior year in a setting related to the degree and their interests. Recent internship sites have included the American Heart Association, the American Red Cross, hospitals, nursing homes, fitness centers, work site health education programs, and substance abuse prevention centers.

Further information is available from the Academic Affairs Office, Department of Kinesiology & Community Health, University of Illinois at Urbana-Champaign, 1206 S. Fourth Street, 2021 Khan Annex, Huff Hall, Champaign, IL 61820, (217) 333-2307.

A 5 year BS MPH joint degree program is available for students majoring in Community Health, I-Health, or Kinesiology. Students apply for

the program in the latter part of their third year (junior year) of study. Students accepted into the BS MPH joint degree program take 12 credit hours of coursework in their senior year that apply to both BS and MPH degrees. In the 5th year of study, students complete the remaining requirements for the MPH degree, and graduate simultaneously with both BS and MPH degrees. A summary of the requirements for the MPH degree is provided here (http://catalog.illinois.edu/graduate/graduate-majors/community-health/master-pub-health/#degreerequirementstext). The requirements are explained in more detail on the MPH program website: http://www.mph.illinois.edu/Program/.

for the Bachelor of Science Major in Community Health, Health Planning & Administration Concentration

The Community Health Program requires certain courses from the approved lists be taken as noted below. The prescribed courses prepare the student for upper division study and may be used to satisfy General Education Requirements provided they are on the appropriate General Education List.

A total of 128 hours is required for a degree in Community Health with all the above requirements met. There will be range of electives a student will be able to take depending on the general education number of hours.

General Education

Code	Title	Hours
Communication Arts		
Composition I and an approved speech performance course; or CMN 111 and CMN 112		6-7
Advanced Composition (CHLH 304 fulfills requirement)		3-4
Quantitative Reasoning I & II		
From approved campus list (must include a course in statistics from approved campus list) (CHLH 244 and CHLH 421 fulfills requirement)		6
Humanities and the Arts		
From approved campus list (CHLH 260 fulfills 3 hours of requirement)		9
Social and Behavioral Sciences		
From approved campus list		9
Natural Sciences and Technology		
From approved campus list		9
Cultural Studies [1]		
One course from Non-Western Cultures approved campus list.		3
One course from U.S. Minority Cultures approved campus list		3
One course from Western Cultures approved campus list		3
Foreign Language: Completion through the third level of the same language in high school or college		
Total Hours		51-53

Code	Title	Hours
Community Health Program Core Requirements		
CHLH 100	Contemporary Health	3
CHLH 125	Orientation KIN & Comm Health	1
CHLH 201	Public Health Research Methods	3
CHLH 210	Community Health Organizations	2
CHLH 250	Health Care Systems	3
CHLH 274	Introduction to Epidemiology	3
CHLH 304	Foundations of Health Behavior	4
CHLH 410	Public Health Practice	4
CHLH 421	Health Data Analysis	3
Kinesiology and Community Health Department Core Requirements		
CHLH 101	Introduction to Public Health	3
KIN 122	Physical Activity and Health	3
Correlate Areas (see Correlates List Tab)		**18**
Each student completes correlates that are planned with the assigned advisor. These courses are designed to enhance and support career goals.		
Electives		**9-11**
Concentration Requirements		**18**
Total Hours		**128**

[1] *Courses in cultural studies may be completed through other categories where appropriate.*

Concentration Requirements

Code	Title	Hours
CHLH 455	Health Services Financing	3
CHLH 457	Health Planning	3
CHLH 458	Health Administration	3
CHLH 380	Orientation to Internship	1
CHLH 485	Community Health Internship	8

for the Bachelor of Science Major in Community Health, Health Planning & Administration Concentration

Correlate Areas

Community Health Correlates Core

Code	Title	Hours
CHLH 199	Undergraduate Open Seminar	
CHLH 199	Undergraduate Open Seminar (Campus Acquaintance Rape Education)	
CHLH 199	Undergraduate Open Seminar (Intro to the Health Services)	
CHLH 260	Introduction to Medical Ethics	
CHLH 314	Introduction to Aging	
CHLH 330	Disability in American Society	
CHLH 336	Tomorrow's Environment	
CHLH 340	Health Promotion Practicum	
CHLH 365	Civic Engagement in Wellness	
CHLH 393	Special Projects	
CHLH 404	Gerontology	
CHLH 407	Disability, Culture & Society	
CHLH 409	Women's Health	
CHLH 415	International Health	
CHLH 448	Exercise & Health Psychology	
CHLH 456	Organization of Health Care	
CHLH 469	Environmental Health	

CHLH 473	Immigration, Health & Society
CHLH 494	Special Topics

If you are a Health Education or Rehabilitation and Disability Studies, these count:

Code	Title	Hours
CHLH 455	Health Services Financing	
CHLH 457	Health Planning	
CHLH 458	Health Administration	

AHS Courses
Communications, Aging, Disability Studies, Experience Learning, Diversity and Administration

Code	Title	Hours
AHS 399	Advanced Open Seminar	1 to 6
KIN 230	Diversity in Recreation, Sport, and Tourism	3
KIN 247	Intro to Sport Psychology	3
KIN 249	Sport & Modern Society	3
KIN 268	Children's Movement	3
KIN 340	Social & Psychological Aspects of Physical Activity	3
KIN 345	Sport and Society	3
KIN 375	Comm Partners & Health	3
KIN 385	Exper in Kinesiology Research	3
KIN 386	Exercise Instruction & Elderly	3
KIN 387	Exper in the Agency Setting	3
KIN 442	Body, Culture & Society	3 or 4
KIN 448	Exercise & Health Psychology	3 or 4
KIN 459	Physical Activity & Aging	3 or 4
RST 200	Leadership in Recreation, Sport and Tourism	2
RST 218	Entrepreneurship	3
RST 225	Environmental Politics & Policy	3
RST 230	Diversity in Recreation, Sport, and Tourism	3
RST 255	Ethical Issues in Recreation, Sport and Tourism	2
RST 316	Human Development and Recreation, Sport and Tourism	3
RST 325	Marketing in Recreation, Sport and Tourism	3
RST 340	Facility Management in Recreation, Sport and Tourism	3
REHB 330	Disability in American Society	3
REHB 401	Introduction to Rehabilitation	4
REHB 407	Disability, Culture & Society	3 or 4
REHB 402	Medical Aspects of Disability	4
REHB 419	Counseling Psychology Pre-Practicum	2 to 4
REHB 435	Work and Disability	2
SOC 270	Global Demography	3
SHS 120	Child, Comm, & Lang Ability	3
SHS 121	American Sign Language I	4
SHS 170	Intro Hum Comm Sys & Disorders	3
SHS 221	American Sign Language II	4
SHS 222	Language & Culture of Deaf Communities	3
SHS 270	Comm Disability in the Media	4
SHS 271	Communication and Aging	3
SHS 321	American Sign Language III	4
SHS 352	Hearing Health and Society	3

Pre Health: M.D., O.D., O.T., P.T., P.A., Dentistry, Optometry, Chiropractor, Etc.

Code	Title	Hours
IB 104	Animal Biology	4
IB 204	Genetics	3 or 4
MCB 100	Introductory Microbiology	3
MCB 244	Human Anatomy & Physiology I	3
MCB 245	Human Anat & Physiol Lab I	2
MCB 246	Human Anatomy & Physiology II	3
MCB 247	Human Anat & Physiol Lab II	2
MCB 250	Molecular Genetics	3
MCB 300	Microbiology	3
MCB 450	Introductory Biochemistry	3
CHEM 232	Elementary Organic Chemistry I	3 or 4
CHEM 233	Elementary Organic Chem Lab I	2
CHEM 332	Elementary Organic Chem II	4
CHEM 360	Chemistry of the Environment	3
PHYS 101	College Physics: Mech & Heat	5
PHYS 101	College Physics: Mech & Heat	5
PHYS 102	College Physics: E&M & Modern	5
CLCV 102	Medical Terms-GRK & LAT Roots	3

Communications, Promotions, Public Relations & Leadership

Code	Title	Hours
ADV 150	Introduction to Advertising	3
ADV 310	Intro to Public Relations	3
ADV 410	Public Relations Strategies	3
AGCM 270	Ag Sales and Persuasive Communication	3
AGCM 320	Public Information Campaigns	4
AGED 220	Prog Del in Ag & Leadership Ed	3
AGED 230		
AGED 260		
AGED 380		
AGED 430	Youth Development Programs	3 or 4
BTW 250	Principles Bus Comm	3
CMN 211	Business and Professional Communication	3
CMN 212	Intro to Organizational Comm	3
CMN 213	Small Group Communication	3
CMN 220	Communicating Public Policy	3
CMN 230	Intro to Interpersonal Comm	3
CMN 232	Intro to Intercultural Comm	3
CMN 260	Intro to Health Communication	3
CMN 280	Comm Technology & Society	3
CMN 336	Family Communication	3
CMN 368	Sexual Communication	3
CMN 377	Propaganda and Modern Society	3
CMN 410	Workplace Comm Technology	3 or 4

CMN 424	Campaigning to Win	3 or 4
CMN 435	Adv Interpersonal Comm	3 or 4
CMN 462	Interpersonal Health Comm	3 or 4
CMN 463	Organizational Health Comm	3 or 4
CMN 464	Health Communication Campaigns	3 or 4
CMN 465	Social Marketing	3 or 4
CMN 467	Communication & Health Equity	3 or 4
EDPR 250	School & Community Experiences	0 to 4
ENG 315	Learning in Community	3
IHLT 230	Leadership in Health	3
IHLT 232	Health Disparities in the U.S.	3
IHLT 240	Aging and Health Policy	3
IHLT 375	Interdis Collab in Health Serv	4
LAW 199	Undergraduate Open Seminar	1 to 3
LAW 301	Introduction to Law	2 or 3
LAW 302	Transitional Justice	3
PS 220	Intro to Public Policy	3

Accounting, Economics & Human Resources

Code	Title	Hours
ACCY 200	Fundamentals of Accounting	
ACCY 201	Accounting and Accountancy I	
ACCY 202	Accounting and Accountancy II	
ACE 210	Environmental Economics	
ACE 240	Personal Financial Planning	
ACE 255	Economics of Food and Environmental Justice	
BADM 300	The Legal Environment of Bus	
BADM 310	Mgmt and Organizational Beh	
BADM 320	Principles of Marketing	
CS 105	Intro Computing: Non-Tech	
ECON 302	Inter Microeconomic Theory	
FIN 221	Corporate Finance	
FIN 232	Intro to Wealth Management	
HRD 415	Diversity in the Workplace	
HRD 492	Supervised Internship	

Human Factors

Code	Title	Hours
ACE 255	Economics of Food and Environmental Justice	
AFRO 310	Race and Cultural Diversity	
AFRO 466	Race, Science, and Medicine	
AFRO 481	Urban Communities & Public Pol	
ANSC 205	World Animal Resources	
ANSC 207	The Science of Pets and How to Care for Them	
ANSC 250	Companion Animals in Society	
ANSC 251	Epidemics and Infectious Diseases	
ANSC 305	Human Animal Interactions	
ANSC 307	Companion Animal Management	
ANTH 104	Talking Culture	
ANTH 246	Forensic Science	
CI 260	Serving Children in Schools and the Community	
EPS 201	Foundations of Education	
EPS 310	Race and Cultural Diversity	
EPS 421	Racial and Ethnic Families	
EDPR 250	School & Community Experiences	
EPSY 201	Educational Psychology	
EPSY 202	Exploring Cultural Diversity	
EPSY 220	Career Theory and Practice	
EPSY 222	Language & Culture of Deaf Communities	
EPSY 236	Child Development in Education	
EPSY 402	Sociocultural Influence on Learning	
FSHN 101	The Science of Food and How it Relates to You	
FSHN 220	Principles of Nutrition	
FSHN 274	NonMajors Food Microbiology	
GEOG 438	Geography of Health Care	
GLBL 240	Global Health	
GLBL 260	Global Human Rights	
GLBL 340	Global Health: Policy & Governance	
GLBL 357	Ethnic Conflict	
GLBL 440	Global Health: Interventions & Evaluations	
GWS 340	Gender, Relationshps & Society	
GWS 363	Gender, Health & Pop Culture	
GWS 366	Feminist Disability Studies	3
HDFS 120	Intro to Family Studies	3
HDFS 140	Intro Gender & Women's Studies	3
HDFS 208	Child Fam with Special Needs	3
HDFS 220	Families in Global Perspective	3
HDFS 221	Asian Families in America	3
HDFS 225	Close Relationships	3
HDFS 259	Motor Development and Control	3
HDFS 261	Self-Help Group Dev & Process	3
HDFS 262	Motor Develop, Growth & Form	3
HDFS 290	Intro to Research Methods	4
HDFS 301	Infancy & Early Childhood	4
HDFS 408	Hospitalized Children	3 or 4
HDFS 420	Inequality, Public Policy, and U.S. Families	3 or 4
HDFS 424	Racial and Ethnic Families	2 to 4
HDFS 426	Family Conflict Management	3 or 4
HIST 483	Race, Science, and Medicine	3 or 4
INFO 202	Social Aspects Info Tech	3
IS 418	Community Engagement	3 or 4
LLS 473	Immigration, Health & Society	3 or 4
PSYC 201	Intro to Social Psych	3
PSYC 210	Behavioral Neuroscience	3
PSYC 216	Child Psych	3
PSYC 238	Psychopathology and Problems in Living	3
PSYC 239	Community Psych	3
PSYC 340	Community Projects	4
PSYC 361	The Psychology of Aging	3
PSYC 451	Neurobio of Aging	0 to 4

PSYC 455	Organizational Psych	2 to 4
PSYC 465	Personality and Soc Dev	3 or 4
SOC 162	Intro to Intl Health Policy	3
SOC 179	Social Organization	3
SOC 196	Issues in Sociology	3
SOC 202	Sexualities	3
SOC 270	Global Demography	3
SOC 274	Health, Illness and Society	3
SOC 275	Criminology	3
SOC 310	Sociology of Deviance	3
SOC 373	Social Inequality	3
SOC 473	Immigration, Health & Society	3 or 4
SOC 478	Geography of Health Care	3 or 4
SOCW 200	Introduction to Social Work	3
SOCW 240	Death & Dying	3
SOCW 297	Asian Families in America	3
SOCW 300	Diversity: Identities & Issues	3
SOCW 315	Social Work Services for Older Adults	3
SOCW 321	Social Entre & Social Change	3
SOCW 360	Social Work and the Military	3
SOCW 420	Subst Use in Social Context	3
SOCW 473	Immigration, Health & Society	3 or 4
SPED 117	The Culture of Disability	3
SPED 322	Introduction to Intellectual Disability	3
SPED 432	Multiple Disabilities	3
SPED 438	Collaborating with Families	3 or 4
TSM 422	Ag Health-Illnesses Prevention	3
UP 260	Social Inequality and Planning	3
UP 340	Planning for Healthy Cities	3
UP 423	Community Development in the Global South	4
UP 438	Disasters and Urban Planning	4

Technology Skills

Code	Title	Hours
ACE 161	Microcomputer Applications	3
BTW 220	Desktop Publishing and Design	2

Community Health: Rehabilitation Studies, BS

for the Bachelor of Science Major in Community Health, Rehabilitation Studies Concentration

department website: http://kch.illinois.edu/
department faculty: Kinesiology & Community Health Faculty (http://kch.illinois.edu/faculty/)
college catalog page: Applied Health Sciences (http://catalog.illinois.edu/schools/ahs/academic-units/)
college website: http://ahs.illinois.edu/

Programs in Community Health and Kinesiology

Undergraduate Programs:

- **major:** Community Health, BS (p. 105)
  - **concentration:** Community Health: Health Education & Promotion, BS (p. 106)
  - **concentration:** Community Health: Health Planning & Administration, BS (p. 110)
  - **concentration:** Community Health: Rehabilitation Studies, BS (p. 114)
- **major:** Kinesiology, BS (p. 251)
  - **concentration:** Kinesiology: Teacher Certification, BS (p. 253)
- **minor:** Kinesiology (p. 507)
- **minor:** Disability Studies (http://catalog.illinois.edu/undergraduate/ahs/minors/disability-studies/)
- **joint degree:** Community Health, BS and Public Health, MPH (p. 118)
- **joint degree:** Community Health, BS and Epidemiology, MPH (p. 462)
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- **joint degree:** Kinesiology, BS and Epidemiology, MPH (p. 463)
- **joint degree:** Interdisciplinary Health Sciences, BS & Epidemiology, MPH (p. 458)

Graduate Programs:

- **degree:** Kinesiology, MS (http://catalog.illinois.edu/graduate/ms_kines/)
- **degree:** Kinesiology, PhD (http://catalog.illinois.edu/graduate/graduate-majors/kinesiology/#doctoratestext)
- **degree:** Community Health, MS (http://catalog.illinois.edu/graduate/graduate-majors/community-health/ms-comm-health/)
- **degree:** Rehabilitation, MS (http://catalog.illinois.edu/graduate/graduate-majors/community-health/ms-rehab/)
- **degree:** Public Health, MPH (http://catalog.illinois.edu/graduate/graduate-majors/community-health/master-pub-health/)
- **joint degree:** Community Health, BS and Public Health, MPH (p. 118)
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The Community Health Program at the University of Illinois prepares students in the ever changing world of health care and health behavior as practitioners and offers three concentrations at the undergraduate level: Health Education & Promotion (p. 106), Health Planning & Administration (p. 110), and Rehabilitation Studies (p. 114). All curricula are built on a foundation of general education courses which emphasize communication skills and critical thinking. The Professional Core courses are designed to help students develop skills in planning, implementation, and evaluation in the context of health services and programs. Students must complete an internship during their senior year in a setting related to the degree and their interests. Recent internship sites have included the American Heart Association, the American Red Cross, hospitals, nursing homes, fitness centers, work site health education programs, and substance abuse prevention centers.

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A 5 year BS MPH joint degree program is available for students majoring in Community Health, I-Health, or Kinesiology. Students apply for

the program in the latter part of their third year (junior year) of study. Students accepted into the BS MPH joint degree program take 12 credit hours of coursework in their senior year that apply to both BS and MPH degrees. In the 5th year of study, students complete the remaining requirements for the MPH degree, and graduate simultaneously with both BS and MPH degrees. A summary of the requirements for the MPH degree is provided here (http://catalog.illinois.edu/graduate/graduate-majors/community-health/master-pub-health/#degreerequirementstext). The requirements are explained in more detail on the MPH program website: http://www.mph.illinois.edu/Program/.

for the Bachelor of Science Major in Community Health, Rehabilitation Studies Concentration

The Community Health Program requires certain courses from the approved lists be taken as noted below. The prescribed courses prepare the student for upper division study and may be used to satisfy General Education Requirements provided they are on the appropriate General Education List.

A total of 128 hours is required for a degree in Community Health with all the above requirements met. There will be range of electives a student will be able to take depending on the general education number of hours.

General Education

Code	Title	Hours
Communication Arts		
Composition I and an approved speech performance course; or CMN 111 and CMN 112		6-7
Advanced Composition (CHLH 304 fulfills requirement)		3-4
Quantitative Reasoning I & II		
From approved campus list (must include a course in statistics from approved campus list) (CHLH 244 and CHLH 421 fulfills requirement)		6
Humanities and the Arts		
From approved campus list (CHLH 260 fulfills 3 hours of requirement)		9
Social and Behavioral Sciences		
From approved campus list		9
Natural Sciences and Technology		
From approved campus list		9
Cultural Studies [1]		
One course from Non-Western Cultures approved campus list.		3
One course from U.S. Minority Cultures approved campus list		3
One course from Western Cultures approved campus list		3
Foreign Language: Completion through the third level of the same language in high school or college		
Total Hours		51-53

Code	Title	Hours
Community Health Program Core Requirements		
CHLH 100	Contemporary Health	3
CHLH 125	Orientation KIN & Comm Health	1
CHLH 201	Public Health Research Methods	3
CHLH 210	Community Health Organizations	2
CHLH 250	Health Care Systems	3
CHLH 274	Introduction to Epidemiology	3
CHLH 304	Foundations of Health Behavior	4
CHLH 410	Public Health Practice	4
CHLH 421	Health Data Analysis	3
Kinesiology and Community Health Department Core Requirements		
CHLH 101	Introduction to Public Health	3
KIN 122	Physical Activity and Health	3
Correlate Areas (see Correlates List Tab)		**18**
Each student completes correlates that are planned with the assigned advisor. These courses are designed to enhance and support career goals.		
Electives		**9-11**
Concentration Requirements		**18**
Total Hours		**128**

[1] *Courses in cultural studies may be completed through other categories where appropriate.*

Concentration Requirements

Code	Title	Hours
REHB 330	Disability in American Society	3
REHB 402	Medical Aspects of Disability	4
REHB 435	Work and Disability	2
CHLH 380	Orientation to Internship	1
CHLH 485	Community Health Internship	8

for the Bachelor of Science Major in Community Health, Rehabilitation Studies Concentration

Community Health Correlates Core

Code	Title	Hours
CHLH 199	Undergraduate Open Seminar	
CHLH 199	Undergraduate Open Seminar (Campus Acquaintance Rape Education)	
CHLH 199	Undergraduate Open Seminar (Intro to the Health Services)	
CHLH 260	Introduction to Medical Ethics	
CHLH 314	Introduction to Aging	
CHLH 330	Disability in American Society	
CHLH 336	Tomorrow's Environment	
CHLH 340	Health Promotion Practicum	
CHLH 365	Civic Engagement in Wellness	
CHLH 393	Special Projects	
CHLH 404	Gerontology	
CHLH 407	Disability, Culture & Society	
CHLH 409	Women's Health	
CHLH 415	International Health	
CHLH 448	Exercise & Health Psychology	
CHLH 456	Organization of Health Care	
CHLH 469	Environmental Health	
CHLH 473	Immigration, Health & Society	
CHLH 494	Special Topics	

If you are a Health Education or Rehabilitation and Disability Studies, these count:

Code	Title	Hours
CHLH 455	Health Services Financing	
CHLH 457	Health Planning	
CHLH 458	Health Administration	

AHS Courses
Communications, Aging, Disability Studies, Experience Learning, Diversity and Administration

Code	Title	Hours
AHS 399	Advanced Open Seminar	1 to 6
KIN 230	Diversity in Recreation, Sport, and Tourism	3
KIN 247	Intro to Sport Psychology	3
KIN 249	Sport & Modern Society	3
KIN 268	Children's Movement	3
KIN 340	Social & Psychological Aspects of Physical Activity	3
KIN 345	Sport and Society	3
KIN 375	Comm Partners & Health	3
KIN 385	Exper in Kinesiology Research	3
KIN 386	Exercise Instruction & Elderly	3
KIN 387	Exper in the Agency Setting	3
KIN 442	Body, Culture & Society	3 or 4
KIN 448	Exercise & Health Psychology	3 or 4
KIN 459	Physical Activity & Aging	3 or 4
RST 200	Leadership in Recreation, Sport and Tourism	2
RST 218	Entrepreneurship	3
RST 225	Environmental Politics & Policy	3
RST 230	Diversity in Recreation, Sport, and Tourism	3
RST 255	Ethical Issues in Recreation, Sport and Tourism	2
RST 316	Human Development and Recreation, Sport and Tourism	3
RST 325	Marketing in Recreation, Sport and Tourism	3
RST 340	Facility Management in Recreation, Sport and Tourism	3
REHB 330	Disability in American Society	3
REHB 401	Introduction to Rehabilitation	4
REHB 407	Disability, Culture & Society	3 or 4
REHB 402	Medical Aspects of Disability	4
REHB 419	Counseling Psychology Pre-Practicum	2 to 4
REHB 435	Work and Disability	2
SOC 270	Global Demography	3
SHS 120	Child, Comm, & Lang Ability	3
SHS 121	American Sign Language I	4
SHS 170	Intro Hum Comm Sys & Disorders	3
SHS 221	American Sign Language II	4
SHS 222	Language & Culture of Deaf Communities	3
SHS 270	Comm Disability in the Media	4
SHS 271	Communication and Aging	3
SHS 321	American Sign Language III	4
SHS 352	Hearing Health and Society	3

Pre Health: M.D., O.D., O.T., P.T., P.A., Dentistry, Optometry, Chiropractor, Etc.

Code	Title	Hours
IB 104	Animal Biology	4
IB 204	Genetics	3 or 4
MCB 100	Introductory Microbiology	3
MCB 244	Human Anatomy & Physiology I	3
MCB 245	Human Anat & Physiol Lab I	2
MCB 246	Human Anatomy & Physiology II	3
MCB 247	Human Anat & Physiol Lab II	2
MCB 250	Molecular Genetics	3
MCB 300	Microbiology	3
MCB 450	Introductory Biochemistry	3
CHEM 232	Elementary Organic Chemistry I	3 or 4
CHEM 233	Elementary Organic Chem Lab I	2
CHEM 332	Elementary Organic Chem II	4
CHEM 360	Chemistry of the Environment	3
PHYS 101	College Physics: Mech & Heat	5
PHYS 101	College Physics: Mech & Heat	5
PHYS 102	College Physics: E&M & Modern	5
CLCV 102	Medical Terms-GRK & LAT Roots	3

Communications, Promotions, Public Relations & Leadership

Code	Title	Hours
ADV 150	Introduction to Advertising	3
ADV 310	Intro to Public Relations	3
ADV 410	Public Relations Strategies	3
AGCM 270	Ag Sales and Persuasive Communication	3
AGCM 320	Public Information Campaigns	4
AGED 220	Prog Del in Ag & Leadership Ed	3
AGED 230		
AGED 260		
AGED 380		
AGED 430	Youth Development Programs	3 or 4
BTW 250	Principles Bus Comm	3
CMN 211	Business and Professional Communication	3
CMN 212	Intro to Organizational Comm	3
CMN 213	Small Group Communication	3
CMN 220	Communicating Public Policy	3
CMN 230	Intro to Interpersonal Comm	3
CMN 232	Intro to Intercultural Comm	3
CMN 260	Intro to Health Communication	3
CMN 280	Comm Technology & Society	3
CMN 336	Family Communication	3
CMN 368	Sexual Communication	3
CMN 377	Propaganda and Modern Society	3
CMN 410	Workplace Comm Technology	3 or 4
CMN 424	Campaigning to Win	3 or 4
CMN 435	Adv Interpersonal Comm	3 or 4

CMN 462	Interpersonal Health Comm	3 or 4
CMN 463	Organizational Health Comm	3 or 4
CMN 464	Health Communication Campaigns	3 or 4
CMN 465	Social Marketing	3 or 4
CMN 467	Communication & Health Equity	3 or 4
EDPR 250	School & Community Experiences	0 to 4
ENG 315	Learning in Community	3
IHLT 230	Leadership in Health	3
IHLT 232	Health Disparities in the U.S.	3
IHLT 240	Aging and Health Policy	3
IHLT 375	Interdis Collab in Health Serv	4
LAW 199	Undergraduate Open Seminar	1 to 3
LAW 301	Introduction to Law	2 or 3
LAW 302	Transitional Justice	3
PS 220	Intro to Public Policy	3

Accounting, Economics & Human Resources

Code	Title	Hours
ACCY 200	Fundamentals of Accounting	
ACCY 201	Accounting and Accountancy I	
ACCY 202	Accounting and Accountancy II	
ACE 210	Environmental Economics	
ACE 240	Personal Financial Planning	
ACE 255	Economics of Food and Environmental Justice	
BADM 300	The Legal Environment of Bus	
BADM 310	Mgmt and Organizational Beh	
BADM 320	Principles of Marketing	
CS 105	Intro Computing: Non-Tech	
ECON 302	Inter Microeconomic Theory	
FIN 221	Corporate Finance	
FIN 232	Intro to Wealth Management	
HRD 415	Diversity in the Workplace	
HRD 492	Supervised Internship	

Human Factors

Code	Title	Hours
ACE 255	Economics of Food and Environmental Justice	
AFRO 310	Race and Cultural Diversity	
AFRO 466	Race, Science, and Medicine	
AFRO 481	Urban Communities & Public Pol	
ANSC 205	World Animal Resources	
ANSC 207	The Science of Pets and How to Care for Them	
ANSC 250	Companion Animals in Society	
ANSC 251	Epidemics and Infectious Diseases	
ANSC 305	Human Animal Interactions	
ANSC 307	Companion Animal Management	
ANTH 104	Talking Culture	
ANTH 246	Forensic Science	
CI 260	Serving Children in Schools and the Community	
EPS 201	Foundations of Education	
EPS 310	Race and Cultural Diversity	
EPS 421	Racial and Ethnic Families	
EDPR 250	School & Community Experiences	
EPSY 201	Educational Psychology	
EPSY 202	Exploring Cultural Diversity	
EPSY 220	Career Theory and Practice	
EPSY 222	Language & Culture of Deaf Communities	
EPSY 236	Child Development in Education	
EPSY 402	Sociocultural Influence on Learning	
FSHN 101	The Science of Food and How it Relates to You	
FSHN 220	Principles of Nutrition	
FSHN 274	NonMajors Food Microbiology	
GEOG 438	Geography of Health Care	
GLBL 240	Global Health	
GLBL 260	Global Human Rights	
GLBL 340	Global Health: Policy & Governance	
GLBL 357	Ethnic Conflict	
GLBL 440	Global Health: Interventions & Evaluations	
GWS 340	Gender, Relationshps & Society	
GWS 363	Gender, Health & Pop Culture	
GWS 366	Feminist Disability Studies	3
HDFS 120	Intro to Family Studies	3
HDFS 140	Intro Gender & Women's Studies	3
HDFS 208	Child Fam with Special Needs	3
HDFS 220	Families in Global Perspective	3
HDFS 221	Asian Families in America	3
HDFS 225	Close Relationships	3
HDFS 259	Motor Development and Control	3
HDFS 261	Self-Help Group Dev & Process	3
HDFS 262	Motor Develop, Growth & Form	3
HDFS 290	Intro to Research Methods	4
HDFS 301	Infancy & Early Childhood	4
HDFS 408	Hospitalized Children	3 or 4
HDFS 420	Inequality, Public Policy, and U.S. Families	3 or 4
HDFS 424	Racial and Ethnic Families	2 to 4
HDFS 426	Family Conflict Management	3 or 4
HIST 483	Race, Science, and Medicine	3 or 4
INFO 202	Social Aspects Info Tech	3
IS 418	Community Engagement	3 or 4
LLS 473	Immigration, Health & Society	3 or 4
PSYC 201	Intro to Social Psych	3
PSYC 210	Behavioral Neuroscience	3
PSYC 216	Child Psych	3
PSYC 238	Psychopathology and Problems in Living	3
PSYC 239	Community Psych	3
PSYC 340	Community Projects	4
PSYC 361	The Psychology of Aging	3
PSYC 451	Neurobio of Aging	0 to 4
PSYC 455	Organizational Psych	2 to 4
PSYC 465	Personality and Soc Dev	3 or 4

SOC 162	Intro to Intl Health Policy	3
SOC 179	Social Organization	3
SOC 196	Issues in Sociology	3
SOC 202	Sexualities	3
SOC 270	Global Demography	3
SOC 274	Health, Illness and Society	3
SOC 275	Criminology	3
SOC 310	Sociology of Deviance	3
SOC 373	Social Inequality	3
SOC 473	Immigration, Health & Society	3 or 4
SOC 478	Geography of Health Care	3 or 4
SOCW 200	Introduction to Social Work	3
SOCW 240	Death & Dying	3
SOCW 297	Asian Families in America	3
SOCW 300	Diversity: Identities & Issues	3
SOCW 315	Social Work Services for Older Adults	3
SOCW 321	Social Entre & Social Change	3
SOCW 360	Social Work and the Military	3
SOCW 420	Subst Use in Social Context	3
SOCW 473	Immigration, Health & Society	3 or 4
SPED 117	The Culture of Disability	3
SPED 322	Introduction to Intellectual Disability	3
SPED 432	Multiple Disabilities	3
SPED 438	Collaborating with Families	3 or 4
TSM 422	Ag Health-Illnesses Prevention	3
UP 260	Social Inequality and Planning	3
UP 340	Planning for Healthy Cities	3
UP 423	Community Development in the Global South	4
UP 438	Disasters and Urban Planning	4

Technology Skills

Code	Title	Hours
ACE 161	Microcomputer Applications	3
BTW 220	Desktop Publishing and Design	2

Learning Outcomes: Community Health, BS

Learning outcomes for the Bachelor of Science Major in Community Health

1. **Content Knowledge**: Students will know and comprehend the significant theories, models, themes, and ideas in the biomechanical, physiological, behavioral, pedagogical, biological, socioeconomic, environmental, and sociocultural correlates of Kinesiology and Community Health.
2. **Critical Thinking and Discovery**: Students will comprehend and demonstrate ethical practices and the application of scientific findings and/or critical analysis in order to interpret, promote inquiry, propose solutions, and/or create new ideas related to health, rehabilitation, and/or human movement.
3. **Awareness and Understanding**: Students will understand and appreciate the diverse socioeconomic, behavioral, sociocultural, biological, environmental, philosophical, and historical factors that influence health, rehabilitation, and human movement.
4. **Programming and Assessment**: Students will apply best practices in developing, implementing, assessing, and evaluating programs and interventions related to health promotion, physical activity adoption and adherence, and the prevention and treatment of diseases.
5. **Leadership and Engagement**: Students will demonstrate leadership and effective communication skills, showcasing an appreciation and commitment to health and physical activity as they develop and sustain productive relationships and work for the common good at local, national, and global levels.

Community Health, BS & Public Health, MPH

for the Bachelor of Science Major in Community Health

Department Website: http://kch.illinois.edu/
Department Faculty: Kinesiology & Community Health Faculty (http://kch.illinois.edu/faculty/)
College Catalog Page: Applied Health Sciences (http://catalog.illinois.edu/schools/ahs/academic-units/)
College Website: http://ahs.illinois.edu/

A 5 year BS MPH joint degree program is available for students majoring in Community Health, I-Health, or Kinesiology. Students apply for the program in the latter part of their third year (junior year) of study. Students accepted into the BS MPH joint degree program take 12 credit hours of coursework in their senior year that apply to both BS and MPH degrees. In the 5th year of study, students complete the remaining requirements for the MPH degree, and graduate simultaneously with both BS and MPH degrees. A summary of the requirements for the MPH degree is provided here (http://catalog.illinois.edu/graduate/graduate-majors/community-health/master-pub-health/#degreerequirementstext). The requirements are explained in more detail on the MPH program website: http://www.mph.illinois.edu/Program/. (https://ahs.illinois.edu/how-to-apply-bs-mph/)

Programs in Community Health and Kinesiology

Undergraduate Programs:

- **major:** Community Health, BS (p. 105)
  - **concentration:** Community Health: Health Education & Promotion, BS (p. 106)
  - **concentration:** Community Health: Health Planning & Administration, BS (p. 110)
  - **concentration:** Community Health: Rehabilitation Studies, BS (p. 114)
- **major:** Kinesiology, BS (p. 251)
  - **concentration:** Kinesiology: Teacher Certification, BS (p. 253)
- **minor:** Kinesiology (p. 507)
- **minor:** Disability Studies (http://catalog.illinois.edu/undergraduate/ahs/minors/disability-studies/)
- **joint degree:** Community Health, BS and Public Health, MPH (p. 118)
- **joint degree:** Community Health, BS and Epidemiology, MPH (p. 462)
- **joint degree:** Kinesiology, BS and Public Health, MPH (p. 465)
- **joint degree:** Kinesiology, BS and Epidemiology, MPH (p. 463)
- **joint degree:** Interdisciplinary Health Sciences, BS & Epidemiology, MPH (p. 458)

Graduate Programs:

- **degree:** Kinesiology, MS (http://catalog.illinois.edu/graduate/ms_kines/)
- **degree:** Kinesiology, PhD (http://catalog.illinois.edu/graduate/graduate-majors/kinesiology/#doctoratestext)
- **degree:** Community Health, MS (http://catalog.illinois.edu/graduate/graduate-majors/community-health/ms-comm-health/)
- **degree:** Rehabilitation, MS (http://catalog.illinois.edu/graduate/graduate-majors/community-health/ms-rehab/)
- **degree:** Public Health, MPH (http://catalog.illinois.edu/graduate/graduate-majors/community-health/master-pub-health/)
- **joint degree:** Community Health, BS and Public Health, MPH (p. 118)
- **joint degree:** Kinesiology, BS and Public Health, MPH (p. 465)

The Community Health Program at the University of Illinois prepares students in the ever changing world of health care and health behavior as practitioners and offers three concentrations at the undergraduate level: Health Education & Promotion, Health Planning & Administration, and Rehabilitation Studies. All curricula are built on a foundation of general education courses which emphasize communication skills and critical thinking. The Professional Core courses are designed to help students develop skills in planning, implementation, and evaluation in the context of health services and programs. Students must complete an internship during their senior year in a setting related to the degree and their interests. Recent internship sites have included the American Heart Association, the American Red Cross, hospitals, nursing homes, fitness centers, work site health education programs, and substance abuse prevention centers.

Further information is available from the Academic Affairs Office, Department of Kinesiology & Community Health, University of Illinois at Urbana-Champaign, 1206 S. Fourth Street, 2021 Khan Annex, Huff Hall, Champaign, IL 61820, (217) 333-2307.

for the joint degrees of Bachelor of Science Major in Community Health and the Master of Public Health in Public Health

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Only students who have completed their junior year but have not yet completed their senior year are eligible to apply. The curriculum, degree requirements, and faculty for the 5-year BS-MPH program (MPH portion) are the same as the regular MPH program.

The BS-MPH program is accelerated. Students take a heavier course load during the fifth year, called the MPH year. The MPH year consists of one Fall semester, one Spring semester, and one Summer semester. For students in the Epidemiology concentration, the MPH portion of the degree consists of one Fall semester, one Spring semester, one Summer semester, and a second Fall semester, with students graduating in December.

Comparative & World Literature, BALAS

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Comparative & World Literature

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program website: https://complit.illinois.edu/
program faculty: Comparative & World Literature Faculty (https://complit.illinois.edu/faculty/)
overview of college admissions & requirements: LAS admissions information (https://www.las.illinois.edu/prospective/)
college website: https://las.illinois.edu/
email: complit@illinois.edu (comlit@illinois.edu)

Students must select one of the following in consultation with an advisor:

Major in Comparative & World Literature, Comparative Literature Concentration (p. 119)

Major in Comparative & World Literature, World Literature Concentration (p. 120)

Comparative & World Literature: Comparative Literature, BALAS

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Comparative & World Literature, Comparative Literature Concentration

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program website: https://complit.illinois.edu/
program faculty: Comparative & World Literature Faculty (https://complit.illinois.edu/faculty/)
overview of college admissions & requirements: LAS admissions information (https://www.las.illinois.edu/prospective/)
college website: https://las.illinois.edu/
email: complit@illinois.edu

The Major in Comparative & World Literature, Comparative Literature Concentration provides an engagement with two or more literary and cultural traditions, studied in historical depth, in their original languages (6 hours of advanced foreign language required).
Study abroad and work across cultures and disciplines is strongly encouraged. The distribution of course work allows for considerable flexibility. The concentration in Comparative Literature can be easily

combined with a major or minor in any national literature, classics, global studies, area studies, ethnic studies, gender and women's studies, or majors and minors in anthropology, art history, cinema and media studies, history, music, philosophy, world religion, the visual arts, or with a certificate in translation studies.

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Comparative & World Literature, Comparative Literature Concentration

A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office before the end of the fifth semester (60 - 75 hours). Please see your adviser.

Departmental distinction: To be eligible for distinction, a student must have at least a 3.25 cumulative grade-point average and a 3.75 grade-point average in departmental courses, complete a senior thesis (CWL 493), and receive the approval of the departmental honors committee. The departmental honors committee will determine the level of distinction to be awarded.

Comparative Literature Concentration Requirements

General education: Students must complete the Campus General Education (https://courses.illinois.edu/**) requirements including the campus general education language requirement.**
Minimum required major and supporting course work equate to 39 hours with at least 18 hours of Comparative Literature courses. Twelve (12) hours of 300- and 400-level courses in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours. Students will complete 40 hours of upper division coursework (these hours can be drawn from all elements of the degree).

Code	Title	Hours
Language: A minimum of 6 hours of advanced language at the 200-400 level (may be satisfied with a proficiency exam)		**6**
CWL 202	Literature and Ideas	3
Five core CWL courses chosen from broadly comparative courses, from the following:		**15**
At least two courses must be at the 300- 400-level. At least one course must be in a period prior to 1800 and one course in a period since 1800.		
CWL 114	Global Consciousness and Lit	
CWL 151	Cross-Cultural Thematics	
CWL 189	Literatures of the Islamic World	
CWL 190	Modern Asian and African Literatures	
CWL 201	Comparative Lit Studies	
CWL 241	Early Masterpieces of Western Culture	
CWL 242	Modern Masterpieces of Western Culture	
CWL 395	Special Topics Comp Lit I	
CWL 441	Themes in Narrative	
CWL 461	Lit Genres and Forms	
CWL 471	International Lit Relations	
CWL 496	Special Topics in Comp Lit II	
Major Literature Coursework- Three courses in a major literature, taught in the orignial language, at 200-400-level. No more than 2 courses at the 200-level. [1]		**9**
Focus Area Coursework - At least two courses from one of the following focus areas, at 200-400 level. No more than 1 course at the 200-level:		**6**
Minor Literature: courses in a second national literature, taught in the original language. [2]		
Interdisciplinary: courses in another discipline, such as philosophy, cinema, art history, fine arts, music, religion, science, medical humanities, law, creative writing		
Cultural Studies: courses with a focus on race, gender, class, postcolonialism, environmental studies, or the like		
Area Studies: courses in a geographical area related to major literature (Africa, Middle East, Latin America, South Asia, East Asia, Eastern Europe, the European Union).		
Minimum Required Hours:		**39**

1 *Literature in the Original Language is defined by what is currently offered by the University (i.e. English, French, German, Italian, Spanish, etc.). Literatures generally taught in translation (including, but not limited to, Arabic, Chinese, Hebrew, Japanese, Persian, Polish, Russian, and Yiddish) may be chosen in consultation with the Director of Undergraduate Studies.*

2 *If one of the literatures studied is English, a student who continues in a graduate program in comparative literature will be required to acquire a reading knowledge of a second foreign language (i.e., one foreign language for the B.A., two foreign languages for the M.A., three foreign languages for the Ph.D.).*

Comparative & World Literature: World Literature, BALAS

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Comparative & World Literature, World Literature Concentration

program website: https://complit.illinois.edu/
program faculty: Comparative & World Literature Faculty (https://complit.illinois.edu/faculty/)
overview of college admissions & requirements: LAS admissions information (https://www.las.illinois.edu/prospective/)
college website: https://las.illinois.edu/
email: complit@illinois.edu

The Major in Comparative & World Literature, World Literature Concentration focuses on breadth in the study of literatures and cultures from around the globe, read in English translation (no foreign language required beyond the General Education requirement). This concentration can be easily combined with a certificate in Translation Studies, a major or minor in Global Studies, Area Studies, Ethnic Studies, Gender and Women's Studies, or majors and minors in anthropology, cinema and media studies, history, music, political science, philosophy, world religion, the visual arts, and related fields.

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Comparative and World Literature, World Literature Concentration

A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office before the end of the fifth semester (60 - 75 hours). Please see your adviser.

Departmental distinction: To be eligible for distinction, a student must have at least a 3.25 cumulative grade-point average and a 3.75 grade-point average in departmental courses, complete a senior thesis (CWL 493), and receive the approval of the departmental honors committee. The departmental honors committee will determine the level of distinction to be awarded.

World Literature Concentration Requirements

General education: Students must complete the Campus General Education (https://courses.illinois.edu/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work equate to 33 hours with at least 18 hours of Comparative Literature courses. Twelve hours of 300- 400-level courses in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours. Students will complete 40 hours of upper division coursework (these hours can be drawn from all elements of the degree).

Code	Title	Hours
CWL 202	Literature and Ideas	3
Five core CWL courses chosen from broadly comparative courses, from the following:		**15**
At least two courses must be at the 300-400- level. At least one course must be in a period prior to 1800 and one course in a period since 1800.		
CWL 114	Global Consciousness and Lit	
CWL 151	Cross-Cultural Thematics	
CWL 189	Literatures of the Islamic World	
CWL 190	Modern Asian and African Literatures	
CWL 201	Comparative Lit Studies	
CWL 241	Early Masterpieces of Western Culture	
CWL 242	Modern Masterpieces of Western Culture	
CWL 395	Special Topics Comp Lit I	
CWL 441	Themes in Narrative	
CWL 461	Lit Genres and Forms	
CWL 471	International Lit Relations	
CWL 496	Special Topics in Comp Lit II	
Three courses from at least two national traditions at 200-400 level. No more than 2 courses at the 200-level. Chosen from any literature courses offered by the following departments:		**9**
African American Studies		
American Indian Studies		
Asian American Studies		
Gender & Women's Studies		
Classics		
East Asian Languages & Cultures		
English		
French & Italian		
Germanic Languages & Literature		
Jewish Culture & Society		
Latino/Latina Studies		
Slavic Languages & Literature		
Spanish & Portuguese		
Area / Cultural Studies Coursework - Two courses at 300-400 level in any literature or in one of the following fields:		**6**
Another discipline: e.g. philosophy, cinema, art history, fine arts, music, religion, science, medical humanities, law, creative writing.		
Cultural studies: e.g. race, gender, class, postcolonialism, environmental studies.		
Area Studies: Africa, Middle East, Latin America, South Asia, East Asia, Eastern Europe, the European Union.		
Minimum Required Hours:		**33**

Learning Outcomes: Comparative & World Literature, BALAS

Learning Outcomes for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Comparative Literature

1. **Social Awareness and Cultural Understanding / Global Consciousness:** CWL students will develop a comparative understanding of national literatures in the context of a globalizing world, and an ability to situate texts in their cultural and historical contexts.
   a. *Measurable by:* analysis of student work samples; degree progress and course completion; focus groups; course syllabus comparison.
2. **Intellectual Reasoning and Knowledge:** CWL students will appreciate the aesthetic qualities of literary texts and develop an awareness of influential critical and interpretive methods.
   a. *Measurable by:* analysis of student work samples; degree progress and course completion; focus groups; course syllabus comparison.
3. **Intellectual Reasoning and Knowledge:** CWL students will demonstrate a general understanding of the conventions of literary genres and of the major developments in literary history.
   a. *Measurable by:* analysis of student work samples; degree progress and course completion; focus groups; course syllabus comparison.
4. **Creative Inquiry and Discovery:** Students will demonstrate ability to express oneself orally and in writing in a clear, coherent and persuasive manner, and to construct an interpretive argument.
   a. *Measurable by:* analysis of student work samples; focus groups.
5. **For Comparative Literature concentration only:** Students will demonstrate mastery of at least two languages.
   a. *Measurable by:* participation in 200-400 level courses in the original language; degree progress and course completion.

Computer Engineering, BS

for the degree of Bachelor of Science in Computer Engineering

department website: https://ece.illinois.edu
department faculty: Electrical & Computer Engineering Faculty (https://ece.illinois.edu/about/directory/faculty/)
overview of college admissions & requirements: The Grainger College of Engineering (https://grainger.illinois.edu/admissions/)
college website: https://grainger.illinois.edu/

Computer Engineering at The Grainger College of Engineering focuses on the development of vital computing technologies, ranging from chips to computers to networks to programming tools to key algorithms for

building exciting applications. Fundamentally, Computer Engineering addresses the problem of building scalable, trustworthy computing systems, and the faculty's interests span a broad spectrum of issues pertinent to this theme. Computer engineering has taken the lead in revolutionizing many science and engineering disciplines with parallel computing, from chips to clouds to planet-scale critical infrastructures, and has defined new standards of security, privacy, and dependability for systems ranging from small circuits to the electric power grids of many nations. Students need a broad and sound set of mathematical and computing skills, and are well-served by a flexible curriculum that enables them to pursue topics of interest among the many subdisciplines in computing.

The computer engineering core curriculum focuses on fundamental computer engineering knowledge: circuits, systems, electromagnetics, computer systems, electronics for information processing and communication, and computer science. The rich set of ECE elective courses permits students to concentrate in any sub-discipline of computer engineering including: hardware systems; cyberphysical systems; foundations and theory; software and languages; algorithms and mathematical tools; trust, reliability, security; networking, mobile and distributed computing; big data analytics and systems; artificial intelligence, robotics, cybernetics.

for the degree of Bachelor of Science in Computer Engineering

Graduation Requirements

Minimum Technical GPA (https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-TechnicalGPARequirement)**: 2.0**
TGPA is required for ECE courses (except ECE 316). See Technical GPA (https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-TechnicalGPARequirement) to clarify requirements.

Minimum Overall GPA: 2.0
Minimum hours required for graduation: 128 hours
General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement. Specific Advanced Composition courses required for this degree are listed below.**

Orientation and Professional Development

Code	Title	Hours
ENG 100	Engineering Orientation [1]	0
Total Hours		0

Foundational Mathematics and Science

Code	Title	Hours
MATH 221	Calculus I [2]	4
MATH 257	Linear Algebra with Computational Applications (Linear Algebra)	3
or MATH 416	Abstract Linear Algebra	
MATH 231	Calculus II	3
MATH 241	Calculus III	4
MATH 285	Intro Differential Equations (Linear Algebra)	3
PHYS 211	University Physics: Mechanics	4
PHYS 212	University Physics: Elec & Mag	4
PHYS 213	Univ Physics: Thermal Physics	2
PHYS 214	Univ Physics: Quantum Physics	2
Total Hours		29

Computer Engineering Technical Core

Code	Title	Hours
ECE 110	Introduction to Electronics [3]	3
ECE 120	Introduction to Computing	4
ECE 210	Analog Signal Processing	4
ECE 220	Computer Systems & Programming	4
CS 173	Discrete Structures [4]	3
CS 225	Data Structures	4
ECE 313	Probability with Engrg Applic [5]	3
ECE 374	Introduction to Algorithms & Models of Computation	4
ECE 385	Digital Systems Laboratory	3
ECE 391	Computer Systems Engineering	4
Total Hours		36

Technical Electives

Code	Title	Hours
29 hours to be selected from departmentally approved List of Technical Electives below:		
AE 202	Aerospace Flight Mechanics	3
AE 302	Aerospace Flight Mechanics II	3
AE 311	Incompressible Flow	3
AE 312	Compressible Flow	3
AE 321	Mechs of Aerospace Structures	3
AE 352	Aerospace Dynamical Systems	3
AE 353	Aerospace Control Systems	3
AE 402	Orbital Mechanics	3 or 4
AE 403	Spacecraft Attitude Control	3 or 4
AE 410	Computational Aerodynamics	3 or 4
AE 412	Viscous Flow & Heat Transfer	4
AE 416	Applied Aerodynamics	3 or 4
AE 419	Aircraft Flight Mechanics	3 or 4
AE 420	Finite Element Analysis	3 or 4
AE 427		
AE 428	Mechanics of Composites	3
AE 433	Aerospace Propulsion	3 or 4
AE 434	Rocket Propulsion	3 or 4
AE 435	Electric Propulsion	3 or 4
AE 451	Aeroelasticity	3 or 4
AE 460	Aerodynamics & Propulsion Lab	2
Agri. Bio Eng. (ABE): all 300 and 400 level courses except 440. Exceptions for seminars and special topics will be reviewed in Advising Office.		
ASTR 210	Introduction to Astrophysics	3
ASTR 310	Computing in Astronomy	3
ASTR 330	Extraterrestrial Life	3
ASTR 350	The Big Bang, Black Holes, and the End of the Universe	3
ASTR 404	Stellar Astrophysics	3
ASTR 405	Planetary Systems	3

ASTR 406	Galaxies and the Universe	3
ASTR 414	Astronomical Techniques	4
ASTR 450	Astrochemistry	4
ATMS 201	General Physical Meteorology	3
ATMS 301	Atmospheric Thermodynamics	3
ATMS 302	Atmospheric Dynamics I	3
ATMS 303	Synoptic-Dynamic Wea Analysis	4
ATMS 304	Radiative Transfer-Remote Sens	3
ATMS 305	Computing and Data Analysis	3
ATMS 404	Risk Analysis in Earth Science	3 or 4
ATMS 405	Boundary Layer Processes	4
ATMS 406	Tropical Meteorology	4
ATMS 410	Radar Remote Sensing	4
ATMS 411	Satellite Remote Sensing	4
ATMS 420	Atmospheric Chemistry	4
ATMS 421	Earth Systems Modeling	4
ATMS 425		
ATMS 447	Climate Change Assessment	3
ATMS 449	Biogeochemical Cycles	4
BIOC 406	Gene Expression & Regulation	3
BIOC 440	Physical Chemistry Principles	4
BIOC 446	Physical Biochemistry	3
BIOC 455	Technqs Biochem & Biotech	4
BIOE 201	Conservation Principles Bioeng	3
BIOE 202	Cell & Tissue Engineering Lab	2
BIOE 302	Modeling Human Physiology	3
BIOE 414	Biomedical Instrumentation	3
BIOE 415	Biomedical Instrumentation Lab	2
BIOE 461	Cellular Biomechanics	4
BIOE 467	Biophotonics	3
BIOE 476	Tissue Engineering	3
BIOE 480	Magnetic Resonance Imaging	3 or 4
Biophysics (BIOP): All 400 level courses except seminars and special topics, which may be reviewed in the Advising Office		
CHBE 221	Principles of CHE	3
CHBE 321	Thermodynamics	4
CHBE 421	Momentum and Heat Transfer	4
CHBE 422	Mass Transfer Operations	4
CHBE 424	Chemical Reaction Engineering	3
CHBE 430	Unit Operations Laboratory	4
CHBE 431	Process Design	4
CHBE 440	Process Control and Dynamics	3
CHBE 451	Transport Phenomena	3
CHBE 452	Chemical Kinetics & Catalysis	3
CHBE 453	Electrochemical Engineering	2 or 3
CHBE 456	Polymer Science & Engineering	3
CHBE 457	Microelectronics Processing	3
CHBE 471	Biochemical Engineering	3 or 4
CHBE 472	Techniques in Biomolecular Eng	3 or 4
CHBE 473	Biomolecular Engineering	3 or 4
CHBE 474	Metabolic Engineering	3 or 4
CHEM 102	General Chemistry I	3
CHEM 103	General Chemistry Lab I	1
CHEM 104	General Chemistry II	3
CHEM 105	General Chemistry Lab II	1
Chemistry (CHEM): All 200, 300 and 400 level courses except 397, 497, 499, and seminars and special topics, which may be reviewed in the Advising Office		
CEE 310	Transportation Engineering	3
CEE 330	Environmental Engineering	3
CEE 408	Railroad Transportation Engrg	3 or 4
CEE 410	Railway Signaling & Control	3 or 4
CEE 416	Traffic Capacity Analysis	3 or 4
CEE 430	Ecological Quality Engineering	2
CEE 447	Atmospheric Chemistry	4
CEE 491	Decision and Risk Analysis	3 or 4
CPSC 265	Genetic Engineering Lab	3
CS 101	Intro Computing: Engrg & Sci (By Approval)	3
CS 173	Discrete Structures	3
CS 225	Data Structures	4
CS 242	Programming Studio	3
CS 357	Numerical Methods I	3
CS 410	Text Information Systems	3 or 4
CS 411	Database Systems	3 or 4
CS 412	Introduction to Data Mining	3 or 4
CS 413	Intro to Combinatorics	3 or 4
CS 414	Multimedia Systems	3 or 4
CS 418	Interactive Computer Graphics	3 or 4
CS 419	Production Computer Graphics	3 or 4
CS 420	Parallel Progrmg: Sci & Engrg	3 or 4
CS 421	Programming Languages & Compilers	3 or 4
CS 422	Programming Language Design	3 or 4
CS 423	Operating Systems Design	3 or 4
CS 424	Real-Time Systems	3 or 4
CS 425	Distributed Systems	3 or 4
CS 426	Compiler Construction	3 or 4
CS 427	Software Engineering I	3 or 4
CS 428	Software Engineering II	3 or 4
CS 429	Software Engineering II, ACP	3
CS 431	Embedded Systems	3 or 4
CS 433	Computer System Organization	3 or 4
CS 436	Computer Networking Laboratory	3 or 4
CS 438	Communication Networks	3 or 4
CS 439	Wireless Networks	3 or 4
CS 440	Artificial Intelligence	3 or 4
CS 445	Computational Photography	3 or 4
CS 446	Machine Learning	3 or 4
CS 447	Natural Language Processing	3 or 4
CS 450	Numerical Analysis	3 or 4
CS 460	Security Laboratory	3 or 4
CS 461	Computer Security I	4
CS 463	Computer Security II	3 or 4
CS 465	User Interface Design	4
CS 466	Introduction to Bioinformatics	3 or 4

CS 467	Social Visualization	3 or 4
CS 473	Algorithms	4
CS 475	Formal Models of Computation	3 or 4
CS 476	Program Verification	3 or 4
CS 477	Formal Software Development Methods	3 or 4
CS 481	Advanced Topics in Stochastic Processes & Applications	3 or 4
CS 484	Parallel Programming	3 or 4
CS 398	Special Topics (As approved)	1 to 4
CS 498	Special Topics (As approved)	1 to 4
ECE 297	Individual Study	1
ECE 304	Photonic Devices	3
ECE 307	Techniques for Engrg Decisions	3
ECE 310	Digital Signal Processing	3
ECE 311	Digital Signal Processing Lab	1
ECE 314	Probability in Engineering Lab	1
ECE 329	Fields and Waves I	3
ECE 330	Power Ckts & Electromechanics	3
ECE 333	Green Electric Energy	3
ECE 340	Semiconductor Electronics	3
ECE 342	Electronic Circuits	3
ECE 343	Electronic Circuits Laboratory	1
ECE 350	Fields and Waves II	3
ECE 365	Data Science and Engineering	3
ECE 374	Introduction to Algorithms & Models of Computation	4
ECE 380	Biomedical Imaging	3
ECE 391	Computer Systems Engineering	4
ECE 395	Advanced Digital Projects Lab	2 or 3
ECE 396	Honors Project	1 to 4
ECE 397	Individual Study in ECE	0 to 4
ECE 402	Electronic Music Synthesis	3
ECE 403	Audio Engineering	3
ECE 408	Applied Parallel Programming	4
ECE 411	Computer Organization & Design	4
ECE 412	Microcomputer Laboratory	3
ECE 414	Biomedical Instrumentation	3
ECE 415	Biomedical Instrumentation Lab	2
ECE 416	Biosensors	3
ECE 417	Multimedia Signal Processing	4
ECE 418	Image & Video Processing	4
ECE 419	Security Laboratory	3 or 4
ECE 420	Embedded DSP Laboratory	2
ECE 422	Computer Security I	4
ECE 424	Computer Security II	3 or 4
ECE 425	Intro to VLSI System Design	3
ECE 428	Distributed Systems	3 or 4
ECE 431	Electric Machinery	4
ECE 432	Advanced Electric Machinery	3
ECE 435	Computer Networking Laboratory	3 or 4
ECE 437	Sensors and Instrumentation	3
ECE 438	Communication Networks	3 or 4
ECE 439	Wireless Networks	3 or 4
ECE 441	Physcs & Modeling Semicond Dev	3
ECE 443	LEDs and Solar Cells	4
ECE 444	IC Device Theory & Fabrication	4
ECE 445	Senior Design Project Lab	4
ECE 446	Principles of Experimental Research in Electrical Engineering	4
ECE 447	Active Microwave Ckt Design	3
ECE 448	Artificial Intelligence	3 or 4
ECE 451	Adv Microwave Measurements	3
ECE 452	Electromagnetic Fields	3
ECE 453	Wireless Communication Systems	4
ECE 454	Antennas	3
ECE 455	Optical Electronics	3 or 4
ECE 456	Global Nav Satellite Systems	4
ECE 457	Microwave Devices & Circuits	3
ECE 458	Applic of Radio Wave Propag	3
ECE 459	Communications Systems	3
ECE 460	Optical Imaging	4
ECE 461	Digital Communications	3
ECE 462	Logic Synthesis	3
ECE 463	Digital Communications Lab	2
ECE 464	Power Electronics	3
ECE 465	Optical Communications Systems	3
ECE 466	Optical Communications Lab	1
ECE 467	Biophotonics	3
ECE 468	Optical Remote Sensing	3
ECE 469	Power Electronics Laboratory	2
ECE 470	Introduction to Robotics	4
ECE 472	Biomedical Ultrasound Imaging	3
ECE 473	Fund of Engrg Acoustics	3 or 4
ECE 476	Power System Analysis	3
ECE 478	Formal Software Development Methods	3 or 4
ECE 480	Magnetic Resonance Imaging	3 or 4
ECE 481	Nanotechnology	4
ECE 482	Digital IC Design	3
ECE 483	Analog IC Design	3
ECE 485	MEMS Devices & Systems	3
ECE 486	Control Systems	4
ECE 487	Intro Quantum Electr for EEs	3
ECE 488	Compound Semicond & Devices	3
ECE 489	Robot Dynamics and Control	4
ECE 490	Introduction to Optimization	3 or 4
ECE 491	Numerical Analysis	3 or 4
ECE 492	Parallel Progrmg: Sci & Engrg	3 or 4
ECE 493	Advanced Engineering Math	3 or 4
ECE 495	Photonic Device Laboratory	3
ECE 496	Senior Research Project	2
ECE 499	Senior Thesis	2
ECE 398	Special Topics in ECE (As approved)	0 to 4
ECE 498	Special Topics in ECE (As approved)	0 to 4

ENG 491	Interdisciplinary Design Proj (CubeSat, Solar Decathlon, Formula SAE, Baja SAE or by approval)	1 to 4
GEOL 107	Physical Geology	4
GEOL 208	History of the Earth System	4
GEOL 333	Earth Materials and the Env	4
GEOL 380	Environmental Geology	4
GEOL 411	Structural Geol and Tectonics	4
GEOL 417	Geol Field Methods, Western US	6
GEOL 432	Mineralogy and Mineral Optics	4
GEOL 436	Petrology and Petrography	4
GEOL 440	Sedimentology and Stratigraphy	4
GEOL 450	Probing the Earth's Interior	3
GEOL 452	Introduction to Geophysics	4
GEOL 460	Geochemistry	3
IE 310	Deterministic Models in Optimization	3
IE 330	Industrial Quality Control	3
IE 360	Facilities Planning and Design	3
IE 361	Production Planning & Control	3
IE 400	Design & Anlys of Experiments	3 or 4
IE 410	Advanced Topics in Stochastic Processes & Applications	3 or 4
IE 411	Optimization of Large Systems	3 or 4
IE 412	OR Models for Mfg Systems	3 or 4
IE 413	Simulation	3 or 4
IE 420	Financial Engineering	3 or 4
IE 430	Economic Found of Quality Syst	3 or 4
IE 431	Design for Six Sigma	3
IB 150	Organismal & Evolutionary Biol	4
IB 202	Physiology	3 or 4
IB 203	Ecology	4
IB 204	Genetics	3 or 4
IB 302	Evolution	4
IB 335	Plant Systematics	4
IB 348	Fish and Wildlife Ecology	3
IB 368	Vertebrate Natural History	4
IB 401	Introduction to Entomology	3 or 4
IB 405	Evolution of Traits and Genomes	3
IB 420	Plant Physiology	3
IB 421	Photosynthesis	3
IB 426	Env and Evol Physl of Animals	3
IB 427	Insect Physiology	4
IB 431	Behavioral Ecology	3
IB 432	Genes and Behavior	3
IB 440	Plants and Global Change	3
IB 443	Evolutionary Ecology	3
IB 444	Insect Ecology	3 or 4
IB 451	Conservation Biology	4
IB 452	Ecosystem Ecology	3
IB 453	Community Ecology	3
IB 461	Ornithology	4
IB 462	Mammalogy	4
IB 463	Ichthyology	4
IB 464	Herpetology	4
IB 467	Principles of Systematics	4
IB 468	Insect Classification and Evol	4
IB 471	General Mycology	4
IB 472	Plant Molecular Biology	1
IB 473	Plant Genomics	1
IB 481	Vector-borne Diseases	4
IB 482	Insect Pest Management	3
IB 483	Insect Pathology	3
IB 485	Environ Toxicology & Health	3
IB 486	Pesticide Toxicology	3 or 4
LING 300	Anat & Physiol Spch Mechanism	4
LING 406	Introduction to Computational Linguistics	3 or 4
LING 407	Logic and Linguistic Analysis	3 or 4
LING 427	Language and the Brain	3 or 4
MSE 280	Engineering Materials	3
Material Science and Engineering (MSE): All 300 and 400 level courses except 304, 460, 461, and seminars/special topics, which may be reviewed by the Advising Office		
MATH 213	Basic Discrete Mathematics	3
MATH 347	Fundamental Mathematics	3
MATH 348	Fundamental Mathematics-ACP	4
MATH 357	Numerical Methods I	3
MATH 402	Non Euclidean Geometry	3 or 4
MATH 403	Euclidean Geometry	3 or 4
MATH 412	Graph Theory	3 or 4
MATH 413	Intro to Combinatorics	3 or 4
MATH 414	Mathematical Logic	3 or 4
MATH 416	Abstract Linear Algebra	3 or 4
MATH 417	Intro to Abstract Algebra	3 or 4
MATH 418	Intro to Abstract Algebra II	3 or 4
MATH 423	Differential Geometry	3 or 4
MATH 424	Honors Real Analysis	3
MATH 425	Honors Advanced Analysis	3
MATH 427	Honors Abstract Algebra	3
MATH 428	Honors Topics in Mathematics	3
MATH 432	Set Theory and Topology	3 or 4
MATH 442	Intro Partial Diff Equations	3 or 4
MATH 444	Elementary Real Analysis	3 or 4
MATH 446	Applied Complex Variables	3 or 4
MATH 447	Real Variables	3 or 4
MATH 448	Complex Variables	3 or 4
MATH 450	Numerical Analysis	3 or 4
MATH 453	Number Theory	3 or 4
MATH 473	Algorithms	4
MATH 475	Formal Models of Computation	3 or 4
MATH 481	Vector and Tensor Analysis	3 or 4
MATH 482	Linear Programming	3 or 4
MATH 484	Nonlinear Programming	3 or 4
MATH 487	Advanced Engineering Math	3 or 4
MATH 489	Dynamics & Differential Eqns	3 or 4
MCB 150	Molec & Cellular Basis of Life	4

MCB 250	Molecular Genetics	3
MCB 251	Exp Techniqs in Molecular Biol	2
MCB 252	Cells, Tissues & Development	3
MCB 253	Exp Techniqs in Cellular Biol	2
MCB 300	Microbiology	3
MCB 301	Experimental Microbiology	3
MCB 314	Introduction to Neurobiology	3
MCB 316	Genetics and Disease	4
MCB 354	Biochem & Phys Basis of Life	3
MCB 400	Cancer Cell Biology	3
MCB 401	Cellular Physiology	3
MCB 402	Sys & Integrative Physiology	3
MCB 403	Cell & Membrane Physiology Lab	1 or 2
MCB 404	Sys & Integrative Physiol Lab	1 to 2
MCB 406	Gene Expression & Regulation	3
MCB 408	Immunology	3
MCB 410	Developmental Biology, Stem Cells and Regenerative Medicine	3
MCB 413	Endocrinology	3
MCB 419	Brain, Behavior & Info Process	3
MCB 421	Microbial Genetics	3
MCB 424	Microbial Biochemistry	3
MCB 426	Bacterial Pathogenesis	3
MCB 430	Molecular Microbiology	3
MCB 431	Microbial Physiology	3
MCB 433	Virology & Viral Pathogenesis	3
MCB 435	Evolution of Infectious Disease	3
MCB 446	Physical Biochemistry	3
MCB 480	Eukaryotic Cell Signaling	3
ME 200	Thermodynamics	3
ME 310	Fundamentals of Fluid Dynamics	4
ME 320	Heat Transfer	4
ME 330	Engineering Materials	4
ME 340	Dynamics of Mechanical Systems	3.5
ME 370	Mechanical Design I	3
ME 371	Mechanical Design II	3
ME 400	Energy Conversion Systems	3 or 4
ME 401	Refrigeration and Cryogenics	3 or 4
ME 402	Design of Thermal Systems	3 or 4
ME 403	Internal Combustion Engines	3 or 4
ME 404	Intermediate Thermodynamics	4
ME 410	Intermediate Gas Dynamics	3 or 4
ME 411	Viscous Flow & Heat Transfer	4
ME 412	Numerical Thermo-Fluid Mechs	2 to 4
ME 420	Intermediate Heat Transfer	4
ME 430	Failure of Engrg Materials	3 or 4
ME 431	Mechanical Component Failure	3 or 4
ME 440	Kinem & Dynamics of Mech Syst	3 or 4
ME 445	Introduction to Robotics	4
ME 450		
ME 451	Computer-Aided Mfg Systems	3 or 4
ME 452	Num Control of Mfg Processes	3 or 4
ME 460	Industrial Control Systems	4
ME 461	Computer Cntrl of Mech Systems	3 or 4
ME 471	Finite Element Analysis	3 or 4
ME 472	Introduction to Tribology	3 or 4
ME 485	MEMS Devices & Systems	3
ME 487	MEMS-NEMS Theory & Fabrication	4
MUS 407	Elect Music Techniques I	3
MUS 409	Elec Music Techniques II	2
NEUR 453	Cog Neuroscience of Vision	3 or 4
NPRE 201	Energy Systems	2 or 3
NPRE 247	Modeling Nuclear Energy System	3
NPRE 402	Nuclear Power Engineering	3 or 4
NPRE 412	Nuclear Power Econ & Fuel Mgmt	3 or 4
NPRE 421	Plasma and Fusion Science	3
NPRE 423	Plasma Laboratory	2
NPRE 429	Plasma Engineering	3
NPRE 431	Materials in Nuclear Engrg	3
NPRE 432	Nuclear Engrg Materials Lab	2
NPRE 435	Radiological Imaging	3
NPRE 441	Radiation Protection	4
NPRE 442	Radioactive Waste Management	3
NPRE 444	Nuclear Analytical Methods Lab	2 or 3
NPRE 446	Radiation Interact w/Matter I	3
NPRE 447	Radiation Interact w/Matter II	3
NPRE 448	Nuclear Syst Engrg & Design	4
NPRE 451	NPRE Laboratory	3
NPRE 455	Neutron Diffusion & Transport	4
NPRE 457	Safety Anlys Nucl Reactor Syst	3 or 4
NPRE 458	Design in NPRE	4
NPRE 470	Fuel Cells & Hydrogen Sources	3
NPRE 475	Wind Power Systems	3 or 4
PHYS 225	Relativity & Math Applications	2
PHYS 325	Classical Mechanics I	3
PHYS 326	Classical Mechanics II	3
PHYS 401	Classical Physics Lab	3
PHYS 402	Light	3 or 4
PHYS 403	Modern Experimental Physics	4 or 5
PHYS 406	Acoustical Physics of Music	4
PHYS 419	Space, Time, and Matter-ACP	3 or 4
PHYS 420	Space, Time, and Matter	2
PHYS 427	Thermal & Statistical Physics	4
PHYS 460	Condensed Matter Physics	4
PHYS 466	Atomic Scale Simulations	3 or 4
PHYS 470	Subatomic Physics	4
PHYS 485	Atomic Phys & Quantum Theory	3
PHYS 486	Quantum Physics I	4
PHYS 487	Quantum Physics II	4
PSYC 204	Intro to Brain and Cognition	3
SHS 200	General Phonetics	3
SHS 240	Intro Sound & Hearing Science	3
SHS 300	Anat & Physiol Spch Mechanism	4
SHS 301	General Speech Science	4

SHS 320	Development of Spoken Language	3
SHS 450	Intro Audiol & Hear Disorders	4
SHS 470	Neural Bases Spch Lang	4
STAT 420	Methods of Applied Statistics	3 or 4
STAT 424	Analysis of Variance	3 or 4
STAT 428	Statistical Computing	3 or 4
STAT 429	Time Series Analysis	3 or 4
STAT 440	Statistical Data Management	3 or 4
SE 411	Reliability Engineering	3 or 4
SE 420	Digital Control Systems	4
SE 423	Mechatronics	3
SE 424	State Space Design for Control	3
TAM 211	Statics	3
TAM 212	Introductory Dynamics	3
TAM 251	Introductory Solid Mechanics	3
TAM 324	Behavior of Materials	4
TAM 335	Introductory Fluid Mechanics	4
TAM 412	Intermediate Dynamics	4
TAM 435	Intermediate Fluid Mechanics	4
TAM 445	Continuum Mechanics	4
TAM 451	Intermediate Solid Mechanics	4
One course from departmentally approved list of EE Foundations Courses		
ECE 310	Digital Signal Processing	3
ECE 330	Power Ckts & Electromechanics	3
ECE 329	Fields and Waves I	3
ECE 340	Semiconductor Electronics	3
ECE 461	Digital Communications	3
ECE 486	Control Systems	4
Three courses from departmentally approved list of Advanced Computing Electives below:		
CS 357	Numerical Methods I	3
CS 411	Database Systems	3 or 4
CS 412	Introduction to Data Mining	3 or 4
CS 414	Multimedia Systems	3 or 4
CS 418	Interactive Computer Graphics	3 or 4
CS 419	Production Computer Graphics	3 or 4
CS 420	Parallel Progrmg: Sci & Engrg	3 or 4
CS 421	Programming Languages & Compilers	3 or 4
CS 423	Operating Systems Design	3 or 4
CS 424	Real-Time Systems	3 or 4
CS 425	Distributed Systems	3 or 4
CS 426	Compiler Construction	3 or 4
CS 431	Embedded Systems	3 or 4
CS 436	Computer Networking Laboratory	3 or 4
CS 438	Communication Networks	3 or 4
CS 440	Artificial Intelligence	3 or 4
CS 446	Machine Learning	3 or 4
CS 450	Numerical Analysis	3 or 4
CS 461	Computer Security I	4
CS 475	Formal Models of Computation	3 or 4
CS 476	Program Verification	3 or 4
CS 477	Formal Software Development Methods	3 or 4
CS 483	Applied Parallel Programming	4
CS 498	Special Topics (MP: Logic for Computer Science)	1 to 4
CS 498	Special Topics (VR: Virtual Reality)	1 to 4
CS 498	Special Topics (AML: Applied Machine Learning)	1 to 4
ECE 408	Applied Parallel Programming	4
ECE 411	Computer Organization & Design	4
ECE 412	Microcomputer Laboratory	3
ECE 419	Security Laboratory	3 or 4
ECE 422	Computer Security I	4
ECE 424	Computer Security II	3 or 4
ECE 425	Intro to VLSI System Design	3
ECE 428	Distributed Systems	3 or 4
ECE 435	Computer Networking Laboratory	3 or 4
ECE 438	Communication Networks	3 or 4
ECE 439	Wireless Networks	3 or 4
ECE 448	Artificial Intelligence	3 or 4
ECE 462	Logic Synthesis	3
ECE 470	Introduction to Robotics	4
ECE 478	Formal Software Development Methods	3 or 4
ECE 491	Numerical Analysis	3 or 4
ECE 492	Parallel Progrmg: Sci & Engrg	3 or 4
ECE 498	Special Topics in ECE (RC: Smart Phone Computing and Applications)	0 to 4
One course from departmentally approved list below:		
ECE 411	Computer Organization & Design	4
ECE 445	Senior Design Project Lab [6]	4
ECE 496	Senior Research Project (and ECE 499 - Senior Thesis) [6]	4

Electives

Code	Title	Hours
The Grainger College of Engineering Liberal Education course list, or additional courses from the campus General Education lists for Social and Behavioral Sciences or Humanities and the Arts [7]		6
Free electives. Additional unrestricted course work, subject to certain exceptions as noted by the College, so that there are at least 128 credit hours earned toward the degree. [8]		12
Total Hours of Curriculum to Graduate		**128**

1 *External transfer students take* ENG 300 *instead.*

2 MATH 220 *may be substituted, with four of the five credit hours applying toward the degree.* MATH 220 *is appropriate for students with no background in calculus.*

3 *Freshmen take* ECE 110 *for 3 credit hours. Lab-only version taken by transfer students (with special permission) is 1 credit hour.*

4 MATH 213 *may be substituted.*

5 STAT 410 *may be substituted.*

6 *Advanced Composition may be satisfied by completing* ECE 445 *or* ECE 496 *and* ECE 499 *or a course within either the general education or free elective categories which has the Advanced Composition designation.*

[7] *The Grainger College of Engineering approved liberal education course list can be found* here *(*https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-GeneralEducation*). Note that these credit hours could carry the required cultural studies designation required for campus general education requirements.*

[8] *The Grainger College of Engineering restrictions to free electives can be found* here *(*https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-FreeElectives*).*

for the degree of Bachelor of Science in Computer Engineering

Suggested Sequence

The curriculum sequence below is a suggested sequence, as all Grainger Engineering students work with a department academic advisor to achieve their educational goals, specific to their needs and preparation. Dynamic and Static curricular maps, which include prerequisite sequencing, can be found here (https://grainger.illinois.edu/academics/undergraduate/majors-and-minors/ce-map/).

First Year

First Semester		Hours
ECE 120	Introduction to Computing	4
ENG 100	Engineering Orientation	0
MATH 221[1]	Calculus I	4
RHET 105 (or General Education elective)[2,3]	Writing and Research	4-3
General Education elective[3]		3
	Semester Hours	15-14
Second Semester		
ECE 110[4]	Introduction to Electronics	3
MATH 231	Calculus II	3
PHYS 211	University Physics: Mechanics	4
ECE 220	Computer Systems Programming	4
General Education elective (or RHET 105)[2,3]		3-4
	Semester Hours	17-18

Second Year

First Semester		
MATH 241	Calculus III	4
MATH 257	Linear Algebra with Computational Applications	3
PHYS 212	University Physics: Elec Mag	4
CS 173[5]	Discrete Structures	3
General Education elective[3]		3
	Semester Hours	17
Second Semester		
MATH 285	Intro Differential Equations	3
ECE 210	Analog Signal Processing	4
CS 225	Data Structures	4
PHYS 213	Univ Physics: Thermal Physics	2
PHYS 214	Univ Physics: Quantum Physics	2
	Semester Hours	15

Third Year

First Semester		
ECE 313[6]	Probability with Engrg Applic	3
ECE 385	Digital Systems Laboratory	3
Technical elective[7]		3
General education elective[3]		3
Free elective		3
	Semester Hours	15
Second Semester		
ECE 391	Computer Systems Engineering	4
Technical elective[7]		7
General Education elective[3]		3
Free elective		3
	Semester Hours	17

Fourth Year

First Semester		
ECE 374	Introduction to Algorithms Models of Computation	4
Technical electives[7]		6
General Education elective[3]		3
Free elective		3
	Semester Hours	16
Second Semester		
ECE 411	Computer Organization Design	4
Technical electives[7]		9
Free elective		3
	Semester Hours	16
	Total Hours:	128

[1] *MATH 220 may be substituted, with four of the five credit hours applying toward the degree. MATH 220 is appropriate for students with no background in calculus.*

[2] *RHET 105 (or an alternative Composition I sequence) is taken either in the first or second semester of the first year, according to the student's UIN (Spring if your UIN is Odd). General Education Elective is taken the other semester. Composition I guidelines can be found at* http://catalog.illinois.edu/general-information/degree-general-education-requirements/ *under Written Communication Requirement.*

[3] *Students must take 6 hours from the campus General Education Social and Behavioral Sciences list, 6 hours from campus General Education Humanities and the Arts list, and 6 hours from a liberal education list approved by the college or from the campus General Education lists for Social and Behavioral Sciences or Humanities and the Arts.*
Students must also complete the campus cultural studies requirement by completing (i) one western/comparative culture(s) course, (ii) one non-western culture(s) course, and (iii) one U.S. Minority Culture(s) course from the General Education cultural studies lists. Most students select general education courses that simultaneously satisfy these cultural studies requirements.

[4] *Freshmen take ECE 110 for 3 credit hours. Lab-only version taken by transfer students (with special permission) is 1 credit hour.*

[5] *MATH 213 may be substituted.*

[6] *STAT 410 may be substituted.*

[7] *All are to be chosen from the departmentally approved* List of Technical Electives *(*https://ece.illinois.edu/academics/ugrad/curriculum/tech-electives-06/*). Students must earn a minimum of 29 hours of technical electives consisting of an Advanced EE Core, three Advanced Computing Electives, a Design Elective and the remaining hours may be chosen from the entire list.*

[8] *ECE 445 or ECE 496 AND ECE 499 may be substituted.*

Learning Outcomes: Computer Engineering, BS

Learning Outcomes for the degree of Bachelor of Science Major in Computer Engineering

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Student learning outcomes are based on learning outcomes in line with the ABET accreditation process.

Computer Engineering graduates will have:

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. An ability to communicate effectively with a range of audiences.
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Computer Science + Advertising, BS

for the degree of Bachelor of Science Major in Computer Science & Advertising

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computer science degree information: CS+X Degrees (https://cs.illinois.edu/academics/undergraduate/degree-program-options/cs-x-degree-programs/#requirements)
advertising department website: CS+Advertising (https://media.illinois.edu/degrees-programs/computer-science-advertising/)

overview of college admissions & requirements: College of Media (p. 1198)
college websites: https://media.illinois.edu/ **and** https://engineering.illinois.edu
advertising email: media-ssc@illinois.edu
computer science email: undergrad@cs.illinois.edu (academic@cs.illinois.edu)

COMPUTER SCIENCE AND ADVERTISING is sponsored jointly by the Departments of Computer Science and Advertising. This is a program for students who plan to pursue careers in the advertising field that have a technology focus. Cloud computing, the availability and ubiquity of data, and the rapid and pervasive adoption of mobile technology have created a paradigm shift in the advertising industry. Projected areas of growth in advertising and communications will be in Search Engine Optimization, web analytics, Computational Advertising, and other emerging areas of technology/media. The degree will prepare students for advanced study at the graduate level as well as immediate entry into the workforce at advertising agencies, businesses with in-house advertising and marketing divisions, and technology companies.

Programs in Advertising

Undergraduate Programs:
- **major:** Advertising, BS (http://catalog.illinois.edu/schools/media/academic-units/advertising/#undergraduatetext)
- **major:** Computer Science & Advertising, BS (http://catalog.illinois.edu/undergraduate/media/departments/advertising/csadv/)
- **minors:** Public Relations (p. 519) | Media (p. 513)

Graduate Programs:
- **degree:** Advertising, MS (p. 549)
- **degree:** Strategic Brand Communication, MS (p. 1030)

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for the degree of Bachelor of Science Major in Computer Science & Advertising

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Please see the computer science advisor in 1210 Siebel Center, as well as an advertising advisor in the College of Media Student Services Center in 18 Gregory Hall.

A Major Plan of Study Form must be completed and submitted to the Department of Computer Science Office of Undergraduate Affairs by the beginning of the fifth semester (60-75 hours).

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Minimum required major and supporting course work normally equates to 68 hours plus 12 additional hours of College of Media requirements. All campus general education and foreign language requirements must be met. The minimum hours required for graduation is 124. At least 12 hours of 300- and 400-level course work must be taken on this campus, and a minimum of 40 hours of upper-division course work is required.
Minimum hours required for graduation: 124 hours
To graduate from the Computer Science & Advertising curriculum, a student must complete the following courses, all of which must be taken for a traditional letter grade.

Code	Title	Hours
Computer Science Core		
CS 124	Introduction to Computer Science I	3
CS 128	Introduction to Computer Science II	3
CS 173	Discrete Structures	3
CS 222	Software Design Lab	1
CS 225	Data Structures	4
CS 240	Introduction to Computer Systems	3
CS 374	Introduction to Algorithms & Models of Computation	4
CS 421	Programming Languages & Compilers	3 or 4
Computer Science Technical Electives: Two 400-level courses chosen in consultation with an advisor. These two courses must be above CS 403, not CS 491, and distinct from all other courses used to fulfill program requirements or options.		6
Mathematical Foundations (also fulfills QR I and II gen eds.)		
MATH 220	Calculus	5
or MATH 221	Calculus I	
MATH 231	Calculus II	3
MATH 225	Introductory Matrix Theory	2 or 3
or MATH 257	Linear Algebra with Computational Applications	
CS 361	Probability & Statistics for Computer Science	3
College of Media Foundations		
Select one from:		3-4
ANTH 103	Anthro in a Changing World	
PSYC 100	Intro Psych	
SOC 100	Introduction to Sociology	
ECON 102	Microeconomic Principles	3
ECON 103	Macroeconomic Principles	3
or ECON 302	Inter Microeconomic Theory	
BADM 320	Principles of Marketing	3
Advertising Core		
ADV 150	Introduction to Advertising	3
ADV 281	Advertising Research Methods	3
ADV 283	Advertising and Brand Strategy	3
ADV 284	Consumer Insight	3
ADV 390	Content Creation	3
ADV 460	Innovation in Advertising	3
ADV 483	Audience Analysis	3
ADV 461	Computational Advertising	3
ADV 492	Tech and Advertising Campaigns	3
Total Hours		**124**

Computer Science + Animal Sciences, BS

for the degree of Bachelor of Science Major in Computer Science & Animal Sciences

animal sciences department information: https://ansc.illinois.edu/
computer science degree information: https://cs.illinois.edu/academics/undergraduate/degree-program-options/cs-x-degree-programs#requirements (https://cs.illinois.edu/academics/undergraduate/degree-program-options/cs-x-degree-programs/#requirements)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college websites: https://aces.illinois.edu/ **and** https://engineering.illinois.edu
computer science email: undergrad@cs.illinois.edu (academic@cs.illinois.edu)
animal sciences email: ANSCadvising@illinois.edu

Please see the Computer Science advisor in 1210 Siebel Center, as well as the Animal Sciences Undergraduate Curriculum Coordinator, Dr. David Miller, 116 Animal Sciences Lab.

for the degree of Bachelor of Science Major in Computer Science & Animal Sciences

Code	Title	Hours
Composition and Speech (choose 1 from):		**6-7**
RHET 105 & CMN 101	Writing and Research and Public Speaking	
CMN 111 & CMN 112	Oral & Written Comm I and Oral & Written Comm II	
Advanced Composition (students select from Gen Ed List)		**3-4**
Cultural Studies		
Western Culture (students select from Gen Ed List)		
Non-Western Culture (students select from Gen Ed List)		
US Minority Culture (students select from Gen Ed List)		
Language other than English (at or above 3rd level)		
Natural Sciences and Technology		**8**
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	
CHEM 104 & CHEM 105	General Chemistry II and General Chemistry Lab II	
Humanities and the Arts (students select from Gen Ed List)		**6**
Social and Behavioral Sciences		**6-7**
ECON 102	Microeconomic Principles	
or ACE 100	Introduction to Applied Microeconomics	
Students choice from Gen Ed List		

Mathematical Foundations (fulfills Quantitative Reasoning I & II)		
CS 361	Probability & Statistics for Computer Science	
MATH 220	Calculus	
or MATH 221	Calculus I	
MATH 225	Introductory Matrix Theory	
or MATH 257	Linear Algebra with Computational Applications	
MATH 231	Calculus II	
Computer Sciences Core		
CS 100	Freshman Orientation	
CS 124	Introduction to Computer Science I	
CS 128	Introduction to Computer Science II	
CS 173	Discrete Structures	
CS 225	Data Structures	
CS 222	Software Design Lab	
CS 374	Introduction to Algorithms & Models of Computation	
CS 357	Numerical Methods I	
or CS 421	Programming Languages & Compilers	
Computer Science Technical Track (two options)		
CS 233 & CS 241	Computer Architecture and System Programming	
OR		
CS 240	Introduction to Computer Systems	
& Two 400-level CS courses	Any two (2) 400-level CS courses above CS 403 except CS 421 and CS 491	
Animal Sciences Core		
ANSC 100	Intro to Animal Sciences	
ANSC 221	Cells, Metabolism and Genetics	
ANSC 222	Anatomy and Physiology	
ANSC 223	Animal Nutrition	
ANSC 224	Animal Reproduction and Growth	
ANSC 398	UG Experiential Learning	
ANSC 498	Integrating Animal Sciences	
Applied Animal Sciences Courses (choose 3)		**9**
ANSC 201	Principles of Dairy Production	
ANSC 204	Intro Dairy Cattle Evaluation	
ANSC 205	World Animal Resources	
ANSC 206	Horse Management	
ANSC 211	Breeding Animal Evaluation	
ANSC 219	Meat Technology	
ANSC 250	Companion Animals in Society	
ANSC 301	Food Animal Production, Management, and Evaluation	
ANSC 305	Human Animal Interactions	
ANSC 307	Companion Animal Management	
ANSC 309	Meat Production and Marketing	
ANSC 310	Meat Selection and Grading	
ANSC 312	Advanced Livestock Evaluation	
ANSC 313	Horse Appraisal	
ANSC 314	Adv Dairy Cattle Evaluation	
ANSC 322	Livestock Feeds and Feeding	
ANSC 370	Companion Animal Policy	
ANSC 400	Dairy Herd Management	
ANSC 401	Beef Production	
ANSC 402	Sheep and Goat Production	
ANSC 403	Pork Production	
ANSC 404	Poultry Science	
ANSC 405	Advanced Dairy Management	
ANSC 407	Animal Shelter Management	
ANSC 424	Pet Food & Feed Manufacturing	
ANSC 435	Milk Quality and Udder Health	
ANSC 437	Adv Reproductive Management	
ANSC 471	ANSC Leaders & Entrepreneurs	
Basic Animal Sciences Courses (choose 3)		**9**
ANSC 251	Epidemics and Infectious Diseases	
ANSC 306	Equine Science	
ANSC 331	Biology of Reproduction	
ANSC 350	Cellular Metabolism in Animals	
ANSC 363	Behavior of Domestic Animals	
ANSC 366	Animal Behavior	
ANSC 406	Zoo Animal Conservation Sci	
ANSC 409	Meat Science	
ANSC 420	Ruminant Nutrition	
ANSC 421	Minerals and Vitamins	
ANSC 422	Companion Animal Nutrition	
ANSC 431	Advanced Reproductive Biology	
ANSC 438	Lactation Biology	
ANSC 440	Applied Statistical Methods I	
ANSC 441	Human Genetics	
ANSC 444	Applied Animal Genetics	
ANSC 445	Statistical Methods	
ANSC 446	Population Genetics	
ANSC 447	Advanced Genetics and Genomics	
ANSC 448	Math Modeling in Life Sciences	
ANSC 449	Biological Modeling	
ANSC 450	Comparative Immunobiology	
ANSC 451	Microbes and the Anim Indust	
ANSC 452	Animal Growth and Development	
ANSC 453	Stem Cell Biology	
ANSC 467	Applied Animal Ecology	
ANSC 509	Muscle Biology	
ANSC 520	Protein and Energy Nutrition	
ANSC 521	Regulation of Metabolism	
ANSC 522	Advanced Ruminant Nutrition	
ANSC 523	Techniques in Animal Nutrition	
ANSC 524	Nonruminant Nutrition Concepts	
ANSC 525	Topics in Nutrition Research	
ANSC 526	Adv Companion Animal Nutrition	
ANSC 533	Repro Physiology Lab Methods	
ANSC 541	Regression Analysis	
ANSC 542	Applied Bioinformatics	
ANSC 543	Bioinformatics	

ANSC 545	Statistical Genomics
ANSC 554	Immunobiological Methods
ANSC 561	Animal Stress Physiology

Computer Science + Anthropology, BSLAS

for the degree of Bachelor of Sciences in Liberal Arts & Sciences Major in Computer Science & Anthropology

computer science website: CS+ X Degrees (https://cs.illinois.edu/academics/undergraduate/degree-program-options/cs-x-degree-programs/#requirements)
anthropology website: CS + Anthropology (https://anthro.illinois.edu/academics/undergraduate-programs/computer-science-and-anthropology/)
department page: https://anthro.illinois.edu/
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college websites: https://las.illinois.edu/ **and** https://engineering.illinois.edu
anthropology email: anthro@illinois.edu
computer science email: undergrad@cs.illinois.edu (academic@cs.illinois.edu)

for the degree of Bachelor of Sciences in Liberal Arts & Sciences Major in Computer Science & Anthropology

Please see the computer science advisor as well as the anthropology advisor.

A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office by the beginning of the fifth semester (60-75 hours). Please see the computer science advisor as well as the anthropology advisor.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 66 hours. Twelve hours of 300- and 400-level Anthropology courses must be taken on this campus.
Minimum hours required for graduation: 120 hours

Code	Title	Hours
Required Computer Science Coursework		
CS 100	Freshman Orientation (recommended) [1]	1
CS 124	Introduction to Computer Science I	3
CS 128	Introduction to Computer Science II	3
CS 173	Discrete Structures	3
CS 225	Data Structures	4
CS 222	Software Design Lab	1
Choose one of the following combinations		8-11
CS 233 & CS 241	Computer Architecture and System Programming	
OR		
CS 240	Introduction to Computer Systems	
& two CS courses at the 400 level above CS 403, excluding CS 421 and CS 491		
Choose one of the following:		
STAT 200	Statistical Analysis	
STAT 212	Biostatistics	
CS 361	Probability & Statistics for Computer Science	
CS 374	Introduction to Algorithms & Models of Computation	4
CS 421	Programming Languages & Compilers	3
Mathematics (may also fulfill the General Education Quantitative Reasoning I and II requirements)		
MATH 221	Calculus I	4-5
or MATH 220	Calculus	
MATH 225	Introductory Matrix Theory	2 or 3
or MATH 257	Linear Algebra with Computational Applications	
MATH 231	Calculus II	3
Required Anthropology Coursework - Minimum of 24 hours		
Required Foundation Courses. Select at least 4 courses from the following. Students may make one course substitution for one of the required foundation courses, choosing from the option listed.		**12-18**
ANTH 101	Introduction to Anthropology	
ANTH 110	Humanizing Science	
ANTH 220	Introduction to Archaeology	
or ANTH 105	World Archaeology	
ANTH 230	Sociocultural Anthropology	
or ANTH 103	Anthro in a Changing World	
ANTH 240	Biological Anthropology	
or ANTH 102	Human Origins and Culture	
ANTH 270	Language in Culture	
or ANTH 104	Talking Culture	
ANTH 374	Anth of Science and Technology	
or ANTH 372	Topics in Lang & Culture	
Electives (Substitutions with permission of advisor)		**6-9**
ANTH 241	Human Biological Variation	
ANTH 268	Images of the Other	
ANTH 368	'America' in the World	
ANTH 375	The Culture of Nature	
ANTH 399	Special Topics (check with advisor for appropriate topics)	
ANTH 411	Research Methods in Socio-Cultural Anthropology	
ANTH 423	Economic Anthropology	
ANTH 453	Landscape Archaeology	
ANTH 499	Topics in Anthropology (check with advisor for appropriate topics)	
Optional Senior Capstone Project (See advisor for details)		

[1] CS 100 is an orientation course aimed at first-year students, so students who declare the major after the freshman year are not required to complete it.

Computer Science + Astronomy, BSLAS

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Computer Science & Astronomy

computer science website: CS + X Degrees (https://cs.illinois.edu/academics/undergraduate/degree-program-options/cs-x-degree-programs/#requirements)
astronomy website: CS + Astronomy (https://astro.illinois.edu/academics/undergraduate-program/computer-science-astronomy-major/)
department page: https://astro.illinois.edu/
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college websites: https://las.illinois.edu/ **and** https://engineering.illinois.edu
astronomy email: astronomy@illinois.edu
computer science email: undergrad@cs.illinois.edu (academic@cs.illinois.edu)

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Computer Science & Astronomy

A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office by the beginning of the fifth semester (60-75 hours). Please see the computer science advisor as well as the astronomy advisor.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 68-71 hours. Twelve hours of 300- and 400-level in the major must be taken on this campus.
A Major Plan of Study form must be completed and submitted to the LAS Student Affairs office by the beginning of the fifth semester (60-75 hours). Please see the Computer Science advisor as well as the Astronomy advisor.

Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Required Computer Science Coursework		
CS 100	Freshman Orientation (recommended) [1]	1
CS 124	Introduction to Computer Science I	3
CS 128	Introduction to Computer Science II	3
CS 173	Discrete Structures	3
CS 225	Data Structures	4
CS 222	Software Design Lab	1
Choose one of the following combinations		8-11
CS 233 & CS 241	Computer Architecture and System Programming	
OR		
CS 240	Introduction to Computer Systems	
& two CS courses at the 400 level above CS 403, excluding CS 421 and CS 491		
Choose one of the following:		3
STAT 200	Statistical Analysis	
STAT 212	Biostatistics	
CS 361	Probability & Statistics for Computer Science	
CS 374	Introduction to Algorithms & Models of Computation	4
CS 421	Programming Languages & Compilers	3
Mathematics (may also fulfill the General Education Quantitative Reasoning I and II requirements)		
MATH 221	Calculus I	4-5
or MATH 220	Calculus	
MATH 225	Introductory Matrix Theory	2 or 3
or MATH 257	Linear Algebra with Computational Applications	
MATH 231	Calculus II	3
Required Astronomy Coursework - Minimum of 27 Hours		
Physics, Mathematics, and Astronomy Foundations		**15**
PHYS 211	University Physics: Mechanics	4
PHYS 212	University Physics: Elec & Mag	4
MATH 241	Calculus III	4
ASTR 210	Introduction to Astrophysics	3
Advanced Astronomy Courses (Minimum 12 total advanced ASTR hours required)		**12-13**
ASTR 310	Computing in Astronomy	3
Select 2 courses from the following list:		6-7
ASTR 404	Stellar Astrophysics	
ASTR 405	Planetary Systems	
ASTR 406	Galaxies and the Universe	
ASTR 414	Astronomical Techniques	
Additional ASTR course(s) at the 300 level or higher		2-3

[1] CS 100 is an orientation course aimed at first-year students, so students who declare the major after the freshman year are not required to complete it.

Learning Outcomes: Computer Science + Astronomy, BSLAS

Learning outcomes for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Computer Science & Astronomy

Undergraduate Computer Science & Astronomy majors will graduate with a demonstrated ability to:

LO1. Understand the hierarchical architecture of the cosmos, increasing in scale from the Solar System to the Galaxy to the Universe, and decreasing in scale to atoms and their nuclei. Understand the interplay among these scales.

LO2. Define and use fundamental principles and techniques of astronomy and astrophysics.

- Identify which principles should be applied to a specified situation
- Show familiarity with astronomical observables and their physical origin.
- Understand and apply basic physics and computational techniques to solve problems in astrophysics, and interpret the results.

LO3. Analyze astronomical data, and quantitative data generally.

- Demonstrate the ability to link observation and theory.
- Demonstrate the ability to draw qualitative conclusions from quantitative information, and vice versa.
- Demonstrate the ability to plan observational programs, use astronomical telescopes and instrumentation, and to analyze and present astronomical data.

LO4. Plan and perform guided research, or attain an advanced-level understanding of a topic of contemporary interest in astronomy and astrophysics.

LO5. Demonstrate the ability to communicate effectively both verbally and in writing.

Computer Science + Chemistry, BSLAS

for the degree of Bachelor of Science in Liberal Arts and Sciences Major in Computer Science and Chemistry

computer science website: CS + X Degrees (https://cs.illinois.edu/academics/undergraduate/degree-program-options/cs-x-degree-programs/#requirements)
chemistry website: CS + Chemistry (https://chemistry.illinois.edu/computer-science-chemistry-degree-requirements/)
department page: https://chemistry.illinois.edu/
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college websites: https://las.illinois.edu/ **and** https://engineering.illinois.edu
chemistry email: scs-advising@illinois.edu
computer science email: undergrad@cs.illinois.edu (academic@cs.illinois.edu)

Undergraduate Degree Programs in Chemistry

For the Degree of Bachelor of Science in Liberal Arts and Sciences

- Major in Computer Science & Chemistry, BSLAS (p. 134)
- Major in Chemistry (Sciences and Letters) (p. 87)
- Major in Chemistry (Sciences and Letters), Chemistry Teaching Concentration (p. 88)

For the Degree of Bachelor of Science in Chemistry

- Major in Chemistry (Specialized Curriculum) (p. 86)
- Major in Chemistry (Specialized Curriculum), Environmental Chemistry Concentration (p. 90)

for the degree of Bachelor of Science in Liberal Arts and Sciences Major in Computer Science and Chemistry

A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office by the beginning of the fifth semester (60-75 hours).

Please visit the computer science advisor as well as the Chemical Sciences advising office.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 66 hours. Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Required Computer Science Coursework		
CS 100	Freshman Orientation (recommended) [1]	1
CS 124	Introduction to Computer Science I	3
CS 128	Introduction to Computer Science II	3
CS 173	Discrete Structures	3
CS 225	Data Structures	4
CS 222	Software Design Lab	1
Choose one of the following combinations		8-11
CS 233 & CS 241	Computer Architecture and System Programming	
OR		
CS 240	Introduction to Computer Systems	
& two CS courses at the 400 level above CS 403, excluding CS 421 and CS 491		
Choose one of the following:		3
STAT 200	Statistical Analysis	
STAT 212	Biostatistics	
CS 361	Probability & Statistics for Computer Science	
CS 374	Introduction to Algorithms & Models of Computation	4
CS 421	Programming Languages & Compilers	3
Mathematics (may also fulfill the General Education Quantitative Reasoning I and II requirements)		
MATH 221	Calculus I	4-5
or MATH 220	Calculus	
MATH 225	Introductory Matrix Theory	2 or 3
or MATH 257	Linear Algebra with Computational Applications	
MATH 231	Calculus II	3
Required Chemistry Coursework - Minimum of 24 hours		
Foundation Courses- 12 hours required		
Select one of the following (General or Accelerated Chemistry):		8
CHEM 102 & CHEM 103 & CHEM 104 & CHEM 105	General Chemistry I and General Chemistry Lab I and General Chemistry II and General Chemistry Lab II	
or		
CHEM 202 & CHEM 203 & CHEM 204	Accelerated Chemistry I and Accelerated Chemistry Lab I and Accelerated Chemistry II	
CHEM 232	Elementary Organic Chemistry I	4
or CHEM 236	Fundamental Organic Chem I	
Advanced Chemistry Courses- 12 hours		
CHEM 440	Physical Chemistry Principles	4
or CHEM 442	Physical Chemistry I	

In consultation with an advisor, choose 8 hours of 300- or 400-level chemistry courses [2]	8

[1] CS 100 is an orientation course aimed at first-year students, so students who declare the major after the freshman year are not required to complete it.

[2] The following courses may not be used to complete the advanced chemistry hours: CHEM 315, CHEM 397, CHEM 445, CHEM 447, CHEM 492, CHEM 494, CHEM 496, CHEM 497 and CHEM 499; and any course in another unit, such as any BIOC or MCB course.

Learning Outcomes: Computer Science + Chemistry, BSLAS

Learning Outcomes for the degree of Bachelor of Science in Liberal Arts and Sciences Major in Computer Science and Chemistry

By the time of graduation, students will have:

Computer Science:

1. An ability to apply knowledge of computing and mathematics appropriate to the discipline
2. An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution
3. An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs
4. An ability to function effectively on teams to accomplish a common goal
5. An understanding of professional, ethical, legal, security and social issues and responsibilities
6. An ability to communicate effectively with a range of audiences
7. An ability to analyze the local and global impact of computing on individuals, organizations, and society
8. A recognition of the need for and an ability to engage in continuing professional development
9. An ability to use current techniques, skills, and tools necessary for computing practice
10. An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the trade-offs involved in design choices
11. An ability to apply design and development principles in the construction of software systems of varying complexity

Chemistry:

1. A thorough knowledge of the basic principles of chemistry, including atomic and molecular structure, chemical dynamics and the chemical and physical properties of substances.
2. An exposure to the sub-fields of chemistry, including analytical, inorganic, organic and physical chemistry.
3. The ability to read, evaluate, interpret, and present (via oral and written communication) numerical, chemical and general scientific information and literature.
4. The ability to carry out experiments, use appropriate experimental apparatus effectively, and demonstrate proper laboratory safety skills.

Computer Science + Crop Sciences, BS

for the degree of Bachelor of Science Major in Computer Science & Crop Sciences

crop sciences department website: https://cropsciences.illinois.edu/
computer science degree information: https://cs.illinois.edu/academics/undergraduate/degree-program-options/cs-x-degree-programs#requirements (https://cs.illinois.edu/academics/undergraduate/degree-program-options/cs-x-degree-programs/#requirements)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college websites: https://aces.illinois.edu/ **and** https://engineering.illinois.edu
computer science contact: undergrad@cs.illinois.edu (academic@cs.illinois.edu)
crop sciences contact: ugrad@cropsciences.illinois.edu

Computer Science + Crop Sciences (CS+CPSC) is a first-of-its-kind partnership between The Grainger College of Engineering's Department of Computer Science and the Department of Crop Sciences in the College of Agricultural, Consumer and Environmental Sciences.

Our growing population and changing climate demand out-of-the-box, multidisciplinary thinkers who can handle increasingly rich data sets. CS+CPSC students fill this crucial gap in the agriculture sector, combining a strong technical background with crop sciences expertise powerful enough to change the world.

Students will be among the first to analyze robotics-enabled soil and field measurements, predict weather and climate impacts on food supplies, and accelerate plant improvement through the simultaneous analysis of genetics, environment, and management.

for the degree of Bachelor of Science Major in Computer Science & Crop Sciences

Please see the Computer Science advisor in 1210 Siebel Center, as well as the Crop Sciences advisor in AE-116 Turner Hall.

To graduate from the Computer Science and Crop Sciences curriculum, a student must complete the following courses, all of which must be taken for a traditional letter grade.

Code	Title	Hours
Composition I and Speech		**6-7**
RHET 105 & CMN 101	Writing and Research and Public Speaking	
OR		
CMN 111 & CMN 112	Oral & Written Comm I and Oral & Written Comm II	
Advanced Composition		
Select from campus-approved list.		3-4
Cultural Studies		

Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists.		9
Foreign Language		
Coursework at or above the third level is required for graduation.		0-15
Quantitative Reasoning I		
See Mathematical Foundations for specific requirement.		3
Quantitative Reasoning II		
See Mathematical Foundations for specific requirement.		3
Natural Sciences and Technology		
Select from campus-approved list.		6
Humanities and the Arts		
Select from campus-approved list.		6
Social and Behavioral Sciences		
Select from campus-approved list.		6
ACES Required		
ACES 101	Contemporary Issues in ACES	2
Computer Science Core		**22**
CS 100	Freshman Orientation (recommended)	1
CS 124	Introduction to Computer Science I	3
CS 128	Introduction to Computer Science II	3
CS 173	Discrete Structures	3
CS 222	Software Design Lab	1
CS 225	Data Structures	4
CS 374	Introduction to Algorithms & Models of Computation	4
CS 421	Programming Languages & Compilers	3
Computer Science Technical Track		**8-11**
Choose from the following options:		
CS 233 & CS 241	Computer Architecture and System Programming	
OR		
CS 240	Introduction to Computer Systems	
& Two CS 4XX	Any two (2) 400-level CS courses except CS 491	
Mathematical Foundations (fulfills Quantitative Reasoning I and II)		**12-15**
CS 361	Probability & Statistics for Computer Science	3
MATH 220	Calculus	4-5
or MATH 221	Calculus I	
MATH 225	Introductory Matrix Theory	2-4
or MATH 257	Linear Algebra with Computational Applications	
or MATH 415	Applied Linear Algebra	
or MATH 416	Abstract Linear Algebra	
MATH 231	Calculus II	3
Crop Sciences Core		**14**
CPSC 102	Foundational Skills in Crop Sciences	2
CPSC 112	Introduction to Crop Sciences	4
CPSC 212	Introduction to Plant Protection	4
CPSC 393	Crop Sciences Internship	3
or CPSC 395	Undergrad Research or Thesis	
CPSC 498	Crop Sci Professional Develpmt	1
Foundational Data Analytics		**6-8**
CPSC 440	Applied Statistical Methods I	4
And select one of the following:		
CPSC 441		
CPSC 444	Introduction to Spatial Analytics	
Crop Sciences Electives		**6**
CPSC/HORT/PLPA 4XX	At least one (1) 400-level CPSC/HORT/PLPA course	
CPSC/HORT/PLPA XXX	Any CPSC/HORT/PLPA course except CPSC 241	
Total Hours		**126**

Computer Science + Economics, BSLAS

for the degree of Bachelor of Science in Liberal Arts and Sciences Major in Computer Science and Economics

computer science website: CS + X Degrees (https://cs.illinois.edu/academics/undergraduate/degree-program-options/cs-x-degree-programs/#requirements)
economics website: CS + Economics (https://economics.illinois.edu/academics/undergraduate-program/majors-minor/cs-econ/)
department page: https://economics.illinois.edu/
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college websites: https://las.illinois.edu/ **and** https://engineering.illinois.edu
economics email: econug@illinois.edu
computer science email: undergrad@cs.illinois.edu (academic@cs.illinois.edu)

Undergraduate Degree Programs in Economics

- Econometrics & Quantitative Economics, BSLAS (p. 164)
- Economics, BALAS (p. 165)
- Computer Science & Economics, BSLAS (p. 136)

For further information, please visit the Economics undergraduate program page (http://www.economics.illinois.edu/undergrad/info/).

for the degree of Bachelor of Science in Liberal Arts and Sciences Major in Computer Science and Economics

Please visit the computer science advisor as well as the economics advising office.

A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office by the beginning of the fifth semester (60-75 hours).

General education: Students must complete the Campus General Education (https://courses.illinois.edu/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 66 hours. Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Required Computer Science Courses:		
CS 100	Freshman Orientation (recommended) [1]	1
CS 124	Introduction to Computer Science I	3
CS 128	Introduction to Computer Science II	3
CS 173	Discrete Structures	3
CS 225	Data Structures	4
CS 222	Software Design Lab	1
Choose one of the following combinations		8-11
CS 233 & CS 241	Computer Architecture and System Programming	
OR		
CS 240	Introduction to Computer Systems	
& two CS courses at the 400 level above CS 403, excluding CS 421 and CS 491. These two courses must be distinct from all other courses used to fulfill program requirements or options.		
Choose one of the following:		3
ECON 202	Economic Statistics I	
STAT 200	Statistical Analysis	
STAT 212	Biostatistics	
CS 361	Probability & Statistics for Computer Science	
CS 374	Introduction to Algorithms & Models of Computation	4
CS 421	Programming Languages & Compilers	3
Mathematics (may also fulfill the General Education Quantitative Reasoning I and II requirements):		
MATH 220	Calculus	4-5
or MATH 221	Calculus I	
MATH 225	Introductory Matrix Theory	2 or 3
or MATH 257	Linear Algebra with Computational Applications	
MATH 231	Calculus II	3
Required Economics Coursework -- minimum 24 hours		
ECON 102	Microeconomic Principles	3
ECON 103	Macroeconomic Principles	3
ECON 203	Economic Statistics II	3
ECON 302	Inter Microeconomic Theory	3
Four 400-level courses in Economics selected from an approval list of computation-focused courses		12
Total Hours		66-71

[1] CS 100 (http://catalog.illinois.edu/search/?P=CS%20100) is an orientation course aimed at first-year students, so students who declare the major after the freshman year are not required to complete it.

Computer Science + Geography & Geographic Information Science, BSLAS

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Computer Science & Geography & Geographic Information Science

computer science degree information: CS + X Degrees (https://cs.illinois.edu/academics/undergraduate/degree-program-options/cs-x-degree-programs/#requirements)
geography & geographic information science information: CS + GGIS (https://cs.illinois.edu/academics/undergraduate/degree-program-options/cs-x-degree-programs/computer-science-geography/)
department page: https://www.ggis.illinois.edu/ (https://ggis.illinois.edu/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college websites: https://las.illinois.edu/ **and** https://engineering.illinois.edu
geography & geographic information email: ggis-advisor@illinois.edu
computer science email: undergrad@cs.illinois.edu (academic@cs.illinois.edu)
Please see the computer science advisor as well as the geography advisor.

Undergraduate Degree Programs in Geography & Geographic Information Science

For the Degree of Bachelor of Science in Liberal Arts and Sciences

- Major in Computer Science & Geography & GIS, BSLAS (p. 137)
- Major in Geography & Geographic Information Science, Geographic Information Science Concentration, BSLAS (p. 206)
- Major in Geography & Geographic Information Science, Physical Geography Concentration, BSLAS (p. 208)

For the Degree of Bachelor of Arts in Liberal Arts and Sciences

- Major in Geography & Geographic Information Science, General Geography Concentration, BALAS (p. 205)
- Major in Geography & Geographic Information Science, Human Geography Concentration, BALAS (p. 207)

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Computer Science & Geography & Geographic Information Science

Please see the computer science advisor as well as the geography advisor.

A Major Plan of Study Form must be completed and submitted to the LAS Student Academic Affairs Office by the beginning of the fifth semester (60-75 hours).

General education: Students must complete the Campus General Education (https://courses.illinois.edu/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 66 hours. Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Required Computer Science Courses:		
CS 100	Freshman Orientation (recommended) [1]	1
CS 124	Introduction to Computer Science I	3
CS 128	Introduction to Computer Science II	3
CS 173	Discrete Structures	3
CS 225	Data Structures	4
CS 222	Software Design Lab	1
Choose one of the following combinations		8-11
CS 233 & CS 241	Computer Architecture and System Programming	
OR		
CS 240	Introduction to Computer Systems	
& two CS courses at the 400 level above CS 403, excluding CS 421 and CS 491		
Choose one of the following:		3
STAT 200	Statistical Analysis	
STAT 212	Biostatistics	
CS 361	Probability & Statistics for Computer Science (recommended)	
CS 374	Introduction to Algorithms & Models of Computation	4
CS 421	Programming Languages & Compilers	3 or 4
Mathematics (may also fulfill the General Education QR I and II requirements)		
MATH 220	Calculus	5
or MATH 221	Calculus I	
MATH 225	Introductory Matrix Theory	2 or 3
or MATH 257	Linear Algebra with Computational Applications	
MATH 231	Calculus II	3
Required Geographic Information Science Coursework - Minimum of 24 hours		
GEOG 371	Spatial Analysis	4
GEOG 379	Intro to GIS Systems	4
GEOG 380	GIS II: Spatial Prob Solving	4
Two (2) additional GIS courses from the following list:		6
GEOG 205	Business Location Decisions	
GEOG 224	Environmental Data Science	
GEOG 280	Intro to Social Statistics	
GEOG 412	Geospatial Tech & Society	
GEOG 407	Foundations of CyberGIS & Geospatial Data Science	
GEOG 421	Earth Systems Modeling	
GEOG 439	Health Applications of GIS	
GEOG 440	Business Applications of GIS	
GEOG 460	Aerial Photo Analysis	
GEOG 468	Biological Modeling	
GEOG 473	Digital Cartography & Map Design	
GEOG 476	Applied GIS to Environ Studies	
GEOG 477	Introduction to Remote Sensing	
GEOG 478	Techniques of Remote Sensing	
GEOG 479	Advanced Topics in GIS	
GEOG 480	Principles of GIS	
GEOG 489	Programming for GIS	
Two (2) human and/or physical geography courses:		6
GEOG 204	Cities of the World	
GEOG 210	Social & Environmental Issues	
GEOG 221	Geographies of Global Conflict	
GEOG 222	Big Rivers of the World	
GEOG 287	Environment and Society	
GEOG 350	Sustainability and the City	
GEOG 356	Sustainable Development in South Asia	
GEOG 370	Water Planet, Water Crisis	
GEOG 384	Population Geography	
GEOG 401	Watershed Hydrology	
GEOG 405	Geography Field Course	
GEOG 406	Fluvial Geomorphology	
GEOG 408	Humans and River Systems	
GEOG 410	Green Development	
GEOG 436	Biogeography	
GEOG 438	Geography of Health Care	
GEOG 446	Sustainable Planning Seminar	
GEOG 455	Geog of Sub-Saharn Africa	
GEOG 465	Transportation & Sustainability	
GEOG 466	Environmental Policy	
GEOG 471	Recent Trends in Geog Thought	
GEOG 482	Challenges of Sustainability	
GEOG 483	Urban Geography	
GEOG 484	Cities, Crime, and Space	
GEOG 496	Climate & Social Vulnerability	

[1] CS 100 (http://catalog.illinois.edu/search/?P=CS%20100) is an orientation course aimed at first-year students, so students who declare the major after the freshman year are not required to complete it.

Computer Science + Linguistics, BSLAS

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Computer Science & Linguistics

computer science degree information: CS + X Degrees (https://cs.illinois.edu/academics/undergraduate/degree-program-options/cs-x-degree-programs/#requirements)
linguistics information: CS + Linguistics (https://linguistics.illinois.edu/academics/undergraduate-program/degrees-offered/cs-linguistics/)
department page: https://linguistics.illinois.edu/
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college websites: https://las.illinois.edu/ **and** https://engineering.illinois.edu
computer science email: undergrad@cs.illinois.edu (academic@cs.illinois.edu)
linguistics advising: https://linguistics.illinois.edu/academics/undergraduate-program/undergraduate-advising (https://linguistics.illinois.edu/academics/undergraduate-program/undergraduate-advising/)

Please see the computer science advisor as well as the linguistics advisor.

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Computer Science & Linguistics

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Please see the computer science advisor as well as the linguistics advisor.

A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office by the beginning of the fifth semester (60-75 hours).

General education: Students must complete the Campus General Education (https://courses.illinois.edu/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 66 hours. Twelve hours of 300- and 400-level Anthropology courses must be taken on this campus.
Minimum hours required for graduation: 120 hours

Code	Title	Hours
Required Computer Science Coursework		
CS 100	Freshman Orientation (recommended) [1]	1
CS 124	Introduction to Computer Science I	3
CS 128	Introduction to Computer Science II	3
CS 173	Discrete Structures	3
CS 225	Data Structures	4
CS 222	Software Design Lab	1
Choose one of the following combinations		8-11
CS 233 & CS 241	Computer Architecture and System Programming	
OR		
CS 240	Introduction to Computer Systems	
& two CS courses at the 400 level above CS 403, excluding CS 421 and CS 491. These two courses must be distinct from all other courses used to fulfill program requirements or options.		
Choose one of the following:		
STAT 200	Statistical Analysis	
STAT 212	Biostatistics	
CS 361	Probability & Statistics for Computer Science	
CS 374	Introduction to Algorithms & Models of Computation	4
CS 421	Programming Languages & Compilers	3
Mathematics (may also fulfill the General Education Quantitative Reasoning I and II requirements)		
MATH 221	Calculus I	4-5
or MATH 220	Calculus	
MATH 225	Introductory Matrix Theory	2 or 3
or MATH 257	Linear Algebra with Computational Applications	
MATH 231	Calculus II	3
Required Linguistics Coursework - Minimum of 24 hours		
LING 100	Intro to Language Science	3
LING 301	Elements of Syntax	3
LING 307	Elmnts Semantics & Pragmatics	3
LING 406	Introduction to Computational Linguistics	3
Advanced Coursework- select at least three of the following		**9**
TRST 415	Machine Translation: History and Applications	
LING 490	Special Topics in Linguistics (Check with advisor for appropriate topics. May be repeated to meet this requirement if topics vary)	
CS 446	Machine Learning	
Linguistics Breadth Course		**3**
Any 200-level or higher Linguistics Course (with the exception of ESL and language courses)		

[1] CS 100 is an orientation course aimed at first-year students, so students who declare the major after the freshman year are not required to complete it.

Learning Outcomes: Computer Science + Linguistics, BSLAS

Learning Outcomes for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Computer Science & Linguistics

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1. An ability to apply knowledge of computing and mathematics appropriate to the discipline.
2. An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution.
3. An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.
4. An ability to function effectively on teams to accomplish a common goal.
5. An understanding of professional, ethical, legal, security and social issues and responsibilities
6. An ability to communicate effectively with a range of audiences
7. An ability to analyze the local and global impact of computing on individuals, organizations, and society
8. A recognition of the need for and an ability to engage in continuing professional development
9. An ability to use current techniques, skills, and tools necessary for computing practice

10. An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the trade-offs involved in design choices
11. An ability to apply design and development principles in the construction of software systems of varying complexity
12. An ability to apply knowledge of linguistics appropriate to the discipline.
13. An ability to analyze a problem, and identify and define the computing as well as the linguistics requirements appropriate to its solution.
14. An ability to design, implement, and evaluate a computational linguistics-based system, process, component, or program to meet desired text processing needs.
15. An ability to analyze the local and global impact of computing, language, as well as language technologies on individuals, organizations, and society.
16. An ability to use current linguistics and computational techniques, skills, and tools necessary for computational linguistics practice.
17. An understanding of Linguistics and Computer Science sufficient to be able to apply computational processes to solve problems naturally arising in language.

Computer Science + Philosophy, BSLAS

for the degree of Bachelor of Sciences in Liberal Arts & Sciences Major in Computer Science & Philosophy

computer science degree information: CS + X Degrees (https://cs.illinois.edu/academics/undergraduate/degree-program-options/cs-x-degree-programs/#requirements)
philosophy information: CS + Philosophy (https://philosophy.illinois.edu/academics/undergraduate-studies/cs-philosophy-major/)
department page: http://www.philosophy.illinois.edu/
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college websites: https://las.illinois.edu/ **and** https://engineering.illinois.edu
philosophy advising: Philosophy Advising (https://philosophy.illinois.edu/academics/undergraduate-studies/advising/)
computer science email: undergrad@cs.illinois.edu (academic@cs.illinois.edu)

Please see the computer science advisor as well as the philosophy advisor.

for the degree of Bachelor of Sciences in Liberal Arts & Sciences Major in Computer Science & Philosophy

Please see the computer science advisor as well as the philosophy advisor.

A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office by the beginning of the fifth semester (60-75 hours).

General education: Students must complete the Campus General Education (https://courses.illinois.edu/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 71-73 hours. Twelve hours of 300- and 400-level Philosophy courses must be taken on this campus.
Minimum hours required for graduation: 120 hours

Code	Title	Hours
Required Computer Science Courses		
CS 100	Freshman Orientation (recommended) [1]	1
CS 124	Introduction to Computer Science I	3
CS 128	Introduction to Computer Science II	3
CS 173	Discrete Structures	3
CS 225	Data Structures	4
CS 222	Software Design Lab	1
Choose one of the following combinations		8-11
CS 233 & CS 241	Computer Architecture and System Programming	
OR		
CS 240	Introduction to Computer Systems	
& two CS courses at the 400 level above CS 403, excluding CS 421 and CS 491. These two courses must be distinct from all other courses used to fulfill program requirements or options.		
Choose one of the following:		
STAT 200	Statistical Analysis	
STAT 212	Biostatistics	
CS 361	Probability & Statistics for Computer Science	
CS 374	Introduction to Algorithms & Models of Computation	4
CS 421	Programming Languages & Compilers	3
Mathematics (may also fulfill the General Education Quantitative Reasoning I and II requirements)		
MATH 220	Calculus	4-5
or MATH 221	Calculus I	
MATH 225	Introductory Matrix Theory	2 or 3
or MATH 257	Linear Algebra with Computational Applications	
MATH 231	Calculus II	3
Required Philosophy coursework		
PHIL 222	Philosophical Foundations of Computer Science	3
PHIL 223	Minds & Machines	3
PHIL 421	Ethical Theories	3
Choose one of the following:		3
PHIL 426	Metaphysics	
PHIL 430	Theory of Knowledge	
Choose one of the following:		3
PHIL 425	Philosophy of Mind	
PHIL 438	Philosophy of Language	
PHIL 439	Philosophy of Mathematics	
PHIL 477	Philosophy of Psychology	
PHIL 454	Advanced Symbolic Logic	3
PHIL 499	Capstone Seminar	3

In consultation with an advisor, choose at least 9 additional hours of coursework in philosophy, with at least 6 of those hours being at the 300- or 400-level.	9
Total Hours	68-74

[1] *CS 100 is an orientation course aimed at first-year students, so students who declare the major after the freshman year are not required to complete it.*

Computer Science, BS

for the degree of Bachelor of Science in Computer Science

department website: https://cs.illinois.edu
department faculty: Computer Science Faculty (https://cs.illinois.edu/people/faculty/)
overview of college admissions & requirements: The Grainger College of Engineering (https://grainger.illinois.edu/admissions/)
college website: https://grainger.illinois.edu/

The Computer Science curriculum provides both a broad and deep knowledge of the theory, design, and application of computer systems, with an emphasis on software systems. Because computing is ubiquitous, application areas involve virtually any field imaginable - from developing gene sequencing algorithms via techniques in computational biology, to designing user interfaces for mobile applications; from designing methods for high frequency trading, to creating computer generated graphics and special effects in the gaming industry; and from creating embedded real time systems to be deployed in medical devices, to analyzing social data from internet communication patterns. During the first two years the curriculum provides a strong foundation in mathematics, science, and computation. Advanced coursework in areas of the student's choosing follows in the second two years, which include either a senior thesis or a senior project. Graduates may go on to graduate study or leading positions in industry.

A combined B.S.-M.S. and B.S-M.C.S. degree program is available. The admission and course requirements are described on the Computer Science website (https://cs.illinois.edu/academics/graduate/fifth-year-masters-programs/5-year-bs-ms-program/).

for the degree of Bachelor of Science in Computer Science

Graduation Requirements

Minimum Technical GPA (https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-TechnicalGPARequirement)**: 2.0**
TGPA is required for CS and Math courses. See Technical GPA (https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-TechnicalGPARequirement) to clarify requirements.

Minimum Overall GPA: 2.0
Minimum hours required for graduation: 128 hours
General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**

Orientation and Professional Development

Code	Title	Hours
CS 100	Freshman Orientation (optional course highly recommended may be used to help meet free elective requirements)	1
CS 210	Ethical & Professional Issues	2 or 3
or CS 211	Ethical and Professional Conduct	
ENG 100	Engineering Orientation [1]	0
Total Hours		3-4

Foundational Mathematics and Science

Code	Title	Hours
Total Hours chosen from the following:		**25**
MATH 221	Calculus I [2]	4
MATH 231	Calculus II	3
MATH 241	Calculus III	4
MATH 415	Applied Linear Algebra	3
or MATH 257	Linear Algebra with Computational Applications	
or MATH 416	Abstract Linear Algebra	
PHYS 211	University Physics: Mechanics	4
PHYS 212	University Physics: Elec & Mag	4
One Science elective course:		**3**
Students must take one course from the Natural Science & Technology (NST) list, in addition to those taken as part of the General Education requirements. The course must be a course that is allowed for credit by the Grainger College of Engineering.		
Exceptions to the list are: ASTR 100, PHYS 101 and PHYS 102, and CHEM 101.		
Students who select either ASTR 121, ASTR 122, or ASTR 150 to satisfy the Science Elective requirement will not be allowed to take ASTR 131 and ASTR 132 as free elective (maximum of 4 credit hours of ASTR 100-level can count towards graduation requirements for all Grainger College of Engineering Undergraduates)		

Computer Science Technical Core

Code	Title	Hours
CS 124	Introduction to Computer Science I (Intro to Computer Science I)	3
CS 128	Introduction to Computer Science II (Intro to Computer Science II)	3
CS 173	Discrete Structures	3
CS 222	Software Design Lab (Software Design Lab)	1
CS 225	Data Structures	4
CS 233	Computer Architecture	4
CS 241	System Programming	4
CS 361	Probability & Statistics for Computer Science	3
CS 357	Numerical Methods I	3

CS 374	Introduction to Algorithms & Models of Computation	4
CS 421	Programming Languages & Compilers	3
Total Hours		35

Technical Electives

Code	Title	Hours
Students must take a minimum of (6) six additional technical electives with at least eighteen (18) cumulative credit hours and chosen from CS 397 **and the** CS 400**-level courses, not including** CS 400**,** CS 401**,** CS 402**,** CS 403 **or** CS 491**.** CS 500**-level courses may be used as technical electives, but only with special permission from the CS Academic Office.** CS 397 **and** CS 499 **may be used with a cumulative maximum of six (6) credits from them counting as technical electives. One "CS-like" course in another department (e.g., ECE) may also be counted as a** CS 400**-level course with permission of the CS Academic Office. Non-CS tech electives will not be considered in focus areas.**		**18**
At least one (1) of the CS courses used for technical electives must be chosen from the list below of CS courses satisfying the team project requirement.		
Team Project Course List:		
CS 417	Virtual Reality (Virtual Reality)	3
CS 427	Software Engineering I	3 or 4
CS 428	Software Engineering II	3 or 4
CS 429	Software Engineering II, ACP	3
CS 437	Topics in Internet of Things (Topics in Internet of Things)	3
CS 465	User Interface Design	4
CS 467	Social Visualization	3 or 4
CS 493	Senior Project II, ACP	3
CS 494	Senior Project II	3
CS 497	CS Team Project	1 to 3
At least three (3) of the CS courses used for technical electives must be chosen from a single focus area, from among the list of focus areas listed below. The team project course may be used as one of them.		
CS 498 Special Topics and CS 598 Special Topics classes may be included in a focus area by department approval.		
Software Foundations:		
CS 407	Cryptography (Cryptography)	3 or 4
CS 409	The Art of Web Programming (The Art of Web Design)	3
CS 422	Programming Language Design	3 or 4
CS 426	Compiler Construction	3 or 4
CS 427	Software Engineering I	3 or 4
CS 428	Software Engineering II	3 or 4
CS 429	Software Engineering II, ACP	3
CS 474	Logic in Computer Science (Logic in Computer Science)	3 or 4
CS 476	Program Verification	3 or 4
CS 477	Formal Software Development Methods	3 or 4
CS 492	Senior Project I	3
CS 521	Advanced Topics in Programming Systems (Advanced Topics in Programming Systems)	4
CS 522	Programming Language Semantics	4
CS 524	Concurrent Progrmg Languages	4
CS 526	Advanced Compiler Construction	4
CS 527	Topics in Software Engineering	4
CS 528	Obj-Oriented Progrmg & Design	4
CS 576	Topics in Automated Deduction	2 to 4
Algorithms and Models of Computation:		
CS 407	Cryptography (Cryptography)	3 or 4
CS 413	Intro to Combinatorics	3 or 4
CS 473	Algorithms	4
CS 474	Logic in Computer Science (Logic in Computer Science)	3 or 4
CS 475	Formal Models of Computation	3 or 4
CS 476	Program Verification	3 or 4
CS 477	Formal Software Development Methods	3 or 4
CS 481	Advanced Topics in Stochastic Processes & Applications	3 or 4
CS 482	Simulation	3 or 4
CS 571	Combinatorial Mathematics	4
CS 572	Extremal Graph Theory	4
CS 573	Algorithms	4
CS 574	Randomized Algorithms	4
CS 575	Methods of Combinatorics	4
CS 576	Topics in Automated Deduction	2 to 4
CS 579	Computational Complexity	4
CS 580	Topics in Algorithmic Game Theory (Topics in Algorithmic Game Theory)	4
CS 583	Approximation Algorithms	4
CS 584	Embedded System Verification	4
Intelligence and Big Data:		
CS 410	Text Information Systems	3 or 4
CS 411	Database Systems	3 or 4
CS 412	Introduction to Data Mining	3 or 4
CS 414	Multimedia Systems	3 or 4
CS 416	Data Visualization (Data Visualization)	3 or 4
CS 440	Artificial Intelligence	3 or 4
CS 441	Applied Machine Learning (Applied Machine Learning)	3 or 4
CS 445	Computational Photography	3 or 4
CS 446	Machine Learning	3 or 4
CS 447	Natural Language Processing	3 or 4
CS 448	Audio Computing Laboratory (Audio Computing Laboratory)	3 or 4
CS 464	Topics in Societal and Ethical Impacts of Computer Technology (Topics in Societal and Ethical Impacts of Computer Technology)	3
CS 466	Introduction to Bioinformatics	3 or 4
CS 467	Social Visualization	3 or 4
CS 469	(Computational Advertising)	3
CS 510	Advanced Information Retrieval	4

CS 511	Advanced Data Management	4
CS 512	Data Mining Principles	4
CS 514	Advanced Topics in Network Science (Advanced Topics in Network Science)	4
CS 540	Deep Learning Theory (Deep Learning Theory)	4
CS 542	Statistical Reinforcement Learning (Statistical Reinforcement Learning)	4
CS 543	Computer Vision	4
CS 544	Optimiz in Computer Vision	4
CS 545	Machine Learning for Signal Processing (Machine Learning for Signal Processing)	4
CS 546	Advanced Topics in Natural Language Processing (Advanced Topics in NLP)	4
CS 548	Models of Cognitive Processes	4
CS 562	Advanced Topics in Security, Privacy, and Machine Learning (Advanced Topics in Security, Privacy, and ML)	4
CS 567	Social Signals and Social Media (Social Signals and Social Media)	4
CS 576	Topics in Automated Deduction	2 to 4
Human and Social Impact:		
CS 409	The Art of Web Programming (The Art of Web Design)	3 or 4
CS 416	Data Visualization (Data Visualization)	3 or 4
CS 417	Virtual Reality (Virtual Reality)	3 or 4
CS 441	Applied Machine Learning (Applied Machine Learning)	3 or 4
CS 460	Security Laboratory	3 or 4
CS 461	Computer Security I	4
CS 463	Computer Security II	3 or 4
CS 464	Topics in Societal and Ethical Impacts of Computer Technology (Topics in Societal and Ethical Impacts of Computer Technology)	3
CS 465	User Interface Design	4
CS 467	Social Visualization	3 or 4
CS 468	Tech and Advertising Campaigns	3
CS 469	(Computational Advertising)	3
CS 500	Current Topics in Computing Education Research (Current Topics in Computing Education Research)	4
CS 514	Advanced Topics in Network Science (Advanced Topics in Network Science)	4
CS 562	Advanced Topics in Security, Privacy, and Machine Learning (Advanced Topics in Security, Privacy, and ML)	4
CS 563	Advanced Computer Security	4
CS 565	Human-Computer Interaction	4
CS 566	(Experimental HCI)	4
CS 567	Social Signals and Social Media (Social Signals and Social Media)	4
Media:		
CS 409	The Art of Web Programming (The Art of Web Design)	3 or 4
CS 414	Multimedia Systems	3 or 4
CS 417	Virtual Reality (Virtual Reality)	3 or 4
CS 418	Interactive Computer Graphics	3 or 4
CS 419	Production Computer Graphics	3 or 4
CS 445	Computational Photography	3 or 4
CS 448	Audio Computing Laboratory (Audio Computing Laboratory)	3 or 4
CS 465	User Interface Design	4
CS 467	Social Visualization	3 or 4
CS 468	Tech and Advertising Campaigns	3
CS 469	(Computational Advertising)	3 or 4
CS 519	Scientific Visualization	4
CS 545	Machine Learning for Signal Processing (Machine Learning for Signal Processing)	4
CS 565	Human-Computer Interaction	4
CS 567	Social Signals and Social Media (Social Signals and Social Media)	4
Scientific, Parallel, and High Perfomance Computing:		
CS 419	Production Computer Graphics	3 or 4
CS 435	Cloud Networking (Cloud Networking)	3 or 4
CS 450	Numerical Analysis	3 or 4
CS 457	Numerical Methods II	3
CS 466	Introduction to Bioinformatics	3 or 4
CS 482	Simulation	3 or 4
CS 483	Applied Parallel Programming	4
CS 484	Parallel Programming	3 or 4
CS 519	Scientific Visualization	4
CS 554	Parallel Numerical Algorithms	4
CS 555	Numerical Methods for PDEs	4
CS 556	Iterative & Multigrid Methods	4
CS 558	Topics in Numerical Analysis	4
Distributed Systems, Networking, and Security:		
CS 407	Cryptography (Cryptography)	3 or 4
CS 423	Operating Systems Design	3 or 4
CS 424	Real-Time Systems	3 or 4
CS 425	Distributed Systems	3 or 4
CS 431	Embedded Systems	3 or 4
CS 435	Cloud Networking (Cloud Networking)	3 or 4
CS 436	Computer Networking Laboratory	3 or 4
CS 437	Topics in Internet of Things (Topics in Internet of Things)	3 or 4
CS 438	Communication Networks	3 or 4
CS 439	Wireless Networks	3 or 4
CS 460	Security Laboratory	3 or 4
CS 461	Computer Security I	4
CS 463	Computer Security II	3 or 4
CS 483	Applied Parallel Programming	4
CS 484	Parallel Programming	3 or 4
CS 523	Advanced Operating Systems	4
CS 524	Concurrent Progrmg Languages	4
CS 525	Advanced Distributed Systems	4
CS 537	Advanced Topics in Internet of Things (IoT) (Advanced Topics in Internet of Things)	4

CS 538	Advanced Computer Networks	4
CS 562	Advanced Topics in Security, Privacy, and Machine Learning (Advanced Topics in Security, Privacy, and ML)	4
CS 563	Advanced Computer Security	4
Machines:		
CS 423	Operating Systems Design	3 or 4
CS 424	Real-Time Systems	3 or 4
CS 426	Compiler Construction	3 or 4
CS 431	Embedded Systems	3 or 4
CS 433	Computer System Organization	3 or 4
CS 484	Parallel Programming	3 or 4
CS 523	Advanced Operating Systems	4
CS 526	Advanced Compiler Construction	4
CS 533	Parallel Computer Architecture	4
CS 534	Advanced Topics in Computer Architecture (Advanced Topics in Computer Architecture)	4
CS 536	Fault-Tolerant Dig Syst Design	4
CS 541	Computer Systems Analysis	4
CS 584	Embedded System Verification	4

Computer Science Advanced Electives

Code	Title	Hours
Students must take for a letter grade a minimum of two (2) advanced elective courses comprising at least six (6) credit hours. These advanced elective courses must be distinct from courses used to satisfy the technical electives. They may be chosen from CS 397 Individual Study and the 400-level coursework offered for letter grade in ANY area offered at the University of Illinois at Urbana-Champaign. It is expected that students will select these additional advanced courses in a way that best augments their program of study. Consultation with a faculty mentors is highly encouraged. A maximum of six (6) credit hours of CS 397 may be used in the combination of technical electives and advanced electives.		6
Total Hours		6

Electives

Code	Title	Hours
The Grainger College of Engineering Liberal Education course list, or additional courses from the campus General Education lists for Social and Behavioral Sciences or Humanities and the Arts [3]		6
Free electives. Additional unrestricted course work, subject to certain exceptions as noted by the College, so that there are at least 128 credit hours earned toward the degree. [4]		18
Total Hours of Curriculum to Graduate		**128**

1 *External transfer students take* ENG 300 *instead.*

2 MATH 220 *may be substituted, with four of the five credit hours applying toward the degree.* MATH 220 *is appropriate for students with no background in calculus.*

3 *The Grainger College of Engineering approved liberal education course list can be found* here *(*https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-GeneralEducationElectives*). Note that these credit hours could carry the required cultural studies designation required for campus general education requirements.*

4 *The Grainger College of Engineering restrictions to free electives can be found* here *(*https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-FreeElectives*).*

for the degree of Bachelor of Science in Computer Science

Suggested Sequence

The curriculum sequence below is a suggested sequence, as all Grainger Engineering students work with a department academic advisor to achieve their educational goals, specific to their needs and preparation. Dynamic and Static curricular maps, which include prerequisite sequencing, can be found here (https://grainger.illinois.edu/academics/undergraduate/majors-and-minors/cs-map/).

First Year

First Semester		**Hours**
CS 100[1]	Freshman Orientation	1
CS 124	Introduction to Computer Science I	3
ENG 100	Engineering Orientation	0
MATH 221[2]	Calculus I	4
Science elective[3]		3
RHET 105 (or General Education elective)[4,5]	Writing and Research	4-3
	Semester Hours	15-14
Second Semester		
CS 128	Introduction to Computer Science II	3
CS 173	Discrete Structures	3
MATH 231	Calculus II	3
General education elective (or RHET 105)[4,5]		3-4
General education elective[5]		3
	Semester Hours	15-16

Second Year

First Semester		
CS 222	Software Design Lab	1
CS 225	Data Structures	4
MATH 241	Calculus III	4
PHYS 211	University Physics: Mechanics	4
General Education Elective[5]		3
	Semester Hours	16
Second Semester		
CS 233	Computer Architecture	4
CS 361	Probability Statistics for Computer Science	3
MATH 257[6]	Linear Algebra with Computational Applications	3
PHYS 212	University Physics: Elec Mag	4
Free elective		3
	Semester Hours	17

Third Year		
First Semester		
CS 210[7]	Ethical Professional Issues	2
CS 241	System Programming	4
CS 357	Numerical Methods I	3
CS Technical elective[8]		3
Free Elective		4
	Semester Hours	16
Second Semester		
CS 374	Introduction to Algorithms Models of Computation	4
CS Technical electives[8]		6
General Education elective[5]		6
	Semester Hours	16
Fourth Year		
First Semester		
CS 421	Programming Languages Compilers	3
CS Technical electives[8]		6
General Education electives[5]		3
Free electives		5
	Semester Hours	17
Second Semester		
CS Technical electives[8]		9
Free electives		7
	Semester Hours	16
	Total Hours:	128

[1] *This optional course is highly recommended for freshmen, who may use it to help meet free elective requirements.*

[2] *MATH 220 may be substituted, with four of the five credit hours applying toward the degree. MATH 220 is appropriate for students with no background in calculus.*

[3] *Students must take one course from the Natural Science & Technology (NST) list, in addition to those taken as part of the General Education Requirements. The course must be one that is allowed for credit by the Grainger College of Engineering.*

[4] *RHET 105 (or an alternative Composition I sequence) is taken either in the first or second semester of the first year, according to the student's UIN (Spring if your UIN is Odd). General Education Elective is taken the other semester. Composition I guidelines can be found at* http://catalog.illinois.edu/general-information/degree-general-education-requirements/ *under Written Communication Requirement.*

[5] *Students must take 6 hours from the campus General Education Social and Behavioral Sciences list, 6 hours from campus General Education Humanities and the Arts list, and 6 hours from a liberal education list approved by the college or from the campus General Education lists for Social and Behavioral Sciences or Humanities and the Arts.*
Students must also complete the campus cultural studies requirement by completing (i) one western/comparative culture(s) course, (ii) one non-western culture(s) course, and (iii) one U.S. Minority Culture(s) course from the General Education cultural studies lists. Most students select general education courses that simultaneously satisfy these cultural studies requirements.

[6] MATH 415 *or* MATH 416 *may be substituted*

[7] CS 211 *may be substituted. The extra 1 credit hour difference between* CS 210 *and* CS 211 *will apply to free electives.*

[8] *To be chosen from a* departmentally approved list (https://cs.illinois.edu/academics/undergraduate/degree-program-options/bs-computer-science-engineering/#technical-electives*), and to include at least three courses from a single focus area.*

Learning Outcomes: Computer Science, BS

Learning Outcomes for the degree of Bachelor of Science Major in Computer Science

By the time of graduation, students will have the ability to:

1. Analyze a complex computing problem and apply principles of computing and other relevant disciplines to identify solutions.
2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
3. Communicate effectively in a variety of professional contexts.
4. Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
5. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
6. Apply computer science theory and software development fundamentals to produce computing-based solutions.

Crafts, BFA

for the Bachelor of Fine Arts Major in Crafts

No longer accepting students: Fall 2020

department website: https://art.illinois.edu
overview of college admissions & requirements: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/
Students pursuing this major select a concentration:

Metals Concentration (p. 145)

The curriculum in Crafts consists of a concentration in Metals. The BFA program focuses on the development of individual artistic and design capabilities, critical perceptions, and the mastery of comprehensive technical skills. The program emphasizes strengths in conceptual and material specialization. The curriculum supports professional training for the self-sustaining visual artist and provides the skills necessary for students to pursue an advanced degree in the arts. The curriculum in Crafts requires 122 credit hours.

Mark Avery, Coordinator of Undergraduate Academic Affairs

140 Art and Design Building, 333-6632, mavery@illinois.edu

Crafts: Metals, BFA

for the Bachelor of Fine Arts Major in Crafts, Metal Concentration

No longer accepting students: Fall 2019

department website: https://art.illinois.edu
department faculty:
overview of college admissions & requirements: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/
email: mavery@illinois.edu

The curriculum in Crafts consists of a concentration in Metal. The BFA program focuses on the development of individual artistic and design capabilities, critical perceptions, and the mastery of comprehensive technical skills. The program emphasizes strengths in conceptual and material specialization. The curriculum supports professional training for the self-sustaining visual artist and provides the skills necessary for students to pursue an advanced degree in the arts. The curriculum in Crafts requires 122 credit hours.

for the Bachelor of Fine Arts Major in Crafts, Metal Concentration

A portfolio review is required for admission to the School of Art and Design.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement. Some Art and Design courses will also apply toward the** General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements.**

Art Foundation

Code	Title	Hours
Foundation Requirements		**16**
ARTF 101	Contemporary Issues in Art	
ARTE 101	Art, Design, and Society	
Choose one Drawing Course (3 hours):		
ARTF 102	Observational Drawing	
ARTF 104	Expressive Drawing	
ARTF 106	Visualization Drawing	
Choose one course in 2D Category (3 hours):		
ARTD 151	Introduction to Graphic Design	
ARTD 160		
ARTS 205	Introduction to Printmaking	
ARTS 251	Beginning Painting	
Choose one course in 3D Category (3 hours):		
ARTD 101	Introduction to Industrial Design	
ARTS 201	Crafts Design	
ARTS 280	Beginning Sculpture	
Choose one course in 4D Category (3 hours):		
ARTS 241	Image Practice	
ARTS 243	Time Arts I	
ARTS 244	Interaction I	
Art History Requirements		**12**
ARTH 110	Introduction to the History of Art and Visual Culture	
200 level and above ARTH courses		
Capstone Requirements		**7**
ARTS 392	Current Art Issues Seminar	
ARTS 451	Advanced Studio II	

Code	Title	Hours
Metal Requirements		
ARTS 230	Jewelry/Metals I	3
ARTS 231	Jewelry/Metals II	3
ARTS 330	Jewelry Metals III	3
ARTS 331	Jewelry Metals IV	3
ARTS 332	Metal Technology (repeat twice)	4
ARTS 430	Jewelry Metals V	5
ARTS 431	Jewelry Metals VI	5
ARTS 333	Enamelling	3
ARTS 334	Metalsmithing	3
ARTS 210	Ceramics Sculpture I	3
ARTS 310	Ceramics Sculpture II	3
ARTS 250	Life Drawing	3
ARTD 260		3
Select one of the following:		6-8
ARTS 280 & ARTS 381	Beginning Sculpture and Intermediate Sculpture	
ARTD 201 & ARTD 202	Industrial Design I and Industrial Design II	
Electives		
Supportive electives (see advisor)		9
Open electives as needed to total 122 hour degree		
Total Hours		59-61

Learning Outcomes: Metals Concentration

Learning outcomes for the Bachelor of Fine Arts Major in Crafts: Metal Concentration

1. the ability to conceive of, design, problem solve, execute, analyze, and critique utilitarian and non-utilitarian objects;
2. the ability to employ and demonstrate technical competency in the making of jewelry, hollowware, and objects using traditional and new approaches in a wide variety of materials;
3. the ability to demonstrate a knowledge of historical and contemporary metalwork practice;
4. the ability to recognize and use jewelry design and metalworking terminology;
5. the ability to apply the elements and principles of two and three-dimensional design to the making of jewelry, hollowware, objects;
6. the ability to create original utilitarian and non-utilitarian objects;
7. the ability to apply critical thinking when analyzing objects;
8. the ability to demonstrate a higher level of perceptual awareness;
9. the ability to demonstrate confidence in and strategies toward individual creativity;
10. the ability to demonstrate a knowledge of safe and effective lab processes.

Creative Writing, BALAS

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Creative Writing

department website: English (http://www.english.illinois.edu/)
creative writing website: Creative Writing (https://english.illinois.edu/academics/undergraduate-studies/majors-minors/creative-writing-major/)
department faculty: English Faculty (https://english.illinois.edu/directory/specialty-areas/)
advising: English & Creative Writing advising (https://www.english.illinois.edu/undergraduate/advising/)
email: english@illinois.edu
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu (https://las.illinois.edu/)

Undergraduate Degree Programs in English

Majors:

English, BALAS (p. 188) **with concentrations:**
English, English Concentration, BALAS (p. 188)
English, English Teaching Concentration, BALAS (p. 189)
English, Topics in English Concentration, BALAS (p. 190)
Creative Writing, BALAS (p. 147)

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Creative Writing

General education: Students must complete the Campus General Education (https://courses.illinois.edu/) requirements.

Minimum required coursework equates to 36 hours in CW and ENGL courses. Twelve hours of 300- or 400-level courses in the major must be taken on this campus, of which at least three (3) hours must be Creative Writing Courses CW 404CW 406

Minimum hours required for graduation: 120 hours

Code	Title	Hours
Major Requirements		
Literature for Creative Writers		**6**
CW 100	Intro to Creative Writing	
CW 200	Reading for Writers	
Craft		**3**
CW 243	The Craft Essay: Creative Reading, Reflection, and Revision	
Creative Writing Workshops		**12**
12 hours of Creative Writing Workshops, including at least one of the following		
3-course (9-hour) Workshop sequences:		
CW 106 & CW 206 & CW 406	Poetry Workshop I and Poetry Workshop II and Poetry Workshop III	
or		
CW 104 & CW 204 & CW 404	Fiction Workshop I and Fiction Workshop II and Fiction Workshop III	
The remaining 3 hours in this category can be satisfied by a fourth CW Workshop outside of the chosen sequence. [1]		
Writing and Literature		**3**
3 hours of Writing and Literature coursework, either:		
3 hours of non-Workshop CW coursework (CW 460, or another approved non-Workshop CW course) [2]		
or		
3 hours of ENGL coursework [3]		
Additional Literature Coursework [4]		**12**
12 additional hours of approved ENGL coursework, including:		
9 hours of approved ENGL Literature coursework [5]		
3 hours of an ENGL Difference & Diaspora course [6]		
Total Hours		36

1. CW 404 and CW 406 may be repeated once for credit, but may not be repeated to fulfill this requirement.
2. Some sections of CW 199, CW 202, and CW 463 may or may not count as a non-Workshop class, depending on the topics offered in a given semester.
3. These hours must be taken at the 200-level or above.
4. A maximum of 3 hours of 100-level coursework may be counted towards the Additional Literature Coursework requirement.
5. Chosen from a list maintained by the Creative Writing Program and the English Advising Office.
6. Chosen from the *Difference & Diaspora* list maintained by the English Program and the English Advising office.

Learning Outcomes: Creative Writing, BALAS

Learning Outcomes for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Creative Writing

1. **Concepts:** Students will identify, analyze, and use the elements of literary craft appropriate for their chosen writing genre.
2. **Writing:** Students will develop a personal style, apply craft techniques that they learn during workshops, and choose from several strategies to revise written work.
3. **Workshop:** Students will identify and learn to use the most effective worship practices. They will learn how to critique the written work of their peers, both orally and in writing, in constructive and mutually beneficial ways.
4. **Reading:** Students will read, analyze, and evaluate contemporary and other literature from the perspective of literary craft and the study of creative writing.
5. **Literary Community and Profession:** Students will learn to evaluate, discuss, and research contemporary literary publishing and editing.

Learning Outcomes: Crop Sciences, BS

Learning outcomes for the degree of Bachelor of Science Major in Crop Sciences

Students graduating with the B.S. in Crop Sciences should be able to:

1. Demonstrate knowledge in the key subject matter areas of applied plant biology; crop growth and development; crop management and protection; and soil science.
2. Demonstrate an ability to identify a problem and develop solutions using quantitative reasoning skills for analysis of biological data.
3. Demonstrate oral and written communication skills necessary to listen and make effective arguments, to share applied scientific concepts with the public, and to make use of a broad variety of media.
4. Demonstrate an ability to lead and function in multidisciplinary teams.
5. Demonstrate the ability to perform self-guided discovery in agricultural sciences, practicing skills of engagement to enhance intellectual curiosity.

Crops Sciences, BS

for the degree of Bachelor of Science Major in Crop Sciences

department website: https://cropsciences.illinois.edu/
department faculty: https://cropsciences.illinois.edu/people/faculty (https://cropsciences.illinois.edu/people/faculty/)/
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college website: https://aces.illinois.edu/

Students pursuing this major select one of these concentrations:

- Agroecology Concentration (p. 148)
- Biological Sciences Concentration (p. 149)
- Crop Agribusiness Concentration (p. 150)
- Crops Concentration (p. 151)
- Horticultural Food Systems Concentration (p. 152)
- Plant Biotechnology and Molecular Biology Concentration (p. 153)
- Plant Protection Concentration (p. 155)

Crop Sciences: Agroecology, BS

for the degree of Bachelor of Science Major in Crop Sciences, Agroecology Concentration

department website: https://cropsciences.illinois.edu/
department faculty: https://cropsciences.illinois.edu/people/faculty (https://cropsciences.illinois.edu/people/faculty/)/
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college website: https://aces.illinois.edu/

The Agroecology Concentration addresses ecologically based management of cropping systems, stewardship of the environment, and sustainable food production systems. The intersection between crop plants and their environment is emphasized in this concentration. Graduates of the Agroecology concentration are prepared for careers in integrated plant health management, government regulatory and environmental agencies or for entrance into graduate or professional school.

for the degree of Bachelor of Science Major in Crop Science, Agroecology Concentration

Prescribed Courses including Campus General Education

Code	Title	Hours
Composition I and Speech		
RHET 105	Writing and Research	4
or equivalent - see College Composition I requirement (3 or 4)		
CMN 101	Public Speaking	3
Advanced Composition		
Select from campus approved list.		3-4
Cultural Studies		
Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists.		9
Foreign Language		
Coursework at or above the third level is required for graduation.		
Quantitative Reasoning I		
Select one of the following:		4-5
MATH 220	Calculus	
MATH 221	Calculus I	
MATH 234	Calculus for Business I	
Quantitative Reasoning II		
CPSC 241	Intro to Applied Statistics	3
Natural Sciences and Technology		
See Specific Concentration Requirements		
Humanities and the Arts		
Select from campus approved list		6
Social and Behavioral Sciences		
ACE 100	Introduction to Applied Microeconomics [1]	3-4
or ECON 102	Microeconomic Principles	
Select from campus approved list.		3-4
ACES required		
ACES 101	Contemporary Issues in ACES	2
Required Concentration		**58-79**

Concentration prescribed courses. See specific concentration requirements.		
Total Hours		**126**

[1] ACE 100 or ECON 102 are not required for the Biological Sciences Concentration.

Agroecology Concentration Requirements

Code	Title	Hours
Natural Sciences and Technology		
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	4
CHEM 104 & CHEM 105	General Chemistry II and General Chemistry Lab II	4
CHEM 232	Elementary Organic Chemistry I	3-4
or CPSC 382	Organic Chem of Biol Processes	
IB 103	Introduction to Plant Biology	4
IB 150	Organismal & Evolutionary Biol	4
IB 203	Ecology	4
MCB 150	Molec & Cellular Basis of Life	4
Select one of the following:		4-5
MCB 100 & MCB 101	Introductory Microbiology and Intro Microbiology Laboratory	
IB 104	Animal Biology	
Agroecology Concentration Required		
CPSC 112	Introduction to Crop Sciences	4
CPSC 226		3
CPSC 270	Applied Entomology	3
CPSC 336	Tomorrow's Environment	3
CPSC 431	Plants and Global Change	3
CPSC 437	Principles of Agroecology	3
CPSC 498	Crop Sci Professional Develpmt	1
NRES 201	Introductory Soils	4
NRES 474	Soil and Water Conservation	3
or NRES 488	Soil Fertility and Fertilizers	
PLPA 204		3
Select one course from three of the following groups:		9-12
ACE 210	Environmental Economics	
or ACE 310	Natural Resource Economics	
CPSC 412	Principles of Crop Production	
or CPSC 414	Forage Crops & Pasture Ecology	
or CPSC 415	Bioenergy Crops	
or CPSC 418	Crop Growth and Management	
CPSC 426	Weed Mgt in Agronomic Crops	
CPSC 473	Mgmt of Field Crop Insects	
NRES 401	Watershed Hydrology	
or NRES 419	Env and Plant Ecosystems	
or NRES 439	Env and Sustainable Dev	
or NRES 488	Soil Fertility and Fertilizers	
PLPA 403	Advanced Plant Pathology	
or PLPA 405	Plant Disease Diagnosis & Mgmt	
or PLPA 407		
Select one of the following:		3-4
ANSC 100	Intro to Animal Sciences	
FSHN 101	The Science of Food and How it Relates to You	
HORT 100	Introduction to Horticulture	
NRES 102	Introduction to NRES	
TSM 100	Technical Systems in Agr	
Total ACES prescribed and elective courses must total 35 hours, of which 20 hours must be completed in residence.		35

Crop Sciences: Biological Sciences, BS

for the degree of Bachelor of Science Major in Crop Science, Biological Sciences Concentration

department website: https://cropsciences.illinois.edu/
department faculty: https://cropsciences.illinois.edu/people/faculty (https://cropsciences.illinois.edu/people/faculty/)/
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college website: https://aces.illinois.edu/

The biological sciences concentration is designed for students who plan to enter a graduate study program or who want professional positions that require more science than in included in the other concentrations. Students follow a first-year program of General Education courses similar to students in other Crop Sciences concentrations. Programs for the second, third, and fourth years are planned in consultation with the student's faculty advisor, in the area of biological sciences. Students and advisors are encouraged to consult individual graduate schools for the specific entrance requirements. Although flexibility in individual course selection is a characteristic of this concentration, graduation requirements are established by selection of elective courses.

Prescribed Courses including Campus General Education

Code	Title	Hours
Composition I and Speech		
RHET 105	Writing and Research	4
or equivalent - see College Composition I requirement (3 or 4)		
CMN 101	Public Speaking	3
Advanced Composition		
Select from campus approved list.		3-4
Cultural Studies		
Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists.		9
Foreign Language		
Coursework at or above the third level is required for graduation.		
Quantitative Reasoning I		
Select one of the following:		4-5
MATH 220	Calculus	
MATH 221	Calculus I	
MATH 234	Calculus for Business I	
Quantitative Reasoning II		

CPSC 241	Intro to Applied Statistics	3
Natural Sciences and Technology		
See Specific Concentration Requirements		
Humanities and the Arts		
Select from campus approved list		6
Social and Behavioral Sciences		
ACE 100	Introduction to Applied Microeconomics [1]	3-4
or ECON 102	Microeconomic Principles	
Select from campus approved list.		3-4
ACES required		
ACES 101	Contemporary Issues in ACES	2
Required Concentration		**58-79**
Concentration prescribed courses. See specific concentration requirements.		
Total Hours		**126**

[1] ACE 100 or ECON 102 are not required for the Biological Sciences Concentration.

Code	Title	Hours
Natural Sciences and Technology		
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	4
CHEM 104 & CHEM 105	General Chemistry II and General Chemistry Lab II	4
CHEM 232	Elementary Organic Chemistry I	3 or 4
IB 103	Introduction to Plant Biology	4
IB 150	Organismal & Evolutionary Biol	4
MCB 150	Molec & Cellular Basis of Life	4
PHYS 101	College Physics: Mech & Heat	5
Biological Sciences Concentration Required		
CPSC 112	Introduction to Crop Sciences	4
CPSC 261	Biotechnology in Agriculture	3
or CPSC 265	Genetic Engineering Lab	
CPSC 352	Plant Genetics	4
CPSC 498	Crop Sci Professional Develpmt	1
Select one of the following:		3
CPSC 226		
CPSC 270	Applied Entomology	
PLPA 204		
Select three of the following:		9
CPSC 426	Weed Mgt in Agronomic Crops	
CPSC 431	Plants and Global Change	
CPSC 452	Advanced Plant Genetics	
CPSC 453	Principles of Plant Breeding	
CPSC 466	Genomics for Plant Improvement	
CPSC 473	Mgmt of Field Crop Insects	
CPSC 484	Plant Physiology	
or HORT 421	Horticultural Physiology	
PLPA 403	Advanced Plant Pathology	
PLPA 405	Plant Disease Diagnosis & Mgmt	
PLPA 407		
Select one of the following:		3-4
ANSC 100	Intro to Animal Sciences	
FSHN 101	The Science of Food and How it Relates to You	
HORT 100	Introduction to Horticulture	
NRES 102	Introduction to NRES	
NRES 201	Introductory Soils	
TSM 100	Technical Systems in Agr	
Select one of the following:		3-5
MCB 100 & MCB 101	Introductory Microbiology and Intro Microbiology Laboratory	
MCB 450	Introductory Biochemistry	
Natural Science Electives		6-9
Total ACES prescribed and elective courses must total 35 hours, of which 20 hours must be completed in residence.		35

Crop Sciences: Crop Agribusiness, BS

for the degree of Bachelor of Science Major in Crop Sciences, Crop Agribusiness Concentration

department website: https://cropsciences.illinois.edu/
department faculty: https://cropsciences.illinois.edu/people/faculty (https://cropsciences.illinois.edu/people/faculty/)/
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college website: https://aces.illinois.edu/

The concentration in crop agribusiness is designed for students wanting to combine agronomic production and business management. This concentration prepares students for careers in production and marketing, cropping systems management, and a broad range of multi-functional agricultural enterprises, or for entrance into graduate school.

Prescribed Courses including Campus General Education

Code	Title	Hours
Composition I and Speech		
RHET 105	Writing and Research	4
or equivalent - see College Composition I requirement (3 or 4)		
CMN 101	Public Speaking	3
Advanced Composition		
Select from campus approved list.		3-4
Cultural Studies		
Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists.		9
Foreign Language		
Coursework at or above the third level is required for graduation.		
Quantitative Reasoning I		
Select one of the following:		4-5
MATH 220	Calculus	
MATH 221	Calculus I	
MATH 234	Calculus for Business I	
Quantitative Reasoning II		
CPSC 241	Intro to Applied Statistics	3

Natural Sciences and Technology		
See Specific Concentration Requirements		
Humanities and the Arts		
Select from campus approved list		6
Social and Behavioral Sciences		
ACE 100	Introduction to Applied Microeconomics [1]	3-4
or ECON 102	Microeconomic Principles	
Select from campus approved list.		3-4
ACES required		
ACES 101	Contemporary Issues in ACES	2
Required Concentration		**58-79**
Concentration prescribed courses. See specific concentration requirements.		
Total Hours		**126**

[1] ACE 100 or ECON 102 are not required for the Biological Sciences Concentration.

Code	Title	Hours
Natural Sciences and Technology		
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	4
CHEM 104 & CHEM 105	General Chemistry II and General Chemistry Lab II	4
IB 103	Introduction to Plant Biology	4
Select one of the following:		4-5
MCB 100 & MCB 101	Introductory Microbiology and Intro Microbiology Laboratory	
IB 104	Animal Biology	
Crop Agribusiness Concentration Required		
ACCY 200	Fundamentals of Accounting	3
or ACCY 201	Accounting and Accountancy I	
ACE 345	Finan Decision Indiv Sm Bus	3
CPSC 112	Introduction to Crop Sciences	4
CPSC 226		3
CPSC 270	Applied Entomology	3
CPSC 498	Crop Sci Professional Develpmt	1
NRES 201	Introductory Soils	4
PLPA 204		3
Select one of the following:		3-4
ANSC 100	Intro to Animal Sciences	
FSHN 101	The Science of Food and How it Relates to You	
HORT 100	Introduction to Horticulture	
NRES 102	Introduction to NRES	
TSM 100	Technical Systems in Agr	
Select 12 hours from the following:		12
CPSC 352	Plant Genetics	
CPSC 412	Principles of Crop Production	
CPSC 414	Forage Crops & Pasture Ecology	
CPSC 415	Bioenergy Crops	
CPSC 418	Crop Growth and Management	
CPSC 426	Weed Mgt in Agronomic Crops	
CPSC 431	Plants and Global Change	
CPSC 437	Principles of Agroecology	
CPSC 453	Principles of Plant Breeding	
CPSC 473	Mgmt of Field Crop Insects	
HORT 341	Greenhouse Mgmt and Production	
HORT 360	Vegetable Crop Production	
HORT 361	Small Fruit Production	
HORT 362	Tree Fruit Production	
HORT 466		
PLPA 405	Plant Disease Diagnosis & Mgmt	
PLPA 407		
Select one of the following:		3
ACE 448	Rural Real Estate Appraisal	
NRES 474	Soil and Water Conservation	
NRES 488	Soil Fertility and Fertilizers	
Select one course from each of the following groups:		6-7
ACE 222	Agricultural Marketing	
or ACE 428	Commodity Futures and Options	
ACE 231	Food and Agribusiness Mgt	
or ACE 232	Farm Management	
Total ACES prescribed and elective courses must total 35 hours, of which 20 must be completed in residence.		35

Crop Sciences: Crops, BS

for the degree of Bachelor of Science Major in Crop Sciences, Crops Concentration

department website: https://cropsciences.illinois.edu/
department faculty: https://cropsciences.illinois.edu/people/faculty (https://cropsciences.illinois.edu/people/faculty/)/
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college website: https://aces.illinois.edu/

The crops concentration is designed for students with an interest in agronomic crop plants. Students study the diversity of crop plants- how they grow and how they are grown This concentration prepares students for careers in crop production and marketing, cropping systems management, plant breeding, and seed merchandising, or for entrance into graduate school.

Prescribed Courses including Campus General Education

Code	Title	Hours
Composition I and Speech		
RHET 105	Writing and Research	4
or equivalent - see College Composition I requirement (3 or 4)		
CMN 101	Public Speaking	3
Advanced Composition		
Select from campus approved list.		3-4
Cultural Studies		
Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists.		9

Foreign Language		
Coursework at or above the third level is required for graduation.		
Quantitative Reasoning I		
Select one of the following:		4-5
MATH 220	Calculus	
MATH 221	Calculus I	
MATH 234	Calculus for Business I	
Quantitative Reasoning II		
CPSC 241	Intro to Applied Statistics	3
Natural Sciences and Technology		
See Specific Concentration Requirements		
Humanities and the Arts		
Select from campus approved list		6
Social and Behavioral Sciences		
ACE 100	Introduction to Applied Microeconomics [1]	3-4
or ECON 102	Microeconomic Principles	
Select from campus approved list.		3-4
ACES required		
ACES 101	Contemporary Issues in ACES	2
Required Concentration		**58-79**
Concentration prescribed courses. See specific concentration requirements.		
Total Hours		**126**

[1] ACE 100 or ECON 102 are not required for the Biological Sciences Concentration.

Code	Title	Hours
Natural Sciences and Technology		
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	4
CHEM 104 & CHEM 105	General Chemistry II and General Chemistry Lab II	4
CHEM 232	Elementary Organic Chemistry I	4
or CPSC 382	Organic Chem of Biol Processes	
IB 103	Introduction to Plant Biology	4
Crops Concentration Required		
CPSC 112	Introduction to Crop Sciences	4
CPSC 226		3
CPSC 270	Applied Entomology	3
CPSC 498	Crop Sci Professional Develpmt	1
NRES 201	Introductory Soils	4
PLPA 204		3
Select one of the following:		4-5
MCB 100 & MCB 101	Introductory Microbiology and Intro Microbiology Laboratory	
IB 104	Animal Biology	
Select one of the following:		3-4
ANSC 100	Intro to Animal Sciences	
FSHN 101	The Science of Food and How it Relates to You	
HORT 100	Introduction to Horticulture	
NRES 102	Introduction to NRES	
TSM 100	Technical Systems in Agr	
Select 12 hours from the following:		12
CPSC 261	Biotechnology in Agriculture	
CPSC 265	Genetic Engineering Lab	
CPSC 352	Plant Genetics	
CPSC 412	Principles of Crop Production	
CPSC 414	Forage Crops & Pasture Ecology	
CPSC 415	Bioenergy Crops	
CPSC 418	Crop Growth and Management	
CPSC 426	Weed Mgt in Agronomic Crops	
CPSC 431	Plants and Global Change	
CPSC 437	Principles of Agroecology	
CPSC 452	Advanced Plant Genetics	
CPSC 453	Principles of Plant Breeding	
CPSC 454	Plant Breeding Methods	
CPSC 484	Plant Physiology	
or HORT 421	Horticultural Physiology	
NRES 419	Env and Plant Ecosystems	
PLPA 403	Advanced Plant Pathology	
PLPA 405	Plant Disease Diagnosis & Mgmt	
PLPA 407		
Select six hours from the following:		6
NRES 471	Pedology	
NRES 474	Soil and Water Conservation	
NRES 475	Environmental Microbiology	
NRES 488	Soil Fertility and Fertilizers	
Total ACES prescribed and elective courses must total 35 hours, of which 20 hours must be completed in residence.		35
Total Hours		126

Crop Sciences: Horticultural Food Systems, BS

for the degree of Bachelor of Science Major in Crop Science, Horticultural Food Systems Concentration

department website: https://cropsciences.illinois.edu/
department faculty: https://cropsciences.illinois.edu/people/faculty (https://cropsciences.illinois.edu/people/faculty/)/
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#academicunitstext)
college website: https://aces.illinois.edu/

This concentration provides students with a strong foundation in plant sciences along with specialized knowledge in horticultural fruit and vegetable crop systems at urban, local, and commercial scales. Graduates from this program are prepared for careers as crop consultants, crop protection and production specialists; entrepreneurs in urban and local food systems; greenhouse or farm managers; and as community gardening and horticultural educators. This concentration will also prepare students for graduate studies leading to careers in research, extension, and education. A minimum of 126 total hours is required.

for the degree of Bachelor of Science in Crop Science, Horticultural Food Systems Concentration

Prescribed Courses including Campus General Education

Code	Title	Hours
Composition I and Speech		
RHET 105	Writing and Research	4
or equivalent - see College Composition I requirement (3 or 4)		
CMN 101	Public Speaking	3
Advanced Composition		
Select from campus approved list.		3-4
Cultural Studies		
Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists.		9
Foreign Language		
Coursework at or above the third level is required for graduation.		
Quantitative Reasoning I		
Select one of the following:		4-5
MATH 220	Calculus	
MATH 221	Calculus I	
MATH 234	Calculus for Business I	
Quantitative Reasoning II		
CPSC 241	Intro to Applied Statistics	3
Natural Sciences and Technology		
See Specific Concentration Requirements		
Humanities and the Arts		
Select from campus approved list		6
Social and Behavioral Sciences		
ACE 100	Introduction to Applied Microeconomics [1]	3-4
or ECON 102	Microeconomic Principles	
Select from campus approved list.		3-4
ACES required		
ACES 101	Contemporary Issues in ACES	2
Required Concentration		**58-79**
Concentration prescribed courses. See specific concentration requirements.		
Total Hours		**126**

[1] ACE 100 or ECON 102 are not required for the Biological Sciences Concentration.

Concentration Requirements

Code	Title	Hours
Natural Science and Technology Required		**15-16**
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	
CHEM 104 & CHEM 105	General Chemistry II and General Chemistry Lab II	
CHEM 232	Elementary Organic Chemistry I	
or CPSC 382	Organic Chem of Biol Processes	
IB 103	Introduction to Plant Biology	
Concentration Required Core Courses:		**29**
CPSC 102	Foundational Skills in Crop Sciences	
CPSC 226		
CPSC 270	Applied Entomology	
CPSC 498	Crop Sci Professional Develpmt	
HORT 100	Introduction to Horticulture	
HORT 240	Plant Propagation	
HORT 360	Vegetable Crop Production	
HORT 361	Small Fruit Production	
HORT 362	Tree Fruit Production	
NRES 201	Introductory Soils	
PLPA 204		
Select 7 or 8 hours from the following specialized courses:		**7-8**
CPSC 352	Plant Genetics	
HORT 341	Greenhouse Mgmt and Production	
HORT 442	Plant Nutrition	
CPSC 484	Plant Physiology	
or IB 420	Plant Physiology	
NRES 438	Soil Nutrient Cycling	
or NRES 488	Soil Fertility and Fertilizers	
Select 15 hours from the following focus area electives:		**15**
ACE 231	Food and Agribusiness Mgt	
CPSC 261	Biotechnology in Agriculture	
CPSC 431	Plants and Global Change	
CPSC 437	Principles of Agroecology	
HORT 180		
HORT 205	Local Food Systems	
HORT 301		
HORT 341	Greenhouse Mgmt and Production [1]	
HORT 344	Planting for Biodiversity and Aesthetics	
HORT 363	Postharvest Handling Hort Crop	
HORT 421	Horticultural Physiology [1]	
HORT 434		
HORT 435	Urban Food Production	
HORT 442	Plant Nutrition [1]	
HORT 447	Horticultural Plant Breeding	
HORT 475		
TSM 311	Humanity in the Food Web	
Total ACES prescribed and elective hours must total 35 hours, of which 20 must be completed in residence.		
Total Required Concentration Hours:		**51-52**

[1] *May only be applied here if not used as a Specialized Course.*

Crop Sciences: Plant Biotechnology and Molecular Biology, BS

for the degree of Bachelor of Science Major in Crop Sciences, Plant Biotechnology and Molecular Biology *Concentration*

department website: https://cropsciences.illinois.edu/
department faculty: https://cropsciences.illinois.edu/people/faculty (https://cropsciences.illinois.edu/people/faculty/)/
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college website: https://aces.illinois.edu/

This program will no longer accept applications: Spring 2022

Please see our new major: Plant Biotechnology, BS (p. 350)

The plant biotechnology and molecular biology concentration provides a curriculum that prepares students for careers in biotechnology or for entrance into graduate or professional school. The basic sciences are emphasized, including a strong foundation in biology and genetics. Students are encouraged to participate in undergraduate independent study in a molecular biology laboratory. For those who wish to pursue graduate work later, adequate preparation may be obtained by suitable choices of electives within the framework of this concentration.

The plant biotechnology and molecular biology concentration provides a curriculum that prepares students for careers in biotechnology or for entrance into graduate or professional school. The basic sciences are emphasized, including a strong foundation in biology and genetics. Students are encouraged to participate in undergraduate independent study in a molecular biology laboratory. For those who wish to pursue graduate work later, adequate preparation may be obtained by suitable choices of electives within the framework of this concentration.

Prescribed Courses including Campus General Education

Code	Title	Hours
Composition I and Speech		
RHET 105	Writing and Research	4
or equivalent - see College Composition I requirement (3 or 4)		
CMN 101	Public Speaking	3
Advanced Composition		
Select from campus approved list.		3-4
Cultural Studies		
Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists.		9
Foreign Language		
Coursework at or above the third level is required for graduation.		
Quantitative Reasoning I		
Select one of the following:		4-5
MATH 220	Calculus	
MATH 221	Calculus I	
MATH 234	Calculus for Business I	
Quantitative Reasoning II		
CPSC 241	Intro to Applied Statistics	3
Natural Sciences and Technology		
See Specific Concentration Requirements		
Humanities and the Arts		
Select from campus approved list		6
Social and Behavioral Sciences		
ACE 100	Introduction to Applied Microeconomics [1]	3-4
or ECON 102	Microeconomic Principles	
Select from campus approved list.		3-4
ACES required		
ACES 101	Contemporary Issues in ACES	2
Required Concentration		**58-79**
Concentration prescribed courses. See specific concentration requirements.		
Total Hours		**126**

[1] ACE 100 or ECON 102 are not required for the Biological Sciences Concentration.

Prescribed Courses including Campus General Education

Code	Title	Hours
Composition I and Speech		
RHET 105	Writing and Research	4
or equivalent - see College Composition I requirement (3 or 4)		
CMN 101	Public Speaking	3
Advanced Composition		
Select from campus approved list.		3-4
Cultural Studies		
Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists.		9
Foreign Language		
Coursework at or above the third level is required for graduation.		
Quantitative Reasoning I		
Select one of the following:		4-5
MATH 220	Calculus	
MATH 221	Calculus I	
MATH 234	Calculus for Business I	
Quantitative Reasoning II		
CPSC 241	Intro to Applied Statistics	3
Natural Sciences and Technology		
See Specific Concentration Requirements		
Humanities and the Arts		
Select from campus approved list		6
Social and Behavioral Sciences		
ACE 100	Introduction to Applied Microeconomics [1]	3-4
or ECON 102	Microeconomic Principles	
Select from campus approved list.		3-4
ACES required		
ACES 101	Contemporary Issues in ACES	2
Required Concentration		**58-79**
Concentration prescribed courses. See specific concentration requirements.		
Total Hours		**126**

Code	Title	Hours
Natural Sciences and Technology		
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	4
CHEM 104 & CHEM 105	General Chemistry II and General Chemistry Lab II	4
IB 150	Organismal & Evolutionary Biol	4
Plant Biotechnology and Molecular Biology Concentration Required		
CHEM 232	Elementary Organic Chemistry I	3 or 4
CHEM 233	Elementary Organic Chem Lab I	2
CPSC 112	Introduction to Crop Sciences	4
CPSC 261	Biotechnology in Agriculture	3
CPSC 265	Genetic Engineering Lab	3
CPSC 352	Plant Genetics	4
CPSC 484	Plant Physiology	3
CPSC 498	Crop Sci Professional Develpmt	1
MCB 450	Introductory Biochemistry	3
Select two of the following:		6
CPSC 226		
CPSC 270	Applied Entomology	
PLPA 204		
Select two of the following:		6-8
CPSC 418	Crop Growth and Management	
CPSC 452	Advanced Plant Genetics	
CPSC 453	Principles of Plant Breeding	
CPSC 466	Genomics for Plant Improvement	
HORT 421	Horticultural Physiology	
HORT 442	Plant Nutrition	
HORT 466		
Select one of the following:		3-4
ANSC 100	Intro to Animal Sciences	
FSHN 101	The Science of Food and How it Relates to You	
HORT 100	Introduction to Horticulture	
NRES 102	Introduction to NRES	
TSM 100	Technical Systems in Agr	
Three courses/groups selected from:		10-15
IB 103	Introduction to Plant Biology	
IB 104	Animal Biology	
MCB 100 & MCB 101	Introductory Microbiology and Intro Microbiology Laboratory	
MCB 150 & MCB 151	Molec & Cellular Basis of Life and Molec & Cellular Laboratory	
Total ACES prescribed and elective courses must total 35 hours, of which 20 must be completed in residence.		35

[1] ACE 100 or ECON 102 are not required for the Biological Sciences Concentration.

Crop Sciences: Plant Protection, BS

for the degree of Bachelor of Science Major in Crop Sciences, Plant Protection Concentration

department website: https://cropsciences.illinois.edu/
department faculty: https://cropsciences.illinois.edu/people/faculty (https://cropsciences.illinois.edu/people/faculty/)/
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college website: https://aces.illinois.edu/

The plant protection concentration provides a broad selection of courses in crops, soils, plant diseases, insects and weeds, and the physical sciences. Students learn how to protect plants from the effects of diseases, insects, and weeds. This concentration is designed to prepare students for careers in crop consulting, integrated pest management, and agribusiness management and merchandising, or for entrance into a graduate program.

Prescribed Courses including Campus General Education

Code	Title	Hours
Composition I and Speech		
RHET 105	Writing and Research	4
or equivalent - see College Composition I requirement (3 or 4)		
CMN 101	Public Speaking	3
Advanced Composition		
Select from campus approved list.		3-4
Cultural Studies		
Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists.		9
Foreign Language		
Coursework at or above the third level is required for graduation.		
Quantitative Reasoning I		
Select one of the following:		4-5
MATH 220	Calculus	
MATH 221	Calculus I	
MATH 234	Calculus for Business I	
Quantitative Reasoning II		
CPSC 241	Intro to Applied Statistics	3
Natural Sciences and Technology		
See Specific Concentration Requirements		
Humanities and the Arts		
Select from campus approved list		6
Social and Behavioral Sciences		
ACE 100	Introduction to Applied Microeconomics [1]	3-4
or ECON 102	Microeconomic Principles	
Select from campus approved list.		3-4
ACES required		
ACES 101	Contemporary Issues in ACES	2
Required Concentration		**58-79**
Concentration prescribed courses. See specific concentration requirements.		
Total Hours		**126**

[1] ACE 100 or ECON 102 are not required for the Biological Sciences Concentration.

Code	Title	Hours
Natural Sciences and Technology		
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	4
CHEM 104 & CHEM 105	General Chemistry II and General Chemistry Lab II	4
CHEM 232	Elementary Organic Chemistry I	3-4
or CPSC 382	Organic Chem of Biol Processes	
IB 103	Introduction to Plant Biology	4
Select one of the following:		4-5
MCB 100 & MCB 101	Introductory Microbiology and Intro Microbiology Laboratory	
IB 104	Animal Biology	
Plant Protection Concentration Required		
CPSC 112	Introduction to Crop Sciences	4
CPSC 226		3
CPSC 270	Applied Entomology	3
CPSC 352	Plant Genetics	3-4
or CPSC 484	Plant Physiology	
CPSC 498	Crop Sci Professional Develpmt	1
NRES 201	Introductory Soils	4
NRES 488	Soil Fertility and Fertilizers	3
PLPA 204		3
Select one of the following:		3-4
ANSC 100	Intro to Animal Sciences	
HORT 100	Introduction to Horticulture	
FSHN 101	The Science of Food and How it Relates to You	
NRES 102	Introduction to NRES	
TSM 100	Technical Systems in Agr	
Select one of the following:		2-3
CPSC 418	Crop Growth and Management	
HORT 361	Small Fruit Production	
HORT 362	Tree Fruit Production	
Select 12 hours from the following:		12
CPSC 426	Weed Mgt in Agronomic Crops	
CPSC 431	Plants and Global Change	
CPSC 473	Mgmt of Field Crop Insects	
CPSC 475	Insect Pathology	
IB 444	Insect Ecology	
IB 468	Insect Classification and Evol	
IB 482	Insect Pest Management	
PLPA 403	Advanced Plant Pathology	
PLPA 407		
TSM 465	Chemical Applications Systems	
Total ACES prescribed and elective courses must total 35 hours, of which 20 must be completed in residence.		35

Dance, BA

for the degree of Bachelor of Arts Major in Dance

department website: http://dance.illinois.edu/
overview of college admissions & requirements: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/
email: dance@illinois.edu

The BA curriculum in dance is designed to provide an integrated and individualized approach to undergraduate studies of dance. The degree is designed for students who want to explore interdisciplinary approaches to art-making, and/or simultaneously pursue a minor or major in another discipline. Students will study three core areas in Dance: Technique, Creative Process, and Dance Academics. Students will identify at least one other key area of interest such as Theater, Music, Anthropology, Business, Art & Design, Environment, Film, Gender Studies, Cultural Studies, etc., and will choose a Major, Minor or Focused Electives in this area of study under consultation with an advisor. Under the mentorship of a faculty member, students will create a BA Capstone Project in their senior year as a synthesis of the studies within dance and another area of study.

Students pursuing a Dance degree at the University of Illinois must be admitted to the BFA in Dance (audition required). Once admitted, those desiring a broader education may choose to apply for admittance into the BA in Dance, rather than continuing in the BFA.

for the degree of Bachelor of Arts Major in Dance

Minimum hours required for graduation: 120 hours

Code	Title	Hours
General Education Requirements		
Composition I		4-6
Advanced Composition		3-4
Humanities & the Arts		6-8
Social & Behavioral Sciences		6-8
Cultural Studies: Non-Western Cultures		3-4
Cultural Studies: U.S. Minority Cultures		3-4
Cultural Studies: Western/Comparative Culture(s)		3-4
Natural Sciences & Technology		6-10
Quantitative Reasoning		6-9
The Language Requirement may be satisfied by:		
-Successfully completing a third-semester college-level course in a language other than English;		
-Successful completion, in high school, of the third year of a language other than English; or		
-Demonstrating proficiency at the third-semester level in a language proficiency examination approved by the College of Liberal Arts and Sciences and the appropriate department.		
Foundation Courses		
FAA 101	Arts at Illinois	1
DANC 150	Orientation to Dance	2

Code	Title	Hours
Technique/Physical Practice		**18**
DANC 160	Beg Contemp Modern Tech Core (1-3 hours per enrollment, repeatable) [1]	4
DANC 260	Int Contemp Modern Tech Core (1-3 hours per enrollment, repeatable) [1]	4
Choose from the following:		10
DANC 160 Beg Contemp Modern Tech Core [1]		
DANC 166	Beginning Ballet Tech Core	
DANC 167	Beginning Ballet Tech Elect	
DANC 260 Int Contemp Modern Tech Core [1]		
DANC 210	Int Jazz Technique	
DANC 211	Int Hip Hop Technique	
DANC 215	Int Tap Dance Technique	
DANC 256	Choreographic Laboratory Intermediate	
DANC 261	Int Contemp Modern Tech Elect	
DANC 266	Intermediate Ballet Tech Core	
DANC 267	Intermediate Ballet Tech Elect	
DANC 301	Yoga Fundamentals	
DANC 310	Dancing Techniques/Dance Majors:	
DANC 360	Int/Adv Contemp Mod Tech Core	
DANC 361	Int/Adv Contemp Mod Tech Elect	
DANC 366	Int/Adv Ballet Tech Core	
DANC 367	Int/Adv Ballet Tech Elect	
DANC 401	Alexander Tech for Dancers	
DANC 402	Alexander Technique Practicum	
DANC 410	Advanced Jazz Technique	
DANC 411	Adv Hip Hop Technique	
DANC 456	Choreographic Laboratory Advanced	
DANC 460	Adv Contemp Modern Tech Core	
DANC 461	Adv Contemp Modern Tech Elect (Modern--variable credit)	
DANC 466	Advanced Ballet Tech Core	
DANC 467	Advanced Ballet Tech Elect (variable credit)	
Creative Process/Performance and Production		**11**
DANC 262	Choreographic Process I	2
DANC 362	Choreographic Process II	2
Choose 2 from the following Improvisation courses:		
DANC 259	Contact Improvisation for Actors, Musicians and Dancers	
DANC 363	Advanced Improvisation	
DANC 459	Contact Improv Act/Mus/Dan II	
DANC 465	Screendance	
Choose 2 from the following Performance courses:		2
DANC 232	Repertory Company	
DANC 220	Perf Pract Student Works I	
DANC 221	Performance in Grad Thesis I	
DANC 222	Perf Pract November I	
DANC 223	Perf Pract February I	
DANC 420	Perf Pract Student Works II	
DANC 421	Performance in Grad Thesis II	
DANC 422	Perf Pract November II	
DANC 423	Perf Pract February II (Variable)	
DANC 424	Collaborative Performance	
Choose 3 from the following Production courses:		3
DANC 131	Production Practicum I	
DANC 231	Production Practicum II	
DANC 330	Dance Documentation (variable credits)	
DANC 331	Production Practicum III	
DANC 431	Production Practicum IV	
Dance Academics		**18**
Choose 6 hours from the following History courses:		6
DANC 100	Intro to Contemporary Dance	
DANC 240	Dance History	
DANC 441	Dance History Seminar	
Choose 12 hours from the following Theory/Pedagogy/History courses:		12
DANC 125	Black Dances of Resistance	
DANC 200	Explore Music through Dance	
DANC 441	Dance History Seminar (if not selected above)	
DANC 340	Dancing Black Popular Culture	
DANC 400	Viewing Dance	
DANC 268	Music Theory for Dancers	
DANC 245	Introduction to Somatics	
DANC 345	Dance Anatomy and Kinesiology	
DANC 450	Teaching Workshop	
DANC 350	Creative Dance for Children	
DANC 375	Production in Dance	
DANC 199	Undergraduate Open Seminar	
DANC 451	Ind Study and Special Topics	
DANC 497	BA Capstone Project [2]	3
Hours in non-Dance classes, chosen in consultation with an advisor		**15**
Open electives as needed to total 120 hours minimum		**120**

[1] DANC 160 and 260 must be taken for at least 4 hours each but are repeatable beyond 4 hours.

[2] Students will enroll in one credit hour of DANC 497, BA Capstone Project in fall of their senior year and two credit hours of DANC 497 in spring of their senior year for a total of three credit hours.

Learning Outcomes: Dance, BA

Learning outcomes for the degree of Bachelor of Arts Major in Dance

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Upon graduation the BA student will be able to:

1. Dance with physical, technical and performance skills.
2. Utilize knowledge of anatomical and somatic approaches in theory and practice.
3. Engage in creative processes and collaborate across domains.
4. Produce a capstone project that reflects synthesis of studies in dance and other fields.
5. Employ diverse modes of thinking, both orally and in writing, to communicate ideas relating to dance and other fields.

6. Demonstrate critical self-reflection, curiosity, self-motivation, and entrepreneurial spirit in creative processes and final products.

Dance, BFA

for the degree of Bachelor of Fine Arts Major in Dance

department website: http://dance.illinois.edu/
overview of college admissions & requirements: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/
email: dance@illinois.edu

The BFA curriculum in dance is an intensive program of study for the dedicated student, offering coursework in the areas of technique, composition, and performance. The curriculum also includes requirements in production, improvisation, music theory and literature for dance, teaching, history, movement sciences, and repertory. Electives may be taken in additional ballet and modern classes, tap, jazz, improvisation, contact improvisation, global dance forms, yoga, Alexander Technique, partnering and Laban movement analysis, Labanotation, screendance, choreographer-composer workshop, dance technology, and independent study.

Program requirements include core daily technique classes consisting of three modern and two ballet classes per week each semester in residence, plus elective technique classes for a minimum of one additional credit hour per semester. A minimum of two courses in additional dance forms (jazz, tap, world dance, etc.) is required. Majors must achieve the advanced technical level in modern and the intermediate level in ballet for a minimum of two semesters prior to graduation. The improvisation/composition sequence consists of a minimum of 11 hours of studio courses culminating in the performance of a senior choreographic project. A minimum of 6 hours of credit is required in performance/repertory courses. The curriculum includes as much as 20 hours of credit in professional electives, which may be taken in professional dance courses and/or related arts and sciences.

Evaluation of majors is an ongoing process. Continued enrollment in the program is contingent upon satisfactory performance. A student is expected to maintain a minimum 2.75 grade point average in all professional course work and a 3.0 cumulative average in studio classes in order to remain in good standing in the department.

It is possible for transfer students to complete degree requirements in a three-year period contingent upon prior completion of general education requirements and the fulfillment of the advanced technique requirement for two semesters prior to graduation.

A total of 130 hours is required for this degree.

for the degree of Bachelor of Fine Arts Major in Dance

Minimum hours for graduation: 130 hours.

Code	Title	Hours
General Education Requirements		
Composition I		4-6
Advanced Composition		3-4
Humanities & the Arts		6-8
Social & Behavioral Sciences		6-8
Cultural Studies: Non-Western Cultures		3-4
Cultural Studies: U.S. Minority Cultures		3-4
Cultural Studies: Western/Comparative Culture(s)		3-4
Natural Sciences & Technology		6-10
Quantitative Reasoning		6-9
The Language Requirement may be satisfied by:		
-Successfully completing a third-semester college-level course in a language other than English;		
-Successful completion, in high school, of the third year of a language other than English; or		
-Demonstrating proficiency at the third-semester level in a language proficiency examination approved by the College of Liberal Arts and Sciences and the appropriate department.		
Foundation Courses		
FAA 101	Arts at Illinois	1
DANC 150	Orientation to Dance	2

Code	Title	Hours
Technique/Physical Practice		**32**
Four credit hours per semester, to include core technique classes each semester in residence, consisting of three modern and two ballet classes per week (3 hours of credit), plus elective technique courses for a minimum of one additional credit hour per semester.		
DANC 160	Beg Contemp Modern Tech Core	1 to 3
DANC 166	Beginning Ballet Tech Core	1 or 2
DANC 167	Beginning Ballet Tech Elect	1 or 2
DANC 210	Int Jazz Technique	1
DANC 211	Int Hip Hop Technique	1
DANC 215	Int Tap Dance Technique	1
DANC 260	Int Contemp Modern Tech Core	1 to 3
DANC 261	Int Contemp Modern Tech Elect	1 to 3
DANC 256	Choreographic Laboratory Intermediate	1 to 2
DANC 266	Intermediate Ballet Tech Core	1 or 2
DANC 267	Intermediate Ballet Tech Elect	1 or 2
DANC 360	Int/Adv Contemp Mod Tech Core	1 to 3
DANC 361	Int/Adv Contemp Mod Tech Elect	1 to 3
DANC 366	Int/Adv Ballet Tech Core	1 or 2
DANC 367	Int/Adv Ballet Tech Elect	1 or 2
DANC 411	Adv Hip Hop Technique	1
DANC 456	Choreographic Laboratory Advanced	1 to 2
DANC 459	Contact Improv Act/Mus/Dan II	1 or 2
DANC 460	Adv Contemp Modern Tech Core	1 to 3
DANC 461	Adv Contemp Modern Tech Elect	1 to 3
DANC 466	Advanced Ballet Tech Core	1 to 3
DANC 467	Advanced Ballet Tech Elect	1 to 3
A minimum of two courses (two credit hours) from the following list:		
DANC 210	Int Jazz Technique	
DANC 211	Int Hip Hop Technique	
DANC 212	Musical Theater Dance	
DANC 215	Int Tap Dance Technique	
DANC 310	Dancing Techniques/Dance Majors:	
DANC 410	Advanced Jazz Technique	

DANC 411	Adv Hip Hop Technique	
Creative Process/Performance and Production		**17-20**
Choose 1 of the following Improvisation courses:		
DANC 259	Contact Improvisation for Actors, Musicians and Dancers	1
Creative Process:		
DANC 262	Choreographic Process I	2
Choose a minimum of 3 courses from the following Advanced Creative Process courses. Courses listed below are repeatable:		
DANC 362	Choreographic Process II	
DANC 363	Advanced Improvisation	
DANC 464	Composer-Chor Workshop	
DANC 465	Screendance	
Choose 6 hours from the following Performance courses: [1]		
DANC 220	Perf Pract Student Works I	
DANC 221	Performance in Grad Thesis I	
DANC 222	Perf Pract November I	
DANC 223	Perf Pract February I	
DANC 232	Repertory Company	
DANC 420	Perf Pract Student Works II	
DANC 421	Performance in Grad Thesis II	
DANC 422	Perf Pract November II	
DANC 423	Perf Pract February II	
DANC 424	Collaborative Performance	
Production		
DANC 375	Production in Dance	1
Choose 4 hours from the following Production courses:		
DANC 131	Production Practicum I	
DANC 231	Production Practicum II	
DANC 330	Dance Documentation	
DANC 331	Production Practicum III	
DANC 431	Production Practicum IV	
Dance Academics		**20**
Dance history/theory		
DANC 240	Dance History	3
Select one of the following:		
ANTH 363	Anth of Dance/Movement	
DANC 340	Dancing Black Popular Culture	
DANC 441	Dance History Seminar	
Six hours of Music for Dance courses:		
DANC 268	Music Theory for Dancers	3
Select one of the following (all meet a general education requirement):		
MUS 130	Music Then and Now	
MUS 132	Popular Music Studies	
MUS 133	Introduction to World Music	
Four hours of Dance Sciences courses:		
DANC 245	Introduction to Somatics	1
DANC 345	Dance Anatomy and Kinesiology	3
Choose 3 hours from the following Dance Education courses:		
DANC 350	Creative Dance for Children	
DANC 450	Teaching Workshop	
Current issues and topics		
DANC 495	Senior Career Seminar	1
Senior Capstone Project		**4**
DANC 498	Senior Thesis Production	1 or 2
DANC 499	Senior Thesis Project	1 to 2
Professional Electives [2]		**6-9**
Focused Electives, chosen in consultation with an advisor. Additional courses in dance such as technique, choreography, performance, "non-categorized" courses in dance, coursework in Music, Theater, or Art.		
Electives as needed to reach a minimum of 130 hours		**130**

[1] A maximum of 16 hours may be accumulated toward degree requirements in DANC 220, DANC 221, DANC 222, DANC 223, DANC 420, DANC 421, DANC 422, DANC 423.

[2] A minimum of 6 - 9 hours must be taken in the area of professional electives, to bring total of Dance courses to 84 hours. It is strongly recommended that dance majors consider taking theatre/arts courses outside of the Department of Dance offerings.

Learning Outcomes: Dance, BFA

Learning outcomes for the degree of Bachelor of Fine Arts Major in Dance

Upon graduation the BFA student will be able to:

1. Dance with substantial physicality, exhibiting technical and performance skill, musicality, and creativity.
2. Utilize knowledge of anatomical and somatic approaches in theory and practice.
3. Locate a creative process, conduct choreographic inquiries, and produce a well-conceived dance work for a performance event.
4. Teach a well-structured movement class with an understanding of pedagogical principles.
5. Employ diverse modes of thinking, both verbally and in writing, to communicate ideas relating to dance.
6. Understand basic technology and its application to dance making, teaching, research, and public relations.

Early Childhood Education, BS

for the degree of Bachelor of Science Major in Early Childhood Education

department office: Curriculum & Instruction
311 Education Building
1310 South Sixth
Champaign, IL 61820
phone: (217) 244-8286

department website: https://education.illinois.edu/ci (http://education.illinois.edu/ci/)
department faculty: Curriculum & Instruction Faculty (https://education.illinois.edu/faculty-finder/ci/)
overview of college admissions & requirements: College of Education (https://education.illinois.edu/programs/undergrad/programs-degrees/ci-ece-ug/)
college website: https://education.illinois.edu/ (http://education.illinois.edu/)

Curriculum Preparatory to Early Childhood School Teaching

This program prepares student candidates to teach birth to grade 2. A minimum of 120 semester hours of credit is necessary for graduation[1].

Students pursuing teacher licensure programs in the College of Education (COE) must meet requirements in a series of sequential gateways. Included in the gateway requirements are successful completion of specified coursework, achievement of appropriate grade point averages, requirements for clinical experiences, and appropriate tests for the licensure area. Meeting all Gateway requirements leads to degree and licensure completion.

In order to be recommended for licensure, candidates are required to maintain University of Illinois at Urbana-Champaign, cumulative, content area, and professional education grade point averages of 2.5 (A=4.0). Candidates in teaching licensure programs must maintain a C or better in ALL content and professional education coursework. Candidates should consult their adviser or the Council on Teacher Education for the list of courses used to compute these grade point averages. For teacher education licensure requirements applicable to all curricula, see the Council on Teacher Education (http://www.cote.illinois.edu/).

Licensure requirements are subject to change without notice as a result of new mandates from the Illinois State Board of Education or the Illinois General Assembly.

This is a Gateways to Opportunity (http://www.ilgateways.com/en/) approved program.

for the degree of Bachelor of Science Major in Early Childhood Education

Curriculum Preparatory to Early Childhood School Teaching

This program prepares student candidates to teach birth to grade 2. A minimum of 120 semester hours of credit is necessary for graduation[1].

Students pursuing teacher licensure programs in the College of Education (COE) must meet requirements in a series of sequential gateways. Included in the gateway requirements are successful completion of specified coursework, achievement of appropriate grade point averages, requirements for clinical experiences, and appropriate tests for the licensure area. Meeting all Gateway requirements leads to degree and licensure completion.

In order to be recommended for licensure, candidates are required to maintain University of Illinois at Urbana-Champaign, cumulative, content area, and professional education grade point averages of 2.5 (A=4.0). Candidates in teaching licensure programs must maintain a C or better in ALL content and professional education coursework. Candidates should consult their adviser or the Council on Teacher Education for the list of courses used to compute these grade point averages. For teacher education licensure requirements applicable to all curricula, see the Council on Teacher Education (http://www.cote.illinois.edu/).

Licensure requirements are subject to change without notice as a result of new mandates from the Illinois State Board of Education or the Illinois General Assembly.

This is a Gateways to Opportunity (http://www.ilgateways.com/en/) approved program.

Degree Requirements

Code	Title	Hours
Orientation Seminar		
EDUC 101	Education Orientation Seminar	1

The following degree requirements also meet general education course requirements and must be selected from the campus general education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) course list.

Code	Title	Hours
Composition I		
Composition I		4-6
Advanced Composition		
Advanced Composition		3-4
Natural Sciences and Technology [1]		
Life Science		3-4
Physical Science		3-4
Earth and Space Science [2]		3-4
Cultural Studies [3]		
Western/Comparative Cultures		3-4
U.S. Minority Cultures		3-4
Non-Western		3-4
Social and Behavioral Sciences [4]		
Social & Behavioral Sciences		6-8
Quantitative Reasoning		
Quantitative Reasoning I		3-5
Quantitative Reasoning I or II		3-4
Humanities and the Arts [5]		
Humanities & the Arts		6
Language other than English		
Three years of one language other than English in high school or completion of the third semester of college-level language.		0-12
Electives		
Elective Courses (if needed to complete the 120 hour graduation requirement)		0-6
Professional Education		
ART 201	Art in Early Childhood	2
CI 415	Language Varieties, Cultures and Learning	3
CI 420	Foundations of Early Childhood Education	5
CI 421	Principles and Practices in Early Childhood Education	3
CI 422	Families, Communities, Schools	3
CI 424	Child Development & Technology	3
CI 443	Mathematics in Early Childhood Education (Mathematics in Early Childhood)	3

CI 445	Science and Social Studies Inquiry (Science and Social Studies Inquiry)	3
CI 465	Language Literacy in Early Childhood Education I	3
CI 466	Language Literacy in Early Childhood Education II	3
EDPR 420	Ed Prac Students with Sp Needs	4
EDPR 432	Ed Prac in EC & ELED	12
EDUC 201 & EDUC 202	Identity and Difference in Education and Social Justice, School and Society	6
EPSY 201	Educational Psychology [5]	3
EPSY 401	Child Language and Education	3
HDFS 301	Infancy & Early Childhood	4
MUS 345	Mus Methods in Early Childhood	2
SPED 414	Assessment in Early Childhood Special Education	3
SPED 450	Introduction to Early Childhood Special Education	2
SPED 465	Curriculum and Methods in Early Childhood Special Education	3
Total minimum hours for degree [6]		**120**

[1] *Required to meet ISBE Science requirement. Exclusions apply including, but not limited to: Horticulture, Dance, and Urban Planning. Must be a science rubric. Consult with advisors for further information.*

[2] *Courses must be selected from a* College of Education approved list *(*http://education.illinois.edu/docs/default-source/saao-documents/ece-earth_space-recommended.pdf?sfvrsn=0*).*

[3] *Across these gen ed categories, students will need to take at least one course from each of the following four different rubrics: ECON, GEOG, HIST, PS to meet the ISBE Social Science requirement.*

[4] A maximum of six hours of upper-level ROTC coursework can count toward the degree as free electives.

[5] *PSYC 100 is a prerequisite for EPSY 201.*

[6] *The total hours required for the degree may be higher for students who have not already completed the language other than English requirement.*

Learning Outcomes: Early Childhood Education, BS

Learning Outcomes for the degree of Bachelor of Science Major in Early Childhood Education

1. Students will acquire deep knowledge of child development as it relates to the field of Education.
2. Students will effectively plan and implement relevant, culturally responsive and developmentally appropriate instruction children from infancy to age eight.
3. Students will use assessment data to drive decisions and solve problems in and out of the classroom.
4. Students will display the expectations of professionalism related to success in the field of education and beyond (fairness, commitment to collaboration, community, reflective practice, and attention to 21st century skills and practices)

Earth, Society, & Environmental Sustainability, BSLAS

for the degree of Bachelor Science in Liberal Arts and Sciences Major in Earth, Society, & Environmental Sustainability

school website: https://www.earth.illinois.edu/
school faculty: Earth, Society & Environment Faculty (https://earth.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
E-mail: sese-info@illinois.edu

Students select one concentration in consultation with an academic advisor:

- Science of the Earth System (SES) Concentration (p. 161)
- Society and the Environment (SAE) Concentration (p. 162)

On-campus UIUC students can transfer to this degree without any special requirements.

Off-campus students who plan to transfer to this degree should have completed, or have in progress, the following:

- the Composition 1 requirement.
- the third level of high school foreign language or second level of college foreign language.

It is highly recommended that off-campus students complete the following requirements before transferring to the online degree - students who have not completed the following requirements may have to take additional coursework (either at UIUC or elsewhere) and should consult the program advisor:

- the UIUC LAS language requirement should be satisfied.
- the General Education Distribution Requirements of the College of Liberal Arts and Sciences should be completed.
- the Cognate Coursework should be completed.

Earth, Society, & Environmental Sustainability: Science of the Earth System (SES), BSLAS

for the degree of Bachelor Science in Liberal Arts and Sciences Major in Earth, Society, & Environmental Sustainability, Science of the Earth System Concentration

department website: https://www.earth.illinois.edu/
department faculty: Earth, Society & Environment Faculty (https://earth.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
E-mail: sese-info@illinois.edu

All students wishing to attend graduate school in any field should discuss necessary supplementary course work with their advisor as early as possible.

A Major Plan of Study form must be completed and submitted to the LAS Student Affairs Office before the end of the fifth semester (60-75 hours). Study abroad courses may be substituted for major and minor requirements with approval of advisor.

Departmental distinction: Students who maintain grade point averages of at least 3.3 in all courses within the major and who undertake a faculty-guided individual research project for credit in the major are recommended for graduation with distinction.

for the degree of Bachelor Science in Liberal Arts and Sciences Major in Earth, Society, & Environmental Sustainability, Science of the Earth System Concentration

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All students wishing to attend graduate school in any field should discuss necessary supplementary course work with their advisor as early as possible.

A Major Plan of Study form must be completed and submitted to the LAS Student Affairs Office before the end of the fifth semester (60-75 hours). Study abroad courses may be substituted for major and minor requirements with approval of advisor.

Distinction: A minimum cumulative grade point average of 3.3, and have also completed an approved independent study project, approved senior thesis, or approved capstone.
High Distinction: A minimum cumulative grade point average of 3.5, and have also completed an approved independent study project, approved senior thesis, or approved capstone.
Highest Distinction: A minimum cumulative grade point average of 3.7, and also completed an approved senior thesis or approved research capstone.

ESE Core Requirements:
General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 48-58 hours. Twelve hours of 300- and 400-level in the major must be taken on this campus. Substitutions may be made with advisor approval.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
ESES Introductory Core: Students take one approved introductory or advanced course from at least four of the following five areas. Approved courses within these areas are available from the ESE advisor [1]		12-14
Environment and the Human Response		
Sustainability, Policy, and Global Change		
Earth's Physical Systems, Resources, and Hazards		
Visualizing the Earth System		
Earth's Biosphere and Ecology		
ESE coursework		6
GEOG 379	Intro to GIS Systems	
ESE 200	Earth Systems	
Advanced Courses		15-20
A minimum of five 300- and 400-level courses, from the approved list and in an academically coherent program approved by the advisor, are required. At least three of these five advanced courses must be listed or cross-listed as an ESE or ENSU course. Courses taken to satisfy the "ESE Introductory Core" requirement cannot simultaneously be used to satisfy the Advanced Course requirement. These courses should be used to help meet the LAS requirement of 21 hours of 300- or 400-level courses overall, and the 12 hours of 300- or 400- level courses in the major. It is strongly recommended that students complete the LAS requirement with 21 hours of 300- or 400-level courses related to the ESE curriculum.		

[1] *OR in the ESE School office OR at* http://www.earth.illinois.edu/students/guides *(*http://www.earth.illinois.edu/students/guides/*)*

Science of the Earth System Concentration Requirements:

Code	Title	Hours
Cognate Course Work		15-18
CHEM 102	General Chemistry I	
or CHEM 202	Accelerated Chemistry I	
CHEM 103	General Chemistry Lab I	
or CHEM 203	Accelerated Chemistry Lab I	
MATH 220	Calculus	
or MATH 221	Calculus I	
STAT 100	Statistics	
PHYS 101	College Physics: Mech & Heat	
or PHYS 211	University Physics: Mechanics	
Highly recommended: ECON 102		

Earth, Society, & Environmental Sustainability: Society and the Environment (SAE), BSLAS

for the degree of Bachelor Science in Liberal Arts and Sciences Major in Earth, Society, & Environmental Sustainability, Society and the Environment Concentration

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school website: https://www.earth.illinois.edu/
school faculty: Earth, Society & Environment Faculty (https://earth.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
E-mail: sese-info@illinois.edu

All students wishing to attend graduate school in any field should discuss necessary supplementary course work with their advisor as early as possible.

A Major Plan of Study form must be completed and submitted to the LAS Student Affairs Office before the end of the fifth semester (60-75 hours). Study abroad courses may be substituted for major and minor requirements with approval of advisor.

Departmental distinction: Students who maintain grade point averages of at least 3.3 in all courses within the major and who undertake a faculty-guided individual research project for credit in the major are recommended for graduation with distinction.

for the degree of Bachelor Science in Liberal Arts and Sciences Major in Earth, Society, & Environmental Sustainability, Society and the Environment Concentration

All students wishing to attend graduate school in any field should discuss necessary supplementary course work with their advisor as early as possible.

A Major Plan of Study form must be completed and submitted to the LAS Student Affairs Office before the end of the fifth semester (60-75 hours). Study abroad courses may be substituted for major and minor requirements with approval of advisor.

Distinction: A minimum cumulative grade point average of 3.3, and have also completed an approved independent study project, approved senior thesis, or approved capstone.
High Distinction: A minimum cumulative grade point average of 3.5, and have also completed an approved independent study project, approved senior thesis, or approved capstone.
Highest Distinction: A minimum cumulative grade point average of 3.7, and also completed an approved senior thesis or approved research capstone.
General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 48-58 hours. Twelve hours of 300- and 400-level in the major must be taken on this campus. Substitutions may be made with advisor approval.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
ESES Introductory Core: Students take one approved introductory or advanced course from at least four of the following five areas. Approved courses within these areas are available from the ESE advisor [1]		12-14
Environment and the Human Response		
Sustainability, Policy, and Global Change		
Earth's Physical Systems, Resources, and Hazards		
Visualizing the Earth System		
Earth's Biosphere and Ecology		
ESE coursework		6
GEOG 379	Intro to GIS Systems	
ESE 200	Earth Systems	
Advanced Courses		15-20

A minimum of five 300- and 400-level courses, from the approved list and in an academically coherent program approved by the advisor, are required. At least three of these five advanced courses must be listed or cross-listed as an ESE or ENSU course. Courses taken to satisfy the "ESE Introductory Core" requirement cannot simultaneously be used to satisfy the Advanced Course requirement. These courses should be used to help meet the LAS requirement of 21 hours of 300- or 400-level courses overall, and the 12 hours of 300- or 400- level courses in the major. It is strongly recommended that students complete the LAS requirement with 21 hours of 300- or 400-level courses related to the ESE curriculum.

[1] *OR in the ESE School office OR at* http://www.earth.illinois.edu/students/guides *(*http://www.earth.illinois.edu/students/guides/*)*

Society and the Environment Concentration Requirements:

Code	Title	Hours
Cognate Course Work		16-18
10-12 hours-Introductory Social Science (Select three courses from approved list)		
3 hours-Statistics (Select one course from approved list)		
3 hours-Economics: ECON 102		
Highly recommended: CHEM 101 or CHEM 102		

Learning Outcomes: Earth, Society, & Environmental Sustainability, BSLAS

Learning Outcomes for the degree of Bachelor Science in Liberal Arts and Sciences Major in Earth, Society, & Environmental Sustainability

1. Be able to recognize, critique and implement commonly accepted Sustainability models and ideas in a wide variety of settings, using systems thinking to link social and natural science concepts.
2. Have a fundamental understanding of the underlying natural science (SES concentration) or social science (SAE concentration) concepts; being able to recognize and apply appropriate scientific methods (SES concentration) and social science methods (SAE concentration).
3. Use quantitative methods to describe, understand and evaluate theoretical and applied issues in environmental and sustainability study; this includes direct calculation, working with data, and using quantitative models.
4. Be able to critically evaluate and then communicate environmental and sustainability concepts to both specialized and wide audiences.
5. Prepare students for professional work in environmental and sustainability practice, such as laboratory and field techniques, apprehending and implementing Geographic Information Sciences (including the use of appropriate software), and quantitative and qualitative methods.

East Asian Languages & Cultures, BALAS

for the degree of Bachelor of Arts in Liberal Arts & Sciences : Major in East Asian Languages & Cultures

department website: https://ealc.illinois.edu/
department faculty: East Asian Languages & Cultures Faculty (https://ealc.illinois.edu/directory/faculty-by-area/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://www.las.illinois.edu/

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in East Asian Languages & Cultures

A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office before the end of the fifth semester (60-75 hours). Please see your advisor.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: normally equates to 33-57 hours. Twelve hours of 300- or 400-level courses in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
One year of a single East Asian Language beyond the intermediate level (i.e., beyond CHIN 204 or CHIN 242; JAPN 204; KOR 204 or KOR 241). [1]		10-30
Disciplinary and period courses: [2]		12
EALC 120	East Asian Civilizations	
One course on East Asia dealing substantially with the period before 1800		
One course in East Asian history		
One course in East Asian literature		
Advanced courses:		12
Four non-language courses at the 300- or 400-level.		
EALC 398	Colloquium in EALC (or an approved senior project.) [3]	3

[1] *Students testing out of the advanced language requirement (306-level) must take two additional non-language courses from East-Asian-related offerings.*

[2] *No course may be counted more than once toward these requirements and at least two courses must be at the 200-level or above.*

[3] *Students selecting the senior project option must submit to the Director of Undergraduate Study a proposal outlining the project to be undertaken, the course in which the project is to be completed and an agreement signed by the faculty member supervising the project.*

Learning Outcomes: East Asian Languages & Cultures, BALAS

Learning Outcomes for the degree of Bachelor of Arts in Liberal Arts & Sciences : Major in East Asian Languages & Cultures

1. **Linguistic Competence and Cultural Understanding:** EALC students will effectively deal with the routine tasks and social situations and express personal meaning in the language of a target country in a linguistically and culturally appropriate manner.
2. **Intellectual Reasoning and Knowledge:** EALC students will demonstrate broad and deep knowledge of East Asian cultures through coursework in more than one discipline.
3. **Creative Inquiry and Discovery:** EALC students will develop a critical and reflective orientation toward social, cultural, and linguistic differences and apply the knowledge to promote inquiry, discover solutions, and generate new ideas and creative works in the form of research.

Econometrics & Quantitative Economics, BSLAS

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Econometrics & Quantitative Economics

department website: https://economics.illinois.edu/
department faculty: Economics Faculty (https://economics.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: econug@illinois.edu

Undergraduate Degree Programs in Economics

- Econometrics & Quantitative Economics, BSLAS (p. 164)
- Economics, BALAS (p. 165)
- Computer Science & Economics, BSLAS (p. 136)

For further information, please visit the Economics undergraduate program page (http://www.economics.illinois.edu/undergrad/info/).

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Econometrics & Quantitative Economics

General education: Students must complete the Campus General Education (https://courses.illinois.edu/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Minimum required major and supporting course work normally equates to 63-65 hours including a minimum of 30 hours of economics courses excluding ECON 199, ECON 220, ECON 398, and ECON 399. Twelve (12) hours of 300- and 400-level courses in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours

Code	Title	Hours
Economics Courses including:		**30**
ECON 102	Microeconomic Principles	3
ECON 103	Macroeconomic Principles	3
ECON 198	Economics at Illinois	1
ECON 202	Economic Statistics I	3
ECON 203	Economic Statistics II	3
ECON 302	Inter Microeconomic Theory	3
ECON 303	Inter Macroeconomic Theory	3
11 additional hours of economics at the 300- or 400-level [1]		

12 hours of economics at the 400-level chosen from a set of courses on econometrics, quantitative economics, computational economics, and mathematical economics.		**12**
Mathematics, Statistics, and Computer Science Courses including:		**15-16**
MATH 220	Calculus	5
or MATH 221	Calculus I	
MATH 231	Calculus II	3
MATH 225	Introductory Matrix Theory	2
Statistics		3
STAT 385	Statistics Programming Methods	
CS 105	Intro Computing: Non-Tech (or CS 101 or CS 125)	3
Supporting course work		**6**
Six hours of courses outside of economics but related to econometrics, quantitative economics, computational economics, or mathematical economics. This would include additional courses in mathematics, statistics, or computer science.		
Total Hours		**63-65**

[1] *Excluding ECON 398 and ECON 399.*

Economics, BALAS

for the degree of Bachelor of Arts in Liberal Arts and Sciences Major in Economics

department website: https://economics.illinois.edu/
department faculty: Economics Faculty (https://economics.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: econug@illinois.edu

Undergraduate Degree Programs in Economics

- Econometrics & Quantitative Economics, BSLAS (p. 164)
- Economics, BALAS (p. 165)
- Computer Science & Economics, BSLAS (p. 136)

For further information, please visit the Economics undergraduate program page (http://www.economics.illinois.edu/undergrad/info/).

for the degree of Bachelor of Arts in Liberal Arts and Sciences Major in Economics

A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office before the end of the fifth semester (60-75 hours). Please see your advisor.

Departmental distinction: A student must have a grade point average of at least 3.25 overall and at least 3.5 in economics; complete a research project (e.g., complete ECON 399); and be recommended by the faculty research adviser.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 55-56 hours including a minimum of 30 hours of economics courses excluding ECON 199**,** ECON 220**,** ECON 398**, and** ECON 399**. Twelve hours of 300- and 400-level in the major must be taken on this campus.**
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Economics Courses including:		30
ECON 102	Microeconomic Principles	
ECON 103	Macroeconomic Principles	
ECON 198	Economics at Illinois	
ECON 202	Economic Statistics I	
ECON 203	Economic Statistics II	
ECON 302	Inter Microeconomic Theory	
ECON 303	Inter Macroeconomic Theory	
11 additional hours of economics at the 300- or 400-level [1]		
Mathematics:		7-8
MATH 220	Calculus	
or MATH 221	Calculus I	
MATH 231	Calculus II	
Additional mathematics courses are recommended		
Supporting course work. 18 hours of courses outside economics but related to the student's major interest in economics (see www.economics.illinois.edu/programs/undergrad (http://www.economics.illinois.edu/programs/undergrad/) for details).		18

[1] *Excluding* ECON 398 *and* ECON 399*.*

For further information, please visit the Economics undergraduate program page (http://www.economics.illinois.edu/undergrad/info/).

Learning Outcomes: Economics, BALAS

Learning Outcomes for the degree of Bachelor of Arts in Liberal Arts and Sciences Major in Economics

1. **Analytical Skills/Problem-Solving:** ECON students will effectively visualize, conceptualize, articulate, and solve complex problems or address problems that do not have a clear answer, with available information, through experimentation and observation, using microeconomic and macroeconomic theory, as well as calculus and statistical tools.
2. **Critical Thinking:** ECON students will apply economic analysis to everyday problems helping them to understand events, evaluate specific policy proposals, compare arguments with different conclusions to a specific issue or problem, and assess the role played by assumptions in arguments that reach different conclusions to a specific economic or policy problem.
3. **Quantitative Reasoning:** ECON students will understand how to apply empirical evidence to economic arguments. Specifically, they may obtain and/or collect relevant data, develop empirical evidence using

appropriate statistical techniques, and interpret the results of such analyses.

4. **Specialized Knowledge and Practical Application:** ECON students will develop deeper analytical, critical, and quantitative skills in specialized areas by applying economic concepts to real world situations.
5. **Interdisciplinary Knowledge, Diverse Issues, and Global Consciousness:** ECON students will broaden their global and disciplinary knowledge, enhancing their understanding of the world around them both within economics and beyond.

Electrical Engineering, BS

For the Degree of Bachelor of Science in Electrical Engineering

department website: https://ece.illinois.edu
department faculty: Electrical & Computer Engineering Faculty (https://ece.illinois.edu/about/directory/faculty/)
overview of college admissions & requirements: The Grainger College of Engineering (https://grainger.illinois.edu/admissions/)
college website: https://grainger.illinois.edu/

Electrical engineering is a multifaceted discipline that over the last century has produced an astounding progression of technological innovations that have shaped virtually every aspect of modern life. Electrical engineers need a broad and solid foundation in mathematics and physics to support their education in the engineering principles of analysis, synthesis, design, implementation, and testing of the devices and systems that provide the bedrock of modern energy, communication, sensing, computing, medical, security, and defense infrastructures. Within each subdiscipline one can find application domains that strongly rely on hands-on experimental work or that are based on theoretical, mathematical and computational approaches. The multidisciplinary nature of the electrical engineering education addresses the growing demand for the innovation and design of sensing, communication, computing, and decision-making systems of increasing complexity in consumer, defense, and medical applications.

The curriculum starts with a core of fundamental courses on circuits, electromagnetics, solid-state electronics, and computer systems, leading to a comprehensive array of specialized courses and laboratories in all of the important areas of modern electrical engineering.

For the Degree of Bachelor of Science in Electrical Engineering

Overview of Curricular Requirements

The curriculum requires 128 hours for graduation and is organized as shown below.

Graduation Requirements

Minimum Technical GPA (https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-TechnicalGPARequirement)**: 2.0**
TGPA is required for ECE courses (except ECE 316). See Technical GPA (https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-TechnicalGPARequirement) to clarify requirements.

Minimum Overall GPA: 2.0
Minimum hours required for graduation: 128 hours
General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement. Specific Advanced Composition courses required for this degree are listed below.**

Orientation and Professional Development

Code	Title	Hours
ENG 100	Engineering Orientation [1]	0
Total Hours		0

Foundational Mathematics and Science

Code	Title	Hours
CHEM 102	General Chemistry I	3
CHEM 103	General Chemistry Lab I	1
MATH 221	Calculus I [2]	4
MATH 231	Calculus II	3
MATH 257	Linear Algebra with Computational Applications (Linear Algebra)	3
or MATH 416	Abstract Linear Algebra	
MATH 241	Calculus III	4
MATH 285	Intro Differential Equations	3
PHYS 211	University Physics: Mechanics	4
PHYS 212	University Physics: Elec & Mag	4
PHYS 213	Univ Physics: Thermal Physics	2
PHYS 214	Univ Physics: Quantum Physics	2
Total Hours		33

Electrical Engineering Technical Core

Code	Title	Hours
ECE 110	Introduction to Electronics [3]	3
ECE 120	Introduction to Computing	4
ECE 220	Computer Systems & Programming	4
ECE 210	Analog Signal Processing	4
ECE 313	Probability with Engrg Applic [4]	3
ECE 329	Fields and Waves I	3
ECE 340	Semiconductor Electronics	3
ECE 385	Digital Systems Laboratory	3
ECE 445	Senior Design Project Lab [5,6]	4
Total Hours		31

Technical Electives

Code	Title	Hours
30 hours, to include:		
Non-ECE courses from list below:		6
AE 202	Aerospace Flight Mechanics	3
AE 302	Aerospace Flight Mechanics II	3
AE 311	Incompressible Flow	3
AE 312	Compressible Flow	3
AE 321	Mechs of Aerospace Structures	3
AE 352	Aerospace Dynamical Systems	3
AE 353	Aerospace Control Systems	3
AE 402	Orbital Mechanics	3 or 4

AE 403	Spacecraft Attitude Control	3 or 4
AE 410	Computational Aerodynamics	3 or 4
AE 412	Viscous Flow & Heat Transfer	4
AE 416	Applied Aerodynamics	3 or 4
AE 419	Aircraft Flight Mechanics	3 or 4
AE 420	Finite Element Analysis	3 or 4
AE 427		
AE 428	Mechanics of Composites	3
AE 433	Aerospace Propulsion	3 or 4
AE 434	Rocket Propulsion	3 or 4
AE 435	Electric Propulsion	3 or 4
AE 451	Aeroelasticity	3 or 4
AE 460	Aerodynamics & Propulsion Lab	2
Ag and Bio Eng. - All 300 and 400 level courses except ABE 440. Except seminars and special topics courses, which may be reviewed in the Advising Office		
ASTR 210	Introduction to Astrophysics	3
ASTR 310	Computing in Astronomy	3
ASTR 330	Extraterrestrial Life	3
ASTR 350	The Big Bang, Black Holes, and the End of the Universe	3
ASTR 404	Stellar Astrophysics	3
ASTR 405	Planetary Systems	3
ASTR 406	Galaxies and the Universe	3
ASTR 414	Astronomical Techniques	4
ASTR 450	Astrochemistry	4
ATMS 201	General Physical Meteorology	3
ATMS 301	Atmospheric Thermodynamics	3
ATMS 302	Atmospheric Dynamics I	3
ATMS 303	Synoptic-Dynamic Wea Analysis	4
ATMS 304	Radiative Transfer-Remote Sens	3
ATMS 305	Computing and Data Analysis	3
ATMS 404	Risk Analysis in Earth Science	3 or 4
ATMS 405	Boundary Layer Processes	4
ATMS 406	Tropical Meteorology	4
ATMS 410	Radar Remote Sensing	4
ATMS 411	Satellite Remote Sensing	4
ATMS 420	Atmospheric Chemistry	4
ATMS 421	Earth Systems Modeling	4
ATMS 425		
ATMS 447	Climate Change Assessment	3
ATMS 449	Biogeochemical Cycles	4
BIOC 406	Gene Expression & Regulation	3
BIOC 440	Physical Chemistry Principles	4
BIOC 446	Physical Biochemistry	3
BIOC 455	Technqs Biochem & Biotech	4
BIOE 201	Conservation Principles Bioeng	3
BIOE 202	Cell & Tissue Engineering Lab	2
BIOE 302	Modeling Human Physiology	3
BIOE 414	Biomedical Instrumentation	3
BIOE 415	Biomedical Instrumentation Lab	2
BIOE 461	Cellular Biomechanics	4
BIOE 467	Biophotonics	3
BIOE 476	Tissue Engineering	3
BIOE 480	Magnetic Resonance Imaging	3 or 4
Biophysics (BIOP): All 400 level courses except seminars and special topics courses, which may be reviewed in the Advising Office.		
CHBE 221	Principles of CHE	3
CHBE 321	Thermodynamics	4
CHBE 421	Momentum and Heat Transfer	4
CHBE 422	Mass Transfer Operations	4
CHBE 424	Chemical Reaction Engineering	3
CHBE 430	Unit Operations Laboratory	4
CHBE 431	Process Design	4
CHBE 440	Process Control and Dynamics	3
CHBE 451	Transport Phenomena	3
CHBE 452	Chemical Kinetics & Catalysis	3
CHBE 453	Electrochemical Engineering	2 or 3
CHBE 456	Polymer Science & Engineering	3
CHBE 457	Microelectronics Processing	3
CHBE 471	Biochemical Engineering	3 or 4
CHBE 472	Techniques in Biomolecular Eng	3 or 4
CHBE 473	Biomolecular Engineering	3 or 4
CHBE 474	Metabolic Engineering	3 or 4
CHEM 104	General Chemistry II	3
CHEM 105	General Chemistry Lab II	1
Chemistry (CHEM): All 200, 300 and 400 level except 397, 497, and 499. Exceptions also include seminars and special topics, which may be reviewed in the Advising Office.		
CEE 310	Transportation Engineering	3
CEE 330	Environmental Engineering	3
CEE 408	Railroad Transportation Engrg	3 or 4
CEE 410	Railway Signaling & Control	3 or 4
CEE 416	Traffic Capacity Analysis	3 or 4
CEE 430	Ecological Quality Engineering	2
CEE 447	Atmospheric Chemistry	4
CEE 491	Decision and Risk Analysis	3 or 4
CPSC 265	Genetic Engineering Lab	3
CS 101	Intro Computing: Engrg & Sci (By Approval)	3
CS 173	Discrete Structures	3
CS 225	Data Structures	4
CS 242	Programming Studio	3
CS 357	Numerical Methods I	3
CS 410	Text Information Systems	3 or 4
CS 411	Database Systems	3 or 4
CS 412	Introduction to Data Mining	3 or 4
CS 413	Intro to Combinatorics	3 or 4
CS 414	Multimedia Systems	3 or 4
CS 418	Interactive Computer Graphics	3 or 4
CS 419	Production Computer Graphics	3 or 4
CS 420	Parallel Progrmg: Sci & Engrg	3 or 4
CS 421	Programming Languages & Compilers	3 or 4
CS 422	Programming Language Design	3 or 4
CS 423	Operating Systems Design	3 or 4
CS 424	Real-Time Systems	3 or 4

CS 425	Distributed Systems	3 or 4
CS 426	Compiler Construction	3 or 4
CS 427	Software Engineering I	3 or 4
CS 428	Software Engineering II	3 or 4
CS 429	Software Engineering II, ACP	3
CS 431	Embedded Systems	3 or 4
CS 433	Computer System Organization	3 or 4
CS 436	Computer Networking Laboratory	3 or 4
CS 438	Communication Networks	3 or 4
CS 439	Wireless Networks	3 or 4
CS 440	Artificial Intelligence	3 or 4
CS 445	Computational Photography	3 or 4
CS 446	Machine Learning	3 or 4
CS 447	Natural Language Processing	3 or 4
CS 450	Numerical Analysis	3 or 4
CS 460	Security Laboratory	3 or 4
CS 461	Computer Security I	4
CS 463	Computer Security II	3 or 4
CS 465	User Interface Design	4
CS 466	Introduction to Bioinformatics	3 or 4
CS 467	Social Visualization	3 or 4
CS 473	Algorithms	4
CS 475	Formal Models of Computation	3 or 4
CS 476	Program Verification	3 or 4
CS 477	Formal Software Development Methods	3 or 4
CS 481	Advanced Topics in Stochastic Processes & Applications	3 or 4
CS 484	Parallel Programming	3 or 4
CS 398	Special Topics (As Approved)	1 to 4
CS 498	Special Topics (As Approved)	1 to 4
ECE 297	Individual Study	1
ECE 304	Photonic Devices	3
ECE 307	Techniques for Engrg Decisions	3
ECE 310	Digital Signal Processing	3
ECE 311	Digital Signal Processing Lab	1
ECE 314	Probability in Engineering Lab	1
ECE 329	Fields and Waves I	3
ECE 330	Power Ckts & Electromechanics	3
ECE 333	Green Electric Energy	3
ECE 340	Semiconductor Electronics	3
ECE 342	Electronic Circuits	3
ECE 343	Electronic Circuits Laboratory	1
ECE 350	Fields and Waves II	3
ECE 365	Data Science and Engineering	3
ECE 374	Introduction to Algorithms & Models of Computation	4
ECE 380	Biomedical Imaging	3
ECE 391	Computer Systems Engineering	4
ECE 395	Advanced Digital Projects Lab	2 or 3
ECE 396	Honors Project	1 to 4
ECE 397	Individual Study in ECE	0 to 4
ECE 402	Electronic Music Synthesis	3
ECE 403	Audio Engineering	3
ECE 408	Applied Parallel Programming	4
ECE 411	Computer Organization & Design	4
ECE 412	Microcomputer Laboratory	3
ECE 414	Biomedical Instrumentation	3
ECE 415	Biomedical Instrumentation Lab	2
ECE 416	Biosensors	3
ECE 417	Multimedia Signal Processing	4
ECE 418	Image & Video Processing	4
ECE 419	Security Laboratory	3 or 4
ECE 420	Embedded DSP Laboratory	2
ECE 422	Computer Security I	4
ECE 424	Computer Security II	3 or 4
ECE 425	Intro to VLSI System Design	3
ECE 428	Distributed Systems	3 or 4
ECE 431	Electric Machinery	4
ECE 432	Advanced Electric Machinery	3
ECE 435	Computer Networking Laboratory	3 or 4
ECE 437	Sensors and Instrumentation	3
ECE 438	Communication Networks	3 or 4
ECE 439	Wireless Networks	3 or 4
ECE 441	Physcs & Modeling Semicond Dev	3
ECE 443	LEDs and Solar Cells	4
ECE 444	IC Device Theory & Fabrication	4
ECE 445	Senior Design Project Lab	4
ECE 446	Principles of Experimental Research in Electrical Engineering	4
ECE 447	Active Microwave Ckt Design	3
ECE 448	Artificial Intelligence	3 or 4
ECE 451	Adv Microwave Measurements	3
ECE 452	Electromagnetic Fields	3
ECE 453	Wireless Communication Systems	4
ECE 454	Antennas	3
ECE 455	Optical Electronics	3 or 4
ECE 456	Global Nav Satellite Systems	4
ECE 457	Microwave Devices & Circuits	3
ECE 458	Applic of Radio Wave Propag	3
ECE 459	Communications Systems	3
ECE 460	Optical Imaging	4
ECE 461	Digital Communications	3
ECE 462	Logic Synthesis	3
ECE 463	Digital Communications Lab	2
ECE 464	Power Electronics	3
ECE 465	Optical Communications Systems	3
ECE 466	Optical Communications Lab	1
ECE 467	Biophotonics	3
ECE 468	Optical Remote Sensing	3
ECE 469	Power Electronics Laboratory	2
ECE 470	Introduction to Robotics	4
ECE 472	Biomedical Ultrasound Imaging	3
ECE 473	Fund of Engrg Acoustics	3 or 4
ECE 476	Power System Analysis	3

ECE 478	Formal Software Development Methods	3 or 4
ECE 480	Magnetic Resonance Imaging	3 or 4
ECE 481	Nanotechnology	4
ECE 482	Digital IC Design	3
ECE 483	Analog IC Design	3
ECE 485	MEMS Devices & Systems	3
ECE 486	Control Systems	4
ECE 487	Intro Quantum Electr for EEs	3
ECE 488	Compound Semicond & Devices	3
ECE 489	Robot Dynamics and Control	4
ECE 490	Introduction to Optimization	3 or 4
ECE 491	Numerical Analysis	3 or 4
ECE 492	Parallel Progrmg: Sci & Engrg	3 or 4
ECE 493	Advanced Engineering Math	3 or 4
ECE 495	Photonic Device Laboratory	3
ECE 496	Senior Research Project	2
ECE 499	Senior Thesis	2
ECE 398	Special Topics in ECE (As approved)	0 to 4
ECE 498	Special Topics in ECE (As approved)	0 to 4
ENG 491	Interdisciplinary Design Proj (CubeSat, Solar Decathlon, Formula SAE, Baja SAE, or by Approval.)	1 to 4
GEOL 107	Physical Geology	4
GEOL 208	History of the Earth System	4
GEOL 333	Earth Materials and the Env	4
GEOL 380	Environmental Geology	4
GEOL 411	Structural Geol and Tectonics	4
GEOL 417	Geol Field Methods, Western US	6
GEOL 432	Mineralogy and Mineral Optics	4
GEOL 436	Petrology and Petrography	4
GEOL 440	Sedimentology and Stratigraphy	4
GEOL 450	Probing the Earth's Interior	3
GEOL 452	Introduction to Geophysics	4
GEOL 460	Geochemistry	3
IE 310	Deterministic Models in Optimization	3
IE 330	Industrial Quality Control	3
IE 360	Facilities Planning and Design	3
IE 361	Production Planning & Control	3
IE 400	Design & Anlys of Experiments	3 or 4
IE 410	Advanced Topics in Stochastic Processes & Applications	3 or 4
IE 411	Optimization of Large Systems	3 or 4
IE 412	OR Models for Mfg Systems	3 or 4
IE 413	Simulation	3 or 4
IE 420	Financial Engineering	3 or 4
IE 430	Economic Found of Quality Syst	3 or 4
IE 431	Design for Six Sigma	3
IB 150	Organismal & Evolutionary Biol	4
IB 202	Physiology	3 or 4
IB 203	Ecology	4
IB 204	Genetics	3 or 4
IB 302	Evolution	4
IB 335	Plant Systematics	4
IB 348	Fish and Wildlife Ecology	3
IB 368	Vertebrate Natural History	4
IB 401	Introduction to Entomology	3 or 4
IB 405	Evolution of Traits and Genomes	3
IB 420	Plant Physiology	3
IB 421	Photosynthesis	3
IB 426	Env and Evol Physl of Animals	3
IB 427	Insect Physiology	4
IB 431	Behavioral Ecology	3
IB 432	Genes and Behavior	3
IB 440	Plants and Global Change	3
IB 443	Evolutionary Ecology	3
IB 444	Insect Ecology	3 or 4
IB 451	Conservation Biology	4
IB 452	Ecosystem Ecology	3
IB 453	Community Ecology	3
IB 461	Ornithology	4
IB 462	Mammalogy	4
IB 463	Ichthyology	4
IB 464	Herpetology	4
IB 467	Principles of Systematics	4
IB 468	Insect Classification and Evol	4
IB 471	General Mycology	4
IB 472	Plant Molecular Biology	1
IB 473	Plant Genomics	1
IB 481	Vector-borne Diseases	4
IB 482	Insect Pest Management	3
IB 483	Insect Pathology	3
IB 485	Environ Toxicology & Health	3
IB 486	Pesticide Toxicology	3 or 4
LING 300	Anat & Physiol Spch Mechanism	4
LING 406	Introduction to Computational Linguistics	3 or 4
LING 407	Logic and Linguistic Analysis	3 or 4
LING 427	Language and the Brain	3 or 4
MSE 280	Engineering Materials	3
Material Science and Eng. (MSE): All 300 and 400 level courses except 304, 460, and 461. Exceptions of seminar and special topics courses can be reviewed in the Advising Office.		
MATH 213	Basic Discrete Mathematics	3
MATH 347	Fundamental Mathematics	3
MATH 348	Fundamental Mathematics-ACP	4
MATH 357	Numerical Methods I	3
MATH 402	Non Euclidean Geometry	3 or 4
MATH 403	Euclidean Geometry	3 or 4
MATH 412	Graph Theory	3 or 4
MATH 413	Intro to Combinatorics	3 or 4
MATH 414	Mathematical Logic	3 or 4
MATH 416	Abstract Linear Algebra	3 or 4
MATH 417	Intro to Abstract Algebra	3 or 4
MATH 418	Intro to Abstract Algebra II	3 or 4
MATH 423	Differential Geometry	3 or 4
MATH 424	Honors Real Analysis	3

MATH 425	Honors Advanced Analysis	3
MATH 427	Honors Abstract Algebra	3
MATH 428	Honors Topics in Mathematics	3
MATH 432	Set Theory and Topology	3 or 4
MATH 442	Intro Partial Diff Equations	3 or 4
MATH 444	Elementary Real Analysis	3 or 4
MATH 446	Applied Complex Variables	3 or 4
MATH 447	Real Variables	3 or 4
MATH 448	Complex Variables	3 or 4
MATH 450	Numerical Analysis	3 or 4
MATH 453	Number Theory	3 or 4
MATH 473	Algorithms	4
MATH 475	Formal Models of Computation	3 or 4
MATH 481	Vector and Tensor Analysis	3 or 4
MATH 482	Linear Programming	3 or 4
MATH 484	Nonlinear Programming	3 or 4
MATH 487	Advanced Engineering Math	3 or 4
MATH 489	Dynamics & Differential Eqns	3 or 4
MCB 150	Molec & Cellular Basis of Life	4
MCB 250	Molecular Genetics	3
MCB 251	Exp Techniqs in Molecular Biol	2
MCB 252	Cells, Tissues & Development	3
MCB 253	Exp Techniqs in Cellular Biol	2
MCB 300	Microbiology	3
MCB 301	Experimental Microbiology	3
MCB 314	Introduction to Neurobiology	3
MCB 316	Genetics and Disease	4
MCB 354	Biochem & Phys Basis of Life	3
MCB 400	Cancer Cell Biology	3
MCB 401	Cellular Physiology	3
MCB 402	Sys & Integrative Physiology	3
MCB 403	Cell & Membrane Physiology Lab	1 or 2
MCB 404	Sys & Integrative Physiol Lab	1 to 2
MCB 406	Gene Expression & Regulation	3
MCB 408	Immunology	3
MCB 410	Developmental Biology, Stem Cells and Regenerative Medicine	3
MCB 413	Endocrinology	3
MCB 419	Brain, Behavior & Info Process	3
MCB 421	Microbial Genetics	3
MCB 424	Microbial Biochemistry	3
MCB 426	Bacterial Pathogenesis	3
MCB 430	Molecular Microbiology	3
MCB 431	Microbial Physiology	3
MCB 433	Virology & Viral Pathogenesis	3
MCB 435	Evolution of Infectious Disease	3
MCB 446	Physical Biochemistry	3
MCB 480	Eukaryotic Cell Signaling	3
ME 200	Thermodynamics	3
ME 310	Fundamentals of Fluid Dynamics	4
ME 320	Heat Transfer	4
ME 330	Engineering Materials	4
ME 340	Dynamics of Mechanical Systems	3.5
ME 370	Mechanical Design I	3
ME 371	Mechanical Design II	3
ME 400	Energy Conversion Systems	3 or 4
ME 401	Refrigeration and Cryogenics	3 or 4
ME 402	Design of Thermal Systems	3 or 4
ME 403	Internal Combustion Engines	3 or 4
ME 404	Intermediate Thermodynamics	4
ME 410	Intermediate Gas Dynamics	3 or 4
ME 411	Viscous Flow & Heat Transfer	4
ME 412	Numerical Thermo-Fluid Mechs	2 to 4
ME 420	Intermediate Heat Transfer	4
ME 430	Failure of Engrg Materials	3 or 4
ME 431	Mechanical Component Failure	3 or 4
ME 440	Kinem & Dynamics of Mech Syst	3 or 4
ME 445	Introduction to Robotics	4
ME 450		
ME 451	Computer-Aided Mfg Systems	3 or 4
ME 452	Num Control of Mfg Processes	3 or 4
ME 460	Industrial Control Systems	4
ME 461	Computer Cntrl of Mech Systems	3 or 4
ME 471	Finite Element Analysis	3 or 4
ME 472	Introduction to Tribology	3 or 4
ME 485	MEMS Devices & Systems	3
ME 487	MEMS-NEMS Theory & Fabrication	4
MUS 407	Elect Music Techniques I	3
MUS 409	Elec Music Techniques II	2
NEUR 453	Cog Neuroscience of Vision	3 or 4
NPRE 201	Energy Systems	2 or 3
NPRE 247	Modeling Nuclear Energy System	3
NPRE 402	Nuclear Power Engineering	3 or 4
NPRE 412	Nuclear Power Econ & Fuel Mgmt	3 or 4
NPRE 421	Plasma and Fusion Science	3
NPRE 423	Plasma Laboratory	2
NPRE 429	Plasma Engineering	3
NPRE 431	Materials in Nuclear Engrg	3
NPRE 432	Nuclear Engrg Materials Lab	2
NPRE 435	Radiological Imaging	3
NPRE 441	Radiation Protection	4
NPRE 442	Radioactive Waste Management	3
NPRE 444	Nuclear Analytical Methods Lab	2 or 3
NPRE 446	Radiation Interact w/Matter I	3
NPRE 447	Radiation Interact w/Matter II	3
NPRE 448	Nuclear Syst Engrg & Design	4
NPRE 451	NPRE Laboratory	3
NPRE 455	Neutron Diffusion & Transport	4
NPRE 457	Safety Anlys Nucl Reactor Syst	3 or 4
NPRE 458	Design in NPRE	4
NPRE 470	Fuel Cells & Hydrogen Sources	3
NPRE 475	Wind Power Systems	3 or 4
PHYS 225	Relativity & Math Applications	2
PHYS 325	Classical Mechanics I	3

PHYS 326	Classical Mechanics II	3
PHYS 401	Classical Physics Lab	3
PHYS 402	Light	3 or 4
PHYS 403	Modern Experimental Physics	4 or 5
PHYS 406	Acoustical Physics of Music	4
PHYS 419	Space, Time, and Matter-ACP	3 or 4
PHYS 420	Space, Time, and Matter	2
PHYS 427	Thermal & Statistical Physics	4
PHYS 460	Condensed Matter Physics	4
PHYS 466	Atomic Scale Simulations	3 or 4
PHYS 470	Subatomic Physics	4
PHYS 485	Atomic Phys & Quantum Theory	3
PHYS 486	Quantum Physics I	4
PHYS 487	Quantum Physics II	4
PSYC 204	Intro to Brain and Cognition	3
SHS 200	General Phonetics	3
SHS 240	Intro Sound & Hearing Science	3
SHS 300	Anat & Physiol Spch Mechanism	4
SHS 301	General Speech Science	4
SHS 320	Development of Spoken Language	3
SHS 450	Intro Audiol & Hear Disorders	4
SHS 470	Neural Bases Spch Lang	4
STAT 420	Methods of Applied Statistics	3 or 4
STAT 424	Analysis of Variance	3 or 4
STAT 428	Statistical Computing	3 or 4
STAT 429	Time Series Analysis	3 or 4
STAT 440	Statistical Data Management	3 or 4
SE 411	Reliability Engineering	3 or 4
SE 420	Digital Control Systems	4
SE 423	Mechatronics	3
SE 424	State Space Design for Control	3
TAM 211	Statics	3
TAM 212	Introductory Dynamics	3
TAM 251	Introductory Solid Mechanics	3
TAM 324	Behavior of Materials	4
TAM 335	Introductory Fluid Mechanics	4
TAM 412	Intermediate Dynamics	4
TAM 435	Intermediate Fluid Mechanics	4
TAM 445	Continuum Mechanics	4
TAM 451	Intermediate Solid Mechanics	4
ECE Courses to include:		
Select three from the following list of Advanced Core ECE electives:		
ECE 391	Computer Systems Engineering	
or CS 225	Data Structures	
ECE 310	Digital Signal Processing	
ECE 330	Power Ckts & Electromechanics	
ECE 342	Electronic Circuits	
ECE 350	Fields and Waves II	
Select three ECE labs identified below. At least one must be hardware labs		
Hardware Labs:		
ECE 343	Electronic Circuits Laboratory	1
ECE 391	Computer Systems Engineering	4
ECE 395	Advanced Digital Projects Lab	2 or 3
ECE 402	Electronic Music Synthesis	3
ECE 415	Biomedical Instrumentation Lab	2
ECE 420	Embedded DSP Laboratory	2
ECE 431	Electric Machinery	4
CS 436	Computer Networking Laboratory	3 or 4
ECE 437	Sensors and Instrumentation	3
ECE 438	Communication Networks	3 or 4
ECE 439	Wireless Networks	3 or 4
ECE 443	LEDs and Solar Cells	4
ECE 444	IC Device Theory & Fabrication	4
ECE 446	Principles of Experimental Research in Electrical Engineering	4
ECE 447	Active Microwave Ckt Design	3
ECE 451	Adv Microwave Measurements	3
ECE 453	Wireless Communication Systems	4
ECE 456	Global Nav Satellite Systems	4
ECE 460	Optical Imaging	4
ECE 463	Digital Communications Lab	2
ECE 466	Optical Communications Lab	1
ECE 468	Optical Remote Sensing	3
ECE 469	Power Electronics Laboratory	2
ECE 470	Introduction to Robotics	4
ECE 481	Nanotechnology	4
ECE 486	Control Systems	4
ECE 489	Robot Dynamics and Control	4
ECE 495	Photonic Device Laboratory	3
Software Labs:		
ECE 311	Digital Signal Processing Lab	1
ECE 314	Probability in Engineering Lab	1
ECE 365	Data Science and Engineering	3
ECE 411	Computer Organization & Design	4

Electives

Code	Title	Hours
The Grainger College of Engineering Liberal Education course list, or additional courses from the campus General Education lists for Social and Behavioral Sciences or Humanities and the Arts [7]		6
Free electives. Additional unrestricted course work, subject to certain exceptions as noted by the College, so that there are at least 128 credit hours earned toward the degree. [8]		12
Total Hours of Curriculum to Graduate		**128**

1 *External transfer students take* ENG 300 *instead.*

2 MATH 220 *may be substituted, with four of the five credit hours applying toward the degree.* MATH 220 *is appropriate for students with no background in calculus.*

3 *Freshmen take* ECE 110 *for 3 credit hours. Lab-only version taken by transfer students (with special permission) is 1 credit hour.*

4 STAT 410 *may be substituted.*

5 ECE 496 *AND* ECE 499 *may be substituted.*

[6] *Advanced Composition may be satisfied by completing* ECE 445*, or a course in either the general education or free elective categories which has the Advanced Composition designation.*

[7] *The Grainger College of Engineering approved liberal education course list can be found* here *(*https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-GeneralEducationElectives*). Note that these credit hours could carry the required cultural studies designation required for campus general education requirements.*

[8] *The Grainger College of Engineering restrictions to free electives can be found* here *(*https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-FreeElectives*).*

For the Degree of Bachelor of Science in Electrical Engineering

Suggested Sequence

The curriculum sequence below is a suggested sequence, as all Grainger Engineering students work with a department academic advisor to achieve their educational goals, specific to their needs and preparation. Dynamic and Static curricular maps, which include prerequisite sequencing, can be found here (https://grainger.illinois.edu/academics/undergraduate/majors-and-minors/ee-map/).

First Year

First Semester		**Hours**
ECE 110[1]	Introduction to Electronics	3
ENG 100	Engineering Orientation	0
MATH 221[2]	Calculus I	4
CHEM 102	General Chemistry I	3
CHEM 103	General Chemistry Lab I	1
RHET 105 (or General Education elective)[3,4]	Writing and Research	4-3
	Semester Hours	15-14
Second Semester		
ECE 120	Introduction to Computing	4
MATH 231	Calculus II	3
MATH 257	Linear Algebra with Computational Applications	3
PHYS 211	University Physics: Mechanics	4
General Education elective (or RHET 105)[3,4]		3-4
	Semester Hours	17-18

Second Year

First Semester		
MATH 241	Calculus III	4
PHYS 212	University Physics: Elec Mag	4
ECE 220	Computer Systems Programming	4
General Education elective[4]		3
Free Elective		3
	Semester Hours	18
Second Semester		
PHYS 213	Univ Physics: Thermal Physics	2
PHYS 214	Univ Physics: Quantum Physics	2
MATH 285	Intro Differential Equations	3
ECE 210	Analog Signal Processing	4
Free elective		3
	Semester Hours	14

Third Year

First Semester		
ECE 329	Fields and Waves I	3
ECE 385	Digital Systems Laboratory	3
Technical elective[5]		4
General education elective[4]		6
	Semester Hours	16
Second Semester		
ECE 313[6]	Probability with Engrg Applic	3
ECE 340	Semiconductor Electronics	3
Technical electives[5]		7
General education elective[4]		3
	Semester Hours	16

Fourth Year

First Semester		
Technical electives[5]		11
Free electives		3
General Education elective[4]		3
	Semester Hours	17
Second Semester		
ECE 445[7]	Senior Design Project Lab	4
Technical electives[5]		8
Free electives		3
	Semester Hours	15
	Total Hours:	128

[1] *Freshmen take ECE 110 for 3 credit hours. Lab only version of ECE 110 taken by transfer students (with special permission) is 1 credit hour.*

[2] *MATH 220 may be substituted, with four of the five credit hours applying toward the degree. MATH 220 is appropriate for students with no background in calculus.*

[3] *RHET 105 (or an alternative Composition I sequence) is taken either in the first or second semester of the first year, according to the student's UIN (Spring if your UIN is Odd). General Education Elective is taken the other semester. Composition I guidelines can be found at* http://catalog.illinois.edu/general-information/degree-general-education-requirements/ *under Written Communication Requirement.*

[4] *Students must take 6 hours from the campus General Education Social and Behavioral Sciences list, 6 hours from campus General Education Humanities and the Arts list, and 6 hours from a liberal education list approved by the college or from the campus General Education lists for Social and Behavioral Sciences or Humanities and the Arts.*
Students must also complete the campus cultural studies requirement by completing (i) one western/comparative culture(s) course, (ii) one non-western culture(s) course, and (iii) one U.S. Minority Culture(s) course from the General Education cultural studies lists. Most students select general education courses that simultaneously satisfy these cultural studies requirements.

[5] *A minimum of 30 hours chosen from the departmentally approved* list of Technical Electives (https://ece.illinois.edu/academics/ugrad/curriculum/tech-electives-06/*). Of these, at least three courses are to be chosen from the ECE advanced core electives and three courses from the list of ECE laboratory electives; 20 hours must be ECE course work, six hours non-ECE course work, and the remaining hours may be chosen from the entire List.*

[6] *STAT 410 may be substituted*

[7] *Advanced Composition. May be satisfied by completing ECE 445 or ECE 496 AND ECE 499 or a course within either the liberal education or free elective categories which has the Advanced Composition designation.*

Learning Outcomes: Electrical Engineering, BS

Learning Outcomes for the degree of Bachelor of Science Major in Electrical Engineering

Student learning outcomes are based on learning outcomes in line with the ABET accreditation process.

Electrical Engineering graduates will have:

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. An ability to communicate effectively with a range of audiences.
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Elementary Education, BS

for the degree of Bachelor of Science Major in Elementary Education

department office: Curriculum & Instruction
311 Education Building
1310 South Sixth
Champaign, IL 61820
phone: (217) 244-8286
department website: https://education.illinois.edu/ci (http://education.illinois.edu/ci/)
department faculty: Curriculum & Instruction Faculty (https://education.illinois.edu/faculty-finder/ci/)
overview of college admissions & requirements: College of Education (https://education.illinois.edu/programs/undergrad/programs-degrees/ci-ele-ug/)
college website: https://education.illinois.edu/ (http://education.illinois.edu/)

This program prepares teachers for grades one through six. A minimum of 120 semester hours is necessary for graduation[1].

Students pursuing teacher licensure programs in the College of Education (COE) must meet requirements in a series of sequential gateways. Included in the gateway requirements are successful completion of specified coursework, achievement of appropriate grade point averages, requirements for clinical experiences, and appropriate tests for the licensure area. Meeting all Gateway requirements leads to degree and licensure completion.

In order to be recommended for licensure, candidates are required to maintain University of Illinois at Urbana-Champaign, cumulative, content area, and professional education grade point averages of 2.5 (A=4.0). Candidates in teaching licensure programs must maintain a C or better in ALL content and professional education coursework. Candidates should consult their adviser or the Council on Teacher Education for the list of courses used to compute these grade point averages. For teacher education licensure requirements applicable to all curricula, see the Council on Teacher Education (http://www.cote.illinois.edu/)

Licensure requirements are subject to change without notice as a result of new mandates from the Illinois State Board of Education or the Illinois General Assembly.

for the degree of Bachelor of Science Major in Elementary Education

Degree Requirements

Code	Title	Hours
EDUC 101	Education Orientation Seminar	1

Code	Title	Hours
Composition I		
Composition I		4
Advanced Composition		
Advanced Composition		3-4
Natural Sciences and Technology [2]		
Life science		3-4
Physical science (mathematics not acceptable)		3-4
Cultural Studies [3]		
Western/Comparative		3-4
US Minority		3-4
Non-Western		3-4
Social/Behavioral Sciences [3]		
Two courses from the approved Social and Behavioral Sciences general education course list.		6-8
Quantitative Reasoning [4]		
MATH 103	Theory of Arithmetic	4
MATH 117	Elementary Mathematics	3-4

or STAT 100	Statistics	
Humanities/Arts [3]		
Two courses from the approved Humanities and the Arts general education course list.		6
Language Other Than English		
Three years of one language other than English in high school or completion of the third semester of college level language.		0-12
Health and Physical Development		
KIN 268	Children's Movement	3
Electives		
Elective Courses (if needed to complete the 120 hour graduation requirement) [1]		6
Professional Education		
EDUC 201 & EDUC 202	Identity and Difference in Education and Social Justice, School and Society (Or program approved equivalent courses)	6
EPSY 201	Educational Psychology [6]	3
EDPR 250	School & Community Experiences [7]	4
EDPR 432	Ed Prac in EC & ELED	12
SPED 405	General Educator's Role in Special Education	3
CI 415	Language Varieties, Cultures and Learning	3
CI 405	Introduction to Teaching Elementary Age Children	3
CI 407	Theory Practice in Elementary School Teaching II	3
CI 406	Theory Practice in Elementary School Teaching I	3
CI 430	Teaching Children Mathematics	3
CI 432	Investigative Approach to Elementary Mathematics Instruction	3
CI 448	Teaching Elementary Social Studies	3
CI 450	Teaching Elementary Science I	3
CI 451	Teaching Elementary Science II	3
CI 467	Principles in Teaching Literature to Children and Youth	3
CI 475	Teaching Elementary Reading and Language Arts I	3
CI 476	Teaching Elementary and Middle Grade Language Arts	3
FAA 202	Artsful Teaching through Integ	3
CI 452	Social Studies as Action and Inquiry	3
Total Hours		120

TOTAL minimum hours include general education and professional education credits.[5]

1 *Six hours of ROTC upper level courses (300 level or above) can count toward the degree as free electives.*

2 *Exclusions apply including, but not limited to: Horticulture, Dance and Urban Planning. Must be a science rubric. Consult with advisers for further information.*

3 *Across these gen-ed categories, students will need to take courses that include at least four different rubrics from the following: ANTH, ECON, GEOG, GLBL, HIST, PS, PSYC, SOC to meet the ISBE Social Science requirement.*

4 *ISBE standards require demonstration of proficiency in algebra and statistics. Consult with adviser for further information.*

5 *The total hours required for the degree may be higher for students who have not already completed the language other than English requirement and/or the ISBE algebra requirement.*

6 *PYSC 100 is a prerequisite for EPSY 201.*

7 *Students will register for EDPR 250 during their spring term of the year one professional education sequence year for zero credit hours and register for EDPR 250 again their fall term of the year two professional education sequence for four credit hours.*

Learning Outcomes: Elementary Education, BS

Learning Outcomes for the degree of Bachelor of Science Major in Elementary Education

1. Students will acquire deep knowledge of content in the field of Education
2. Students will effectively plan and implement relevant, culturally responsive and developmentally appropriate instruction for elementary students, grades 1-6.
3. Students will use data to drive decisions and solve problems in and out of the classroom
4. Students will display the expectations of professionalism related to success in the field of education and beyond (fairness, commitment to collaboration, community, reflective practice, and attention to 21st century skills and practices)

Engineering Mechanics, BS

for the degree of Bachelor of Science in Engineering Mechanics

department website: http://mechse.illinois.edu/
department faculty: Mechanical Science & Engineering Faculty (https://mechse.illinois.edu/people/faculty/)
overview of college admissions & requirements: The Grainger College of Engineering (https://grainger.illinois.edu/admissions/)
college website: https://grainger.illinois.edu/

The Engineering Mechanics program at Illinois (accredited by the Engineering Accreditation Commission of ABET, www.abet.org) is a major that focuses on the principles of mechanics that underpin design and engineering in diverse industries including materials, energy, biotechnology, civil, and aerospace to name a few. Students learn rigorous mathematical, scientific, and engineering principles in subject areas such as statics, dynamics, strength of materials, and fluid dynamics. Further, Engineering Mechanics students learn how to apply these basic principles in modern engineering design through laboratory and project work. The program also benefits from a cohesive secondary field which students can tailor to fit their academic and career objectives. Engineering Mechanics is well suited for students with an interest in analysis and design, and physical principles.

for the degree of Bachelor of Science in Engineering Mechanics

Graduation Requirements

Minimum Technical GPA (https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-TechnicalGPARequirement)**: 2.0**

TGPA is required for required Engineering courses and any technical elective courses. See Technical GPA (https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-TechnicalGPARequirement) to clarify requirements.

Minimum Overall GPA: 2.0
Minimum hours required for graduation: 128 hours
General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement. Specific Advanced Composition courses required for this degree are listed below.**

Orientation and Professional Development

Code	Title	Hours
ENG 100	Engineering Orientation [1]	0
TAM 195	Mechanics in the Modern World	1
ME 290	Seminar	0
Total Hours		1

Foundational Mathematics and Science

Code	Title	Hours
CHEM 102	General Chemistry I	3
CHEM 103	General Chemistry Lab I [2]	1
CHEM 104	General Chemistry II	3
CHEM 105	General Chemistry Lab II [2]	1
MATH 221	Calculus I [3]	4
MATH 231	Calculus II	3
MATH 241	Calculus III	4
MATH 257	Linear Algebra with Computational Applications [4]	3
MATH 441	Differential Equations [5]	3
MATH 442	Intro Partial Diff Equations	3
PHYS 211	University Physics: Mechanics	4
PHYS 212	University Physics: Elec & Mag	4
PHYS 213	Univ Physics: Thermal Physics	2
PHYS 214	Univ Physics: Quantum Physics	2
Total Hours		40

Engineering Mechanics Technical Core

Code	Title	Hours
CS 101	Intro Computing: Engrg & Sci [6]	3
ECE 205	Electrical and Electronic Circuits [7]	3
ME 170	Computer-Aided Design	3
ME 200	Thermodynamics	3
ME 470	Senior Design Project [8]	3
TAM 211	Statics	3
TAM 212	Introductory Dynamics [9]	3
TAM 251	Introductory Solid Mechanics	3
TAM 252	Solid Mechanics Design	1
TAM 270	Design for Manufacturability	3
TAM 324	Behavior of Materials [8]	4
TAM 335	Introductory Fluid Mechanics	4
TAM 412	Intermediate Dynamics	4
TAM 445	Continuum Mechanics	4
TAM 470	Computational Mechanics	3
Total Hours		47

Secondary Field Option Electives

Code	Title	Hours
Secondary field electives selected from departmentally approved courses for Secondary Field Options. Each secondary field generally specifies two required courses and two additional courses from a list of approved elective courses. For each of the secondary fields, the required and approved elective courses specified for each are listed below. To add flexibility to the program and to accommodate particular interests, the student may fashion an individualized secondary field option. The only requirements are that the courses be related to mechanics, form a coherent and cohesive group, include at least two engineering courses, and total at least 12 hours of advanced-level coursework that are distinct from required courses in the Engineering Mechanics curriculum. This can include 500-level courses, if the student has the adequate preparation, for any of the secondary field elective courses. Each student must formally declare their choice of secondary field with a Mechanical Science and Engineering Undergraduate Programs Office advisor using a Secondary Field Options form.		**12**
Biomechanics		
Required Courses		
MCB 150	Molec & Cellular Basis of Life	4
MCB 151	Molec & Cellular Laboratory	1
TAM 461	Cellular Biomechanics	4
Approved Courses		
ECE 473	Fund of Engrg Acoustics	3 or 4
ECE 380	Biomedical Imaging	3
ME 481	Whole-Body Musculoskel Biomech	3 or 4
ME 482	Musculoskel Tissue Mechanics	3 or 4
ME 483	Mechanobiology	4
BIOP 401	Introduction to Biophysics	3
TAM 497	Independent Study	1 to 3
Computational Mechanics		
Required Courses		
CS 357	Numerical Methods I	3
ME 471	Finite Element Analysis	3 or 4
Approved Courses		
CS 450	Numerical Analysis	3 or 4
CS 457	Numerical Methods II	3
ME 412	Numerical Thermo-Fluid Mechs	2 to 4
TAM 497	Independent Study	1 to 3
Engineering Science and Applied Mathematics		
Required Courses		
MATH 446	Applied Complex Variables	3-4
or MATH 448	Complex Variables	

Any 400 level MATH course, excluding MATH 415, MATH 441, and MATH 442		3 or 4
Approved Courses		
AE 353	Aerospace Control Systems	3
AE 402	Orbital Mechanics	3 or 4
CEE 491	Decision and Risk Analysis	3 or 4
ECE 329	Fields and Waves I	3
ECE 330	Power Ckts & Electromechanics	3
ECE 473	Fund of Engrg Acoustics	3 or 4
PHYS 402	Light	3 or 4
TAM 497	Independent Study	1 to 3
Experimental Mechanics		
Required Courses		
TAM 456	Experimental Stress Analysis	3
ECE 206	Electrical and Electronic Circuits Lab	1
Approved Courses		
CS 357	Numerical Methods I	3
ECE 473	Fund of Engrg Acoustics	3 or 4
ME 360	Signal Processing	3.5
PHYS 402	Light	3 or 4
TAM 497	Independent Study	1 to 3
Fluid Mechanics		
Required Courses		
TAM 435	Intermediate Fluid Mechanics	4
ME 410	Intermediate Gas Dynamics	3 or 4
Approved Courses		
AE 412	Viscous Flow & Heat Transfer	4
CEE 445		
CEE 451	Environmental Fluid Mechanics	3
CEE 453	Urban Hydrology and Hydraulics	4
ECE 473	Fund of Engrg Acoustics	3 or 4
ME 412	Numerical Thermo-Fluid Mechs	2 to 4
TAM 497	Independent Study	1 to 3
Mechanics of Materials		
Required Courses		
TAM 424	Mechanics of Structural Metals	3 or 4
TAM 428	Mechanics of Composites	3
Approved Courses		
CEE 310	Transportation Engineering	3
MSE 401	Thermodynamics of Materials	3
MSE 455	Macromolecular Solids	3
MSE 489	Matl Select for Sustainability	3 or 4
NPRE 431	Materials in Nuclear Engrg	3
TAM 497	Independent Study	1 to 3
Solid Mechanics		
Required Courses		
TAM 424	Mechanics of Structural Metals	3 or 4
TAM 451	Intermediate Solid Mechanics	4
Approved Courses		
CEE 360	Structural Engineering	3
CEE 460	Steel Structures I	3
CEE 461	Reinforced Concrete I	3
CS 357	Numerical Methods I	3
ECE 473	Fund of Engrg Acoustics	3 or 4
TAM 497	Independent Study	1 to 3

Electives

Code	Title	Hours
The Grainger College of Engineering Liberal Education course list, or additional courses from the campus General Education lists for Social and Behavioral Sciences or Humanities and the Arts [10]		6
Free electives. Additional unrestricted course work, subject to certain exceptions as noted by the College, so that there are at least 128 credit hours earned toward the degree. [11]		6
Total Hours of Curriculum to Graduate		**128**

1 *External transfer students take* ENG 300 *instead.*

2 CHEM 103 *(*http://catalog.illinois.edu/search/?P=CHEM%20103*) requirement waived for students who received test-based credit (AP, IB, or proficiency) for* CHEM 102 *(*http://catalog.illinois.edu/search/?P=CHEM%20102*), similarly* CHEM 105 *(*http://catalog.illinois.edu/search/?P=CHEM%20105*) requirement waived for students who received test-based credit for* CHEM 104 *(*http://catalog.illinois.edu/search/?P=CHEM%20104*). Students are still required to have 128 hours minimum to graduate.*

3 MATH 220 *may be substituted, with four of the five credit hours applying toward the degree.* MATH 220 *is appropriate for students with no background in calculus.*

4 MATH 415 *(*http://catalog.illinois.edu/search/?P=MATH%20415*) may be substituted for students entering prior to Fall 2021.*

5 *Transfer or incoming students with credit upon admission to the Engineering Mechanics program may substitute* MATH 284 *(*http://catalog.illinois.edu/search/?P=MATH%20284*) or* MATH 285 *(*http://catalog.illinois.edu/search/?P=MATH%20285*) with a grade of B+ or higher.*

6 *CS 124 or* CS 125 *(*http://catalog.illinois.edu/search/?P=CS%20125*) or* ECE 220 *(*http://catalog.illinois.edu/search/?P=ECE%20220*) may be substituted.*

7 ECE 110 *(*http://catalog.illinois.edu/search/?P=ECE%20110*) and* ECE 210 *(*http://catalog.illinois.edu/search/?P=ECE%20210*) (or* ECE 211 *(*http://catalog.illinois.edu/search/?P=ECE%20211*)) combined may be substituted.*

8 *Advanced Composition satisfied by completing* TAM 324 *and* ME 470*.*

9 *Transfers and Physics minor/dual degree students may substitute* PHYS 325 *(*http://catalog.illinois.edu/search/?P=PHYS%20325*).*

10 *The Grainger College of Engineering approved liberal education course list can be found* here *(*https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-GeneralEducationElectives*). Note that these credit hours could carry the required cultural studies designation required for campus general education requirements.*

11 *The Grainger College of Engineering restrictions to free electives can be found* here *(*https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-FreeElectives*).*

for the degree of Bachelor of Science in Engineering Mechanics

Suggested Sequence

The curriculum sequence below is a suggested sequence, as all Grainger Engineering students work with a department academic advisor to achieve their educational goals, specific to their needs and preparation. Dynamic and Static curricular maps, which include prerequisite and corequisite sequencing, can be found here (https://grainger.illinois.edu/academics/undergraduate/majors-and-minors/engineering-mechanics-map/).

First Year

First Semester		Hours
TAM 195	Mechanics in the Modern World	1
ENG 100	Engineering Orientation	0
MATH 221[1]	Calculus I	4
CHEM 102	General Chemistry I	3
CHEM 103	General Chemistry Lab I	1
RHET 105 or ME 170[2]	Writing and Research	4-3
General education elective[3]		3
	Semester Hours	16-15

Second Semester		
MATH 231	Calculus II	3
CS 101	Intro Computing: Engrg Sci	3
PHYS 211	University Physics: Mechanics	4
ME 170 or RHET 105[2]	Computer-Aided Design	3-4
General education elective[3]		3
	Semester Hours	16-17

Second Year

First Semester		
MATH 257	Linear Algebra with Computational Applications	3
CHEM 104	General Chemistry II	3
CHEM 105	General Chemistry Lab II	1
TAM 211	Statics	3
TAM 270	Design for Manufacturability	3
ME 290	Seminar	0
General education elective[3]		3
	Semester Hours	16

Second Semester		
MATH 241	Calculus III	4
PHYS 212	University Physics: Elec Mag	4
TAM 212	Introductory Dynamics	3
TAM 251	Introductory Solid Mechanics	3
TAM 252	Solid Mechanics Design	1
General education elective[3]		3
	Semester Hours	18

Third Year

First Semester		
MATH 441	Differential Equations	3
ECE 205	Electrical and Electronic Circuits	3
ME 200	Thermodynamics	3
TAM 335	Introductory Fluid Mechanics	4
Free Elective		3
	Semester Hours	16

Second Semester		
PHYS 213	Univ Physics: Thermal Physics	2
PHYS 214	Univ Physics: Quantum Physics	2
TAM 324	Behavior of Materials	4
TAM 412	Intermediate Dynamics	4
TAM 445	Continuum Mechanics	4
	Semester Hours	16

Fourth Year

First Semester		
ME 470 (or Secondary field elective)[4]	Senior Design Project	3
MATH 442	Intro Partial Diff Equations	3
TAM 470	Computational Mechanics	3
Secondary field elective[4]		3
General education elective[3]		3
	Semester Hours	15

Second Semester		
Secondary Field Elective (or ME 470)[4]		3
Secondary field elective[4]		6
General education elective[3]		3
Free elective		3
	Semester Hours	15
	Total Hours:	128

[1] *MATH 220 may be substituted, with four of the five credit hours applying toward the degree. MATH 220 is appropriate for students with no background in calculus.*

[2] *RHET 105 (or an alternative Composition I sequence) is taken either in the first or second semester of the first year, according to the student's UIN (Spring if your UIN is Odd). ME 170 is taken the other semester. Composition I guidelines can be found at* http://catalog.illinois.edu/general-information/degree-general-education-requirements/ *under Written Communication Requirement.*

[3] *Students must take 6 hours from the campus General Education Social and Behavioral Sciences list, 6 hours from campus General Education Humanities and the Arts list, and 6 hours from a liberal education list approved by the college or from the campus General Education lists for Social and Behavioral Sciences or Humanities and the Arts.*
Students must also complete the campus cultural studies requirement by completing (i) one western/comparative culture(s) course, (ii) one non-western culture(s) course, and (iii) one U.S. Minority Culture(s) course from the General Education cultural studies lists. Most students select general education courses that simultaneously satisfy these cultural studies requirements.

[4] *Select with departmental approval or choose from departmentally pre-approved* list of Secondary Field Electives *(*http://mechanical.illinois.edu/undergraduate/bs-engineering-mechanics/#EMSecondaryFields*).*

Learning Outcomes: Engineering Mechanics, BS

Learning Outcomes for the degree of Bachelor of Science Major in Engineering Mechanics

Student learning outcomes are based on learning outcomes in line with the ABET accreditation process.

Engineering Mechanics graduates will have:

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. An ability to communicate effectively with a range of audiences.
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Engineering Technology & Management for Agricultural Systems, BS

for the degree of Bachelor of Science Major in Engineering Technology & Management for Agricultural Systems

department website: https://abe.illinois.edu/undergraduate/
department faculty: https://abe.illinois.edu/directory/faculty (https://abe.illinois.edu/directory/faculty/)

overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college website: https://aces.illinois.edu/

The major in Engineering Technology and Management for Agricultural Systems is designed to prepare students as problem solvers for systems involving the application, management, and/or marketing of engineering technologies. Students are instructed in engineering and business principles in preparation as technically competent business persons for professional careers as entrepreneurs, marketing representatives, or plant managers working with service organizations, manufacturers, corporate farms, retail dealers, power suppliers, contractors, or management companies from production through processing and distribution.

Students pursuing this major select one of four concentrations:

- Agricultural Production & Processing (p. 179)
- Construction Management (p. 182)
- Digital & Precision Agriculture (p. 184)
- Energy & the Environment (p. 186)

for the degree of Bachelor of Science Major in Engineering Technology & Management for Agricultural Systems

Prescribed Courses including Campus General Education

Code	Title	Hours
Composition I and Speech		
Select one of the following:		6-7
RHET 105 & CMN 101	Writing and Research and Public Speaking (or equivalent (see college Composition I requirement))	
CMN 111 & CMN 112	Oral & Written Comm I and Oral & Written Comm II	
Advanced Composition		**3-4**
Select from the below list		
AGCM 220	Communicating Agriculture	
BADM 340	Ethical Dilemmas of Business	
BTW 250	Principles Bus Comm	
BTW 261	Principles Tech Comm	
ECE 316	Ethics and Engineering	
ESE 360	Environmental Writing	
LEAD 230	Leadership Communications	
NRES 419	Env and Plant Ecosystems	
PLPA 200	Plants, Pathogens, and People	
TSM 311	Humanity in the Food Web	
Cultural Studies		**9**
Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists.		
Foreign Language		
Coursework at or above the third level is required for graduation.		
Quantitative Reasoning I		
MATH 234	Calculus for Business I (or equivalent)	4
Quantitative Reasoning II		**3 or 4**
Select one of the following:		
ACE 262	Applied Statistical Methods and Data Analytics I	
CPSC 241	Intro to Applied Statistics	
ECON 202	Economic Statistics I	
STAT 107	Data Science Discovery	
Natural Sciences and Technology		
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	4
PHYS 101	College Physics: Mech & Heat	5
Select one of the following:		4-5

CHEM 104 & CHEM 105	General Chemistry II and General Chemistry Lab II	
OR		
PHYS 102	College Physics: E&M & Modern	
Humanities and the Arts		
Select from campus approved list.		6
Social and Behavioral Sciences		
ACE 100	Introduction to Applied Microeconomics	3-4
or ECON 102	Microeconomic Principles	
Social and behavioral sciences. Select from campus approved list.		3 or 4
ACES Prescribed		
ACES 101	Contemporary Issues in ACES	2
TSM Required		
CS 105	Intro Computing: Non-Tech	3
TSM 100	Technical Systems in Agr	3
TSM 339	Optimization in Engineering Technology and Management	3
TSM 421	Ag Safety-Injury Prevention	3
or TSM 422	Ag Health-Illnesses Prevention	
TSM 430	Project Management	2
TSM 439	Capstone Experience	4
Business electives		**6**
A total of 6 hours from the Business Electives list which do not satisfy any other requirements.		
ACCY 200	Fundamentals of Accounting	3
ACCY 201	Accounting and Accountancy I	3
ACCY 202	Accounting and Accountancy II	3
ACCY 211	Understanding Financial Statements	3
ACCY 212	Understanding Accounting for Business Decisions	3
ACE 210	Environmental Economics	3
ACE 240	Personal Financial Planning	3
ACE 310	Natural Resource Economics	3
ACE 345	Finan Decision Indiv Sm Bus	3
ACE 346	Tax Policy and Finan Planning	3
ACE 432	Advanced Farm Management	3 or 4
ACE 435	Global Agribusiness Management	3
AGCM 270	Ag Sales and Persuasive Communication	3
BADM 300	The Legal Environment of Bus	3
BADM 310	Mgmt and Organizational Beh	3
BADM 311	Leading Individuals and Teams	3
BADM 312	Designing and Managing Orgs	3
BADM 313	Strategic Human Resource Management	3
BADM 314	Leading Negotiations	3
BADM 320	Principles of Marketing	3
BADM 322	Marketing Research	3
BADM 323	Marketing Communications	3
BADM 326	Pricing Strategy	3
FIN 221	Corporate Finance	3
FIN 230	Introduction to Insurance	3
LER 290	Introduction to Employment Law	3
LEAD 140	Harnessing Your Interpersonal Intelligence	2
LEAD 260	Foundations of Leadership	3
LEAD 340	Leadership Ethics & Society: Addressing Contemporary Challenges	3
LEAD 380	Leadership in Groups and Teams	3
LEAD 440	Interpersonal Intelligence for Professional Success	2
SE 361	Emotional Intelligence Skills	3
SE 400	Engineering Law	3 or 4
TE 230	Design Thinking/Need-Finding	3
TE 250	From Idea to Enterprise	2
TE 333	Creativity, Innovation, Vision	4
TE 360	Lectures in Engineering Entrepreneurship	1
TE 450	Startups: Incorporation, Funding, Contracts, & Intellectual Property	3
Introductory Related Courses		
Select 2 courses from the list for your concentration.		6-8
TSM Electives		
A total of 20 hours from the list for your concentration with a minimum of 11 hours at the advanced level.		20
Concentration Electives		
Select 18 hours from the list for your concentration, which do not satisfy any other requirements, with a minimum of 12 hours at the advanced level.		18
Total Hours		**126**

ETMAS majors will need 40 hours of upper-level courses (300- and 400-level) to satisfy the campus minimum requirement of 40 hours of advanced coursework.

Engineering Technology & Management for Agricultural Systems: Agricultural Production & Processing, BS

for the degree of Bachelor of Science Major in Engineering Technology & Management for Agricultural Systems: Agricultural Production & Processing concentration

department website: https://abe.illinois.edu/undergraduate/
department faculty: https://abe.illinois.edu/directory/faculty (https://abe.illinois.edu/directory/faculty/)

overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college website: https://aces.illinois.edu/

Students in the Agricultural Production & Processing concentration learn the technology, machinery, and management of the agricultural production system. Students will gain knowledge and skills in topics including: 1) the agricultural industry from an operational and management perspective; 2) agricultural machinery, grain storage systems, and bioprocessing systems; 3) numerical and scientific processes to drive management decisions; and 4) the science and management of the complete food production system. Graduates of the Agricultural Production & Processing concentration are prepared for

careers in industry with both small and large companies, agricultural retailers and service providers, production farming operations, government and environmental agencies, or for entrance into graduate or professional school.

for the degree of Bachelor of Science Major in Engineering Technology & Management for Agricultural Systems, Agricultural Production & Processing concentration

Prescribed Courses including Campus General Education

Code	Title	Hours
Composition I and Speech		
Select one of the following:		6-7
RHET 105 & CMN 101	Writing and Research and Public Speaking (or equivalent (see college Composition I requirement))	
CMN 111 & CMN 112	Oral & Written Comm I and Oral & Written Comm II	
Advanced Composition		**3-4**
Select from the below list		
AGCM 220	Communicating Agriculture	
BADM 340	Ethical Dilemmas of Business	
BTW 250	Principles Bus Comm	
BTW 261	Principles Tech Comm	
ECE 316	Ethics and Engineering	
ESE 360	Environmental Writing	
LEAD 230	Leadership Communications	
NRES 419	Env and Plant Ecosystems	
PLPA 200	Plants, Pathogens, and People	
TSM 311	Humanity in the Food Web	
Cultural Studies		**9**
Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists.		
Foreign Language		
Coursework at or above the third level is required for graduation.		
Quantitative Reasoning I		
MATH 234	Calculus for Business I (or equivalent)	4
Quantitative Reasoning II		**3 or 4**
Select one of the following:		
ACE 262	Applied Statistical Methods and Data Analytics I	
CPSC 241	Intro to Applied Statistics	
ECON 202	Economic Statistics I	
STAT 107	Data Science Discovery	
Natural Sciences and Technology		
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	4
PHYS 101	College Physics: Mech & Heat	5
Select one of the following:		4-5
CHEM 104 & CHEM 105	General Chemistry II and General Chemistry Lab II	
OR		
PHYS 102	College Physics: E&M & Modern	
Humanities and the Arts		
Select from campus approved list.		6
Social and Behavioral Sciences		
ACE 100	Introduction to Applied Microeconomics	3-4
or ECON 102	Microeconomic Principles	
Social and behavioral sciences. Select from campus approved list.		3 or 4
ACES Prescribed		
ACES 101	Contemporary Issues in ACES	2
TSM Required		
CS 105	Intro Computing: Non-Tech	3
TSM 100	Technical Systems in Agr	3
TSM 339	Optimization in Engineering Technology and Management	3
TSM 421	Ag Safety-Injury Prevention	3
or TSM 422	Ag Health-Illnesses Prevention	
TSM 430	Project Management	2
TSM 439	Capstone Experience	4
Business electives		**6**
A total of 6 hours from the Business Electives list which do not satisfy any other requirements.		
ACCY 200	Fundamentals of Accounting	3
ACCY 201	Accounting and Accountancy I	3
ACCY 202	Accounting and Accountancy II	3
ACCY 211	Understanding Financial Statements	3
ACCY 212	Understanding Accounting for Business Decisions	3
ACE 210	Environmental Economics	3
ACE 240	Personal Financial Planning	3
ACE 310	Natural Resource Economics	3
ACE 345	Finan Decision Indiv Sm Bus	3
ACE 346	Tax Policy and Finan Planning	3
ACE 432	Advanced Farm Management	3 or 4
ACE 435	Global Agribusiness Management	3
AGCM 270	Ag Sales and Persuasive Communication	3
BADM 300	The Legal Environment of Bus	3
BADM 310	Mgmt and Organizational Beh	3
BADM 311	Leading Individuals and Teams	3
BADM 312	Designing and Managing Orgs	3
BADM 313	Strategic Human Resource Management	3
BADM 314	Leading Negotiations	3
BADM 320	Principles of Marketing	3
BADM 322	Marketing Research	3
BADM 323	Marketing Communications	3
BADM 326	Pricing Strategy	3
FIN 221	Corporate Finance	3
FIN 230	Introduction to Insurance	3
LER 290	Introduction to Employment Law	3
LEAD 140	Harnessing Your Interpersonal Intelligence	2
LEAD 260	Foundations of Leadership	3
LEAD 340	Leadership Ethics & Society: Addressing Contemporary Challenges	3

LEAD 380	Leadership in Groups and Teams	3
LEAD 440	Interpersonal Intelligence for Professional Success	2
SE 361	Emotional Intelligence Skills	3
SE 400	Engineering Law	3 or 4
TE 230	Design Thinking/Need-Finding	3
TE 250	From Idea to Enterprise	2
TE 333	Creativity, Innovation, Vision	4
TE 360	Lectures in Engineering Entrepreneurship	1
TE 450	Startups: Incorporation, Funding, Contracts, & Intellectual Property	3
Introductory Related Courses		
Select 2 courses from the list for your concentration.		6-8
TSM Electives		
A total of 20 hours from the list for your concentration with a minimum of 11 hours at the advanced level.		20
Concentration Electives		
Select 18 hours from the list for your concentration, which do not satisfy any other requirements, with a minimum of 12 hours at the advanced level.		18
Total Hours		**126**

ETMAS majors will need 40 hours of upper-level courses (300- and 400-level) to satisfy the campus minimum requirement of 40 hours of advanced coursework.

Concentration Requirements

Code	Title	Hours
Introductory Related Courses		
Select two courses from this list:		
ACES 102	Intro Sustainable Food Systems	3
ANSC 100	Intro to Animal Sciences	4
CPSC 112	Introduction to Crop Sciences	4
HORT 100	Introduction to Horticulture	3
FSHN 101	The Science of Food and How it Relates to You	3
LEAD 260	Foundations of Leadership	3
MFST 101	Experiencing Food Systems	3
NRES 201	Introductory Soils	4
TSM Electives		
Required:		
TSM 103	Agricultural Machinery and Technology	2
Select an additional 18 hours from the below list for a total of 20 hours with a minimum of 11 hours at the advanced level		
TSM 130	Basics of CAD	1
TSM 132	Basics of Project Management	1
TSM 232	Materials and Construction Sys	3
TSM 233	Metallurgy & Welding Process	3
TSM 234	Wiring, Motors and Control Sys	3
TSM 262	Off-Road Equipment Management	3
TSM 295	Undergrad Research or Thesis	1 to 4
TSM 352	Land and Water Mgt Systems	3
TSM 363	Fluid Power Systems	2
TSM 371	Residential Housing Design	3
TSM 372	Environ Control & HVAC Systems	3
TSM 381	Grain Drying & Storage Systems	3
TSM 396	UG Honors Research or Thesis	1 to 4
TSM 425	Managing Ag Safety Risk	3
TSM 435	Elec Computer Ctrl Sys	3
TSM 464	Engine and Tractor Power	3
TSM 467	Precision Agric Technology	3
TSM 486	Grain Bioprocessing Coproducts	3
TSM 496	Independent Study	1 to 4
Concentration Electives		
Select 18 hours from the lists below with a minimum of 12 hours at the advanced level		
Select two from the Food and Agricultural Marketing Management and Law category		
Food and Agricultural Marketing Management and Law		
ACE 222	Agricultural Marketing	
ACE 231	Food and Agribusiness Mgt	
ACE 232	Farm Management	
ACE 306	Food Law	
ACE 403	Agricultural Law	
ACE 427	Commodity Price Analysis	
ACE 428	Commodity Futures and Options	
ACE 430	Food Marketing	
ACE 431	Agri-food Strategic Management	
ACE 432	Advanced Farm Management	
ACE 435	Global Agribusiness Management	
Pick four classes from no more than two of these categories:		
Animal Production & Processing		
ANSC 219	Meat Technology	
ANSC 223	Animal Nutrition	
ANSC 301	Food Animal Production, Management, and Evaluation	
ANSC 310	Meat Selection and Grading	
ANSC 322	Livestock Feeds and Feeding	
ANSC 400	Dairy Herd Management	
ANSC 401	Beef Production	
ANSC 402	Sheep and Goat Production	
ANSC 403	Pork Production	
ANSC 404	Poultry Science	
ANSC 424	Pet Food & Feed Manufacturing	
Food Production & Processing		
FSHN 232	Science of Food Preparation	
FSHN 260	Raw Materials for Processing	
FSHN 345	Strategic Operations Management	
FSHN 460	Food Processing Engineering	
FSHN 465	Principles of Food Technology	
FSHN 469	Package Engineering	
FSHN 471	Food & Industrial Microbiology	
FSHN 472	Applied Food Microbiology	
Horticultural Production & Processing		
HORT 205	Local Food Systems	
HORT 341	Greenhouse Mgmt and Production	
HORT 360	Vegetable Crop Production	
HORT 361	Small Fruit Production	

HORT 363	Postharvest Handling Hort Crop
HORT 435	Urban Food Production
PLPA 405	Plant Disease Diagnosis & Mgmt
Crop Production & Processing	
CPSC 212	Introduction to Plant Protection
CPSC 270	Applied Entomology
CPSC 408	Integrated Pest Management
CPSC 412	Principles of Crop Production
CPSC 414	Forage Crops & Pasture Ecology
CPSC 415	Bioenergy Crops
CPSC 418	Crop Growth and Management
CPSC 426	Weed Mgt in Agronomic Crops
CPSC 473	Mgmt of Field Crop Insects
NRES 474	Soil and Water Conservation
NRES 488	Soil Fertility and Fertilizers
PLPA 405	Plant Disease Diagnosis & Mgmt

Engineering Technology & Management for Agricultural Systems: Construction Management, BS

for the degree of Bachelor of Science Major in Engineering Technology & Management for Agricultural Systems: Construction Management concentration

department website: https://abe.illinois.edu/undergraduate/
department faculty: https://abe.illinois.edu/directory/faculty (https://abe.illinois.edu/directory/faculty/)

overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college website: https://aces.illinois.edu/

Students in the Construction Management concentration are trained in construction skills and concepts, as well as management practices and principles Students learn to 1) manage residential, agricultural, and industrial construction technologies; 2) operate and manufacture systems that provide the desired environmental conditions for animals, people, crop storage, and greenhouses; 3) maintain systems to handle and treat biowaste; and 4) develop alternative housing and nutrient management practices. Graduates of the Construction Management concentration are prepared for careers with private construction companies, government and environmental agencies, or for entrance into graduate or professional school.

for the degree of Bachelor of Science Major in Engineering Technology & Management for Agricultural Systems, Construction Management concentration

Prescribed Courses including Campus General Education

Code	Title	Hours
Composition I and Speech		
Select one of the following:		6-7
RHET 105 & CMN 101	Writing and Research and Public Speaking (or equivalent (see college Composition I requirement))	
CMN 111 & CMN 112	Oral & Written Comm I and Oral & Written Comm II	
Advanced Composition		**3-4**
Select from the below list		
AGCM 220	Communicating Agriculture	
BADM 340	Ethical Dilemmas of Business	
BTW 250	Principles Bus Comm	
BTW 261	Principles Tech Comm	
ECE 316	Ethics and Engineering	
ESE 360	Environmental Writing	
LEAD 230	Leadership Communications	
NRES 419	Env and Plant Ecosystems	
PLPA 200	Plants, Pathogens, and People	
TSM 311	Humanity in the Food Web	
Cultural Studies		**9**
Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists.		
Foreign Language		
Coursework at or above the third level is required for graduation.		
Quantitative Reasoning I		
MATH 234	Calculus for Business I (or equivalent)	4
Quantitative Reasoning II		**3 or 4**
Select one of the following:		
ACE 262	Applied Statistical Methods and Data Analytics I	
CPSC 241	Intro to Applied Statistics	
ECON 202	Economic Statistics I	
STAT 107	Data Science Discovery	
Natural Sciences and Technology		
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	4
PHYS 101	College Physics: Mech & Heat	5
Select one of the following:		4-5
CHEM 104 & CHEM 105	General Chemistry II and General Chemistry Lab II	
OR		
PHYS 102	College Physics: E&M & Modern	
Humanities and the Arts		
Select from campus approved list.		6
Social and Behavioral Sciences		
ACE 100	Introduction to Applied Microeconomics	3-4
or ECON 102	Microeconomic Principles	
Social and behavioral sciences. Select from campus approved list.		3 or 4
ACES Prescribed		

ACES 101	Contemporary Issues in ACES	2
TSM Required		
CS 105	Intro Computing: Non-Tech	3
TSM 100	Technical Systems in Agr	3
TSM 339	Optimization in Engineering Technology and Management	3
TSM 421	Ag Safety-Injury Prevention	3
or TSM 422	Ag Health-Illnesses Prevention	
TSM 430	Project Management	2
TSM 439	Capstone Experience	4
Business electives		**6**
A total of 6 hours from the Business Electives list which do not satisfy any other requirements.		
ACCY 200	Fundamentals of Accounting	3
ACCY 201	Accounting and Accountancy I	3
ACCY 202	Accounting and Accountancy II	3
ACCY 211	Understanding Financial Statements	3
ACCY 212	Understanding Accounting for Business Decisions	3
ACE 210	Environmental Economics	3
ACE 240	Personal Financial Planning	3
ACE 310	Natural Resource Economics	3
ACE 345	Finan Decision Indiv Sm Bus	3
ACE 346	Tax Policy and Finan Planning	3
ACE 432	Advanced Farm Management	3 or 4
ACE 435	Global Agribusiness Management	3
AGCM 270	Ag Sales and Persuasive Communication	3
BADM 300	The Legal Environment of Bus	3
BADM 310	Mgmt and Organizational Beh	3
BADM 311	Leading Individuals and Teams	3
BADM 312	Designing and Managing Orgs	3
BADM 313	Strategic Human Resource Management	3
BADM 314	Leading Negotiations	3
BADM 320	Principles of Marketing	3
BADM 322	Marketing Research	3
BADM 323	Marketing Communications	3
BADM 326	Pricing Strategy	3
FIN 221	Corporate Finance	3
FIN 230	Introduction to Insurance	3
LER 290	Introduction to Employment Law	3
LEAD 140	Harnessing Your Interpersonal Intelligence	2
LEAD 260	Foundations of Leadership	3
LEAD 340	Leadership Ethics & Society: Addressing Contemporary Challenges	3
LEAD 380	Leadership in Groups and Teams	3
LEAD 440	Interpersonal Intelligence for Professional Success	2
SE 361	Emotional Intelligence Skills	3
SE 400	Engineering Law	3 or 4
TE 230	Design Thinking/Need-Finding	3
TE 250	From Idea to Enterprise	2
TE 333	Creativity, Innovation, Vision	4
TE 360	Lectures in Engineering Entrepreneurship	1
TE 450	Startups: Incorporation, Funding, Contracts, & Intellectual Property	3
Introductory Related Courses		
Select 2 courses from the list for your concentration.		6-8
TSM Electives		
A total of 20 hours from the list for your concentration with a minimum of 11 hours at the advanced level.		20
Concentration Electives		
Select 18 hours from the list for your concentration, which do not satisfy any other requirements, with a minimum of 12 hours at the advanced level.		18
Total Hours		**126**

ETMAS majors will need 40 hours of upper-level courses (300- and 400-level) to satisfy the campus minimum requirement of 40 hours of advanced coursework.

Concentration Requirements:

Code	Title	Hours
Introductory Related Courses		
Select two courses from this list:		
LEAD 260	Foundations of Leadership	3
NRES 201	Introductory Soils	4
UP 101	Introduction to City Planning	3
UP 136	Urban Sustainability	3
TSM Electives		
Required:		
TSM 232	Materials and Construction Sys	3
TSM 371	Residential Housing Design	3
TSM 372	Environ Control & HVAC Systems	3
Select an additional 11 hours from the list below for a total of 20 hours with a minimum of 11 hours at the advanced level		
TSM 130	Basics of CAD	1
TSM 132	Basics of Project Management	1
TSM 233	Metallurgy & Welding Process	3
TSM 234	Wiring, Motors and Control Sys	3
TSM 262	Off-Road Equipment Management	3
TSM 295	Undergrad Research or Thesis	1 to 4
TSM 352	Land and Water Mgt Systems	3
TSM 363	Fluid Power Systems	2
TSM 396	UG Honors Research or Thesis	1 to 4
TSM 425	Managing Ag Safety Risk	3
TSM 435	Elec Computer Ctrl Sys	3
TSM 496	Independent Study	1 to 4
Concentration Electives		
Select 18 hours from the list below with a minimum of 12 hours at the advanced level.		
At least two of:		
CEE 320	Construction Engineering	
CEE 420	Construction Productivity	
CEE 421	Construction Planning	
CEE 422	Construction Cost Analysis	
At least one of:		
BADM 300	The Legal Environment of Bus	
BADM 310	Mgmt and Organizational Beh	

BADM 320	Principles of Marketing
FIN 221	Corporate Finance
FIN 241	Fundamentals of Real Estate
At least one of:	
UP 406	Urban Ecology
UP 446	Sustainable Planning Seminar
UP 466	Energy & the Built Environment
UP 475	Real Estate Development Fundamentals
UP 480	Sustainable Design Principles
May select from the below list to achieve 18 hours:	
ACE 435	Global Agribusiness Management
CEE 424	Sustainable Const Methods
ESE 482	Challenges of Sustainability

Engineering Technology & Management for Agricultural Systems: Digital & Precision Agriculture, BS

for the degree of Bachelor of Science Major in Engineering Technology & Management for Agricultural Systems: Digital & Precision Agriculture concentration

department website: https://abe.illinois.edu/undergraduate/
department faculty: https://abe.illinois.edu/directory/faculty (https://abe.illinois.edu/directory/faculty/)

overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college website: https://aces.illinois.edu/

Students in the Digital & Precision Agriculture concentration learn the application of technology in agriculture and the larger system of production agriculture, including machinery, agronomy, and business management. Students will gain an understanding of 1) the application of advanced technology used in agriculture with an emphasis on geospatial information systems and machinery technology; 2) the functional workings and management of agricultural machinery; 3) crop and soil science and their interactions with advanced technologies; 4) numerical and scientific processes to drive agricultural management decisions; and 5) business operations and management with a focus on the agricultural industry. Graduates of the Digital & Precision Agriculture concentration are prepared for careers in industry with both small and large companies, agricultural retailers and service providers, production farming operations, government and environmental agencies, or for entrance into graduate or professional school.

for the degree of Bachelor of Science Major in Engineering Technology & Management for Agricultural Systems, Digital & Precision Agriculture concentration

Prescribed Courses including Campus General Education

Code	Title	Hours
Composition I and Speech		
Select one of the following:		6-7
RHET 105 & CMN 101	Writing and Research and Public Speaking (or equivalent (see college Composition I requirement))	
CMN 111 & CMN 112	Oral & Written Comm I and Oral & Written Comm II	
Advanced Composition		**3-4**
Select from the below list		
AGCM 220	Communicating Agriculture	
BADM 340	Ethical Dilemmas of Business	
BTW 250	Principles Bus Comm	
BTW 261	Principles Tech Comm	
ECE 316	Ethics and Engineering	
ESE 360	Environmental Writing	
LEAD 230	Leadership Communications	
NRES 419	Env and Plant Ecosystems	
PLPA 200	Plants, Pathogens, and People	
TSM 311	Humanity in the Food Web	
Cultural Studies		**9**
Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists.		
Foreign Language		
Coursework at or above the third level is required for graduation.		
Quantitative Reasoning I		
MATH 234	Calculus for Business I (or equivalent)	4
Quantitative Reasoning II		**3 or 4**
Select one of the following:		
ACE 262	Applied Statistical Methods and Data Analytics I	
CPSC 241	Intro to Applied Statistics	
ECON 202	Economic Statistics I	
STAT 107	Data Science Discovery	
Natural Sciences and Technology		
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	4
PHYS 101	College Physics: Mech & Heat	5
Select one of the following:		4-5
CHEM 104 & CHEM 105	General Chemistry II and General Chemistry Lab II	
OR		
PHYS 102	College Physics: E&M & Modern	
Humanities and the Arts		
Select from campus approved list.		6
Social and Behavioral Sciences		
ACE 100	Introduction to Applied Microeconomics	3-4
or ECON 102	Microeconomic Principles	
Social and behavioral sciences. Select from campus approved list.		3 or 4
ACES Prescribed		

ACES 101	Contemporary Issues in ACES	2
TSM Required		
CS 105	Intro Computing: Non-Tech	3
TSM 100	Technical Systems in Agr	3
TSM 339	Optimization in Engineering Technology and Management	3
TSM 421	Ag Safety-Injury Prevention	3
or TSM 422	Ag Health-Illnesses Prevention	
TSM 430	Project Management	2
TSM 439	Capstone Experience	4
Business electives		**6**
A total of 6 hours from the Business Electives list which do not satisfy any other requirements.		
ACCY 200	Fundamentals of Accounting	3
ACCY 201	Accounting and Accountancy I	3
ACCY 202	Accounting and Accountancy II	3
ACCY 211	Understanding Financial Statements	3
ACCY 212	Understanding Accounting for Business Decisions	3
ACE 210	Environmental Economics	3
ACE 240	Personal Financial Planning	3
ACE 310	Natural Resource Economics	3
ACE 345	Finan Decision Indiv Sm Bus	3
ACE 346	Tax Policy and Finan Planning	3
ACE 432	Advanced Farm Management	3 or 4
ACE 435	Global Agribusiness Management	3
AGCM 270	Ag Sales and Persuasive Communication	3
BADM 300	The Legal Environment of Bus	3
BADM 310	Mgmt and Organizational Beh	3
BADM 311	Leading Individuals and Teams	3
BADM 312	Designing and Managing Orgs	3
BADM 313	Strategic Human Resource Management	3
BADM 314	Leading Negotiations	3
BADM 320	Principles of Marketing	3
BADM 322	Marketing Research	3
BADM 323	Marketing Communications	3
BADM 326	Pricing Strategy	3
FIN 221	Corporate Finance	3
FIN 230	Introduction to Insurance	3
LER 290	Introduction to Employment Law	3
LEAD 140	Harnessing Your Interpersonal Intelligence	2
LEAD 260	Foundations of Leadership	3
LEAD 340	Leadership Ethics & Society: Addressing Contemporary Challenges	3
LEAD 380	Leadership in Groups and Teams	3
LEAD 440	Interpersonal Intelligence for Professional Success	2
SE 361	Emotional Intelligence Skills	3
SE 400	Engineering Law	3 or 4
TE 230	Design Thinking/Need-Finding	3
TE 250	From Idea to Enterprise	2
TE 333	Creativity, Innovation, Vision	4
TE 360	Lectures in Engineering Entrepreneurship	1
TE 450	Startups: Incorporation, Funding, Contracts, & Intellectual Property	3
Introductory Related Courses		
Select 2 courses from the list for your concentration.		6-8
TSM Electives		
A total of 20 hours from the list for your concentration with a minimum of 11 hours at the advanced level.		20
Concentration Electives		
Select 18 hours from the list for your concentration, which do not satisfy any other requirements, with a minimum of 12 hours at the advanced level.		18
Total Hours		**126**

ETMAS majors will need 40 hours of upper-level courses (300- and 400-level) to satisfy the campus minimum requirement of 40 hours of advanced coursework.

Concentration Requirements

Code	Title	Hours
Introductory Related Courses		
CPSC 112	Introduction to Crop Sciences	4
NRES 201	Introductory Soils	4
TSM Electives		
Required		
TSM 103	Agricultural Machinery and Technology	2
TSM 262	Off-Road Equipment Management	3
TSM 363	Fluid Power Systems	2
TSM 435	Elec Computer Ctrl Sys	3
TSM 464	Engine and Tractor Power	3
TSM 467	Precision Agric Technology	3
Select an additional 4 hours from the below list for a total of 20 hours with a minimum of 11 hours at the advanced level		
TSM 130	Basics of CAD	1
TSM 132	Basics of Project Management	1
TSM 233	Metallurgy & Welding Process	3
TSM 234	Wiring, Motors and Control Sys	3
TSM 295	Undergrad Research or Thesis	1 to 4
TSM 352	Land and Water Mgt Systems	3
TSM 381	Grain Drying & Storage Systems	3
TSM 396	UG Honors Research or Thesis	1 to 4
TSM 425	Managing Ag Safety Risk	3
TSM 486	Grain Bioprocessing Coproducts	3
TSM 496	Independent Study	1 to 4
Concentration Electives		
Select 18 hours from the list below with a minimum of 12 hours at the advanced level.		
ACE 210	Environmental Economics	3
ACE 222	Agricultural Marketing	3
ACE 231	Food and Agribusiness Mgt	3
ACE 232	Farm Management	3
ACE 427	Commodity Price Analysis	3
ACE 428	Commodity Futures and Options	3
ACE 432	Advanced Farm Management	3 or 4
ACE 435	Global Agribusiness Management	3
One set of:		

GEOG 379 & GEOG 380	Intro to GIS Systems and GIS II: Spatial Prob Solving
OR	
GEOG 477 & GEOG 478	Introduction to Remote Sensing and Techniques of Remote Sensing
OR	
NRES 454 & NRES 455	GIS in Natural Resource Mgmt and Adv GIS for Nat Res Planning
One of:	
NRES 438	Soil Nutrient Cycling
NRES 471	Pedology
NRES 474	Soil and Water Conservation
NRES 488	Soil Fertility and Fertilizers
One of:	
CPSC 408	Integrated Pest Management
CPSC 412	Principles of Crop Production
CPSC 418	Crop Growth and Management
CPSC 426	Weed Mgt in Agronomic Crops
CPSC 473	Mgmt of Field Crop Insects

Engineering Technology & Management for Agricultural Systems: Energy & the Environment, BS

for the degree of Bachelor of Science Major in Engineering Technology & Management for Agricultural Systems: Energy & the Environment concentration

department website: https://abe.illinois.edu/undergraduate/
department faculty: https://abe.illinois.edu/directory/faculty (https://abe.illinois.edu/directory/faculty/)

overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college website: https://aces.illinois.edu/

Students in the Energy and the Environment concentration focus on renewable energy systems, environmental systems, or both. Students will 1) gain an understanding of the science behind renewable energy from sunlight wind, geothermal, and biomass sources; 2) perform economic analysts of proposed systems; 3) manage energy systems to blend appropriate sources into reliable , cost-effective, and long-lasting systems; and 4) develop, construct, and operate large-scale, grid-connected renewable energy projects. Students will also have the ability to utilize GIS and other technologies to develop and manage practices for controlling the transport of agricultural and other non-point sources of pollution in the environment, and to implement systems for sustaining and improving water quality, maintaining ecosystems, managing stormwater, and developing optimal irrigation use and drainage systems. Gradates of the Energy & the Environment concentration are prepared for careers with private consulting firms, government and environmental agencies, both small and large technology companies, or for entrance into graduate or professional school.

for the degree of Bachelor of Science Major in Engineering Technology & Management for Agricultural Systems, Energy & the Environment concentration

Prescribed Courses including Campus General Education

Code	Title	Hours
Composition I and Speech		
Select one of the following:		6-7
RHET 105 & CMN 101	Writing and Research and Public Speaking (or equivalent (see college Composition I requirement))	
CMN 111 & CMN 112	Oral & Written Comm I and Oral & Written Comm II	
Advanced Composition		**3-4**
Select from the below list		
AGCM 220	Communicating Agriculture	
BADM 340	Ethical Dilemmas of Business	
BTW 250	Principles Bus Comm	
BTW 261	Principles Tech Comm	
ECE 316	Ethics and Engineering	
ESE 360	Environmental Writing	
LEAD 230	Leadership Communications	
NRES 419	Env and Plant Ecosystems	
PLPA 200	Plants, Pathogens, and People	
TSM 311	Humanity in the Food Web	
Cultural Studies		**9**
Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists.		
Foreign Language		
Coursework at or above the third level is required for graduation.		
Quantitative Reasoning I		
MATH 234	Calculus for Business I (or equivalent)	4
Quantitative Reasoning II		**3 or 4**
Select one of the following:		
ACE 262	Applied Statistical Methods and Data Analytics I	
CPSC 241	Intro to Applied Statistics	
ECON 202	Economic Statistics I	
STAT 107	Data Science Discovery	
Natural Sciences and Technology		
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	4
PHYS 101	College Physics: Mech & Heat	5
Select one of the following:		4-5
CHEM 104 & CHEM 105	General Chemistry II and General Chemistry Lab II	
OR		
PHYS 102	College Physics: E&M & Modern	
Humanities and the Arts		
Select from campus approved list.		6
Social and Behavioral Sciences		

ACE 100	Introduction to Applied Microeconomics	3-4
or ECON 102	Microeconomic Principles	
Social and behavioral sciences. Select from campus approved list.		3 or 4
ACES Prescribed		
ACES 101	Contemporary Issues in ACES	2
TSM Required		
CS 105	Intro Computing: Non-Tech	3
TSM 100	Technical Systems in Agr	3
TSM 339	Optimization in Engineering Technology and Management	3
TSM 421	Ag Safety-Injury Prevention	3
or TSM 422	Ag Health-Illnesses Prevention	
TSM 430	Project Management	2
TSM 439	Capstone Experience	4
Business electives		**6**
A total of 6 hours from the Business Electives list which do not satisfy any other requirements.		
ACCY 200	Fundamentals of Accounting	3
ACCY 201	Accounting and Accountancy I	3
ACCY 202	Accounting and Accountancy II	3
ACCY 211	Understanding Financial Statements	3
ACCY 212	Understanding Accounting for Business Decisions	3
ACE 210	Environmental Economics	3
ACE 240	Personal Financial Planning	3
ACE 310	Natural Resource Economics	3
ACE 345	Finan Decision Indiv Sm Bus	3
ACE 346	Tax Policy and Finan Planning	3
ACE 432	Advanced Farm Management	3 or 4
ACE 435	Global Agribusiness Management	3
AGCM 270	Ag Sales and Persuasive Communication	3
BADM 300	The Legal Environment of Bus	3
BADM 310	Mgmt and Organizational Beh	3
BADM 311	Leading Individuals and Teams	3
BADM 312	Designing and Managing Orgs	3
BADM 313	Strategic Human Resource Management	3
BADM 314	Leading Negotiations	3
BADM 320	Principles of Marketing	3
BADM 322	Marketing Research	3
BADM 323	Marketing Communications	3
BADM 326	Pricing Strategy	3
FIN 221	Corporate Finance	3
FIN 230	Introduction to Insurance	3
LER 290	Introduction to Employment Law	3
LEAD 140	Harnessing Your Interpersonal Intelligence	2
LEAD 260	Foundations of Leadership	3
LEAD 340	Leadership Ethics & Society: Addressing Contemporary Challenges	3
LEAD 380	Leadership in Groups and Teams	3
LEAD 440	Interpersonal Intelligence for Professional Success	2
SE 361	Emotional Intelligence Skills	3
SE 400	Engineering Law	3 or 4
TE 230	Design Thinking/Need-Finding	3
TE 250	From Idea to Enterprise	2
TE 333	Creativity, Innovation, Vision	4
TE 360	Lectures in Engineering Entrepreneurship	1
TE 450	Startups: Incorporation, Funding, Contracts, & Intellectual Property	3
Introductory Related Courses		
Select 2 courses from the list for your concentration.		6-8
TSM Electives		
A total of 20 hours from the list for your concentration with a minimum of 11 hours at the advanced level.		20
Concentration Electives		
Select 18 hours from the list for your concentration, which do not satisfy any other requirements, with a minimum of 12 hours at the advanced level.		18
Total Hours		**126**

ETMAS majors will need 40 hours of upper-level courses (300- and 400-level) to satisfy the campus minimum requirement of 40 hours of advanced coursework.

Concentration Requirements

Code	Title	Hours
Introductory Related Courses		
Select two courses from this list		
ACES 102	Intro Sustainable Food Systems	3
CPSC 112	Introduction to Crop Sciences	4
ENVS 101	Introduction to Energy Sources	3
LEAD 260	Foundations of Leadership	3
NRES 102	Introduction to NRES	3
NRES 201	Introductory Soils	4
UP 136	Urban Sustainability	3
TSM Electives		
Required		
TSM 352	Land and Water Mgt Systems	3
TSM 438	Renewable Energy Applications	3
Select an additional 14 hours from the list below for a total of 20 hours with a minimum of 11 hours at the advanced level		
TSM 130	Basics of CAD	1
TSM 132	Basics of Project Management	1
TSM 232	Materials and Construction Sys	3
TSM 233	Metallurgy & Welding Process	3
TSM 234	Wiring, Motors and Control Sys	3
TSM 295	Undergrad Research or Thesis	1 to 4
TSM 371	Residential Housing Design	3
TSM 372	Environ Control & HVAC Systems	3
TSM 396	UG Honors Research or Thesis	1 to 4
TSM 425	Managing Ag Safety Risk	3
TSM 435	Elec Computer Ctrl Sys	3
TSM 496	Independent Study	1 to 4
Concentration Electives		
Select 18 hours from the list below with a minimum of 12 hours at the advanced level.		
At least one of:		

ACE 210	Environmental Economics
ACE 310	Natural Resource Economics
ACE 406	Environmental Law
ACE 410	Energy Economics
ACE 411	Environment and Development
At least one of:	
NRES 219	Applied Ecology
NRES 370	Environmental Sustainability
NRES 419	Env and Plant Ecosystems
NRES 420	Restoration Ecology
NRES 425	Natural Resources Law & Policy
NRES 426	Renewable Energy Policy
NRES 438	Soil Nutrient Cycling
NRES 439	Env and Sustainable Dev
NRES 471	Pedology
NRES 474	Soil and Water Conservation
NRES 477	Introduction to Remote Sensing
NRES 488	Soil Fertility and Fertilizers
At least one of:	
UP 405	Watershed Ecology and Planning
UP 406	Urban Ecology
UP 446	Sustainable Planning Seminar
UP 466	Energy & the Built Environment
UP 480	Sustainable Design Principles
May select from the below list to achieve 18 hours:	
AGCM 330	Environmental Communications
ECE 482	Digital IC Design
CEE 320	Construction Engineering
CEE 330	Environmental Engineering
CPSC 215	The Prairie and Bioenergy
CPSC 336	Tomorrow's Environment
CPSC 415	Bioenergy Crops
CPSC 416	Native Plants, Pollinators, & Food Ecosystems
CPSC 431	Plants and Global Change
CPSC 437	Principles of Agroecology
ESE 465	Transportation & Sustainability
ESE 482	Challenges of Sustainability
GLBL 201	Energy Systems

Learning Outcomes: Engineering Technology & Management for Agricultural Systems, BS

Learning outcomes for the degree of Bachelor of Science Major in Engineering Technology & Management for Agricultural Systems

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Students graduating with the B.S. in Engineering Technology & Management for Agricultural Systems should be able to:

1. Obtain subject matter expertise
2. Identify problems and develop problem solving abilities / critical thinking
3. Function effectively on multidisciplinary teams
4. Demonstrate professional and ethical values
5. Communicate effectively in written and oral forms
6. Engage in life-long learning skills
7. Develop leadership and interpersonal skills
8. Analyze and interpret data
9. Understand social and cultural contexts
10. Develop global perspective

English, BALAS

for the degree of Bachelors of Arts in Liberal Arts & Sciences Major in English

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department website: https://www.english.illinois.edu/
department faculty: English Faculty (https://english.illinois.edu/directory/faculty/)
advising: https://www.english.illinois.edu/undergraduate/advising/
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/

Undergraduate Degree Programs in English

Majors:

English, BALAS (p. 188) **with concentrations:**
- English, English Concentration, BALAS (p. 188)
- English, English Teaching Concentration, BALAS (p. 189)
- English, Topics in English Concentration, BALAS (p. 190)

Creative Writing, BALAS (p. 147)

Departmental Distinction: Students interested in graduating with distinction or high distinction are encouraged to consult the departmental honors adviser. In addition, students interested in the departmental honors program should contact the English department advising office.
for the degree of Bachelors of Arts in Liberal Arts & Sciences: Major in English

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Select a concentration:

- English Concentration (p. 188)
- Topics in English Concentration (p. 190)
- English Teaching Concentration (p. 189)

English: English Concentration, BALAS

for the degree of Bachelors of Arts in Liberal Arts & Sciences Major in English, English Concentration

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department website: https://www.english.illinois.edu/
department faculty: English Faculty (https://english.illinois.edu/directory/faculty/)
advising: English advising (https://www.english.illinois.edu/undergraduate/advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu (https://las.illinois.edu/)

Undergraduate Degree Programs in English

Majors:

English, BALAS (p. 188) **with concentrations:**
- English, English Concentration, BALAS (p. 188)
- English, English Teaching Concentration, BALAS (p. 189)
- English, Topics in English Concentration, BALAS (p. 190)

Creative Writing, BALAS (p. 147)

for the degree of Bachelors of Arts in Liberal Arts & Sciences Major in English, English Concentration

Minimum required major and supporting coursework equates to 39 hours of English department courses. Students must complete at least 15 hours of coursework at the 300-level or above (ENGL 301, ENGL 350, and 9 more hours), and 6 of these hours must come from two different period areas.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) requirements.

Minimum hours required for graduation: 120 hours.

Departmental Distinction: Students interested in graduating with distinction or high distinction are encouraged to consult the departmental honors adviser. In addition, students interested in graduating with distinction or high distinction are encouraged to consult the English department advising office.

Concentration Requirements

Code	Title	Hours
Core Courses		**9**
ENGL 200	Introduction to the Study of Literature and Culture (prerequisite for other English courses; can be taken at the same time as a course that satisfies the Composition I requirement)	
ENGL 301	Introduction to Critical Theory	
ENGL 350	Writing about Literature, Text, and Culture	
Historical Surveys		**6**
Students are encouraged to take these required survey courses as early as possible after completing ENGL 200		
Two courses from the following options:		
ENGL 209	Early British Literature and Culture	
ENGL 255	Early American Literature and Culture	
ENGL 259	Early African American Literature and Culture	
Any ethnic literature survey with a significant pre-1900 focus [1]		
Period Courses (American, British, Anglophone, etc.)		**15**
6 hours: At least two courses that cover at least two of the following categories:		
Medieval Literature & Culture (before 1550)		
Shakespeare		
Early Modern Literature & Culture (1550-1660, other than Shakespeare)		
Eighteenth-Century Literature & Culture (1660-1800)		
3 hours: At least one course in Nineteenth-Century Literature & Culture		
3 hours: At least one course in Twentieth-Century Literature & Culture		
3 hours: At least one course in Contemporary Literature & Culture		
Elective Coursework [1,2]		**9**
At least three courses chosen from those controlled by or cross-listed with the Department of English (Business and Technical Writing, Creative Writing, and English)		
One course in Difference and Diaspora. This requirement can be fulfilled by taking an appropriately focused course from among ENGL 350: Writing about Literature, Text, and Culture; the historical surveys; the period courses; or the elective coursework.		
Total Hours		39

1. Chosen from the list maintained in the Department of English. Note: ENGL 350 can serve as a period course, a cluster course, an elective course, and/or a Difference and Diaspora course only when it is not also being used to fulfill a core requirement. Students who wish to use ENGL 350 in this way must thus take the course a second time (and with a different topic than the first time).
2. Student may count one Independent Study course (ENGL 290, ENGL 390 or BTW 290) toward the additional coursework requirement.

English: English Teaching, BALAS

for the degree of Bachelors of Arts in Liberal Arts & Sciences Major in English, English Teaching Concentration

department website: https://www.english.illinois.edu/
department faculty: English Faculty (https://english.illinois.edu/directory/faculty/)
advising: English advising (https://www.english.illinois.edu/undergraduate/advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu (https://las.illinois.edu/)

Undergraduate Degree Programs in English

Majors:

English, BALAS (p. 188) **with concentrations:**

English, English Concentration, BALAS (p. 188)

English, English Teaching Concentration, BALAS (p. 189)

English, Topics in English Concentration, BALAS (p. 190)

Creative Writing, BALAS (p. 147)

for the degree of Bachelors of Arts in Liberal Arts & Sciences: Major in English, English Teaching Concentration

This concentration fulfills state certification requirements to teach high school (grades 9-12) English Language Arts through the AP/honors level.

Minimum required concentration and supporting coursework normally equates to 78 hours: 39 hours of English department courses and 39 hours of courses from the Teacher Education Minor in Secondary School Teaching. Students must complete at least 15 hours of coursework at the 300-level or above (ENGL 301, ENGL 350, and 9 more hours). Twelve hours of 300- and 400-level courses in the major must be taken on this campus.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) requirements including the campus general education language requirement.

Time to degree completion varies. Minimum time to completion is eight semesters, with some students requiring ten semesters. Transfer students may need ten total semesters combined to complete the program. Please see the LAS Transfer Handbook for more information.

To remain in good standing in this program and be recommended for licensure, candidates are required to maintain UIUC, cumulative, content area, and professional education grade point averages of 2.5 (A=4.0). Candidates should consult their advisor or the Council on Teacher Education for the list of courses used to compute these grade point averages.

Prerequisites to transfer to the English Teaching concentration: Students must complete ENGL 200, the two required historical surveys, and ENGL 301 (Intro to Critical Theory). In addition, it is strongly recommended that students complete five additional ENGL courses (chosen in consultation with an English advisor) appropriate to the English Teaching Concentration.

Departmental Distinction: Students interested in graduating with distinction or high distinction are encouraged to consult the departmental honors adviser. In addition, students interested in the departmental honors program should contact the English department advising office.

English Teaching Requirements

Code	Title	Hours
Core Courses		**9**
ENGL 200	Introduction to the Study of Literature and Culture (prerequisite for other English courses; can be taken at the same time as a course that satisfies the Composition I requirement)	
ENGL 301	Introduction to Critical Theory	
ENGL 350	Writing about Literature, Text, and Culture	
Historical Surveys		**6**
Students are encouraged to take these required survery courses as early as possible after completing ENGL 200		
ENGL 209	Early British Literature and Culture	
ENGL 255	Early American Literature and Culture	
Period Courses (American, British, Anglophone, etc.) [1]		**15**
3 hours: At least one course in one of the following categories:		
Medieval Literature & Culture (before 1550)		
Early Modern Literature & Culture (1550-1660, other then Shakespeare)		
Eighteenth-Century Literature & Culture (1660-1800)		
3 hours: Shakespeare		
3 hours: At least one course in Nineteenth-Century Literature & Culture		
3 hours: At least one course in Twentieth-Century Literature & Culture		
3 hours: At least one course in Contemporary Literature & Culture		
Language, Composition, & Pedagogy Courses		**9**
ENGL 402	Descriptive English Grammar	
ENGL 481	Composition Theory and Practice	
Select at least one of the following (3 hours):		
ENGL 310	Introduction to the Study of the English Language	
ENGL 311	History of the English Language	
ENGL 380	Topics in Writing Studies	
ENGL 482	Writing Technologies	
ENGL 485	Literature for the High School	
BTW 490	Special Topics Prof Writing	
One course in Difference & Diaspora. This requirement can be fulfilled by taking an appropriately focused course from among ENGL 350, the historical surveys, or the period courses. [1]		
Teacher Education Minor in Secondary School Teaching (p. 528)		**39**
Total Hours		78

[1] Chosen from the list maintained in the Department of English. Note: ENGL 350 can serve as a period course, a cluster course, an elective course, and/or a Difference and Diaspora course only when it is not also being used to fulfill a core requirement. Students who wish to use ENGL 350 in this way must thus take the course a second time (and with a different topic than the first time).

English: Topics in English, BALAS

for the degree of Bachelors of Arts in Liberal Arts & Sciences Major in English, Topics in English Concentration

department website: https://www.english.illinois.edu/
department faculty: English Faculty (https://english.illinois.edu/directory/faculty/)
advising: English advising (https://www.english.illinois.edu/undergraduate/advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu (https://las.illinois.edu/)

Undergraduate Degree Programs in English

Majors:

English, BALAS (p. 188) **with concentrations:**
- English, English Concentration, BALAS (p. 188)
- English, English Teaching Concentration, BALAS (p. 189)
- English, Topics in English Concentration, BALAS (p. 190)

Creative Writing, BALAS (p. 147)

for the degree of Bachelors of Arts in Liberal Arts & Sciences: Major in English, Topics in English Concentration

Minimum required major and supporting coursework equates to 39 hours of English department courses. Students must complete at least 15 hours of coursework at the 300-level or above (ENGL 301, ENGL 350, and 9 more hours) and 9 of these hours (including the capstone) must be taken in the student's chosen field.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) requirements.

Minimum hours required for graduation: 120 hours

For this concentration, students will complete 12 hours of coursework (4 courses) in one of three cluster areas: Literature and Science, Media Cultures, or Race, Indigeneity, Gender, and Sexuality. These 12 hours will be selected from an approved list of courses for this category maintained by the English department. Students can access these lists and a further description of each cluster on the Department of English website (https://english.illinois.edu/academics/undergraduate-studies/majors-minors/).

Departmental Distinction: Students interested in graduating with distinction or high distinction are encouraged to consult the departmental honors adviser. In addition, students interested in the departmental honors program should contact the English department advising office.

Topics in English

Code	Title	Hours
Core Courses		**9**
ENGL 200	Introduction to the Study of Literature and Culture (prerequisite for other English courses; can be taken at the same time as a course that satisfies the Composition I requirement)	
ENGL 301	Introduction to Critical Theory	
ENGL 350	Writing about Literature, Text, and Culture	
Cluster Courses [1]		**12**
Four courses in one of the following clusters, selected from approved lists maintained by the English Department:		
Literature and Science		
Media Cultures		
Race, Indigeneity, Gender, and Sexuality		
Capstone Course		**3**
ENGL 400	Senior Capstone Seminar (guided research in the student's chosen field)	
Elective Coursework [1,2]		**15**
At least five courses chosen from those controlled by or cross-listed with the Department of English (Business and Technical Writing, Creative Writing, and English)		
One course in Difference and Diaspora. This requirement can be fulfilled by taking an appropriately focused course from among ENGL 350: Writing about Literature, Text, and Culture; the cluster courses; or the elective coursework. [1]		
Total Hours		39

1. Chosen from the list maintained in the Department of English. Note: ENGL 350 can serve as a period course, a cluster course, an elective course, and/or a Difference and Diaspora course only when it is not also being used to fulfill a core requirement. Students who wish to use ENGL 350 in this way must thus take the course a second time (and with a different topic than the first time).
2. Students may count one Independent Study course (ENGL 290, ENGL 390 or BTW 290) toward the additional coursework requirement.

Learning Outcomes: English, BALAS

Learning Outcomes for the degree of Bachelors of Arts in Liberal Arts & Sciences Major in English

1. Capacity to understand, analyze, and interpret 'texts', broadly construed, through a variety of methods including close reading.
2. Capacity to understand literature and literary history in relation to historical, theoretical, aesthetic, and political contexts.
3. Ability to craft rigorous and well-supported arguments that demonstrate an awareness of audience (skills associated with the research paper).
4. Literacy, including clarity of written expression and the capacity to evaluate external sources.
5. Awareness of the ways in which forms of difference, including racial, ethnic, gender, and sexual difference, inform the production and reception of literature.

Finance, BS

for the degree of Bachelor of Science Major in Finance

The field of finance is primarily concerned with the acquisition and management of funds by business firms, governments, and individuals. A business seeks financial advice when considering the purchase of new equipment, the expansion of present facilities, or the raising of additional funds. Determining the value of financial and real assets and derivatives is a key activity in finance.

As the study of finance is designed to provide the student with both the theoretical background and the analytical tools required to make effective judgments in finance, many students select careers in business financial management, commercial and investment banking, investments, government finance, insurance, and real estate. In addition to the finance major requirements, students in finance must meet the University General Education requirements and the Gies College of Business core requirements (for more detail, see the Gies College of Business undergraduate section (https://giesbusiness.illinois.edu/undergraduate-hub/majors-and-minors/finance/)).

for the degree of Bachelor of Science Major in Finance

Advising Notes

- Courses taken to fulfill major requirements may not be taken on a credit-no credit basis.
- It is recommended that Finance majors take additional accounting. ACCY 201 and ACCY 202 are required in the business core. Many employers look favorably upon additional accounting courses.

Core Curriculum

Normally, students must register for no fewer than 12 hours or more than 18 hours in each semester. Students should take mathematics, economics, and accountancy courses in the semesters indicated in the sample schedule of courses. The computer science course must be taken during the first year. The computer science requirement no longer allows ACE 161 as an equivalent course.

Up to 4 hours of Kinesiology activity courses, numbered 100-110 may be counted toward the 124 hours for the degree. The same section of a course may not be repeated for credit. Credit is limited to a maximum of 12 credit hours for 199 courses. Students may receive foreign language credit for courses only 2 levels below highest level taken in high school. For example: 4 years of high school French-no credit below FR 102.

Credit toward the 124 degree hours is not given for MATH 101. Once the math requirement is completed, lower level math courses cannot be taken for credit.

Any course used to fill a specific degree requirement may not be taken on the credit-no credit grade option. Only free electives may be taken on the credit-no credit option. All finance and accountancy courses must be taken for a grade. It is recommended that all courses taken in the business administration area be taken for a grade.

Minimum hours required for graduation: 124 hours.

University Composition Requirements

Code	Title	Hours
Composition I: Principles of Composition [1]		4-7
Advanced Composition		3

General Education Requirements

Code	Title	Hours
A minimum of six courses is required, as follows:		18
Humanities & the Arts: Literature & the Arts (1-2 courses) [4]		
Humanities & the Arts: Historical & Philosophical Perspectives (1-2 courses) [4]		
Natural Sciences & Technology: Physical Sciences (0-2 courses) [5]		
Natural Sciences & Technology: Life Sciences (0-2 courses) [5]		
Behavioral Sciences (1 course)		
Cultural Studies: Non-Western Cultures (1 course)		
Cultural Studies: U.S. Minorities Cultures (1 course)		
Cultural Studies: Western/Comparative Cultures (1 course)		
Quantitative Reasoning (2 courses) [7]		

Language Other Than English

Code	Title	Hours
Completion of the third semester or equivalent of a language other than English is required. Completion of three years of a single language in high school satisfies this requirement.		0-15

Business Core Requirements

Code	Title	Hours
ACCY 201 & ACCY 202	Accounting and Accountancy I and Accounting and Accountancy II	6
BUS 101	Professional Responsibility and Business [2]	3
BUS 201	Business Dynamics	3
BUS 301	Business in Action	3
BUS 401	Global Business Perspectives	3
BADM 210 & BADM 211	Business Analytics I and Business Analytics II	6
BADM 275	Fundamentals of Operations Management	3
BADM 300	The Legal Environment of Bus	3
BADM 310	Mgmt and Organizational Beh [6]	3
BADM 320	Principles of Marketing	3
BADM 449	Business Policy and Strategy	3
CMN 101	Public Speaking	3
CS 105	Intro Computing: Non-Tech	3
ECON 102 & ECON 103	Microeconomic Principles and Macroeconomic Principles	6
FIN 221	Corporate Finance	3
Total Hours		54

1 *For a list of the specific courses that meet this requirement, see the college Office of Undergraduate Affairs in 1055 Business Instructional Facility or see the Course Explorer for a list of approved general education courses.*

2 BUS 101, BUS 201, BUS 301 *and* BUS 401 *are required for all Gies College of Business students. Students who enter the College their first year take each sequential course every fall.*
Inter-College transfer students take BUS 301 *and* BUS 401 *in their sophomore year. Off-campus transfer students take* BUS 101 *and* BUS 201 *in their junior year.*

4 *Three courses in the Humanities & the Arts area are required and students must complete at least one course in the Literature & the Arts and Historical & Perspectives subcategories. At least one of the courses must be a 200 or higher level course.*

5 *Two courses in the Natural Sciences & Technology area are required. It is strongly recommended that students complete one course in the Physical Sciences and Life Sciences subcategories.*

[6] *This course includes limited voluntary participation as a subject in experiments.*

[7] CS 105 *fulfills a Quantitative Reasoning I requirement.*

Code	Title	Hours
For Students Admitted Prior to Fall 2016		
FIN 300	Financial Markets (Prerequisite: FIN 221 Corporate Finance)	3
FIN 321	Advanced Corporate Finance (Prerequisite: FIN 300 Financial Markets)	3
Three additional full-semester, 3-hour 400-level Finance courses except FIN 494 or FIN 495 (Senior Research) and FIN 490 (Special Topics).		9
Select one of the following (Major elective):		3-4
ACCY 301	Atg Measurement & Disclosure (Prerequisite: ACCY 202)	
ACCY 302	Decision Making for Atg (Prerequisite: ACCY 202)	
ACE 428	Commodity Futures and Options	
BADM 374	Management Decision Models (Prerequisite: ECON 202 or consent of instructor)	
Economics: any 300- or 400-level course excluding ECON 302		
GEOG 483	Urban Geography	
Mathematics or statistics: any course above the minimum mathematics or statistics requirement of the college with the exception of MATH 225.		
Other courses as recommended by the Department of Finance faculty and approved by the Department of Finance chairperson.		

Code	Title	Hours
For Students Admitted Fall 2016 and Later		
FIN 300	Financial Markets (Prerequisite: FIN 221 Corporate Finance)	3
FIN 321	Advanced Corporate Finance (Prerequisite FIN 300 Financial Markets)	3
FIN 411	Investment & Portfolio Mngt (Prerequisite: FIN 300 Financial Markets)	3
Four additional full-semester, 3 hour 400 level-Finance courses except FIN 494 or FIN 495 (Senior Research) and FIN 490 (Special Topics).		12
One additional full-semester, 3-hour Finance course at the 200-level or above.		3

Learning Outcomes: Finance, BS

Learning Outcomes for the degree of Bachelor of Science Major in Finance

1. Discipline-based competency: Students will acquire sufficient discipline based competency to address current and future corporate and investment finance problems. Such competency includes using finance knowledge and tools necessary to value real and financial assets, analyze a company's financial performance, and identify risk factors underlying such valuations or analysis.
2. Written and verbal communication competency: Students will be able to effectively integrate information into a coherent, well-organized, professional report.
3. Proficiency in the tools of the trade: Students should be able to demonstrate proficiency in the tools of the trade. First and foremost is Excel, but proficiency in Bloomberg, Morningstar, Capital IQ and the other tools of our trade.
4. Professional practice and ethics: Students should be familiar with professional practice and demonstrate consistent ethical behavior.

Food Science & Human Nutrition, BS

for the degree of Bachelor of Science Major in Food Science & Human Nutrition

department website: https://fshn.illinois.edu
department faculty: https://fshn.illinois.edu/directory/faculty/
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college website: https://aces.illinois.edu/

Learning Outcomes

Students pursuing this major select one of four concentrations:

- Food Science Concentration (p. 195)
- Dietetics Concentration (p. 193)
- Human Nutrition Concentration (p. 198)
- Hospitality Management Concentration (p. 197)

Food Science & Human Nutrition: Dietetics, BS

for Bachelor of Science: Major in Food Science & Human Nutrition, Dietetics concentration

department website: https://fshn.illinois.edu
department faculty: https://fshn.illinois.edu/directory/faculty/
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#academicunitstext)
college website: https://aces.illinois.edu/

The Dietetics Concentration meets the requirements set by the Accreditation Council on Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics (AND) and qualifies students for competitive dietetic internships. Upon completion of a postgraduate internship, students selecting this concentration may take the examination to become Registered Dietitians. Students choosing this concentration who do not complete an internship will be prepared for entry-level supervisory positions in food service facilities and in the food and pharmaceutical industries.

for the degree of Bachelor of Science Major in Food Science & Human Nutrition, Dietetics concentration

Prescribed Courses including Campus General Education

Code	Title	Hours
Composition I and Speech		
Select one of the following:		6-7
RHET 105 & CMN 101	Writing and Research and Public Speaking (or equivalent) (see college Composition I requirement)	
CMN 111 & CMN 112	Oral & Written Comm I and Oral & Written Comm II	
Advanced Composition		
Select one course from campus approved list of Advanced Composition courses.		3-4
Cultural Studies		
Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists. [1]		9
Foreign Language		
Coursework at or above the third level is required for graduation.		
Quantitative Reasoning I		
Select one of the following: [2]		4-5
MATH 220	Calculus	
MATH 221	Calculus I	
MATH 234	Calculus for Business I (This course does not count for students in the Food Science Concentration; choose from the other two options.)	
Quantitative Reasoning II		
Select one of the following:		3-4
ACE 261	Applied Statistical Methods	
CPSC 241	Intro to Applied Statistics	
ECON 202	Economic Statistics I	
PSYC 235	Intro to Statistics	
STAT 100	Statistics	
Natural Sciences and Technology		
Chemistry [3]		3 or 8
CHEM 101	Introductory Chemistry	
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	
CHEM 104 & CHEM 105	General Chemistry II and General Chemistry Lab II	
MCB 100	Introductory Microbiology	3
MCB 101	Intro Microbiology Laboratory [4]	2
Humanities and the Arts		
Select from campus approved list.		6
Social and Behavioral Sciences		
Select from campus approved list and/or see individual concentration. [5]		9
ACES Prescribed Course		
ACES 101	Contemporary Issues in ACES	2
Required Concentration		
Concentration prescribed courses. See specific requirements for each concentration listed below.		
Total Hours [6]		**126 or 130**

1 *Students in the Food Science Concentration must choose CPSC 116, and one course from Western cultures, and one from U.S. minority cultures from campus approved lists.*

2 *Students in the Food Science Concentration must select from* MATH 220 *or* MATH 221.

3 *Students in the Hospitality Management Concentration must take CHEM 101. All other concentrations take CHEM 102 + 103 & CHEM 104 + 105, which are* ***not*** *required for the Hospitality Management Concentration.*

4 *Not required for the Food Science Concentration*

5 *AGED 230 or 260 and 3 hours selected from the campus approved list for students in the Food Science Concentration - 6 hours total.*

6 *The Food Science Concentration requires a minimum of 130 hours; the Dietetics, Human Nutrition, and Hospitality Management Concentrations each require a minimum of 126 hours.*

Code	Title	Hours
Other Natural Sciences and Technology Required		
CHEM 232	Elementary Organic Chemistry I	4
CHEM 233	Elementary Organic Chem Lab I	2
MCB 244	Human Anatomy & Physiology I	3
or FSHN 250	Nutritional Physiology I	
MCB 246	Human Anatomy & Physiology II	3
or FSHN 251	Nutritional Physiology II	
Social and Behavioral Sciences - required hours		**9-11**
HDFS 105	Intro to Human Development	
ACE 100	Introduction to Applied Microeconomics	
or ECON 102	Microeconomic Principles	
or ECON 103	Macroeconomic Principles	
Choose from the following:		
ANTH 101	Introduction to Anthropology	
ANTH 102	Human Origins and Culture	
ANTH 103	Anthro in a Changing World	
ANTH 209	Food, Culture, and Society	
HDFS 220	Families in Global Perspective	
PSYC 100	Intro Psych	
SOC 100	Introduction to Sociology	
Dietetics Concentration Requirements		
CHLH 250	Health Care Systems	3
FSHN 101	The Science of Food and How it Relates to You	3
FSHN 150	Introduction to Dietetics	1
FSHN 220	Principles of Nutrition	4
FSHN 232	Science of Food Preparation	3
FSHN 249	Food Service Sanitation	1
FSHN 329	Communication in Nutrition	3
FSHN 322	Nutrition and the Life Cycle	3
FSHN 340	Food Production and Service	4
FSHN 345	Strategic Operations Management	3
FSHN 420	Nutritional Aspects of Disease	3
FSHN 426	Biochemical Nutrition I	3
FSHN 427	Biochemical Nutrition II	3

FSHN 428	Community Nutrition	3
FSHN 429	Nutrition Assessment & Therapy	3
FSHN 450	Dietetics: Professional Issues	2
FSHN 459	Nutrition Focused Physical Assessment	2
Dietetics Concentration Electives - select one of the following:		**2-4**
BIOC 455	Technqs Biochem & Biotech	
CHLH 300-499	Any 300 or 400 level CHLH Course [1]	
FSHN 300-499	Any 300 or 400 level FSHN Course [1]	
HDFS 301	Infancy & Early Childhood	
HDFS 305	Middle Childhood	
HDFS 310	Adult Development	
HDFS 322	US Latina and Latino Families	
HDFS 405	Adolescent Development	
KIN 300-499	Any 300 or 400 level KIN Course [1]	
TSM 311	Humanity in the Food Web	
Elective hours as needed to reach a minimum of 126		

[1] Cannot be used to fulfill more than one requirement.

Learning Outcomes: Dietetics Concentration

Learning outcomes for the degree of Bachelor of Science Major in Food Science & Human Nutrition: Dietetics Concentration

All graduates of the University of Illinois Didactic Program in Dietetics (DPD) will be able to:

KRDN 1.1 Demonstrate how to locate, interpret, evaluate and use professional literature to make ethical, evidence-based practice decisions.

KRDN 1.2 Use current information technologies to locate and apply evidence-based guidelines and protocols.

KRDN 1.3 Apply critical thinking skills.

KRDN 2.1 Demonstrate effective and professional oral and written communication and documentation.

KRDN 2.2 Describe the governance of nutrition and dietetics practice, such as the Scope of Nutrition and Dietetics Practice and the Code of Ethics for the Profession of Nutrition and Dietetics; and describe interprofessional relationships in various practice settings.

KRDN 2.3 Assess the impact of a public policy position on nutrition and dietetics practice.

KRDN 2.4 Discuss the impact of health care policy and different health care delivery systems on food and nutrition services.

KRDN 2.5 Identify and describe the work of interprofessional teams and the roles of others with whom the registered dietitian nutritionist collaborates in the delivery of food and nutrition services.

KRDN 2.6 Demonstrate an understanding of cultural competence/sensitivity.

KRDN 2.7 Demonstrate identification with the nutrition and dietetics profession through activities such as participation in professional organizations and defending a position on issues impacting the nutrition and dietetics profession.

KRDN 2.8 Demonstrate an understanding of the importance and expectations of a professional in mentoring and precepting others.

KRDN 3.1 Use the Nutrition Care Process to make decisions, identify nutrition-related problems and determine and evaluate nutrition interventions.

KRDN 3.2 Develop an educational session or program/educational strategy for a target population.

KRDN 3.3 Demonstrate counseling and education methods to facilitate behavior change and enhance wellness for diverse individuals and groups.

KRDN 3.4 Explain the processes involved in delivering quality food and nutrition services.

KRDN 3.5 Describe basic concepts of nutritional genomics.

KRDN 4.1 Apply management theories to the development of programs or services.

KRDN 4.2 Evaluate a budget and interpret financial data.

KRDN 4.3 Describe the regulation system related to billing and coding, what services are reimbursable by third party payers, and how reimbursement may be obtained.

KRDN 4.4 Apply the principles of human resource management to different situations.

KRDN 4.5 Describe safety principles related to food, personnel and consumers.

KRDN 4.6 Analyze data for assessment and evaluate data to be used in decision-making for continuous quality improvement.

Food Science & Human Nutrition: Food Science, BS

for the degree of Bachelor of Science Major in Food Science & Human Nutrition, Food Science Concentration

department website: https://fshn.illinois.edu
department faculty: https://fshn.illinois.edu/directory/faculty/
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#academicunitstext)
college website: https://aces.illinois.edu/

The Food Science concentration exposes students to all components of food production: harvesting and raw-product handling, food-processing procedures and techniques, packaging, and food storage. Students selecting this concentration are prepared for careers in many areas of the food industry.

for the degree of Bachelor of Science Major in Food Science & Human Nutrition, Food Science Concentration

Prescribed Courses including Campus General Education

Code	Title	Hours
Composition I and Speech		
Select one of the following:		6-7
RHET 105 & CMN 101	Writing and Research and Public Speaking (or equivalent) (see college Composition I requirement)	
CMN 111 & CMN 112	Oral & Written Comm I and Oral & Written Comm II	
Advanced Composition		
Select one course from campus approved list of Advanced Composition courses.		3-4
Cultural Studies		
Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists. [1]		9
Foreign Language		
Coursework at or above the third level is required for graduation.		
Quantitative Reasoning I		
Select one of the following: [2]		4-5
MATH 220	Calculus	
MATH 221	Calculus I	
MATH 234	Calculus for Business I (This course does not count for students in the Food Science Concentration; choose from the other two options.)	
Quantitative Reasoning II		
Select one of the following:		3-4
ACE 261	Applied Statistical Methods	
CPSC 241	Intro to Applied Statistics	
ECON 202	Economic Statistics I	
PSYC 235	Intro to Statistics	
STAT 100	Statistics	
Natural Sciences and Technology		
Chemistry [3]		3 or 8
CHEM 101	Introductory Chemistry	
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	
CHEM 104 & CHEM 105	General Chemistry II and General Chemistry Lab II	
MCB 100	Introductory Microbiology	3
MCB 101	Intro Microbiology Laboratory [4]	2
Humanities and the Arts		
Select from campus approved list.		6
Social and Behavioral Sciences		
Select from campus approved list and/or see individual concentration. [5]		9
ACES Prescribed Course		
ACES 101	Contemporary Issues in ACES	2
Required Concentration		
Concentration prescribed courses. See specific requirements for each concentration listed below.		
Total Hours [6]		**126 or 130**

1 *Students in the Food Science Concentration must choose CPSC 116, and one course from Western cultures, and one from U.S. minority cultures from campus approved lists.*

2 *Students in the Food Science Concentration must select from* MATH 220 *or* MATH 221.

3 *Students in the Hospitality Management Concentration must take CHEM 101. All other concentrations take CHEM 102 + 103 & CHEM 104 + 105, which are* ***not*** *required for the Hospitality Management Concentration.*

4 *Not required for the Food Science Concentration*

5 *AGED 230 or 260 and 3 hours selected from the campus approved list for students in the Food Science Concentration - 6 hours total.*

6 *The Food Science Concentration requires a minimum of 130 hours; the Dietetics, Human Nutrition, and Hospitality Management Concentrations each require a minimum of 126 hours.*

Code	Title	Hours
Other Natural Sciences and Technology Required Courses		
CHEM 232	Elementary Organic Chemistry I	4
PHYS 101	College Physics: Mech & Heat	5
IB 100	Biology in Today's World	3
or IB 105	Environmental Biology	
Food Science Concentration Required Courses		
FSHN 101	The Science of Food and How it Relates to You	3
FSHN 120	Contemporary Nutrition	3
or FSHN 220	Principles of Nutrition	
FSHN 201	Math for Food Science	3
FSHN 230	Food Sci Professional Issues	1
FSHN 232	Science of Food Preparation	3
FSHN 260	Raw Materials for Processing	4
FSHN 302	Sensory Evaluation of Foods	3
FSHN 414	Food Chemistry	3
FSHN 416	Food Chemistry Laboratory	3
FSHN 418	Food Analysis	4
FSHN 419	Food Ingredient Technology	3
FSHN 460	Food Processing Engineering	3
FSHN 466	Food Product Development	4
FSHN 471	Food & Industrial Microbiology	3
FSHN 472	Applied Food Microbiology	3
FSHN 481	Food Processing Unit Operations I	2
FSHN 482	Food Processing Unit Operations I Lab	1
FSHN 483	Food Processing Unit Operations II	2
FSHN 484	Food Processing Unit Operations II Lab	1
ANSC 350	Cellular Metabolism in Animals	3
or MCB 450	Introductory Biochemistry	
Select 9 hours from the Food Science-related course list below. 6 hours must be at the 300-400 level:		9
FSHN 249	Food Service Sanitation	
FSHN 295	UG Research or Thesis (up to 3 credit hours will count toward degree)	
FSHN 345	Strategic Operations Management	
FSHN 417	Neuroscience of Eating & Drinking	

FSHN 425	Food Marketing
FSHN 464	Beverage Science & Technology
FSHN 469	Package Engineering
FSHN 480	Basic Toxicology
ACE 161	Microcomputer Applications
ACE 306	Food Law
CHEM 233	Elementary Organic Chem Lab I

Learning Outcomes: Food Science Concentration

Learning outcomes for the degree of Bachelor of Science Major in Food Science & Human Nutrition: Food Science Concentration

All graduates of the University of Illinois Food Science concentration will achieve the following:

1. Graduates are A) competent in core food science areas and B) can integrate and apply their knowledge to solve real-world problems and make decisions.Core Food Science Areas include: Food Chemistry and Analysis, Food Safety and Microbiology, Food Processing and Engineering, and Sensory Science. Associated Areas include: Nutrition and Health, Quality Assurance, Food Laws and Regulations
2. Graduates possess strong critical thinking and problem solving skills.
3. Graduates are proficient communicators.
4. Graduates possess impactful professional and leadership skills.

Aspirational goals

Graduates of our Food Science program: 1) value diversity, 2) are confident in their abilities, 3) volunteer their services to their professional and societal communities, and 4) take professional and ethical responsibility for their actions.

Food Science & Human Nutrition: Hospitality Management, BS

for the degree of Bachelor of Science Major in Food Science & Human Nutrition, Hospitality Management Concentration

department website: https://fshn.illinois.edu
department faculty: https://fshn.illinois.edu/directory/faculty/
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#academicunitstext)
college website: https://aces.illinois.edu/

The Hospitality Management concentration prescribes courses that meet the professional needs of the hospitality industry and career goals of students entering the major. The concentration is designed for students interested in integrating the basic principles of business and hospitality management with the goal of pursuing professional and management careers in hospitality-related industries. The program comprises 35 hours of hospitality-related course work, including food science; food management; nutrition; sanitation; purchasing; and the management of institutional, commercial, and fine dining facilities. Through the integration of food-focused theory, practice, and experience, it is the mission of the program to prepare leaders in the hospitality industry with a foundation in science, business, and management.

for the degree of Bachelor of Science Major in Food Science & Human Nutrition, Hospitality Management Concentration

Prescribed Courses including Campus General Education

Code	Title	Hours
Composition I and Speech		
Select one of the following:		6-7
RHET 105 & CMN 101	Writing and Research and Public Speaking (or equivalent) (see college Composition I requirement)	
CMN 111 & CMN 112	Oral & Written Comm I and Oral & Written Comm II	
Advanced Composition		
Select one course from campus approved list of Advanced Composition courses.		3-4
Cultural Studies		
Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists. [1]		9
Foreign Language		
Coursework at or above the third level is required for graduation.		
Quantitative Reasoning I		
Select one of the following: [2]		4-5
MATH 220	Calculus	
MATH 221	Calculus I	
MATH 234	Calculus for Business I (This course does not count for students in the Food Science Concentration; choose from the other two options.)	
Quantitative Reasoning II		
Select one of the following:		3-4
ACE 261	Applied Statistical Methods	
CPSC 241	Intro to Applied Statistics	
ECON 202	Economic Statistics I	
PSYC 235	Intro to Statistics	
STAT 100	Statistics	
Natural Sciences and Technology		
Chemistry [3]		3 or 8
CHEM 101	Introductory Chemistry	
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	
CHEM 104 & CHEM 105	General Chemistry II and General Chemistry Lab II	
MCB 100	Introductory Microbiology	3
MCB 101	Intro Microbiology Laboratory [4]	2
Humanities and the Arts		
Select from campus approved list.		6
Social and Behavioral Sciences		
Select from campus approved list and/or see individual concentration. [5]		9
ACES Prescribed Course		

ACES 101	Contemporary Issues in ACES	2
Required Concentration		
Concentration prescribed courses. See specific requirements for each concentration listed below.		
Total Hours [6]		**126 or 130**

[1] *Students in the Food Science Concentration must choose CPSC 116, and one course from Western cultures, and one from U.S. minority cultures from campus approved lists.*

[2] *Students in the Food Science Concentration must select from* MATH 220 *or* MATH 221.

[3] *Students in the Hospitality Management Concentration must take CHEM 101. All other concentrations take CHEM 102 + 103 & CHEM 104 + 105, which are* ***not*** *required for the Hospitality Management Concentration.*

[4] *Not required for the Food Science Concentration*

[5] *AGED 230 or 260 and 3 hours selected from the campus approved list for students in the Food Science Concentration - 6 hours total.*

[6] *The Food Science Concentration requires a minimum of 130 hours; the Dietetics, Human Nutrition, and Hospitality Management Concentrations each require a minimum of 126 hours.*

Code	Title	Hours
Social and Behavioral Sciences		
PSYC 100	Intro Psych	4
ACE 100	Introduction to Applied Microeconomics	3-4
or ECON 102	Microeconomic Principles	
Hospitality Management Concentration Required		
ACCY 200	Fundamentals of Accounting	3
ACE 161	Microcomputer Applications	3
ANSC 309	Meat Production and Marketing	2
BADM 300	The Legal Environment of Bus	3
BADM 310	Mgmt and Organizational Beh	3
BADM 320	Principles of Marketing	3
FSHN 101	The Science of Food and How it Relates to You	3
FSHN 120	Contemporary Nutrition	3
FSHN 140	Introduction to Hospitality	3
FSHN 145	Intro Hospitality Management	3
FSHN 232	Science of Food Preparation	3
FSHN 249	Food Service Sanitation	1
FSHN 292	Hospitality Management: Professional Issues	1
FSHN 293	Off Campus Internship	2-4
FSHN 340	Food Production and Service	4
FSHN 345	Strategic Operations Management	3
FSHN 346	Foundations of Hotel Management (Foundations of Hotel Management)	3
FSHN 441	Services Management (Services Management)	2
FSHN 442	Hospitality Management & Leadership Skills	3
FSHN 443	Management of Fine Dining	4
LEAD 320	Training Needs Assessment	3
LEAD 321	Training and Development	3
PSYC 245	Industrial Org Psych	3
Elective hours as needed to reach a minimum of 126		

Learning Outcomes: Hospitality Management Concentration

Learning outcomes for the degree of Bachelor of Science Major in Food Science & Human Nutrition: Hospitality Management Concentration

All graduates of the University of Illinois Hospitality Management concentration will be able to:

1. Professionally manage the preparation, presentation and service of quality food. Apply science concepts to the food and beverage component of the hospitality industry. Identify hotel/lodging management and allied hospitality industries' concepts. (Industry Skills)
2. Integrate human, financial and physical resources management into hospitality related operations. Practice and evaluate elements of service management. (Management Skills)
3. Demonstrate ability to analyze, assess, evaluate, adapt and apply problem solving skills. (Problem Solving)
4. Demonstrate effective written and oral communication skills. (Communication)
5. Gain practical and professional experiences. Integrate and practice ethics, leadership, and collaboration. (Professional Experiences)

Food Science & Human Nutrition: Human Nutrition, BS

for the degree of Bachelor of Science Major in Food Science & Human Nutrition, Human Nutrition Concentration

department website: https://fshn.illinois.edu
department faculty: https://fshn.illinois.edu/directory/faculty/
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#academicunitstext)
college website: https://aces.illinois.edu/

This program of study provides the background for students who plan to pursue careers in nutrition and related health sciences. This concentration focuses on the field of human nutrition and reflects the growing need to prepare individuals for careers in health and nutrition. For students who expect to pursue advanced degrees in nutritional sciences or professional degrees in medicine, dentistry or law, the human nutrition concentration may be chosen. The concentration emphasizes a strong science background and allows students to obtain a strong human nutrition preparation that is not available elsewhere on campus. For those interested in practicing nutrition or nutrition counseling, please see Dietetics.

for the degree of Bachelor of Science Major in Food Science & Human Nutrition, Human Nutrition Concentration

Prescribed Courses including Campus General Education

Code	Title	Hours
Composition I and Speech		
Select one of the following:		6-7
RHET 105 & CMN 101	Writing and Research and Public Speaking (or equivalent) (see college Composition I requirement)	
CMN 111 & CMN 112	Oral & Written Comm I and Oral & Written Comm II	
Advanced Composition		
Select one course from campus approved list of Advanced Composition courses.		3-4
Cultural Studies		
Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists. [1]		9
Foreign Language		
Coursework at or above the third level is required for graduation.		
Quantitative Reasoning I		
Select one of the following: [2]		4-5
MATH 220	Calculus	
MATH 221	Calculus I	
MATH 234	Calculus for Business I (This course does not count for students in the Food Science Concentration; choose from the other two options.)	
Quantitative Reasoning II		
Select one of the following:		3-4
ACE 261	Applied Statistical Methods	
CPSC 241	Intro to Applied Statistics	
ECON 202	Economic Statistics I	
PSYC 235	Intro to Statistics	
STAT 100	Statistics	
Natural Sciences and Technology		
Chemistry [3]		3 or 8
CHEM 101	Introductory Chemistry	
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	
CHEM 104 & CHEM 105	General Chemistry II and General Chemistry Lab II	
MCB 100	Introductory Microbiology	3
MCB 101	Intro Microbiology Laboratory [4]	2
Humanities and the Arts		
Select from campus approved list.		6
Social and Behavioral Sciences		
Select from campus approved list and/or see individual concentration. [5]		9
ACES Prescribed Course		
ACES 101	Contemporary Issues in ACES	2
Required Concentration		
Concentration prescribed courses. See specific requirements for each concentration listed below.		
Total Hours [6]		**126 or 130**

1 *Students in the Food Science Concentration must choose CPSC 116, and one course from Western cultures, and one from U.S. minority cultures from campus approved lists.*

2 *Students in the Food Science Concentration must select from* MATH 220 *or* MATH 221.

3 *Students in the Hospitality Management Concentration must take CHEM 101. All other concentrations take CHEM 102 + 103 & CHEM 104 + 105, which are **not** required for the Hospitality Management Concentration.*

4 *Not required for the Food Science Concentration*

5 *AGED 230 or 260 and 3 hours selected from the campus approved list for students in the Food Science Concentration - 6 hours total.*

6 *The Food Science Concentration requires a minimum of 130 hours; the Dietetics, Human Nutrition, and Hospitality Management Concentrations each require a minimum of 126 hours.*

Code	Title	Hours
Other Natural Science and Technology Required		
CHEM 232	Elementary Organic Chemistry I	4
CHEM 233	Elementary Organic Chem Lab I	2
MCB 244	Human Anatomy & Physiology I	3
MCB 246	Human Anatomy & Physiology II	3
MCB 450	Introductory Biochemistry	3
Human Nutrition Required		
FSHN 101	The Science of Food and How it Relates to You	3
FSHN 220	Principles of Nutrition	4
FSHN 420	Nutritional Aspects of Disease	3
FSHN 426	Biochemical Nutrition I	3
FSHN 427	Biochemical Nutrition II	3
Select a minimum of two courses from the following list of Restricted Electives:		**6**
FSHN 249	Food Service Sanitation	
FSHN 302	Sensory Evaluation of Foods	
FSHN 322	Nutrition and the Life Cycle	
FSHN 329	Communication in Nutrition	
FSHN 344	Business Etiquette	
FSHN 345	Strategic Operations Management	
FSHN 398	Undergraduate Seminar	
FSHN 414	Food Chemistry	
FSHN 418	Food Analysis	
FSHN 421	Pediatric Clinical Nutrition	
FSHN 425	Food Marketing	
FSHN 428	Community Nutrition	
FSHN 429	Nutrition Assessment & Therapy	
FSHN 440	Applied Statistical Methods I	
FSHN 460	Food Processing Engineering	
FSHN 461		
FSHN 465	Principles of Food Technology	
FSHN 471	Food & Industrial Microbiology	
FSHN 480	Basic Toxicology	

Science electives: A minimum of two science courses from below list. Courses cannot be used to fulfill other requirements.		**6**
ANSC 100	Intro to Animal Sciences	
ANSC 110	Life With Animals and Biotech	
ANSC 207	The Science of Pets and How to Care for Them	
ANSC 221	Cells, Metabolism and Genetics	
ANSC 222	Anatomy and Physiology	
ANSC 223	Animal Nutrition	
ANSC 224	Animal Reproduction and Growth	
ANSC 350	Cellular Metabolism in Animals	
ANSC 404	Poultry Science	
ANSC 409	Meat Science	
ANSC 420	Ruminant Nutrition	
ANSC 422	Companion Animal Nutrition	
ANSC 423	Advanced Dairy Nutrition	
ANSC 431	Advanced Reproductive Biology	
ANSC 438	Lactation Biology	
ANSC 441	Human Genetics	
ANSC 450	Comparative Immunobiology	
ANSC 452	Animal Growth and Development	
ANSC 453	Stem Cell Biology	
ANTH 240	Biological Anthropology	
ANTH 246	Forensic Science	
ANTH 249	Evolution and Human Disease	
ANTH 441	Human Genetics	
ASTR 100	Introduction to Astronomy	
ASTR 121	Solar System and Worlds Beyond	
ASTR 122	Stars and Galaxies	
ASTR 150	Killer Skies: Astro-Disasters	
ASTR 210	Introduction to Astrophysics	
ATMS 100	Introduction to Meteorology	
ATMS 120	Severe and Hazardous Weather	
ATMS 140	Climate and Global Change	
BIOC 455	Technqs Biochem & Biotech	
CHEM 312	Inorganic Chemistry	
CHEM 360	Chemistry of the Environment	
CHLH 100	Contemporary Health	
CHLH 200	Mental Health	
CHLH 206	Human Sexuality	
CHLH 243	Drug Use and Abuse	
CHLH 250	Health Care Systems	
CHLH 274	Introduction to Epidemiology	
CHLH 415	International Health	
CPSC 112	Introduction to Crop Sciences	
CPSC 116	The Global Food Production Web	
CPSC 226		
CPSC 270	Applied Entomology	
FSHN 232	Science of Food Preparation	
GEOG 101	Global Development&Environment	
GEOG 103	Earth's Physical Systems	
GEOL 100	Planet Earth	
GEOL 104	Geology of the National Parks	
GEOL 107	Physical Geology	
GEOL 117	The Oceans	
GEOL 118	Natural Disasters	
GEOL 380	Environmental Geology	
HDFS 105	Intro to Human Development	
HORT 100	Introduction to Horticulture	
HORT 105	Vegetable Gardening	
HORT 180		
IB 100	Biology in Today's World	
IB 103	Introduction to Plant Biology	
IB 104	Animal Biology	
IB 105	Environmental Biology	
IB 150	Organismal & Evolutionary Biol	
KIN 121	Survey of Sports Medicine	
KIN 122	Physical Activity and Health	
KIN 150	Bioscience of Human Movement	
KIN 262	Motor Develop, Growth & Form	
KIN 352	Bioenergetics of Movement	
MCB 150	Molec & Cellular Basis of Life	
MCB 250	Molecular Genetics	
MCB 252	Cells, Tissues & Development	
MCB 290	Undergraduate Research	
MCB 314	Introduction to Neurobiology	
MCB 316	Genetics and Disease	
MCB 408	Immunology	
NRES 100	Fundamentals of Env Sci	
NRES 102	Introduction to NRES	
PHYS 101	College Physics: Mech & Heat	
PHYS 102	College Physics: E&M & Modern	
PHYS 140	How Things Work	
PHYS 211	University Physics: Mechanics	
PHYS 212	University Physics: Elec & Mag	
PHYS 213	Univ Physics: Thermal Physics	
PHYS 214	Univ Physics: Quantum Physics	
PLPA 200	Plants, Pathogens, and People	
PLPA 204		
PSYC 230	Perception & Sensory Processes	
PSYC 238	Psychopathology and Problems in Living	
Elective hours as needed to reach minimum of 126		

Learning Outcomes: Human Nutrition Concentration

Learning outcomes for the degree of Bachelor of Science Major in Food Science & Human Nutrition: Human Nutrition Concentration

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All graduates of the University of Illinois Human Nutrition concentration will be able to:

1. Demonstrate critical thinking, problem solving and communication skills.

2. Understand basic sciences relevant to nutrition, research and application of nutrition and an awareness of social and economic factors in food.
3. Prepared to pursue careers in the food, health, and fitness industries, or enter medicine, dentistry, nursing, and other health professions.

Foreign Language Teaching

Curricula Preparatory to Teach Foreign Languages

The College of Liberal Arts and Sciences offers curricula for the preparation of teachers of French (http://catalog.illinois.edu/undergraduate/las/academic-units/french-italian/curriculum-preparatory-teaching-french/), German (http://catalog.illinois.edu/undergraduate/las/academic-units/german/curriculum-preparatory-teaching-german/), Latin (http://catalog.illinois.edu/undergraduate/las/academic-units/classics/teach-latin/), and Spanish (http://catalog.illinois.edu/undergraduate/las/academic-units/spanish-portuguese/teaching-spanish-major/).

Illinois law requires all candidates for licensure in World Languages pass the appropriate language content-area test prior to student teaching, and an oral proficiency test in their content major language prior to licensure.

A student must have at least 2.5 (A+ = 4.0) cumulative and University of Illinois grade point averages to remain in the teaching option. A student must also maintain at least a 2.5 grade point average in all attempts at content area and pedagogy courses taken at the University of Illinois in order to remain in the teaching option.

E-mail: flte@illinois.edu

Prerequisite to application to the Teaching Option

GPA of 2.5 in all content courses in the intended majors of French, German, Latin, Spanish.

General Education Requirements: Students in the Foreign Language Teaching Curricula of French, German, Latin, and Spanish will be expected to complete the Campus General Education (https://courses.illinois.edu/) requirements (including the campus general education language requirement).

Code	Title	Hours
FLTE 471	Introduction to Second Language Teaching	4
FLTE 475	Learning to Teach World Language	4
FLTE 478	Secondary World Language Teaching [1]	4
EPS 201	Foundations of Education	3
EPSY 201	Educational Psychology	3
SPED 405	General Educator's Role in Special Education	3
EDPR 442	Educational Practice in Secondary Education	8
Total Hours		29

[1] In the fall semester, students enroll for 3 hours with instruction occurring in the first 10 weeks. In the spring semester, students enroll for 1 hour with instruction occurring in the first 4 weeks.

French, BALAS

for the degree of Bachelor of Arts in Liberal Arts and Science Major in French

department website: https://frit.illinois.edu/
department faculty: French & Italian Faculty (https://frit.illinois.edu/directory/faculty/)
advising: French & Italian advising (https://frit.illinois.edu/academics/advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: french-italian@illinois.edu

The **BALAS in French** allows students to specialize in one of the following concentrations:

The French Studies concentration focuses on courses in language, literature, culture, film, and linguistics.

The French Commercial Studies concentration combines a focus on French language and culture with appropriate courses in business.

Select a concentration in consultation with your adviser.

- French Commercial Studies Concentration (p. 201)
- French Studies Concentration (p. 202)

Undergraduate degree programs in French & Italian:

French, BALAS (p. 201)

Teaching of French, BA (p. 421)

Italian, BALAS (p. 249)

5 Year BALAS /MA in French and European Union Studies

The Department of French and Italian with the European Union Center offers a 5-year BALAS/MA degree program in French and the Master of Arts in European Union Studies (MAEUS). In order to be admitted to this degree program, students apply through a joint application process to their BALAS–granting program and the European Union Center during their third year of studies. Requirements for this degree program are identical to those for the stand-alone BALAS and for the stand-alone MAEUS. Students will receive both degrees when the requirements are met for the degrees; the BALAS and MA degrees will be conferred separately and independently. More detailed information may be obtained from department and EUC offices.

French: French Commercial Studies, BALAS

for the degree of Bachelor of Arts in Liberal Arts and Sciences Major in French, French Commercial Studies Concentration

department website: https://frit.illinois.edu/academics/french (https://frit.illinois.edu/academics/french/)
department faculty: French & Italian Faculty (https://frit.illinois.edu/directory/faculty/)
advising: French & Italian advising (https://frit.illinois.edu/academics/advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: french-italian@illinois.edu

for the degree of Bachelor of Arts in Liberal Arts and Sciences Major in French, French Commercial Studies Concentration

A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office before the end of the fifth semester (60 - 75 hours). Please see your adviser.

Departmental distinction: A student must have at least a 3.45 LAS cumulative grade point average, complete a senior thesis FR 492**, and complete two additional advanced-level courses in French or in supporting course work. Consult the honors adviser for details.**

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 34 hours beyond the 100-level. Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
FR 205	Oral French	2
FR 207	Writing and Grammar Workshop	3
FR 211	Introduction to Literary Studies	3
FR 212	Introduction to Cultural Analysis: French Identities	3
FR 213	French Phonetics	2
FR 314	Advanced Grammar in Context	3
FR 419	Techniques in Translation I	3
FR 485	Commercial & Econ French I	3
Four courses at the 300- or 400- level (3 of 4 of the electives must be taken in French) in any of the following: French language and translation, business, cinema, culture, linguistics, literature, media.		12
Approved supporting course work in business administration, finance, and/or economics selected in consultation with the concentration adviser.		15
Total hours		**49**

French: French Studies, BALAS

for the degree of Bachelor of Arts in Liberal Arts and Sciences Major in French, French Studies Concentration

department website: https://frit.illinois.edu/academics/french (https://frit.illinois.edu/academics/french/)
department faculty: French & Italian Faculty (https://frit.illinois.edu/directory/faculty/)
advising: French & Italian advising (https://frit.illinois.edu/academics/advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: french-italian@illinois.edu

for the degree of Bachelor of Arts in Liberal Arts and Sciences Major in French, French Studies Concentration

A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office before the end of the fifth semester (60 - 75 hours). Please see your adviser.

Departmental distinction: A student must have at least a 3.45 LAS cumulative grade point average, complete a senior thesis FR 492**, and complete two additional advanced-level courses in French or in supporting course work. Consult the honors adviser for details.**

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 37 hours. Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
FR 207	Writing and Grammar Workshop	3
FR 211	Introduction to Literary Studies	3
FR 212	Introduction to Cultural Analysis: French Identities	3
Language Courses		
FR 205	Oral French	2
FR 213	French Phonetics	2
FR 314	Advanced Grammar in Context	3
Culture Courses		
Choose two of the following:		6
FR 335	French Cultural History to 1789	
FR 336	French Cultural History 1789-1968	
FR 337	Contemporary France	
Literature Courses		
Two courses at the 300- or 400-level in French and/or Francophone literature		6
Medieval and Early Modern Period course		
Students must take one course focused on the medieval/early modern period. Students may choose from FR 335 or FR 301. This course can be used to fulfill the Culture or Literature Courses requirement.		
Electives		

Three French courses at the 300- or 400-level in any of the following areas: language and translation, business, cinema, culture, linguistics, literature, media.	9
Total Hours	37

Learning Outcomes: French, BALAS

Learning outcomes for the degree of Bachelor of Arts in Liberal Arts and Science Major in French

Upon graduating with a major in French, students shall be able to do the following:

1. **Language proficiency and accuracy:** reach an advanced level of proficiency and accuracy in reading, writing, listening, and speaking in interpretive, presentational, and interpersonal modes of communication(based on proficiency guidelines outlined by the American Council on the Teaching of Foreign Languages [ACTFL]and the Common European Framework of Reference for Languages [CEFRL]).
2. **Research skills and literacy in texts, media, and technology in French:** access, manage, evaluate, select, and effectively use culturally authentic and relevant sources according to the standards of professional conduct; understand how these resources relate to language and culture; use appropriate tools when interpreting sources, interacting with others, and producing written, oral, or visual content.
3. **Intercultural awareness, knowledge, and competence:** identify and analyze products, practices, and perspectives of the French and Francophone world, and compare them to their own and other cultures.
4. **Knowledge about literature and the visual arts in French**: acquire general and specific knowledge of literature in French and visual arts from a formal, historical, and global perspective.
5. **Knowledge about French linguistics:** acquire general knowledge about the structure and history of the French language.

Gender & Women's Studies, BALAS

for the degree of Bachelor of Arts in Liberal Arts and Sciences Major in Gender and Women's Studies

department website: https://www.gws.illinois.edu/
department faculty: Gender & Women's Studies Faculty (https://gws.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: gws-email@illinois.edu

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Gender & Women's Studies

A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office before the end of the fifth semester (60-75 hours). Please see your advisor.

Departmental distinction: To be eligible for graduation with distinction, a student must have a cumulative grade-point average (GPA) of 3.5 and a 3.5 GPA within the major.
High distinction. To be eligible for graduation with high distinction, a student must have a cumulative grade point average (GPA) of 3.5, a GPA of 3.7 within the major, and complete a thesis or project in a 400-level GWS course that is approved by the department.

Advising: The Department of Gender and Women's Studies provides advising for students to help plan a coherent program of study.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 33 hours. Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Required Courses		
GWS 201	Race, Gender & Power	3
GWS 202	Sexualities	3
GWS 498	Senior Seminar	3
GWS 350	Feminist & Gender Theory	3
or GWS 370	Queer Theory	
Additional Coursework [1]		
At least 15 additional hours of coursework offered by the Gender & Women's Studies Department, with no more than 3 hours at the 100 or 200 level. Required courses are offered by the Department of Gender & Women's Studies and are on an approved list maintained in the department office and with the GWS advisor.		15
Area Electives		
Two courses in Gender and Women's Studies. No more than one may be counted from the 100 or 200 level. For a list of approved courses contact the GWS department or the GWS advisor.		6
Of the 33 hours in the major, students must take at least one course focused on transnational or non-U.S. issues. For a list of approved courses contact the GWS department or the GWS advisor.		
Total Hours		33

[1] *Topics courses (*GWS 199, GWS 295, GWS 395, GWS 495*) may count up to 3 hours toward the additional coursework with consent of the GWS advisor.* GWS 390 *or* GWS 490 *may count up to 3 hours toward additional coursework with consent of the GWS advisor.*

Learning Outcomes: Gender and Women's Studies, BALAS

Learning Outcomes for the degree of Bachelor of Arts in Liberal Arts and Sciences Major in Gender and Women's Studies

1. **Intellectual Reasoning and Knowledge:** Students will acquire a level of proficiency in Gender and Women's Studies, which can include but is not limited to broad and deep knowledge about feminist

movements, intersectionality, queer and trans studies, imperialism and coloniality, and feminist and queer theories and methods across academic disciplines and fields. Students will learn that feminisms are both historical movements as well as bodies of critical inquiry, encompassing a wide range of actors and objects of study, including forms of information retrieval and knowledge production.

2. **Critical Inquiry and Creative Literacy:** Students will apply feminist and queer theories in developing their own capacities for critical inquiry and creative literacy. Students will also exercise their skills in oral and written communication, expressing new ideas in scholarly compositions and also generating multidisciplinary projects.
3. **Social Awareness and Understanding Power:** Students will recognize the gendered dimensions of social, philosophical, aesthetic, cultural, and political claims about national and global movements and events. Students will become familiar with feminist and queer theories and movements that consider together indigeneity, race, religion, nation, disability, gender, and sexuality to understand historical and contemporary formations of power.
4. **Self-Reflexivity and Community Engagement:** Students will demonstrate self-reflexivity about their ideas and social and political positions in their classrooms and communities, learning how to build and sustain relationships in striving for both immediate harm reduction and long-term social justice.
5. **Global Consciousness:** Students will understand how complex and interdependent forces —environmental, social, cultural, economic, and political— shape a range of possibilities and foreclosures for individuals and populations unevenly across the world, learning to apply indigenous, postcolonial, and transnational feminist and queer critiques to those forces.

Geography & Geographic Information Science

department website: https://www.geog.illinois.edu/
department faculty: Geography Faculty (https://www.geog.illinois.edu/people/)
overview of college admissions & requirements: LAS admissions information (https://www.las.illinois.edu/prospective/)
college website: https://las.illinois.edu/
email: g (geology@illinois.edu)eography@illinois.edu (geography@illinois.edu)

Students interested in majoring in Geography and Geographic Information Science may choose the Bachelor of Arts in Liberal Arts & Sciences (http://catalog.illinois.edu/undergraduate/las/geography-geographic-information-science-balas/), or the Bachelor of Science in Liberal Arts & Sciences (http://catalog.illinois.edu/undergraduate/las/geography-geographic-information-science-bslas/).

Students pursuing the Bachelor of Arts in Liberal Arts & Sciences select one of two concentrations:

General Geography Concentration (http://catalog.illinois.edu/undergraduate/las/geography-geographic-information-science-balas/general-geography/)

Geography majors integrate social science, physical science, and technology in their study of how humans use the Earth's surface. Majors in Geography & GIS can sample courses from different subfields of geography without having to choose one specialty of the discipline. Upon completion, the students are prepared for diverse employment opportunities, or further studies in a geography graduate program.

Human Geography Concentration (http://catalog.illinois.edu/undergraduate/las/geography-geographic-information-science-balas/human-geography/)

The Human Geography concentration allows students to specialize in the social science aspect of modern geography. The curriculum includes the systematic study of human social organization and its environmental consequences. Employment opportunities for human geographers include urban and regional planning, transportation, marketing, real estate, tourism, and international business.

Students pursuing the Bachelor of Science in Liberal Arts & Sciences select one of two concentrations:

Geographic Information Science Concentration (http://catalog.illinois.edu/undergraduate/las/geography-geographic-information-science-bslas/geographic-information-science/)

The Geographic Information Science (GIS) concentration emphasizes the creation, use and analysis of digital geographic information to examine economic, environmental, physical and social phenomena. The GIS concentration provides students with in-depth training in contemporary software packages to prepare them for careers in the field. There is growing demand for professional knowledge of the earth's systems and the use of geographic information systems to enhance business, protect the environment and manage the massive amounts of spatial data now widely available on the internet. The U.S. Department of Labor has identified geospatial technologies as one of the fastest-growing domestic job sectors.

Physical Geography Concentration (http://catalog.illinois.edu/undergraduate/las/geography-geographic-information-science-bslas/physical-geography/)

The Physical Geography concentration examines the earth sciences including patterns of climates, land-forms, vegetation, soils, and water. Graduates of our physical geography concentration will be equipped for careers in infrastructure development, land and water resources management, and surveying.

Geography & Geographic Information Science, BALAS

for the degree of Bachelor of Arts in Liberal Arts & Sciences: Major in Geography & Geographic Information Science

department website: https://www.ggis.illinois.edu/
department faculty: Geography & GIS Faculty (https://www.geog.illinois.edu/people/)
advising: Geography & GGIS advising (https://ggis.illinois.edu/academics/undergraduate/advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: geography@illinois.edu

Students pursuing this major select one of two concentrations:

- General Geography Concentration (p. 205)
- Human Geography Concentration (p. 207)

Undergraduate Degree Programs in Geography & Geographic Information Science

For the Degree of Bachelor of Science in Liberal Arts and Sciences

- Major in Computer Science & Geography & GIS, BSLAS (p. 137)
- Major in Geography & Geographic Information Science, Geographic Information Science Concentration, BSLAS (p. 206)
- Major in Geography & Geographic Information Science, Physical Geography Concentration, BSLAS (p. 208)

For the Degree of Bachelor of Arts in Liberal Arts and Sciences

- Major in Geography & Geographic Information Science, General Geography Concentration, BALAS (p. 205)
- Major in Geography & Geographic Information Science, Human Geography Concentration, BALAS (p. 207)

Geography & Geographic Information Science, BSLAS

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Geography & Geographic Information Science

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department website: https://ggis.illinois.edu/
department faculty: Geography & GGIS Faculty (https://ggis.illinois.edu/directory/faculty/)
advising: Geography & GGIS advising (https://ggis.illinois.edu/academics/undergraduate/advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: geography@illinois.edu

Students pursuing this major select one of two concentrations:

- Geographic Information Science Concentration (p. 206)
- Physical Geography Concentration (p. 208)

Undergraduate Degree Programs in Geography & Geographic Information Science

For the Degree of Bachelor of Science in Liberal Arts and Sciences

- Major in Computer Science & Geography & GIS, BSLAS (p. 137)
- Major in Geography & Geographic Information Science, Geographic Information Science Concentration, BSLAS (p. 206)
- Major in Geography & Geographic Information Science, Physical Geography Concentration, BSLAS (p. 208)

For the Degree of Bachelor of Arts in Liberal Arts and Sciences

- Major in Geography & Geographic Information Science, General Geography Concentration, BALAS (p. 205)
- Major in Geography & Geographic Information Science, Human Geography Concentration, BALAS (p. 207)

Geography & Geographic Information Science: General Geography, BALAS

for the degree of Bachelor of Arts in Liberal Arts & Sciences: Major in Geography & Geographic Information Science, General Geography Concentration

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department website: https://www.ggis.illinois.edu/
department faculty: Geography & GGIS Faculty (https://ggis.illinois.edu/directory/faculty/)
advising: Geography & GGIS advising (https://ggis.illinois.edu/academics/undergraduate/advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
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email: geography@illinois.edu

Undergraduate Degree Programs in Geography & Geographic Information Science

For the Degree of Bachelor of Science in Liberal Arts and Sciences

- Major in Computer Science & Geography & GIS, BSLAS (p. 137)
- Major in Geography & Geographic Information Science, Geographic Information Science Concentration, BSLAS (p. 206)
- Major in Geography & Geographic Information Science, Physical Geography Concentration, BSLAS (p. 208)

For the Degree of Bachelor of Arts in Liberal Arts and Sciences

- Major in Geography & Geographic Information Science, General Geography Concentration, BALAS (p. 205)
- Major in Geography & Geographic Information Science, Human Geography Concentration, BALAS (p. 207)

for the degree of Bachelor of Arts in Liberal Arts & Sciences: Major in Geography & Geographic Information Science, General Geography Concentration

A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office by the beginning of the fifth semester (60-75 hours).

Departmental distinction: Students majoring in Geography and Geographic Information Science can earn distinction, high distinction, and highest distinction upon graduation. The requirements for these awards are:

- For distinction: 3.3 GPA overall; 3.3 GPA in GGIS courses.
- For high distinction: 3.3 GPA overall; 3.75 GPA in GGIS courses.
- For highest distinction: 3.3 GPA overall; 3.75 GPA in GGIS courses; satisfactorily complete an
- independent project (GEOG 391).

Students should consult their advisors regarding distinction requirements as soon as they enter the major (no later than the end of their junior year).

General education: Students must complete the Campus General Education (https://courses.illinois.edu/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: A minimum of 35 credit hours of Geography and Geographic Information Science courses. Twelve (12) hours of 300- and 400-level courses in the major must be taken on this campus.

Geography and Geographic Information Science Core Requirements

Code	Title	Hours
Total Core Hours		**10-12**
Select one of the following:		3-4
GEOG/ATMS 100	Introduction to Meteorology	
GEOG 103	Earth's Physical Systems	
GEOG 222	Big Rivers of the World	
Select one of the following:		3-4
GEOG 101	Global Development&Environment	
GEOG 104	Social and Cultural Geography	
GEOG 105	The Digital Earth	
GEOG 106	Geographies of Globalization	
GEOG 210	Social & Environmental Issues	
GEOG 221	Geographies of Global Conflict	
Choose one of the following:		4
GEOG 371	Spatial Analysis	
GEOG 379	Intro to GIS Systems	

General Geography Concentration Requirements

Code	Title	Hours
Geography and Geographic Information Science courses, selected from 200- to 400-level courses, of which 6 hours must be at the 300 or 400 level (p. 1608)		25-27
Total Hours required for graduation		**120**

Geography & Geographic Information Science: Geographic Information Science, BSLAS

For the Degree of Bachelor of Science in Liberal Arts & Sciences: Major in Geography & Geographic Information Science, Geographic Information Science Concentration

department website: https://ggis.illinois.edu/
department faculty: Geography & GGIS Faculty (https://ggis.illinois.edu/directory/faculty/)
advising: Geography & GGIS advising (https://ggis.illinois.edu/academics/undergraduate/advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: geography@illinois.edu

Undergraduate Degree Programs in Geography & Geographic Information Science

For the Degree of Bachelor of Science in Liberal Arts and Sciences

- Major in Computer Science & Geography & GIS, BSLAS (p. 137)
- Major in Geography & Geographic Information Science, Geographic Information Science Concentration, BSLAS (p. 206)
- Major in Geography & Geographic Information Science, Physical Geography Concentration, BSLAS (p. 208)

For the Degree of Bachelor of Arts in Liberal Arts and Sciences

- Major in Geography & Geographic Information Science, General Geography Concentration, BALAS (p. 205)
- Major in Geography & Geographic Information Science, Human Geography Concentration, BALAS (p. 207)

for the degree of Bachelor of Science in Liberal Arts & Sciences: Major in Geography & Geographic Information Science, Geographic Information Science Concentration

A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office by the beginning of the fifth semester (60-75 hours).

Departmental distinction: Students majoring in Geography and Geographic Information Science can earn distinction, high distinction, and highest distinction upon graduation. The requirements for these awards are:

- For distinction: 3.3 GPA overall; 3.3 GPA in GGIS courses.
- For high distinction: 3.3 GPA overall; 3.75 GPA in GGIS courses.
- For highest distinction: 3.3 GPA overall; 3.75 GPA in GGIS courses; satisfactorily complete an
- independent project (GEOG 391).

Students should consult their advisors regarding distinction requirements as soon as they enter the major (no later than the end of their junior year).

General education: Students must complete the Campus General Education (https://courses.illinois.edu/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: a minimum of 40 upper-division hours. Twelve (12) hours of 300- and 400-level courses in the major must be taken on this campus.

Geography and Geographic Information Science Core Requirements

Code	Title	Hours
Total Core Hours		**10-16**
Select one of the following three(3) courses:		**3-4**
GEOG 100	Introduction to Meteorology	
GEOG 103	Earth's Physical Systems	
GEOG 222	Big Rivers of the World	
Select one of the following six (6) courses:		**3-4**
GEOG 101	Global Development&Environment	
GEOG 104	Social and Cultural Geography	
GEOG 105	The Digital Earth	
GEOG 106	Geographies of Globalization	
GEOG 210	Social & Environmental Issues	
GEOG 221	Geographies of Global Conflict	

Select one of the following two (2) courses: [1]		**4-8**
GEOG 371	Spatial Analysis	
GEOG 379	Intro to GIS Systems	

[1] *Students pursuing the Geographic Information Science Concentration are required to take both GEOG 371 and GEOG 379.*

Geographic Information Science Concentration Requirements

Code	Title	Hours
Total concentration-required hours		**26-30**
GEOG 371	Spatial Analysis	4
GEOG 380	GIS II: Spatial Prob Solving	4
Select one of the following courses:		3
CS 105	Intro Computing: Non-Tech	
CS 125	Introduction to Computer Science	
or equivalent course approved by the Department's Advisor		
Select a minimum of three courses from the following:		9-11
GEOG 205	Business Location Decisions	
GEOG/SOC 280	Intro to Social Statistics	
GEOG 407	Foundations of CyberGIS & Geospatial Data Science	
GEOG 412	Geospatial Tech & Society	
GEOG/ATMS 421	Earth Systems Modeling	
GEOG/PATH 439	Health Applications of GIS	
GEOG 460	Aerial Photo Analysis	
GEOG 468	Biological Modeling	
GEOG 473	Digital Cartography & Map Design	
GEOG 476	Applied GIS to Environ Studies	
GEOG 477	Introduction to Remote Sensing	
GEOG 478	Techniques of Remote Sensing	
GEOG 479	Advanced Topics in GIS	
GEOG 480	Principles of GIS	
GEOG 489	Programming for GIS	
Select two human and/or physical geography courses:		**6-8**
GEOG 204	Cities of the World	
GEOG 210	Social & Environmental Issues	
GEOG 221	Geographies of Global Conflict	
GEOG 222	Big Rivers of the World	
GEOG 224	Environmental Data Science	
GEOG 287	Environment and Society	
GEOG 350	Sustainability and the City	
GEOG 356	Sustainable Development in South Asia	
GEOG 370	Water Planet, Water Crisis	
GEOG 384	Population Geography	
GEOG 401	Watershed Hydrology	
GEOG 405	Geography Field Course	
GEOG 406	Fluvial Geomorphology	
GEOG 408	Humans and River Systems	
GEOG 410	Green Development	
GEOG 436	Biogeography	
GEOG 438	Geography of Health Care	
GEOG 446	Sustainable Planning Seminar	
GEOG 455	Geog of Sub-Saharn Africa	
GEOG 465	Transportation & Sustainability	
GEOG 466	Environmental Policy	
GEOG 471	Recent Trends in Geog Thought	
GEOG 482	Challenges of Sustainability	
GEOG 483	Urban Geography	
GEOG 484	Cities, Crime, and Space	
GEOG 496	Climate & Social Vulnerability	
Total hours required for graduation		120

Geography & Geographic Information Science: Human Geography, BALAS

for the degree of Bachelor of Arts in Liberal Arts & Sciences: Major in Geography & Geographic Information Science, Human Geography Concentration

department website: https://ggis.illinois.edu/
department faculty: Geography & GGIS Faculty (https://ggis.illinois.edu/directory/faculty/)
advising: Geography & GGIS advising (https://ggis.illinois.edu/academics/undergraduate/advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: geography@illinois.edu

Undergraduate Degree Programs in Geography & Geographic Information Science

For the Degree of Bachelor of Science in Liberal Arts and Sciences

- Major in Computer Science & Geography & GIS, BSLAS (p. 137)
- Major in Geography & Geographic Information Science, Geographic Information Science Concentration, BSLAS (p. 206)
- Major in Geography & Geographic Information Science, Physical Geography Concentration, BSLAS (p. 208)

For the Degree of Bachelor of Arts in Liberal Arts and Sciences

- Major in Geography & Geographic Information Science, General Geography Concentration, BALAS (p. 205)
- Major in Geography & Geographic Information Science, Human Geography Concentration, BALAS (p. 207)

for the degree of Bachelor of Arts in Liberal Arts & Sciences: Major in Geography & Geographic Information Science, Human Geography Concentration

A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office by the beginning of the fifth semester (60-75 hours).

Departmental distinction: Students majoring in Geography and Geographic Information Science can earn distinction, high distinction, and highest distinction upon graduation. The requirements for these awards are:

- For distinction: 3.3 GPA overall; 3.3 GPA in GGIS courses.
- For high distinction: 3.3 GPA overall; 3.75 GPA in GGIS courses.
- For highest distinction: 3.3 GPA overall; 3.75 GPA in GGIS courses; satisfactorily complete an
- independent project (GEOG 391).

Students should consult their advisors regarding distinction requirements as soon as they enter the major (no later than the end of their junior year).

General education: Students must complete the Campus General Education (https://courses.illinois.edu/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: A minimum of 35 credit hours of Geography and Geographic Information Science courses. Twelve (12) hours of 300- and 400-level courses in the major must be taken on this campus.

Geography and Geographic Information Science Core Requirements

Code	Title	Hours
Total Core Hours		**10-12**
Select one of the following:		3-4
GEOG/ATMS 100	Introduction to Meteorology	
GEOG 103	Earth's Physical Systems	
GEOG 222	Big Rivers of the World	
Select one of the following:		3-4
GEOG 101	Global Development&Environment	
GEOG 104	Social and Cultural Geography	
GEOG 105	The Digital Earth	
GEOG 106	Geographies of Globalization	
GEOG 210	Social & Environmental Issues	
GEOG 221	Geographies of Global Conflict	
Choose one of the following:		4
GEOG 371	Spatial Analysis	
GEOG 379	Intro to GIS Systems	

Human Geography Concentration Requirements:

Code	Title	Hours
200-to 400-level Geography and Geographic Information Science courses (of which at least 6 hours must be at the 300 or 400 level) selected from the following:		25-27
GEOG 204	Cities of the World	
GEOG 205	Business Location Decisions	
GEOG 210	Social & Environmental Issues	
GEOG 224	Environmental Data Science	
GEOG 254	American People, Places, & Environments	
SOC 280	Intro to Social Statistics	
NRES/GEOG 287	Environment and Society	
GEOG 350	Sustainability and the City	
GEOG 356	Sustainable Development in South Asia	
ESE 320/ GEOG 370	Water Planet, Water Crisis	
GEOG 371	Spatial Analysis	
GEOG 384	Population Geography	
GEOG 390	Individual Study	
GEOG 391	Honors Individual Study	
GEOG 405	Geography Field Course	
GEOG 410	Green Development	
GEOG 412	Geospatial Tech & Society	
LA 427	Amer Vernacular Cultural Land	
GEOG 438	Geography of Health Care	
PATH/GEOG 439	Health Applications of GIS	
UP/GEOG 446	Sustainable Planning Seminar	
GEOG 455	Geog of Sub-Saharn Africa	
GEOG 465	Transportation & Sustainability	
GEOG 466	Environmental Policy	
GEOG 471	Recent Trends in Geog Thought	
GEOG 473	Digital Cartography & Map Design	
GEOG 477	Introduction to Remote Sensing	
ESE/GEOG 482	Challenges of Sustainability	
GEOG 483	Urban Geography	
GEOG 496	Climate & Social Vulnerability	
Total Hours required for graduation		120

Geography & Geographic Information Science: Physical Geography, BSLAS

for the degree of Bachelor of Science in Liberal Arts & Sciences: Major in Geography & Geographic Information Science, Physical Geography Concentration

department website: https://ggis.illinois.edu/
department faculty: Geography & GGIS Faculty (https://ggis.illinois.edu/directory/faculty/)
advising: Geography & GGIS advising (https://ggis.illinois.edu/academics/undergraduate/advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: geography@illinois.edu

Undergraduate Degree Programs in Geography & Geographic Information Science

For the Degree of Bachelor of Science in Liberal Arts and Sciences

- Major in Computer Science & Geography & GIS, BSLAS (p. 137)
- Major in Geography & Geographic Information Science, Geographic Information Science Concentration, BSLAS (p. 206)
- Major in Geography & Geographic Information Science, Physical Geography Concentration, BSLAS (p. 208)

For the Degree of Bachelor of Arts in Liberal Arts and Sciences

- Major in Geography & Geographic Information Science, General Geography Concentration, BALAS (p. 205)
- Major in Geography & Geographic Information Science, Human Geography Concentration, BALAS (p. 207)

for the degree of Bachelor of Science in Liberal Arts & Sciences: Major in Geography & Geographic Information Science, Physical Geography Concentration

A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office by the beginning of the fifth semester (60-75 hours).

Departmental distinction: Students majoring in Geography and Geographic Information Science can earn distinction, high distinction, and highest distinction upon graduation. The requirements for these awards are:

- For distinction: 3.3 GPA overall; 3.3 GPA in GGIS courses.
- For high distinction: 3.3 GPA overall; 3.75 GPA in GGIS courses.
- For highest distinction: 3.3 GPA overall; 3.75 GPA in GGIS courses; satisfactorily complete an
- independent project (GEOG 391).

Students should consult their advisors regarding distinction requirements as soon as they enter the major (no later than the end of their junior year).

General education: Students must complete the Campus General Education (https://courses.illinois.edu/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: a minimum of 40 upper-division hours. Twelve (12) hours of 300- and 400-level courses in the major must be taken on this campus.

Geography and Geographic Information Science Core Requirements

Code	Title	Hours
Total Core Hours		**10-16**
Select one of the following three(3) courses:		**3-4**
GEOG 100	Introduction to Meteorology	
GEOG 103	Earth's Physical Systems	
GEOG 222	Big Rivers of the World	
Select one of the following six (6) courses:		**3-4**
GEOG 101	Global Development&Environment	
GEOG 104	Social and Cultural Geography	
GEOG 105	The Digital Earth	
GEOG 106	Geographies of Globalization	
GEOG 210	Social & Environmental Issues	
GEOG 221	Geographies of Global Conflict	
Select one of the following two (2) courses: [1]		**4-8**
GEOG 371	Spatial Analysis	
GEOG 379	Intro to GIS Systems	

[1] *Students pursuing the Geographic Information Science Concentration are required to take both GEOG 371 and GEOG 379.*

Physical Geography Concentration Requirements:

Code	Title	Hours
Total Concentration required hours		
200- to 400-level Geography and Geographic Information Science courses (of which at least 6 hours must be at the 300 or 400 level) selected from the following:		25-27
GEOG 210	Social & Environmental Issues	
GEOG 222	Big Rivers of the World	
GEOG/NRES 287	Environment and Society	
GEOG 370/ ESE 320	Water Planet, Water Crisis	
GEOG 371	Spatial Analysis	
GEOG 390	Individual Study	
GEOG 391	Honors Individual Study	
GEOG/NRES 401	Watershed Hydrology	
GEOG 405	Geography Field Course	
GEOG 406	Fluvial Geomorphology	
GEOG 408	Humans and River Systems	
GEOG 412	Geospatial Tech & Society	
GEOG/ATMS 421	Earth Systems Modeling	
GEOG 436/ IB 439	Biogeography	
GEOG 460	Aerial Photo Analysis	
GEOG 468	Biological Modeling	
GEOG 471	Recent Trends in Geog Thought	
GEOG 473	Digital Cartography & Map Design	
GEOG 476	Applied GIS to Environ Studies	
GEOG 477	Introduction to Remote Sensing	
GEOG 478	Techniques of Remote Sensing	
MATH 220	Calculus	4-5
or MATH 221	Calculus I	
PHYS 101	College Physics: Mech & Heat	4-5
or PHYS 211	University Physics: Mechanics	
Select one of the following:		**4**
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	
CHEM 104 & CHEM 105	General Chemistry II and General Chemistry Lab II	
Total Hours required for graduation		**120**

Learning Outcomes: Geography & Geographic Information Science, BSLAS

Learning Outcomes for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Geography & Geographic Information Science

1. **Geographic Understanding**
   - Definition: GGIS students will understand the interconnectedness of places and scales in human-environmental systems, including the sustainability of those systems.
2. **Spatial Patterns and Processes**
   - Definition: GGIS students will be able to analyze spatial patterns, distributions, processes, and connections within and among different human-environmental systems, using qualitative, quantitative, computational, and/or spatial methods of research appropriate to their level of training and their field of geographic inquiry.

3. **Problem-Solving and Communication**
   - Definition: GGIS students will be able to formulate and conduct geographic analyses and communicate the results in verbal, written, and visual form.

Geology

department website: https://www.geology.illinois.edu/undergraduate (https://www.geology.illinois.edu/undergraduate/)
department faculty: Geology Faculty (https://www.geology.illinois.edu/directory/faculty/)
overview of college admissions & requirements: LAS admissions information (https://www.las.illinois.edu/prospective/)
college website: https://las.illinois.edu/
email: geology@illinois.edu

Students interested in majoring in geology may choose the Specialized Curriculum in Geology (http://catalog.illinois.edu/undergraduate/las/geology-bs/#degreerequirementstext), leading to the Bachelor of Science Major in Geology, or the Geology Major (http://catalog.illinois.edu/undergraduate/las/geology-bslas/#degreerequirementstext), leading to the Bachelor of Science in Liberal Arts and Sciences.

The Specialized Curriculum in Geology is designed for students who plan to pursue graduate study in geology or geophysics or who wish to work professionally in the environmental field upon obtaining the bachelor's degree. It consists of geology, geophysics, and environmental geology areas, and offers more training in geology and related science than is required of students who make geology their major in the Sciences and Letters Curriculum.

The Geology Major in the Science and Letters Curriculum is designed for students who want a more flexible course of study than is provided by the Specialized Curriculum in Geology and Geophysics. It may be used by those wishing to obtain a more liberal education and/or background in geology for use in fields such as anthropology, business, mineral economics, regional planning, journalism, law, sales, or library and information science. It is not intended to prepare a student for graduate work in the geological sciences unless the student selects additional courses in mathematics, chemistry, and physics comparable to those required in the Specialized Curriculum in Geology.

Geology, BS

for the degree of Bachelor of Science Major in Geology (Specialized Curriculum)

department website: https://www.geology.illinois.edu/undergraduate (https://www.geology.illinois.edu/undergraduate/)
department faculty: Geology Faculty (https://www.geology.illinois.edu/cms/One.aspx?portalId=127672&pageId=225782)
advising: Geology advising (https://www.geology.illinois.edu/cms/One.aspx?portalId=127672&pageId=258530)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: geology@illinois.edu

The **Specialized Curriculum in Geology (BS)** is designed for students who plan to pursue graduate study in geology or geophysics or who wish to work professionally in the environmental field upon obtaining the bachelor's degree. It consists of geology, geophysics, and environmental geology areas, and offers more training in geology and related science than is required of students who make geology their major in the Sciences and Letters Curriculum. Students must choose one of the following: Geology, Geophysics, or Environmental Geology.

Undergraduate Degree Programs in Geology

For the Degree of Bachelor of Science in Liberal Arts and Sciences

Students select one of the following in consultation with an adviser:

- Major in Geology (Sciences and Letters) (p. 214)
- Major in Geology (Sciences and Letters), Earth and Environmental Sciences Concentration (p. 215)
- Major in Geology (Sciences and Letters), Earth Science Teaching Concentration (p. 215)

For the Degree of Bachelor of Science in Geology

Students select one of the following in consultation with an adviser:

- Major in Geology (Specialized Curriculum) (p. 210)
- Major in Geology (Specialized Curriculum), Environmental Geology Concentration (p. 212)
- Major in Geology (Specialized Curriculum), Geophysics Concentration (p. 211)

for the degree of Bachelor of Science Major in Geology

Specialized Curriculum

Graduation requires a grade point average of at least 2.0 overall and a 2.0 average in all required science and technical courses (geology, physics, mathematics, chemistry, and technical requirements listed below). The Department of Geology will supply upon request a Guide for Geology Undergraduates giving more information about the curriculum.

Departmental Distinction: Students majoring in Geology can earn distinction, high distinction, and highest distinction upon graduation. The requirements for these awards are:

Distinction: A minimum cumulative grade point average of 3.3, and have also completed an approved independent study project, approved senior thesis, or approved capstone

High Distinction: A minimum cumulative grade point average of 3.5, and have also completed an approved independent study project, approved senior thesis, or approved capstone

Highest Distinction: A minimum cumulative grade point average of 3.7, and also completed an approved senior thesis or approved research capstone

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum hours required for graduation: 126 hours.

Code	Title	Hours
Chemistry: Select one group of courses:		**8-9**
CHEM 102	General Chemistry I	
CHEM 103	General Chemistry Lab I	

CHEM 104	General Chemistry II	
CHEM 105	General Chemistry Lab II	
or		
CHEM 202	Accelerated Chemistry I	
CHEM 203	Accelerated Chemistry Lab I	
CHEM 204	Accelerated Chemistry II	
CHEM 205	Accelerated Chemistry Lab II	
45 hours of Geology Courses: [1]		
GEOL 107	Physical Geology [2]	4
GEOL 208	History of the Earth System	4
GEOL 143	History of Life	3
GEOL 411	Structural Geol and Tectonics	4
GEOL 417	Geol Field Methods, Western US [3]	6
GEOL 432	Mineralogy and Mineral Optics	4
GEOL 436	Petrology and Petrography	4
GEOL 440	Sedimentology and Stratigraphy	4
Select one of the following:		3-4
GEOL 450	Probing the Earth's Interior	
or GEOL 452	Introduction to Geophysics	
GEOL 460	Geochemistry	3
6 additional hours 300- or 400-level geology		6
Mathematics		**13-15**
MATH 220	Calculus	
or MATH 221	Calculus I	
MATH 231	Calculus II	
MATH 225	Introductory Matrix Theory	
or MATH 415	Applied Linear Algebra	
MATH 241	Calculus III	
Physics. Select one group of courses:		**8-10**
PHYS 211	University Physics: Mechanics	
PHYS 212	University Physics: Elec & Mag	
or		
PHYS 101	College Physics: Mech & Heat	
PHYS 102	College Physics: E&M & Modern	
Additional Technical Requirements		**3**
Select at least 3 hours from the following:		
IB 103	Introduction to Plant Biology	
IB 104	Animal Biology	
CS 101	Intro Computing: Engrg & Sci	
CS 125	Introduction to Computer Science	
CPSC 440	Applied Statistical Methods I	
STAT 400	Statistics and Probability I	
MATH 285	Intro Differential Equations	
MATH 441	Differential Equations	
PHYS 213	Univ Physics: Thermal Physics	
PHYS 214	Univ Physics: Quantum Physics	

[1] Students transferring into the geology concentration from another science or engineering program may substitute up to 8 hours of 300- or 400-level science or engineering credits for 8 hours of 300-or 400-level geology courses with departmental approval.

[2] Students who decide to follow the curriculum after first taking GEOL 100 or GEOL 103 should enroll in GEOL 208. GEOL 100 or GEOL 103 will be accepted as a substitute for GEOL 107, but students should be aware that these courses are not intended for science majors.

[3] GEOL 417 is a 6-hour summer field course taught off campus.

Geology: Geophysics, BS

for the degree of Bachelor of Science Major in Geology, Geophysics Concentration (Specialized Curriculum)

department website: https://www.geology.illinois.edu/undergraduate (https://www.geology.illinois.edu/undergraduate/)
department faculty: Geology Faculty (https://www.geology.illinois.edu/people/)
advising: Geology advising (https://www.geology.illinois.edu/cms/One.aspx?portalId=127672&pageId=258530)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: geology@illinois.edu

The **Specialized Curriculum in Geology (BS)** is designed for students who plan to pursue graduate study in geology or geophysics or who wish to work professionally in the environmental field upon obtaining the bachelor's degree. It consists of geology, geophysics, and environmental geology areas, and offers more training in geology and related science than is required of students who make geology their major in the Sciences and Letters Curriculum. Students must choose one of the following: Geology, Geophysics, or Environmental Geology.

Undergraduate Degree Programs in Geology

For the Degree of Bachelor of Science in Liberal Arts and Sciences

Students select one of the following in consultation with an adviser:

- Major in Geology (Sciences and Letters) (p. 214)
- Major in Geology (Sciences and Letters), Earth and Environmental Sciences Concentration (p. 215)
- Major in Geology (Sciences and Letters), Earth Science Teaching Concentration (p. 215)

For the Degree of Bachelor of Science in Geology

Students select one of the following in consultation with an adviser:

- Major in Geology (Specialized Curriculum) (p. 210)
- Major in Geology (Specialized Curriculum), Environmental Geology Concentration (p. 212)
- Major in Geology (Specialized Curriculum), Geophysics Concentration (p. 211)

for the degree of Bachelor of Science Major in Geology, Geophysics Concentration

Graduation requires a grade point average of at least 2.0 overall and a 2.0 average in all required science and technical courses (geology, physics, mathematics, chemistry, and technical requirements listed below). The

Department of Geology will supply upon request a Guide for Geology Undergraduates giving more information about the curriculum.

Departmental Distinction: Students majoring in Geology can earn distinction, high distinction, and highest distinction upon graduation. The requirements for these awards are:

Distinction: A minimum cumulative grade point average of 3.3, and have also completed an approved independent study project, approved senior thesis, or approved capstone

High Distinction: A minimum cumulative grade point average of 3.5, and have also completed an approved independent study project, approved senior thesis, or approved capstone

Highest Distinction: A minimum cumulative grade point average of 3.7, and also completed an approved senior thesis or approved research capstone

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum hours required for graduation: 126 hours.

Code	Title	Hours
Chemistry: Select one group of courses:		**8-9**
CHEM 102	General Chemistry I	
CHEM 103	General Chemistry Lab I	
CHEM 104	General Chemistry II	
CHEM 105	General Chemistry Lab II	
or		
CHEM 202	Accelerated Chemistry I	
CHEM 203	Accelerated Chemistry Lab I	
CHEM 204	Accelerated Chemistry II	
CHEM 205	Accelerated Chemistry Lab II	
22 hours of Geology Courses		
GEOL 107	Physical Geology [1]	4
GEOL 208	History of the Earth System	4
GEOL 452	Introduction to Geophysics	4
10 additional hours of 300 or 400 level geology courses		10
Mathematics		**16-18**
MATH 220	Calculus	
or MATH 221	Calculus I	
MATH 231	Calculus II	
MATH 241	Calculus III	
MATH 225	Introductory Matrix Theory	
or MATH 415	Applied Linear Algebra	
MATH 285	Intro Differential Equations	
Physics		**15-17**
PHYS 211	University Physics: Mechanics	
PHYS 212	University Physics: Elec & Mag	
PHYS 213	Univ Physics: Thermal Physics	
PHYS 214	Univ Physics: Quantum Physics	
Select one of the following:		
PHYS 325	Classical Mechanics I	
or		
TAM 210 & TAM 212	Introduction to Statics and Introductory Dynamics	
Additional Technical Requirements		**13**
CS 101	Intro Computing: Engrg & Sci	
or CS 125	Introduction to Computer Science	
MSE 401	Thermodynamics of Materials	
or PHYS 427	Thermal & Statistical Physics	
or CHEM 444	Physical Chemistry II	
Six hours of other 300- or 400-level science, math, or engineering courses selected with adviser approval.		

[1] Students who decide to follow the curriculum after first taking GEOL 100 or GEOL 103 should enroll in GEOL 208. GEOL 100 or GEOL 103 will be accepted as a substitute for GEOL 107, but students should be aware that these courses are not intended for science majors.

Geology: Environmental Geology, BS

for the degree of Bachelor of Science Major in Geology, Environmental Geology Concentration (Specialized Curriculum)

department website: https://www.geology.illinois.edu/undergraduate (https://www.geology.illinois.edu/undergraduate/)
department faculty: Geology Faculty (https://www.geology.illinois.edu/people/)
advising: Geology advising (https://www.geology.illinois.edu/cms/One.aspx?portalId=127672&pageId=258530)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: geology@illinois.edu

The **Specialized Curriculum in Geology (BS)** is designed for students who plan to pursue graduate study in geology or geophysics or who wish to work professionally in the environmental field upon obtaining the bachelor's degree. It consists of geology, geophysics, and environmental geology areas, and offers more training in geology and related science than is required of students who make geology their major in the Sciences and Letters Curriculum. Students must choose one of the following: Geology, Geophysics, or Environmental Geology.

Undergraduate Degree Programs in Geology

For the Degree of Bachelor of Science in Liberal Arts and Sciences

Students select one of the following in consultation with an adviser:

- Major in Geology (Sciences and Letters) (p. 214)
- Major in Geology (Sciences and Letters), Earth and Environmental Sciences Concentration (p. 215)
- Major in Geology (Sciences and Letters), Earth Science Teaching Concentration (p. 215)

For the Degree of Bachelor of Science in Geology

Students select one of the following in consultation with an adviser:

- Major in Geology (Specialized Curriculum) (p. 210)
- Major in Geology (Specialized Curriculum), Environmental Geology Concentration (p. 212)

- Major in Geology (Specialized Curriculum), Geophysics Concentration (p. 211)

for the degree of Bachelor of Science Major in Geology, Environmental Geology Concentration

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Graduation requires a grade point average of at least 2.0 overall and a 2.0 average in all required science and technical courses (geology, physics, mathematics, chemistry, and technical requirements listed below). The Department of Geology will supply upon request a Guide for Geology Undergraduates giving more information about the curriculum.

Departmental Distinction: Students majoring in Geology can earn distinction, high distinction, and highest distinction upon graduation. The requirements for these awards are:

Distinction: A minimum cumulative grade point average of 3.3, and have also completed an approved independent study project, approved senior thesis, or approved capstone

High Distinction: A minimum cumulative grade point average of 3.5, and have also completed an approved independent study project, approved senior thesis, or approved capstone

Highest Distinction: A minimum cumulative grade point average of 3.7, and also completed an approved senior thesis or approved research capstone

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General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum hours required for graduation: 126 hours.

Code	Title	Hours
Chemistry- Select one group of courses:		**8-9**
CHEM 102	General Chemistry I	
CHEM 103	General Chemistry Lab I	
CHEM 104	General Chemistry II	
CHEM 105	General Chemistry Lab II	
or		
CHEM 202	Accelerated Chemistry I	
CHEM 203	Accelerated Chemistry Lab I	
CHEM 204	Accelerated Chemistry II	
CHEM 205	Accelerated Chemistry Lab II	
24 hours of Geology Courses		
GEOL 107	Physical Geology [1]	4
GEOL 208	History of the Earth System	4
GEOL 380	Environmental Geology	4
GEOL 401	Geomorphology	4
GEOL 451	Env and Exploration Geophysics	4
or GEOL 452	Introduction to Geophysics	
GEOL 470	Introduction to Hydrogeology	4
Mathematics		**11-12**
MATH 220	Calculus	
or MATH 221	Calculus I	
MATH 231	Calculus II	
MATH 241	Calculus III	
Physics		**8-10**
PHYS 211 & PHYS 212	University Physics: Mechanics and University Physics: Elec & Mag	
or		
PHYS 101 & PHYS 102	College Physics: Mech & Heat and College Physics: E&M & Modern	
Statistics- Select one of the following:		**4**
CPSC 440	Applied Statistical Methods I	
STAT 400	Statistics and Probability I	
Additional Technical Requirements		**24**
Select from the following courses. At least 9 hours must be geology courses and at least 9 hours must be non-geology courses.		
CEE 330	Environmental Engineering	
CHEM 232	Elementary Organic Chemistry I	
CS 101	Intro Computing: Engrg & Sci	
CS 125	Introduction to Computer Science	
ENVS 431	Environ Toxicology & Health	
GEOG 477	Introduction to Remote Sensing	
GEOL 411	Structural Geol and Tectonics	
GEOL 417	Geol Field Methods, Western US [2]	
GEOL 432	Mineralogy and Mineral Optics	
GEOL 436	Petrology and Petrography	
GEOL 440	Sedimentology and Stratigraphy	
GEOL 460	Geochemistry	
MATH 225	Introductory Matrix Theory	
MATH 415	Applied Linear Algebra	
MATH 285	Intro Differential Equations	
MATH 441	Differential Equations	
MCB 100	Introductory Microbiology	
MCB 101	Intro Microbiology Laboratory	
PHYS 213	Univ Physics: Thermal Physics	
PHYS 214	Univ Physics: Quantum Physics	
STAT 420	Methods of Applied Statistics	
TAM 210	Introduction to Statics	
TAM 211	Statics	

[1] *Students who decide to follow the curriculum after first taking* GEOL 100 *or GEOL 103 should enroll in* GEOL 208. GEOL 100 *or GEOL 103 will be accepted as a substitute for* GEOL 107, *but students should be aware that these courses are not intended for science majors.*

[2] GEOL 417 is a 6-hour summer field course taught off campus.

Learning Outcomes: Geology, BS

Learning Outcomes for the degree of Bachelor of Science Major in Geology

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1. Students will develop cross-disciplinary skills of observation, data collection, and spatial display of data (e.g., map making) related to geological materials, features, and processes.
2. Students will develop an understanding of the physical, chemical and mathematical theories fundamental to earth processes through rigorous coursework and research.

3. Students will develop and apply critical thinking skills to synthesize principles learned in the classroom, and data collected in the laboratory and in the field in order to evaluate hypotheses and solve geological problems.
4. Students will demonstrate the ability to communicate effectively scientific data, interpretations, and hypotheses through written and oral methods.
5. Students will hone and apply interpersonal skills in a professional setting through group work, research activities, and field studies.

Geology, BSLAS

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Geology (Sciences & Letters)

department website: https://www.geology.illinois.edu/undergraduate (https://www.geology.illinois.edu/undergraduate/)
department faculty: Geology Faculty (https://www.geology.illinois.edu/people/)
advising: Geology advising (https://www.geology.illinois.edu/cms/One.aspx?portalId=127672&pageId=258530)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: geology@illinois.edu

The **Sciences and Letters Curriculum in Geology (BSLAS)**, administered by the Department of Geology, is designed for students who want a more flexible course of study than is provided by the Specialized Curriculum in Geology and Geophysics. It may be used by those wishing to obtain a more liberal education and/or background in geology for use in fields such as anthropology, business, mineral economics, regional planning, journalism, law, sales, or library and information science. It is not intended to prepare a student for graduate work in the geological sciences unless the student selects additional courses in mathematics, chemistry, and physics comparable to those required in the Specialized Geology and Geophysics Curriculum. Students must choose from the following: Geology, Earth and Environmental Sciences, or Earth Science Teaching. The Earth Science Teaching Concentration is designed for students preparing to teach earth science at the secondary school level.

Undergraduate Degree Programs in Geology

For the Degree of Bachelor of Science in Liberal Arts and Sciences

Students select one of the following in consultation with an adviser:

- Major in Geology (Sciences and Letters) (p. 214)
- Major in Geology (Sciences and Letters), Earth and Environmental Sciences Concentration (p. 215)
- Major in Geology (Sciences and Letters), Earth Science Teaching Concentration (p. 215)

For the Degree of Bachelor of Science in Geology

Students select one of the following in consultation with an adviser:

- Major in Geology (Specialized Curriculum) (p. 210)
- Major in Geology (Specialized Curriculum), Environmental Geology Concentration (p. 212)
- Major in Geology (Specialized Curriculum), Geophysics Concentration (p. 211)

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Geology (Sciences & Letters)

Departmental Distinction: Students majoring in Geology can earn distinction, high distinction, and highest distinction upon graduation. The requirements for these awards are:

Distinction: A minimum cumulative grade point average of 3.3, and have also completed an approved independent study project, approved senior thesis, or approved capstone

High Distinction: A minimum cumulative grade point average of 3.5, and have also completed an approved independent study project, approved senior thesis, or approved capstone

Highest Distinction: A minimum cumulative grade point average of 3.7, and also completed an approved senior thesis or approved research capstone

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Minimum required course work normally equates to 47-52 hours including at least 26 hours in Geology. Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Core requirements:		
GEOL 107	Physical Geology [1]	4
GEOL 208	History of the Earth System	4
CHEM 102	General Chemistry I	3
CHEM 103	General Chemistry Lab I	1
Select one of the following MATH courses: [2]		4-5
MATH 220	Calculus	
or MATH 221	Calculus I	
MATH 234	Calculus for Business I	
Additional requirements beyond the core requirements:		
CHEM 104	General Chemistry II	3
CHEM 105	General Chemistry Lab II	1
PHYS 101	College Physics: Mech & Heat	4-5
or PHYS 211	University Physics: Mechanics	
GEOL 411	Structural Geol and Tectonics	4
GEOL 417	Geol Field Methods, Western US [3]	6
GEOL 432	Mineralogy and Mineral Optics	4
GEOL 436	Petrology and Petrography	4
GEOL 440	Sedimentology and Stratigraphy	4
Three to four hours of advanced Geology or cognate science elective		3-4

[1] *Students who decide to follow the curriculum after first taking* GEOL 100 *or GEOL 103 should enroll in* GEOL 208. GEOL 100 *or GEOL 103 will be accepted as a substitute for* GEOL 107*, but students should be aware that these courses are not intended for science majors.*

[2] An introductory Statistics course, e.g., STAT 100, SOC 280, ECON 202, or a second semester of Calculus is recommended

[3] GEOL 417 *is a summer field course taught off campus.*

Geology: Earth & Environmental Sciences, BSLAS

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Geology (Sciences & Letters), Earth & Environmental Sciences Concentration

department website: https://www.geology.illinois.edu/undergraduate (https://www.geology.illinois.edu/undergraduate/)
department faculty: Geology Faculty (https://www.geology.illinois.edu/people/)
advising: Geology advising (https://www.geology.illinois.edu/cms/One.aspx?portalId=127672&pageId=258530)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: geology@illinois.edu

The **Sciences and Letters Curriculum in Geology (BSLAS)**, administered by the Department of Geology, is designed for students who want a more flexible course of study than is provided by the Specialized Curriculum in Geology and Geophysics. It may be used by those wishing to obtain a more liberal education and/or background in geology for use in fields such as anthropology, business, mineral economics, regional planning, journalism, law, sales, or library and information science. It is not intended to prepare a student for graduate work in the geological sciences unless the student selects additional courses in mathematics, chemistry, and physics comparable to those required in the Specialized Geology and Geophysics Curriculum. Students must choose from the following: Geology, Earth and Environmental Sciences, or Earth Science Teaching. The Earth Science Teaching Concentration is designed for students preparing to teach earth science at the secondary school level.

Undergraduate Degree Programs in Geology

For the Degree of Bachelor of Science in Liberal Arts and Sciences

Students select one of the following in consultation with an adviser:

- Major in Geology (Sciences and Letters) (p. 214)
- Major in Geology (Sciences and Letters), Earth and Environmental Sciences Concentration (p. 215)
- Major in Geology (Sciences and Letters), Earth Science Teaching Concentration (p. 215)

For the Degree of Bachelor of Science in Geology

Students select one of the following in consultation with an adviser:

- Major in Geology (Specialized Curriculum) (p. 210)
- Major in Geology (Specialized Curriculum), Environmental Geology Concentration (p. 212)
- Major in Geology (Specialized Curriculum), Geophysics Concentration (p. 211)

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Geology (Sciences & Letters), Earth & Environmental Sciences Concentration

Departmental Distinction: Students majoring in Geology can earn distinction, high distinction, and highest distinction upon graduation. The requirements for these awards are:

Distinction: A minimum cumulative grade point average of 3.3, and have also completed an approved independent study project, approved senior thesis, or approved capstone

High Distinction: A minimum cumulative grade point average of 3.5, and have also completed an approved independent study project, approved senior thesis, or approved capstone

Highest Distinction: A minimum cumulative grade point average of 3.7, and also completed an approved senior thesis or approved research capstone

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 43 hours including at least 26 hours in Geology. Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Core requirements:		
GEOL 107	Physical Geology [1]	4
GEOL 208	History of the Earth System	4
CHEM 102	General Chemistry I	3
CHEM 103	General Chemistry Lab I	1
Select one of the following MATH courses: [2]		4-5
MATH 220	Calculus	
or MATH 221	Calculus I	
MATH 234	Calculus for Business I	
Courses beyond the core requirements		
ATMS 140	Climate and Global Change	3
or GEOL 118	Natural Disasters	
GEOL 333	Earth Materials and the Env	4
or GEOL 432	Mineralogy and Mineral Optics	
GEOL 380	Environmental Geology	4
Ten to twelve hours of additional advanced geology courses		10-12
Six to eight hours Environmental Studies electives. (see Geology advisor for list of approved courses)		6-8

[1] *Students who decide to follow the curriculum after first taking* GEOL 100 *or GEOL 103 should enroll in* GEOL 208. GEOL 100 *or GEOL 103 will be accepted as a substitute for* GEOL 107*, but students should be aware that these courses are not intended for science majors.*

[2] An introductory Statistics course, e.g., STAT 100, SOC 280, ECON 202, or a second semester of Calculus is recommended.

Geology: Earth Science Teaching, BSLAS

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Geology (Sciences & Letters), Earth Science Teaching Concentration

department website: https://www.geology.illinois.edu/undergraduate (https://www.geology.illinois.edu/undergraduate/)
department faculty: Geology Faculty (https://www.geology.illinois.edu/people/)
advising: Geology advising (https://www.geology.illinois.edu/cms/One.aspx?portalId=127672&pageId=258530)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: geology@illinois.edu

The **Sciences and Letters Curriculum in Geology (BSLAS)**, administered by the Department of Geology, is designed for students who want a more flexible course of study than is provided by the Specialized Curriculum in Geology and Geophysics. It may be used by those wishing to obtain a more liberal education and/or background in geology for use in fields such as anthropology, business, mineral economics, regional planning, journalism, law, sales, or library and information science. It is not intended to prepare a student for graduate work in the geological sciences unless the student selects additional courses in mathematics, chemistry, and physics comparable to those required in the Specialized Geology and Geophysics Curriculum. Students must choose from the following: Geology, Earth and Environmental Sciences, or Earth Science Teaching. The Earth Science Teaching Concentration is designed for students preparing to teach earth science at the secondary school level.

Undergraduate Degree Programs in Geology

For the Degree of Bachelor of Science in Liberal Arts and Sciences

Students select one of the following in consultation with an adviser:

- Major in Geology (Sciences and Letters) (p. 214)
- Major in Geology (Sciences and Letters), Earth and Environmental Sciences Concentration (p. 215)
- Major in Geology (Sciences and Letters), Earth Science Teaching Concentration (p. 215)

For the Degree of Bachelor of Science in Geology

Students select one of the following in consultation with an adviser:

- Major in Geology (Specialized Curriculum) (p. 210)
- Major in Geology (Specialized Curriculum), Environmental Geology Concentration (p. 212)
- Major in Geology (Specialized Curriculum), Geophysics Concentration (p. 211)

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Geology (Sciences & Letters), Earth Science Teaching Concentration

This concentration fulfills state certification requirements to teach high school (grades 9-12) Earth and Space Science through the AP/honors level and biology, chemistry, environmental science and physics up to but not including the AP/honors level.

Time to degree completion varies. Minimum time to completion is 8 semesters. Some students require 10 semesters. Transfer students may need 10 total semesters combined to complete the program. Please see the LAS section in the transfer handbook (https://admissions.illinois.edu/Content/docs/Handbook_LAS.pdf) for more information.

In order to remain in good standing in this program and be recommended for certification, candidates are required to maintain UIUC, cumulative, content area, and professional education grade-point averages of 2.5 (A= 4.0). Candidates should consult their advisor or the Council on Teacher Education for the list of courses used to compute these grade-point averages.

Departmental Distinction: Students majoring in Geology can earn distinction, high distinction, and highest distinction upon graduation. The requirements for these awards are:

Distinction: A minimum cumulative grade point average of 3.3, and must present evidence of exemplary teaching

High Distinction: A minimum cumulative grade point average of 3.5, and must present evidence of exemplary teaching

Highest Distinction: A minimum cumulative grade point average of 3.7, and must present evidence of exemplary teaching

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 55-59 hours in the concentration and 39 hours for the Teacher Education Minor in Secondary School Teaching. Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Foundation Courses		
The following courses must be completed or in progress when students apply to the Secondary Education minor.		
GEOL 107	Physical Geology [1]	4
GEOL 208	History of the Earth System	4
GEOL 333	Earth Materials and the Env [2]	4
MATH 220	Calculus	4-5
or MATH 221	Calculus I	
or MATH 234	Calculus for Business I	
Additional Required Coursework		
Teacher Education Minor in Secondary School Teaching (http://catalog.illinois.edu/undergraduate/education/secondary/)		39
Select one group of courses:		5-6
ASTR 100	Introduction to Astronomy	
& ASTR 131	and The Solar System Lab	
& ASTR 132	and Stars and Galaxies Lab	
or		
ASTR 121	Solar System and Worlds Beyond	
& ASTR 122	and Stars and Galaxies	
ATMS 100	Introduction to Meteorology	3
IB 100	Biology in Today's World	3
Select one group of courses:		4
CHEM 102	General Chemistry I	
& CHEM 103	and General Chemistry Lab I	
or		

CHEM 202 & CHEM 203	Accelerated Chemistry I and Accelerated Chemistry Lab I	
GEOL 117	The Oceans	3
GEOL 143	History of Life	3
Advanced-hour course work in Geology		8
Select one group of courses:		10-12
PHYS 101 & PHYS 102	College Physics: Mech & Heat and College Physics: E&M & Modern	
or		
PHYS 211 & PHYS 212 & PHYS 213 & PHYS 214	University Physics: Mechanics and University Physics: Elec & Mag and Univ Physics: Thermal Physics and Univ Physics: Quantum Physics	

Requirements for the Teacher Education in Secondary School Teaching Minor

Code	Title	Hours
Professional Education Required Courses		
EDUC 201	Identity and Difference in Education [1]	3
EDUC 202	Social Justice, School and Society [1]	3
CI 401	Introductory Teaching in a Diverse Society	3
CI 403	Teaching a Diverse High School Student Population	3
CI 404	Teaching and Assessing Secondary School Students	3
CI 473	Disciplinary Literacy	3
EPSY 201	Educational Psychology [1, 2]	3
EPSY 485	Assessing Student Performance	3
SPED 405	General Educator's Role in Special Education	3
EDPR 442	Educational Practice in Secondary Education	12
Total Hours		39-40

[1] EDUC 201, EDUC 202 and EPSY 201 can be completed at any time during the degree and are not pre-requisites to apply for the minor.

[2] PSYC 100 is a pre-requisite for EPSY 201.

Learning Outcomes: Geology, BSLAS

Learning Outcomes for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Geology (Sciences & Letters)

1. Students will develop cross-disciplinary skills of observation, data collection, and spatial display of data (e.g., map making) related to geological materials, features, and processes.
2. Students will develop an understanding of the physical, chemical and mathematical theories fundamental to earth processes through rigorous coursework and research.
3. Students will develop and apply critical thinking skills to synthesize principles learned in the classroom, and data collected in the laboratory and in the field in order to evaluate hypotheses and solve geological problems.
4. Students will demonstrate the ability to communicate effectively scientific data, interpretations, and hypotheses through written and oral methods.
5. Students will hone and apply interpersonal skills in a professional setting through group work, research activities, and field studies.

Germanic Studies, BALAS

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Germanic Studies

department website: https://www.germanic.illinois.edu
department faculty: Germanic Languages & Literatures Faculty (https://germanic.illinois.edu/directory/faculty/)
advising: German advising (https://germanic.illinois.edu/academics/german/undergraduate-programs/undergraduate-advisor/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: germanic@illinois.edu

The BALAS in Germanic Studies serves to develop competence in German or Scandinavian languages and cultures. Students will gain familiarity with the structure of the language and its use in the context of business, contemporary culture, intellectual history, literature, and science. Students must select one concentration in consultation with an adviser:

- German Studies Concentration (http://catalog.illinois.edu/undergraduate/las/germanic-studies-balas/german-culture-literature/)
- German Business & Commercial Studies Concentration (p. 218)
- Scandinavian Studies Concentration (p. 219)

The Department of German Languages & Literatures also offers a BA in the Teaching of German (p. 422)**.**

5 year BALAS/MA in Germanic Studies

The Department of Germanic Languages and Literatures offers a 5-year program leading to two degrees, a BALAS in Germanic Studies and an MA in German. In order to be admitted to this program, student can apply during their second or third year of studies. Requirements for this program are identical to those for the BALAS and the MA in the Department of Germanic Languages and Literatures.

In order to be admitted to the 5-year BALAS/MA during their *second* year, students will need to be in good standing, have finished GER 211 and GER 331, have a general **GPA of 3.0** and a German GPA of 3.0, and be required to write a short essay in German.

In order to apply for the 5-year BALAS/MA during their *third* year, students will have to have finished GER 401 and GER 420, have a general **GPA of 3.0** and a German GPA of 3.0, and be required to write a short essay in German.

The department will continue to monitor the GPAs of students admitted to the BALAS/MA program into their third and fourth years and before formal admission to the Graduate College. The decision about students' admission to the 5-year program will be made by the graduate admissions committee in conjunction with undergraduate and graduate advisors of the department. The Department will consider students in the fifth year of this program for departmental support as Teaching Assistants and Research Assistants, or for fellowships and scholarships.

The minimum total number of hours required for graduation from the BALAS/MA program is 152. Up to 12 hours not required for the

BALAS (120 hours) taken during the fourth year can be used to meet the requirements for the MA (32 hours). Students admitted to the program will receive both degrees once all requirements for the 5-year BALAS/MA degree program have been successfully completed. More detailed information may be obtained from the departmental office.

5 Year BALAS/MA in German and European Union Studies

The Department of Germanic Languages & Literatures with the European Union Center offers a 5-year BALAS/MA degree program in German (including a Scandinavian Studies Concentration) and the Master of Arts in European Union Studies (MAEUS). In order to be admitted to this degree program, students apply through a joint application process to their BALAS-granting program and the European Union Center during their third year of studies. Requirements for this degree program are identical to those for the standalone BALAS and for the stand-alone MAEUS. Students will receive both degrees when the requirements are met for the degrees; the BALAS and MA degrees will be conferred separately and independently. More detailed information may be obtained from department and EUC offices.

Germanic Studies: German Business & Commercial Studies, BALAS

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Germanic Studies, German Business & Commercial Studies Concentration

department website: http://www.germanic.illinois.edu/undergraduate/
department faculty: Germanic Languages & Literatures Faculty (https://germanic.illinois.edu/directory/faculty/)
advising: German advising (https://germanic.illinois.edu/academics/german/undergraduate-programs/undergraduate-advisor/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: germanic@illinois.edu

The German Business and Commercial Studies concentration focuses on the language and customs of the business world in German-speaking countries, together with study of international affairs and commerce, especially trade with Europe.

Undergraduate degree programs in Germanic Languages & Literatures:

Germanic Studies: German Studies, BALAS (p. 217)

Germanic Studies: German Business & Commercial Studies, BALAS (p. 218)

Teaching of German, BA (p. 422)

Germanic Studies: Scandinavian Studies, BALAS (p. 219)

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Germanic Studies, German Business & Commercial Studies Concentration

The German Business and Commercial Studies concentration focuses on the language and customs of the business world in German-speaking countries, together with study of international affairs and commerce, especially trade with Europe.

A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office before the end of the fifth semester (60-75 hours). Please see your adviser.

Departmental distinction: Students majoring in the Department of Germanic Languages and Literatures are urged to consult the departmental honors adviser by the second semester of the junior year for information pertaining to senior honors work and honors awards in the department.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 34 hours in German. Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Minimum of 34 hours of German courses including:		
GER 211	Conversation and Writing I	3
GER 212	Conversation and Writing II	3
GER 320	German for Business	3
GER 321	German for Economics	3
GER 420	German Cultural History	4
Select 18 hours, including at least 12 hours of 300- and 400-level coursework from this list:		18
GER 103	Intermediate German I	
GER 104	Intermediate German II	
GER 201	German Popular Culture	
GER 205	Germany and Europe	
GER 250	Grimms' Fairy Tales - ACP	
or GER 251	Grimm's Fairy Tales in Context	
GER 260	The Holocaust in Context - ACP	
or GER 261	The Holocaust in Context	
GER 270	Sexuality and Literature	
GER 331	Intro to German Literature	
GER 332	German Literature and Culture	
GER 385	Politics of the European Union	
GER 401	Global Issues in German	
GER 403	German-English Translation: Theory & Practice	
GER 465	German Linguistics	
GER 470	Middle Ages to Baroque	
GER 471	Enlightenment to Romanticism	
GER 472	Realism to Expressionism	
GER 473	1920s to Today	
GER 493	German Cinema I	
GER 494	German Cinema II	
Total Hours		34

Germanic Studies: German Studies, BALAS

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Germanic Studies, German Studies Concentration

department website: https://www.germanic.illinois.edu
department faculty: Germanic Languages & Literatures Faculty (https://germanic.illinois.edu/directory/faculty/)
advising: German advising (https://germanic.illinois.edu/academics/german/undergraduate-programs/undergraduate-advisor/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: germanic@illinois.edu

The Germanic Studies Concentration provides a multidisciplinary approach to the study of German, emphasizing a balanced knowledge of German language, literature, and culture as well as exposure to contemporary politics and social issues in broader European and global contexts.

Undergraduate degree programs in Germanic Languages & Literatures:

Germanic Studies: German Studies, BALAS (p. 217)

Germanic Studies: German Business & Commercial Studies, BALAS (p. 218)

Teaching of German, BA (p. 422)

Germanic Studies: Scandinavian Studies, BALAS (p. 219)

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Germanic Studies, German Studies Concentration

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 34 hours in German. Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Minimum of 34 hours of German courses including:		
GER 211	Conversation and Writing I	3
GER 212	Conversation and Writing II	3
GER 420	German Cultural History	4
Select 24 hours, including at least 12 hours of 300- and 400-level coursework from this list:		24
GER 103	Intermediate German I	
GER 104	Intermediate German II	
GER 201	German Popular Culture	
GER 205	Germany and Europe	
GER 250	Grimms' Fairy Tales - ACP	
or GER 251	Grimm's Fairy Tales in Context	
GER 260	The Holocaust in Context - ACP	
or GER 261	The Holocaust in Context	
GER 270	Sexuality and Literature	
GER 331	Intro to German Literature	
GER 332	German Literature and Culture	
GER 385	Politics of the European Union	
GER 401	Global Issues in German	
GER 403	German-English Translation: Theory & Practice	
GER 465	German Linguistics	
GER 470	Middle Ages to Baroque	
GER 471	Enlightenment to Romanticism	
GER 472	Realism to Expressionism	
GER 473	1920s to Today	
GER 493	German Cinema I	
GER 494	German Cinema II	
Total Hours		34

Germanic Studies: Scandinavian Studies, BALAS

http://www.germanic.illinois.edu/undergraduate/

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Germanic Studies, Scandinavian Studies Concentration

department website: https://www.germanic.illinois.edu
department faculty: Germanic Languages & Literatures Faculty (https://germanic.illinois.edu/directory/faculty/)
advising: German advising (https://germanic.illinois.edu/academics/german/undergraduate-programs/undergraduate-advisor/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: germanic@illinois.edu

Designed for students with a broad interest in Scandinavian Studies, including acquiring proficiency in a modern Scandinavian language. Fulfilling the requirements for the Major usually involves one semester of study abroad at a Scandinavian university.

Undergraduate degree programs in Germanic Languages & Literatures:

Germanic Studies: German Studies, BALAS (p. 217)

Germanic Studies: German Business & Commercial Studies, BALAS (p. 218)

Teaching of German, BA (p. 422)

Germanic Studies: Scandinavian Studies, BALAS (p. 219)

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Germanic Studies, Scandinavian Studies Concentration

Designed for students with a broad interest in Scandinavian Studies, including acquiring proficiency in a modern Scandinavian language.

Fulfilling the requirements for the Major usually involves one semester of study abroad at a Scandinavian university.

A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office before the end of the fifth semester (60-75 hours). Please see your adviser.

Departmental distinction: Students majoring in the Department of Germanic Languages and Literatures are urged to consult the departmental honors adviser by the second semester of the junior year for information pertaining to senior honors work and honors awards in the department.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 30 hours in Scandinavian courses beyond SCAN 101-102. Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Language Courses beyond SCAN 101-SCAN 102: [1]		12
SCAN 103	Intermediate Scandinavian I	
SCAN 104	Intermediate Scandinavian II	
SCAN 494	Topics in Scan Languages	
At least 6 hours from the following 200-level course offerings:		6
SCAN 215	Madness, Myth, and Murder	
SCAN 225	Vikings to Volvos: Scandinavia	
SCAN 251	Viking Mythology	
SCAN 252	Viking Sagas in Translation	
Select at least 12 hours from the following 300- and 400-level courses:		12
SCAN 305	Old Norse - Icelandic I	
SCAN 306	Old Norse - Icelandic II	
SCAN 376	Children and Youth Literature	
SCAN 463	Modern Scandinavian Drama	
SCAN 470	Scandinavian Politics and Society	
SCAN 472	Kierkegaard and the Self	
SCAN 490	Green Screen: Film and Nature	
SCAN 492	Scandinavian Cinema	
SCAN 496	Special Topics in Scan Studies	
Total Hours		30

Learning Outcomes: Germanic Studies, BALAS

Learning Outcomes for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Germanic Studies

1. *Language ability:* Students develop and improve their foreign language abilities, i.e. their ability to read, speak, write, and listen in German and/or a modern Scandinavian language in order to work with texts and communicate with others in these languages.
2. *Cultural-historical literacy and knowledge:* Students develop and improve their ability to function in non-native cultural-historical and linguistic contexts and communities in order to respect and navigate cultural differences and build upon similarities. Furthermore, students will synthesize knowledge relevant to broad cultural and linguistic areas within German and/or Scandinavian studies in order to apply that knowledge toward the other learning outcomes outlined here.
3. *Analytical and argumentative skills:* Students develop and improve their abilities to analyze diverse cultural artifacts in order to apply analytical thinking and discursive skills to the construction of sound, supported, factual argumentation rather than merely expression of opinion, completely or in part.
4. *Writing development:* Students will demonstrate and produce well-written, communicative, argumentative, and interpretive texts in German, Swedish, and/or English in order to competently meet diverse writing tasks carried out in any of the relevant languages above. Furthermore, students will be able to carry out various forms of research in support of their writing in order to create more substantive texts, which are also genre appropriate and written for a particular audience.

Global Studies, BALAS

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Global Studies

program website: https://globalstudies.illinois.edu/
program faculty: Global Studies Faculty (https://globalstudies.illinois.edu/directory/faculty-and-staff/)
advising: Global Studies advising (https://globalstudies.illinois.edu/academics/advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: globalstudies@illinois.edu

5 Year BALAS/MA in Global Studies and European Union Studies

The Program in Global Studies with the European Union Center offers a 5-year BALAS /MA degree program in Global Studies and the Master of Arts in European Union Studies (MAEUS). In order to be admitted to this degree program, students apply through a joint application process to their BALAS-granting program and the European Union Center during their third year of studies. Requirements for this degree program are identical to those for the stand-alone BALAS and for the stand-alone MAEUS. Students will receive both degrees when the requirements are met for the degrees; the BALAS and MA degrees will be conferred separately and independently. More detailed information may be obtained from department and EUC offices.

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Global Studies

A Major Plan of Study Form must be completed and submitted to the Global Studies academic advisor before the end of the fourth semester (60 hours) and prior to the required study abroad. Please see your advisor.

Departmental distinction: The department may award distinction, high distinction, or highest distinction to any Global Studies major whose overall and major grade point averages are 3.25 or higher, who successfully completes 3 hours of GLBL 494 or other approved research

methods course and who completes a distinction research project. See the departmental academic advisor for details.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 51-52 hours and includes a semester-long full time study abroad program and a minimum of 12 hours of 300- and 400-level courses.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Foundations Requirements		
GLBL 100	Intro to Global Studies	3
Global Studies. Four courses must be selected from the approved course list; they must include no more than one course from four of the following six departments: Anthropology, Economics, Geography, History, Political Science, and Sociology.		12
Global Studies Seminars. Students study current events and contemporary global issues. Select three courses from GLBL 296 or one GLBL 298 course and one GLBL 296 course.		3-4
Language and Culture Requirements		
Language. Select courses from the approved course list in a language other than your primary language(s). These various courses represent the 5th and 6th level of study.		6
Area Studies. 200- to 400-level courses which complement the language requirement must include work in at least two disciplinary departments. Area Studies and Language must be geographically related and correspond to language and study abroad location.		9
One Semester (Fall or Spring) Study Abroad. Students study a variety of subjects in an approved study abroad program that furthers their language and cultural knowledge or their cultural knowledge and thematic area knowledge. Students must be enrolled full-time to receive credit toward this requirement.		
Thematic Area Requirements		
Students choose an approved thematic area and, in consultation with a Global Studies advisor, construct an appropriate customized curriculum of a minimum of 18 hours. Students cannot include more than 3 hours of 100-level work and must complete 9 hours of 300- and 400-level coursework. Courses must be taken from more than one department. Approved thematic areas are:		18
A. Cultures in Contact		
B. Wealth and Poverty in a Globalized World		
C. Human Rights		
D. Governance, Conflict and Resolution		
E. Knowledge, Communication and Information Systems		
F. Environment, Sustainability, and Social Responsibility		
G. Global Health		
Optional Senior Capstone. Students do an individual research project (GLBL 200, 494 and GLBL 495) based on their Thematic Area.		
Total Hours		51-52

5 Year BALAS/MA in Global Studies and European Union Studies

The Program in Global Studies with the European Union Center offers a 5-year BALAS /MA degree program in Global Studies and the Master of Arts in European Union Studies (MAEUS). In order to be admitted to this degree program, students apply through a joint application process to their BALAS-granting program and the European Union Center during their third year of studies. Requirements for this degree program are identical to those for the stand-alone BALAS and for the stand-alone MAEUS. Students will receive both degrees when the requirements are met for the degrees; the BALAS and MA degrees will be conferred separately and independently. More detailed information may be obtained from department and EUC offices.

Learning Outcomes: Global Studies, BALAS

Learning outcomes for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Global Studies

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Student Learning Outcomes: LAS Global Studies strongly supports the campus-wide Student Learning Outcomes as recognized by the Office of the Provost Committee on Student Learning Outcomes. Global Studies majors will be able to:

1. Global Consciousness is not only our most important learning outcome, it is one that we extend beyond its definition in the 2017 SLOs.
   a. Our majors will discover how complex, interdependent global systems—natural, environmental, social, cultural, economic, and political—affect and are affected by the local identities and ethical choices of individuals and institutions
   b. Beyond that however, they will have developed new skills in in how to research these interconnections
   c. Required advanced language acquisition and study abroad are indispensable in developing global consciousness.
2. Creative Inquiry and Discovery is a learning outcome we continue to give an increasing emphasis.
   a. Our majors will apply knowledge to promote inquiry, discover solutions, and generate new ideas and creative works and beyond that an increasing number will also conduct their own research.
3. Intellectual Reasoning and Knowledge is produced not only through courses but also through study abroad programs.
4. Gain Social Awareness and Cultural Understanding as a learning outcome is secured through intensive experiential, cross-cultural learning through coursework, advanced language study and study abroad.
   a. Study abroad and advanced language acquisition will foster cultural and linguistic immersion, community engagement, intercultural competency and creative inquiry.
   b. Experiential learning can take place in local, national and global settings.
   c. All of these are crucial in developing a critical and reflective orientation toward such social and cultural differences as race, indigeneity, gender, class, sexuality, language, and disability.
5. Effective Leadership and Community Engagement are important skills our students acquire through developing their ability to make deliberate and independent choices about their intellectual and professional trajectories and through combining coursework and

experiential learning with the pursuit of leadership opportunities (such as the Global Studies Leaders), fieldwork, RSO engagement, volunteer opportunities, and internships with governmental and non-governmental organizations.

Graphic Design, BFA

for the degree of Bachelor of Fine Arts Major in Graphic Design

school office: 143 Art and Design Building, Champaign, IL 61820
contact: Mark Avery, Coordinator of Undergraduate Academic Affairs
email: mavery@illinois.edu
phone: (217) 333-6632
department website: School of Art & Design (https://art.illinois.edu/)
department faculty: Art & Design Faculty (https://art.illinois.edu/index.php/people/faculty-staff/)
overview of college admissions & requirements: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/

The curriculum in graphic design requires 122 credit hours and prepares the student for entrance into the professional practice of design visual communications. Studio work addresses graphic design fundamentals (typography and image making), design history and contemporary practices, research methods, user experience, and social responsibility. Students engage with complex problems and are asked to identify opportunities where design can intervene. In addition, students have the opportunity to develop their personal interests by taking advantage of a highly interdisciplinary selection of elective courses offered by the School of Art + Design, including photography, video, traditional printmaking, sustainability, advanced interaction design, and the design of Ninth Letter (http://www.ninthletter.com/), a nationally-distributed and award-winning literary arts journal.

Students in the School of Art and Design must complete the Campus General Education requirements (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/). Some Art and Design courses will also apply toward the General Education requirements (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/).

A portfolio review is required for admission to the School of Art and Design.

for the degree of Bachelor of Fine Arts Major in Graphic Design

Students in the School of Art and Design must complete the Campus General Education requirements. Some Art and Design courses will also apply toward the General Education requirements.

A portfolio review is required for admission to the School of Art and Design.

First Year Curriculum

Code	Title	Hours
FAA 101	Arts at Illinois	1
ARTF 101	Contemporary Issues in Art	2
ARTE 101	Art, Design, and Society	2
ARTH 110	Introduction to the History of Art and Visual Culture	3
Select one Drawing course:		3
ARTF 102	Observational Drawing	
ARTF 104	Expressive Drawing	
ARTF 106	Visualization Drawing	
Select one course in 2D Category:		3
ARTD 151	Introduction to Graphic Design	
ARTS 205	Introduction to Printmaking (required for Studio Art: Printmaking)	
ARTS 221	Fashion Illustration (required for Studio Art: Fashion)	
ARTS 251	Beginning Painting (required for Studio Art: Painting)	
ARTS 264	Basic Photography (required for Studio Art: Photography)	
Select one course in 3D Category:		3
ARTD 101	Introduction to Industrial Design	
ARTS 210	Ceramics Sculpture I	
ARTS 230	Jewelry/Metals I	
ARTS 280	Beginning Sculpture (required for Studio Art: Sculpture)	
Select one course in 4D Category:		3
ARTS 241	Image Practice	
ARTS 243	Time Arts I	
ARTS 244	Interaction I	
Total Hours		**20**

Graphic Design Requirements

Code	Title	Hours
ARTD 218	Interaction Design Foundation	3
ARTD 222	Typographic Practice	3
ARTD 251	Graphic Design Toolbox	2
ARTD 270	Design Methods	2
ARTD 318	Interaction Design	2
ARTD 333	Type & Image	3
ARTD 351	Graphic Design Inquiry	2
ARTD 371	Graphic Design Practicum	2
ARTD 418	Advanced Interaction Design	3
ARTD 444	Typographic Systems	3
ARTD 451	Ethics of a Designer in a Global Economy	4
ARTD 471	Graphic Design Capstone	3
Total Hours		32

Art History

Code	Title	Hours
ARTH 211	Design History Survey	3
Advanced art history (200-level or above)		6
Total Hours		9

Electives

Code	Title	Hours
Art and Design electives (art and design courses not in graphic design requirements)		12
Open electives as needed to total 122 hour degree		

Learning Outcomes: Graphic Design, BFA

Learning outcomes for the degree of Bachelor of Fine Arts Major in Graphic Design

1. A deep understanding of effective typography and image relationships as used in the graphic design discipline.
2. Ability to realize an idea through an iterative creative making process of refinement.
3. Skills to see, research, organize, and visualize abstract ideas across multiple media.
4. Ability to use and embrace the research methods, frameworks, tools, technologies, and techniques of the graphic design discipline as it evolves.
5. Ability to apply knowledge of perception, cognition, and embodiment.
6. An understanding of the diverse professional, social, and ethical impacts of the graphic design discipline.
7. Understanding the use of tools and technology, including their roles in the creation,reproduction, and distribution of visual messages.

History of Art, BALAS

for the degree of Bachelor of Arts in Liberal Arts & Sciences, major in History of Art

department website: Art History information (http://www.art.illinois.edu/index.php/prospective/academics/undergraduate-programs/art-history/)
advising information: LAS Advising site (http://www.las.illinois.edu/students/advising/declared/)
department faculty: Art History Faculty (https://art.illinois.edu/index.php/people/faculty-staff/)

overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/

The Program in Art History is unique at the University of Illinois, Urbana-Champaign. Though housed in the School of Art and Design in the College of Fine and Applied Arts, the Program in Art History offers a Bachelor of Arts degree in the History of Art from the College of Liberal Arts and Sciences.
The College of Liberal Arts and Sciences administers admission to the major in the History or Art; however, the Program in Art History advises all History of Art majors.

The curriculum in the History of Art requires 120 credit hours and offers a broad historical and cultural education related to the visual and build world. The curriculum provides sound preparation for the graduate study required for museum work or teaching at the college level.

for the degree of Bachelor of Arts in Liberal Arts & Sciences, major in History of Art

Departmental distinction: To be eligible for distinction, a student must earn a high grade point average and complete at least 4 semester hours of independent research to write a senior research paper. See the undergraduate adviser for details.
General education: Students must complete the Campus General Education (https://courses.illinois.edu/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Twelve (12) hours of 300- and 400-level courses in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Total required Core Hours		**39**
1 course in studio art, graphic design or industrial design		**3**
1 foundational gateway course at the 100-level:		**3**
ARTH 110	Introduction to the History of Art and Visual Culture	
Three (3) Supporting Courses in the Humanities offered by LAS:		**9**
These courses must be approved by the Art History advisor and be outside the field of art history with the goal of enhancing the student's understanding of the cultural context within which works of art and architecture have been created.		
See list of Approved Supplemental Courses below		
Six (6) 200-400 level courses in Art History, offered in the School of Art & Design [1]		**18**
Students must take at least one course in three of the following areas: 1) Africa and the Middle East; 2) Asia; 3) the Americas; 4) Europe		
At least one course must cover material before 1700		
At least one course must cover material after 1700		
With an advisor's approval, up to 6 credit hours of courses in the history of architecture or landscape architecture at the 200-400 level may be taken towards the fulfillment of these required hours		
Though students must take a total of 6 courses, some may count toward the fulfillment of more than one area and period requirement. For instance, a course in 20th century African art could count as a class covering both Africa and the Middle East and material after 1700.		
Two (2) seminars in Art History at the 400-level		**6**
Courses must be designated as art history seminars (not all 400-level courses have this designation), or be approved as a seminar by the undergraduate advisor		
See approved list below		
Total Hours required for graduation		**120**

[1] *Though students must take a total of 6 courses, some courses may count toward the fulfillment of more than one area and period requirement. For instance, a course in 20th century African art could count as a class covering both Africa and the Middle East and material after 1700.*

Code	Title	Hours
History of Art - List of Approved Supplemental Humanities Courses [1]		
AFRO 212	Intro African American Theat	3
AFRO 227	Studies in Black Television	3
AFRO 228	Hip Hop Music: History and Culture	3
AFRO 243	Pan Africanism	3
AFRO 259	Early African American Literature and Culture	3
or AFRO 260	Modern African American Literature and Culture	
AFRO/ENGL 272	Minority Images in Amer Film	3
AFRO 382	African Amer Families in Film	3
AFRO 400	African Diasporic Thought in the Caribbean	3 or 4
AFST 222	Introduction to Modern Africa	3
AFST 266	African Film and Society	3
ANTH 224	Tourist Cities and Sites	3
ANTH 250	The World Through Museums	3
ANTH 364	Performing "America	3
ANTH 462	Museum Theory and Practice	3 or 4
AAS 200	U.S. Race and Empire	3
AAS 211	Asian Americans and the Arts	3
AAS 246	Asian American Youth in Film	3
AAS/GWS 275	The Politics of Fashion	3
AAS 300/ GWS 305/LLS 305	Theories of Race, Gender, and Sexuality	3
AAS/GWS 315	War, Memory, and Cinema	3
CLCV 206	Classical Allusions in Cinema	3
CLCV 240	Gender & Sexuality in Greco-Roman Antiquity	3
ENGL 202	Medieval Literature and Culture	3
ENGL 204	Renaissance Literature and Culture	3
ENGL 206	Enlightenment Literature and Culture	3
ENGL 207	Romantic Literature and Culture	3
ENGL 208	Victorian Literature and Culture	3
ENGL 209	Early British Literature and Culture	3
or ENGL 210	British Literature from 1800 to the Present	
ENGL 211/ AFST 210/CWL 210	Introduction to Modern African Literature	3
ENGL 213	Modernist Literature and Culture	3
ENGL 224/ LLS 240/SPAN 240	Latina/o Popular Culture	3
ENGL 253	Topics in Literature and New Media	3
ENGL 255	Early American Literature and Culture	3
ENGL 273	American Cinema, 1950-2000	3
ENGL 285	Postcolonial Literature in English	3
HIST 200	Intro Hist Interpretation	3
HIST 202	American Environmental History	3
HIST 203	Reacting to the Past	3
HIST 205	Lived Experience in Latin America	3
HIST 211	History of Southern Africa	3
HIST 212	History of Eastern Africa	3
HIST/EALC 220	Traditional China	3
HIST/EALC 221	Modern China	3
HIST/EALC 226	Premodern Japanese History	3
HIST/EALC 227	Modern Japanese History	3
HIST 258	20thC World to Midcentury	3
HIST 259	20thC World from Midcentury	3
HIST 260	History of Russia	3
HIST 270	United States History to 1815	3
HIST 271	Nineteenth Century America	3
HIST 272	Twentieth Century America	3
HIST 274	US Foreign Relations Since 1917	3
HIST/LLS 279	Mexican-American History	3
HIST/AAS/AFRO/ LLS 281	Constructing Race in America	3
HIST/GWS 285	US Gender History to 1877	3
HIST/GWS 286	US Gender History Since 1877	3
HIST/GWS/AFRO 287	African-American Women	3
HIST 310	Global Capitalism in History	3
HIST/MDVL/REL 345	Medieval Civilization	3
HIST 347	Protestant & Catholic Refs	3
HIST 349	Age of Revolution, 1775-1815	3
HIST 350	19thC Romanticism & Politics	3
HIST 352	Europe in the World	3
HIST 354	Twentieth Century Europe	3
HIST 357	Modern France	3
HIST 360	European Culture in a Global Context	3
HIST 370	Colonial America	3
HIST 373	Origins of the Civil War	3
HIST 374	Civil War and Reconstruction	3
HIST 375	Soc History Indus Am to 1918	3
HIST 376	Soc History Indus Am from 1918	3
HIST 379	Latina/os and the City	3
HIST 380	US in an Age of Empire	3
HIST/EALC 420	China Under the Qing Dynasty	2 to 4
HIST 425/ CWL 478/ EALC 476	Classical Chinese Thought	3 or 4
HIST/GWS 459	Postcolonial/Queer	3 or 4
HIST 462	Soviet Union Since 1917	2 to 4
HIST 472		
HIST 476/ LLS 475	History of the American West	3 or 4
ITAL 406	Italian Culture and Globalization	3 or 4
LLS/ANTH 259	Latina/o Anthropology	3
LLS/ENGL 458	Latina/o Performance	3 or 4
LLS 460/AAS 400	Critical Ethnic Studies	3 or 4
LLS 465	Race, Sex, and Deviance	3 or 4
LLS 473/ ANTH 472	Immigration, Health & Society	3 or 4
PHIL 411	Nineteenth Century Philosophy	3 or 4

PHIL 412	Classical Modern Philosophers	3 or 4
PHIL 414	Major Recent Philosophers	3 or 4

[1] *Please note: this is not a complete list of approved courses as individual student interests may guide supplemental courses in any number of directions. To ensure students take appropriate courses, all supplemental Humanities hours must be approved by the BALAS advisor.*

Code	Title	Hours
List of 400-level Seminars		
ARTH 413	Sacred African Diaspora Arts	3 or 4
ARTH 415	The Archaeology of Greece	3
ARTH 424	Gothic Art	3 or 4
ARTH 430	Topics: Italian Art 1300-1500	3 or 4
ARTH 431	Topics: Northern Art 1300-1500	3 or 4
ARTH 436	17th-Century Dutch & Flemish Art	3 or 4
ARTH 440	Romantic Art	3 or 4
ARTH 445	European Art Between the Wars	3 or 4
ARTH 447	France and Its Others	3 or 4
ARTH 495	Senior Seminar in Art History	3

History, BALAS

for the degree of Bachelor or Arts in Liberal Arts & Sciences Major in History

department website: https://www.history.illinois.edu/ (https://history.illinois.edu/)
department faculty: History Faculty (https://history.illinois.edu/directory/faculty/)
advising: History advising (https://history.illinois.edu/academics/undergraduate-studies/academic-advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: history@illinois.edu

Studying History at the University of Illinois, Urbana-Champaign will prepare you for informed participation in public life and wide array of career paths, including in law, government, public policy, business, film-making, teaching, advertising, public relations, social work, the media, publishing, diplomacy, and military intelligence. The requirement that every Illinois History major successfully complete a work of original historical research means that our graduates have a demonstrated capacity to think contextually, locate and analyze evidence, evaluate competing viewpoints, assess causation, offer new interpretations, and solve complex problems.

for the degree of Bachelor or Arts in Liberal Arts and Sciences Major in History

Departmental distinction: To be eligible for distinction, a student must be admitted to the Honors Program in History and complete its required coursework. Those admitted (ideally before the beginning of the junior year) must have earned at least a 3.5 GPA in History and a 3.25 GPA overall. They will then pursue a sequence consisting of HIST 498 , HIST 492 and successful completion of either:

1. HIST 493 and HIST 499 in two consecutive semesters (in which case, the level of distinction awarded to student will be decided by the examining committee) OR
2. The completion of two approved independent research projects under the supervision of two different advisors (HIST 490). (in which case, students will be eligible for an award of distinction only, but not high or highest distinction).

General education: Students must complete the Campus General Education (https://courses.illinois.edu/) **requirements including the campus general education language requirement.**
Minimum required major course work: 36 hours of History courses.

Code	Title	Hours
Minimum of 36 hours of History courses including:		
Two introductory History courses at the 100 level (preliminary coursework)		6
African, Asian, Global, Latin American, Middle Eastern History courses at the 200-level or above, at least 3 hours at the 300 level or above [1]		6
European History courses at the 200-level or above, at least 3 hours at the 300 level or above [1]		6
U.S. History courses at the 200-level or above, at least 3 hours at the 300 level or above. 3 hours must be in U.S. Minority History. [1]		6
Hours of history electives (at the 200-level or above). NOTE: HIST 200 and HIST 498 are required. HIST 200 and HIST 498 may count toward any of the area requirements or the 12 hours of History electives. For those students in the Honors Program, HIST 490 or HIST 493 may count toward any of the area requirements or the 12 hours of History electives. HIST 492 and HIST 499 must be taken as part of the 12 hours of required History electives.		12
Of the 36 hours of History courses, students must take 6 hours in a pre-modern period, one defined as before 1600 and one defined as before 1800 (HIST 100 and HIST 142 may not be used to fulfill this requirement). [1]		
Total Hours required for graduation [2]		**120**

[1] *Chosen from the list maintained in the Department of History*

[2] *Eighteen advanced hours (300- and 400-level) of History courses are required in the major. 12 of those 18 advanced hours must be taken on this campus.*

History: Social Science: History Teaching, BALAS

For the Degree of Bachelor of Arts in Liberal Arts & Sciences Major in History, History Teaching Concentration

department website: https://www.history.illinois.edu/ (https://history.illinois.edu/)
department faculty: History Faculty (https://history.illinois.edu/directory/faculty/)
advising: History advising (https://history.illinois.edu/academics/undergraduate-studies/academic-advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: history@illinois.edu

This concentration fulfills state certification requirements to teach high school history (grades 9-12) through the AP/honors level and high school economics, geography, political science, psychology, and sociology/anthropology up to but not including the AP/honors level.

Time to degree completion varies. Minimum time to completion is 8 semesters, but some students may require 10 semesters. Transfer students may need 10 total semesters combined to complete the program. Please see the LAS section in the transfer handbook (https://admissions.illinois.edu/Content/docs/Handbook_LAS.pdf) for more information.

For the Degree of Bachelor of Arts in Liberal Arts & Sciences Major in History, History Teaching Concentration

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This concentration fulfills state certification requirements to teach high school history (grades 9-12) through the AP/honors level and high school economics, geography, political science, psychology, and sociology/anthropology up to but not including the AP/honors level.

Time to degree completion varies, but when following the new requirements effective Fall 2020, the expected completion time is 8 semesters. Transfer students may need 10 total semesters combined to complete the program. Please see the LAS section in the transfer handbook (https://admissions.illinois.edu/Content/docs/Handbook_LAS.pdf) for more information.

To remain in good standing in this program and be recommended for certification, candidates are required to maintain UIUC, cumulative, content area, and professional education, grade-point averages of 2.5 (A= 4.0). Candidates should consult their advisor or the Council on Teacher Education for the list of courses used to compute these grade-point averages.

Departmental distinction: To be eligible for distinction, a student must be admitted to the Honors Program in History and complete its required coursework. Those admitted (ideally before the beginning of the junior year) must have earned at least a 3.5 GPA in History and a 3.25 GPA overall. They will then pursue a sequence consisting of HIST 498, HIST 492 and successful completion of either

1. HIST 493 and HIST 499 in two consecutive semesters (in which case, the level of distinction awarded to student will be decided by the examining committee) OR
2. The completion of two approved independent research projects under the supervision of two different advisors (HIST 490) (in which case, students will be eligible for an award of distinction only, but not high or highest distinction).

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Students are required to take a minimum of 33 hours in History courses.
Only one of the following Advanced Composition courses (HIST 140, HIST 143, HIST 170, HIST 173) **will count toward the 33 hours required in History courses.**
Twelve hours of 300- and 400-level in the major must be taken on this campus.
Students in this concentration must complete the Teacher Education Minor in Secondary School Teaching (39 hours).
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Foundation Courses		
The following courses must be completed or in progress when students apply to the Secondary Education minor.		
Select one of the following Political Science courses:		3
PS 100	Intro to Political Science	
PS 101	Intro to US Gov & Pol	
PS 240	Intro to Comp Politics	
PS 241	Comp Politics in Dev Nations	
PSYC 100	Intro Psych	4
SOC 100	Introduction to Sociology	4
HIST 200	Intro Hist Interpretation	3
Select one course each from two of the following three categories:		6-8
Global History		
HIST 100	Global History	
Western Civilization		
HIST 140	Western Civ to 1660-ACP	
or HIST 141	Western Civ to 1660	
HIST 142	Western Civ Since 1660	
or HIST 143	Western Civ Since 1660-ACP	
United States History		
HIST 170	US History to 1877-ACP	
or HIST 171	US History to 1877	
HIST 172	US History Since 1877	
or HIST 173	US History Since 1877-ACP	
HIST 174	Black America, 1619-Present	
Additional Required coursework		
Teacher Education Minor in Secondary School Teaching (http://catalog.illinois.edu/undergraduate/education/secondary/)		39
United States History		
Select one of the following (A US History survey course if not taken as a foundation course):		3-4
HIST 170	US History to 1877-ACP	
or HIST 171	US History to 1877	
HIST 172	US History Since 1877	
or HIST 173	US History Since 1877-ACP	
HIST 174	Black America, 1619-Present	
One 100-400 level course in US history		3

One 100-400 level course in US history focusing on US minorities history		3
HIST 273	Illinois History	3
or HIST 288	American Indians of Illinois	
or HIST 382	Race and Migration in Chicago	
Nonwestern and Global History		
HIST 100	Global History (if not taken as a foundation course)	3
One 100-400 level course in global or nonwestern history		3
One 100-400 level course in global or nonwestern history		3
European History		
Select one of the following (A Western Civ survey course if not taken as a foundation course):		3-4
HIST 140	Western Civ to 1660-ACP	
or HIST 141	Western Civ to 1660	
HIST 142	Western Civ Since 1660	
or HIST 143	Western Civ Since 1660-ACP	
One 100-400 level course in European history		3
One 100-400 level course in European History		3
Students must take HIST 498 - Research and Writing Seminar. Students may count the 3 hours towards any of the history areas noted above: US, Nonwestern/Global, or European.		
Students must complete 12 hours of advanced (300+) coursework in History. HIST 498 may count toward those 12 hours.		
Pre modern requirement: One History course must have a significant pre-1800 component.		
Social Science Requirement		
ECON 102	Microeconomic Principles	3
or ECON 103	Macroeconomic Principles	
One 100-400 level Geography course		3-4

Learning Outcomes: History, BALAS

Learning outcomes for the degree of Bachelor or Arts in Liberal Arts & Sciences Major in History

1. Historical interpretation:
   a. Students will be able to connect past and present, demonstrating an understanding of ways that the past has shaped the world we live in today
   b. Students will be able to grasp the complexity of historical causation
   c. Students will have a broad and empathetic understanding of the commonalities and differences of the human experience, as influenced by factors such as culture, race, ethnicity, gender, and class in a matrix of time and place
   d. Students will be able to critically assess different sources of information and points of view
2. Historical research:
   a. Students will be able to formulate historical questions
   b. Students will be able to locate, organize, analyze, and synthesize data to answer these questions
   c. Students will be able to craft original historical arguments
   d. Students will be able to position these arguments contextually
3. Historical communication:
   a. Students will be able to express their ideas clearly, logically, and in evidence-based ways
   b. Students will be able to convey their ideas to different audiences
   c. Students will be able to evaluate, review, and edit historical writing and other forms of historical communication

Human Development & Family Studies, BS

for the Bachelor of Science Major in Human Development & Family Studies

department website: https://hdfs.illinois.edu/
department faculty: Human Development & Family Studies Faculty (https://hdfs.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college website: https://aces.illinois.edu/

The Human Development and Family Studies program prepares students for graduate/professional education or employment in areas such as pediatric services in hospitals, medicine and allied health fields, marriage and family therapy, family law, human resources, child care services, family life education, social work, counseling, human services, and business activities related to children and families. Students select course work according to their interests in human development, such as infancy, early childhood or adolescence, and relationship and family science, such as intimate relationships, parent-child interaction, and family stress and change. Basic courses in these areas are linked to practical experiences in educational and community settings, and most courses emphasize issues related to cultural diversity and gender. Students develop an individualized plan within this major according to their career and professional interests.

for the Bachelor of Science Major in Human Development & Family Studies

Prescribed Core Courses including Campus General Education

Code	Title	Hours
Composition I and Speech		
Select one of the following:		6-7
RHET 105 & CMN 101	Writing and Research and Public Speaking (or equivalent) (see college Composition I requirement)	
CMN 111 & CMN 112	Oral & Written Comm I and Oral & Written Comm II	
Advanced Composition		
Select from campus approved list.		3-4
Language Other Than English		
Coursework at or above the third level is required for graduation.		
Cultural Studies		
Select one course from Non-Western Cultures, one from U.S. Minority Cultures, and one from Western/Comparative Cultures from campus-approved lists.		9
Quantitative Reasoning I		

Select one of the following:		3-4
STAT 100	Statistics	
ACE 262	Applied Statistical Methods and Data Analytics I	
CPSC 241	Intro to Applied Statistics	
ECON 202	Economic Statistics I	
PSYC 235	Intro to Statistics	
SOC 280	Intro to Social Statistics	
Quantitative Reasoning II		
Select from campus approved list.		3-5
Natural Sciences and Technology		
Select from campus approved list.		6
Humanities and the Arts		
Select from campus approved list.		6
Social and Behavioral Sciences		
PSYC 100	Intro Psych	4
SOC 100	Introduction to Sociology	4
ACES Required		
ACES 101	Contemporary Issues in ACES	2
Human Development and Family Studies Required		
HDFS 101	Opportunities, Careers in HDFS	1
HDFS 105	Intro to Human Development	3
HDFS 120	Intro to Family Studies	3
HDFS 290	Intro to Research Methods	4
ACE 240	Personal Financial Planning	3
FSHN 120	Contemporary Nutrition	3
or CHLH 100	Contemporary Health	
Select one of the following child/adolescent development courses:		3-4
HDFS 301	Infancy & Early Childhood	
HDFS 305	Middle Childhood	
HDFS 405	Adolescent Development	
Select one of the following relationships/family courses:		3-4
HDFS 225	Close Relationships	
HDFS 425	Family Stress and Change	
Select two of the following diversity courses:		6
HDFS 208	Child Fam with Special Needs	
HDFS 220	Families in Global Perspective	
HDFS 221	Asian Families in America	
HDFS 322	US Latina and Latino Families	
HDFS 340	Gender, Relationshps & Society	
HDFS 379	HDFS Study Abroad Experience	
HDFS 420	Inequality, Public Policy, and U.S. Families	
HDFS 424	Racial and Ethnic Families	
HDFS 444	LGBT Indiv, Fam & Community	
Select one of the following applied courses:		3-4
HDFS 206	Early Childhood Curriculum Dev	
HDFS 294	Research Internship	
HDFS 295	Independent Study or Research	
HDFS 396	Honors Research or Thesis	
HDFS 450	Practicum in HDFS	
HDFS 461	Family Life Education	
HDFS 494	Applied Research Methods	
LEAD 260	Foundations of Leadership	
Individualized Plan		**16-18**
Choose from a list of HDFS courses based on individual career goals and in consultation with the HDFS Academic Advisor. At least 15 hours at 300 level or above. Courses taken to meet other HDFS requirements can not count toward the Individualized Plan.		
HDFS 108	Grief and Loss Across the Lifespan	
HDFS 206	Early Childhood Curriculum Dev	
HDFS 208	Child Fam with Special Needs	
HDFS 220	Families in Global Perspective	
HDFS 225	Close Relationships	
HDFS 301	Infancy & Early Childhood	
HDFS 305	Middle Childhood	
HDFS 310	Adult Development	
HDFS 322	US Latina and Latino Families	
HDFS 340	Gender, Relationshps & Society	
HDFS 401	Socialization and Development	
HDFS 405	Adolescent Development	
HDFS 406	Child Dev Class Supervision	
HDFS 408	Hospitalized Children	
HDFS 420	Inequality, Public Policy, and U.S. Families	
HDFS 425	Family Stress and Change	
HDFS 426	Family Conflict Management	
HDFS 444	LGBT Indiv, Fam & Community	
HDFS 461	Family Life Education	
Minimum of 40 hours of advanced credit required		
Total Hours		**126**

Human Development & Family Studies: Child & Adolescent Development, BS

for the degree of Bachelor of Science Major in Human Development & Family Studies, Child and Adolescent Development Concentration

department website: https://hdfs.illinois.edu/
department faculty: Human Development & Family Studies Faculty (https://hdfs.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/)
college website: https://aces.illinois.edu/

This concentration will no longer accept students: Spring 2022

see Human Development & Family Studies, BS (p. 227)

The Child and Adolescent Development concentration emphasizes the influence of environment, biology, families, peer groups, schools, and communities on the well-being of children and adolescents. Graduates with this concentration are qualified to provide a wide range of services and lead programs for children and their families. Career opportunities

include child life specialist, parent education, developmental therapy, adoption case work and day-care administration. Graduates also choose to pursue graduate education in a variety of fields, including pediatrics, occupational therapy, nursing, law, human development research, education, psychology, social work, and business.

for the degree of Bachelor of Science Major in Human Development & Family Studies, Child and Adolescent Development Concentration

Prescribed Core Courses including Campus General Education

Code	Title	Hours
Composition I and Speech		
Select one of the following:		6-7
RHET 105 & CMN 101	Writing and Research and Public Speaking (or equivalent) (see college Composition I requirement)	
CMN 111 & CMN 112	Oral & Written Comm I and Oral & Written Comm II	
Advanced Composition		
Select from campus approved list.		3-4
Language Other Than English		
Coursework at or above the third level is required for graduation.		
Cultural Studies		
Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists.		9
Quantitative Reasoning I		
Select one of the following:		3-4
STAT 100	Statistics	3
ACE 261	Applied Statistical Methods	4
CPSC 241	Intro to Applied Statistics	3
ECON 202	Economic Statistics I	3
PSYC 235	Intro to Statistics	3
SOC 280	Intro to Social Statistics	4
Quantitative Reasoning II		
Select from campus approved list.		3-5
Natural Sciences and Technology		
Select from campus approved list.		6
Humanities and the Arts		
Select from campus approved list.		6
Social and Behavioral Sciences		
PSYC 100	Intro Psych	4
SOC 100	Introduction to Sociology	4
ACES Required		
ACES 101	Contemporary Issues in ACES	2
Human Development and Family Studies Required		
HDFS 101	Opportunities, Careers in HDFS	1
HDFS 105	Intro to Human Development	3
HDFS 120	Intro to Family Studies	3
HDFS 220	Families in Global Perspective	3
HDFS 290	Intro to Research Methods	4
ACE 161	Microcomputer Applications	3
ACE 240	Personal Financial Planning	3
FSHN 120 or CHLH 100	Contemporary Nutrition Contemporary Health	3
Select one of the following:		3
HDFS 208	Child Fam with Special Needs	
HDFS 221	Asian Families in America	
HDFS 340	Gender, Relationshps & Society	
HDFS 341	Asian American Youth	
HDFS 379	HDFS Study Abroad Experience	
HDFS 322	US Latina and Latino Families	
HDFS 444	LGBT Indiv, Fam & Community	
Select one of the following:		3-6
HDFS 206	Early Childhood Curriculum Dev	
HDFS 261	Self-Help Group Dev & Process	
HDFS 294	Research Internship	
HDFS 450	Practicum in HDFS	
HDFS 494	Applied Research Methods	
Required Concentration		**16-18**
See specific requirements for each concentration listed below.		
Additional courses must be completed to yield a total of 126 hours for graduation.		
Total Hours		**126**

Code	Title	Hours
Child and Adolescent Development Concentration Required		
HDFS 401	Socialization and Development	4
Three courses selected from:		9-10
HDFS 301	Infancy & Early Childhood	
HDFS 305	Middle Childhood	
HDFS 310	Adult Development	
HDFS 405	Adolescent Development	
One course selected from:		3-4
HDFS 420	Inequality, Public Policy, and U.S. Families	
HDFS 425	Family Stress and Change	
HDFS 426	Family Conflict Management	
HDFS 427		
Total Hours		16-18

Human Development & Family Studies: Family Studies, BS

for the degree of Bachelor of Science Major in Human Development & Family Studies, Family Studies Concentration

department website: https://hdfs.illinois.edu/
department faculty: Human Development & Family Studies Faculty (https://hdfs.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/)
college website: https://aces.illinois.edu/

This concentration will no longer accept students: Spring 2022

see Human Development & Family Studies, BS (p. 227)

Students in the Family Studies concentration focus on how families operate, develop, and change in response to the challenges of modern life. Students learn to appreciate the diversity of family life by studying different cultures and how families learn to manage stress and become resilient. Graduates with this concentration are qualified to provide many services to families. Career opportunities include family life educator, human resource specialist, caseworker or family service coordinator. Graduates also may choose to pursue graduate education in a variety of fields, including, marriage and family therapy, social work, policy specialist, psychology, family law, medicine, or human resources.

for the degree of Bachelor of Science Major in Human Development & Family Studies, Family Studies Concentration

Prescribed Core Courses including Campus General Education

Code	Title	Hours
Composition I and Speech		
Select one of the following:		6-7
RHET 105 & CMN 101	Writing and Research and Public Speaking (or equivalent) (see college Composition I requirement)	
CMN 111 & CMN 112	Oral & Written Comm I and Oral & Written Comm II	
Advanced Composition		
Select from campus approved list.		3-4
Language Other Than English		
Coursework at or above the third level is required for graduation.		
Cultural Studies		
Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists.		9
Quantitative Reasoning I		
Select one of the following:		3-4
STAT 100	Statistics	3
ACE 261	Applied Statistical Methods	4
CPSC 241	Intro to Applied Statistics	3
ECON 202	Economic Statistics I	3
PSYC 235	Intro to Statistics	3
SOC 280	Intro to Social Statistics	4
Quantitative Reasoning II		
Select from campus approved list.		3-5
Natural Sciences and Technology		
Select from campus approved list.		6
Humanities and the Arts		
Select from campus approved list.		6
Social and Behavioral Sciences		
PSYC 100	Intro Psych	4
SOC 100	Introduction to Sociology	4
ACES Required		
ACES 101	Contemporary Issues in ACES	2
Human Development and Family Studies Required		
HDFS 101	Opportunities, Careers in HDFS	1
HDFS 105	Intro to Human Development	3
HDFS 120	Intro to Family Studies	3
HDFS 220	Families in Global Perspective	3
HDFS 290	Intro to Research Methods	4
ACE 161	Microcomputer Applications	3
ACE 240	Personal Financial Planning	3
FSHN 120	Contemporary Nutrition	3
or CHLH 100	Contemporary Health	
Select one of the following:		3
HDFS 208	Child Fam with Special Needs	
HDFS 221	Asian Families in America	
HDFS 340	Gender, Relationshps & Society	
HDFS 341	Asian American Youth	
HDFS 379	HDFS Study Abroad Experience	
HDFS 322	US Latina and Latino Families	
HDFS 444	LGBT Indiv, Fam & Community	
Select one of the following:		3-6
HDFS 206	Early Childhood Curriculum Dev	
HDFS 261	Self-Help Group Dev & Process	
HDFS 294	Research Internship	
HDFS 450	Practicum in HDFS	
HDFS 494	Applied Research Methods	
Required Concentration		**16-18**
See specific requirements for each concentration listed below.		
Additional courses must be completed to yield a total of 126 hours for graduation.		
Total Hours		**126**

Code	Title	Hours
Family Studies Concentration Required		
HDFS 425	Family Stress and Change	4
Three courses selected from:		9
HDFS 225	Close Relationships	
HDFS 420	Inequality, Public Policy, and U.S. Families	
HDFS 426	Family Conflict Management	
HDFS 427		
One course selected from:		3-4
HDFS 301	Infancy & Early Childhood	
HDFS 305	Middle Childhood	
HDFS 310	Adult Development	
HDFS 405	Adolescent Development	
Total Hours		16-17

Learning Outcomes: Human Development & Family Studies, BS

Learning outcomes for the Bachelor of Science Major in Human Development & Family Studies

1. *HDFS students will demonstrate a strong foundation in theories and empirical knowledge associated with human development and family studies (i.e., developmental periods and domains; socialization contexts; diversity among families and children; research methods; family dynamics, transitions, and resilience; and family policy)*
   a. Recall key terminology (theoretical, empirical, methodological, substantive concepts)
   b. Describe current and historical challenges affecting individuals and families (e.g., social, political, economic, cultural, ethical, including research ethics)
   c. Summarize key theories, models, and principles (e.g., grand, disciplinary, substantive, methodological)
   d. Apply theories, models, and principles to developmental, relationship, familial, and social issues
   e. Apply knowledge to global contexts
   f. Integrate knowledge across courses and content areas (i.e., human development and family studies; lower level to higher level courses)
   g. Critique current theoretical and empirical knowledge of and methodological approaches to studying human development, relationships, and families
2. *HDFS students will exhibit the skills necessary to effectively apply knowledge and generate new ideas to solve real world issues*
   a. Use effective written communication
   b. Use e to achieve group goals
   c. Apply research-based knowledge to working with children, families, and communities and/or agencies that serve them
3. *HDFS students will demonstrate a critical and reflexive orientation toward and sensitivity to issues of diversity and inclusion*
   a. Describe the historical and current relevance of diversity and inclusion to individuals, relationships, families, and communities
   b. Reflect on one's own interconnected positions, privileges, and disadvantages across multiple contexts
   c. Critically examine one's own beliefs, assumptions, values, attitudes, and biases
   d. Demonstrate awareness of and sensitivity to issues of diversity and inclusion in one's own work (e.g., written and oral communication)
   e. Critically evaluate the cultural respectfulness and appropriateness of research, programs, and policies related to human development and families
   f. Critically evaluate the potential impact of research, programs, and policies on diversity and inclusion
   g. Demonstrate awareness of global factors (e.g., economic, political, cultural, social) and how they may affect individuals, families and communities
4. *HDFS students will develop professional competence skills and establish well-informed career and professional goals*
   a. Identify and compare/contrast a range of career options for HDFS majors
   b. Create professional/job-related materials (e.g., resume, cover letter, purpose statement)
   c. Connect discipline knowledge to personal and professional life
   d. Develop leadership skills (e.g., through formal positions; informal mentoring to prospective/new students; representing the department; participation in class teamwork)
   e. Develop professional connections to support career and professional goals (e.g., relationships with professors, internship supervisors who can serve as references; connections to professionals through attending conferences/workshops or engaging with guest speakers in class)
      i. Make decisions appropriate grammar and writing mechanics
      ii. Demonstrate a working knowledge of APA style
      iii. Respond to constructive criticism (e.g., revision process, peer review)
      iv. Produce written work that is organized, logical, and fully developed
   f. Use effective oral communication (e.g., clearly and logically present ideas aloud through presentation to class or group)
   g. Apply knowledge to formulate and investigate hypotheses or research questions
   h. Apply knowledge to propose or create research-based programs or policies
   i. Critically evaluate the quality of published research, programs, and policies and their implications for individuals, relationships, and families
   j. Collaborate and solve problems
      i. Independently
      ii. Collaboratively
   k. Exhibit professional and ethical behavior

Individual Plans of Study, BALAS or BSLAS

For the Degree of Bachelor of Arts in Liberal Arts and Sciences, or Bachelor of Science in Liberal Arts and Sciences Major in Individual Plans of Study

academic advisor: Tenaya Reifsteck
program address: 2002 Lincoln Hall, 702 S. Wright St., Urbana, IL 61801
program information: http://www.las.illinois.edu/students/programs/majors/ips/
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: las-ips@illinois.edu

Minimum required major and supporting course work normally equates to 51-70 hours.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/) requirements including the campus general education language requirement.

Twelve hours of 300- and 400-level courses in the major must be taken on this campus.

A Major Plan of Study Form must be completed and submitted to the LAS Student Academic Affairs Office before the end of the fifth semester (60-75 hours). Please see your adviser.

Minimum hours required for graduation: 120 hours

Departmental distinction: To graduate with distinction, a student must

1. have a cumulative grade point average of at least 3.25 and
2. successfully complete a project that has been approved by the IPS advisory committee.

Further information on requirements for graduation with distinction may be obtained from the secretary of the IPS advisory committee.

Students in the College of Liberal Arts and Sciences may choose any of the undergraduate degree programs offered within the college. These majors and specialized curricula, each with its own pattern of requirements and electives, are continuously reviewed by the sponsoring departments and the college and revised as needed. At the same time, it is not possible to anticipate or specify all possible undergraduate fields of study. So, in order to encourage the growth of new academic disciplines, the college sponsors the experimental major-the Individual Plans of Study program. IPS allows the student to create an original major more appropriate for the individual's educational needs and characterized by a unique pattern of upper-level courses with a new academic direction. Recent IPS students have successfully pursued such innovative majors as Cinematography, Entomology, Neuroscience, Meteorology, and Middle Eastern Studies.

The development of an IPS program begins with the student's perception that a more appropriate field of study could exist beyond the present majors. Consultation with the secretary of the IPS advisory committee and with faculty members in related fields will soon establish whether an original major is appropriate. Then, with the cooperation of one or more faculty members who consent to serve as advisers for this IPS program, an IPS major is planned and justified as carefully as if this were a departmental major.

Once an IPS program is formulated, the student and adviser make formal application to the IPS advisory committee, which evaluates and decides whether a proposed IPS program is appropriate for the aims of both the student and the college. The IPS Advisory Committee and the college will determine whether BA or BS is appropriate for the proposed program of study. Students interested in IPS are encouraged to inquire as early as possible in the sophomore year. In all cases, IPS programs must be initiated and approved before the end of the student's junior year. If program innovation sounds challenging and attractive, additional information is available at the LAS Student Academic Affairs Office, 2002 Lincoln Hall.

Industrial Design, BFA

for the degree of Bachelor of Fine Arts Major in Industrial Design

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school office: 143 Art and Design Building, Champaign, IL 61820
contact: Mark Avery, Coordinator of Undergraduate Academic Affairs
email: mavery@illinois.edu
phone: (217) 333-6632
department website: School of Art & Design (https://art.illinois.edu/)
department faculty: Art & Design Faculty (https://art.illinois.edu/index.php/people/faculty-staff/)
overview of college admissions & requirements: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/
email: mavery@illinois.edu

The Industrial design program focuses on a human centered approach to identify opportunities to design new products and services. The studio courses emphasize learning through problem-solving, understanding user experience, market demand, materials, and production processes. Students can develop their interest, and engage in creating intuitive, innovative products and services, that are in visual harmony with their environment. Designs that satisfy the consumer desire while being responsive to changes in technology and culture benefit society.

The curriculum in Industrial Design requires 122 credit hours.

for the degree of Bachelor of Fine Arts Major in Industrial Design

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Students in the School of Art and Design must complete the Campus General Education requirements. Some Art and Design courses will also apply toward the General Education requirements.

A portfolio review is required for admission to the School of Art and Design.

First Year Curriculum

Code	Title	Hours
FAA 101	Arts at Illinois	1
ARTF 101	Contemporary Issues in Art	2
ARTE 101	Art, Design, and Society	2
ARTH 110	Introduction to the History of Art and Visual Culture	3
Select one Drawing course:		3
ARTF 102	Observational Drawing	
ARTF 104	Expressive Drawing	
ARTF 106	Visualization Drawing	
Select one course in 2D Category:		3
ARTD 151	Introduction to Graphic Design	
ARTS 205	Introduction to Printmaking (required for Studio Art: Printmaking)	
ARTS 221	Fashion Illustration (required for Studio Art: Fashion)	
ARTS 251	Beginning Painting (required for Studio Art: Painting)	
ARTS 264	Basic Photography (required for Studio Art: Photography)	
Select one course in 3D Category:		3
ARTD 101	Introduction to Industrial Design	
ARTS 210	Ceramics Sculpture I	

ARTS 230	Jewelry/Metals I	
ARTS 280	Beginning Sculpture (required for Studio Art: Sculpture)	
Select one course in 4D Category:		3
ARTS 241	Image Practice	
ARTS 243	Time Arts I	
ARTS 244	Interaction I	
Total Hours		**20**

Industrial Design Requirements

Code	Title	Hours
ARTD 201 & ARTD 202	Industrial Design I and Industrial Design II	8
ARTD 301 & ARTD 302	Industrial Design III and Industrial Design IV	8
ARTD 401 & ARTD 402	Industrial Design V and Industrial Design VI	8
ARTD 225	Design Drawing	3
ARTD 228	Computer Applications	3
ARTD 326	Sustainability & Manufacturing	3
ARTD 328	Human-Centered Product Design	3
ARTD 426	Product Innovation	3
ARTD 448	Professional Design Practice	3
Total Hours		42

Art History

Code	Title	Hours
ARTH 211	Design History Survey	3
Advanced art history (200-level or above)		6
Total Hours		9

Electives

Code	Title	Hours
Art + Design courses (art and design courses not in industrial design requirements or used as industrial design electives)		12
Open electives as needed to total a minimum of 122 hours.		

Learning Outcomes: Industrial Design, BFA

Learning outcomes for the degree of Bachelor of Fine Arts Major in Industrial Design

1. **Research**...the ability to select and use appropriate research and experimental methods, to access existing data sources or to generate new data, to analyze and draw insights for future work, with particular emphasis on identifying human needs
2. **Creative synthesis**...the ability to produce creative proposals from investigation, or in response to identified opportunities or requirements, using appropriate thinking, modeling and making strategies, taking account of users, audience, market needs, makers, producers or exhibitors as appropriate
3. **Production**...the ability to select and use appropriate making and manufacturing processes in your own work, with an understanding of the potential of new technologies
4. **Organization**....the ability to plan and implement action, identifying targets and organizing resources, effectively managing self and collaborations with others
5. **Communication**...the ability to use various forms of communication as appropriate to elicit information, to explain, to debate and persuade, adapting to audience and situations Conceptualization...the ability to realize an idea through an iterative creative making process of refinement
6. **Conceptualization**...the ability to realize an idea through an iterative creative process of refinement.
7. **Understanding impacts**...of the diverse professional, social, and ethical effects of the industrial design discipline
8. **Contextualization**...the ability to understand the multiple contexts of design practice, including the historical, theoretical, critical, professional, cultural, environmental and technological
9. **Learning**...the ability to carry out independent learning as a basis for academic study, lifelong learning and for personal professional development including the ability to independently evaluate your own work with the aim of improving and developing your own practice

Industrial Engineering, BS

for the degree of Bachelor of Science in Industrial Engineering

department website: https://ise.illinois.edu (https://ise.illinois.edu/)
department faculty: Industrial & Enterprise Systems Faculty (https://ise.illinois.edu/directory/faculty.html)
overview of college admissions & requirements: The Grainger College of Engineering (https://grainger.illinois.edu/admissions/)
college website: https://grainger.illinois.edu/

Industrial engineering is a discipline that encompasses the analysis, development, improvement, implementation, and evaluation of integrated systems and their components, including materials, information, energy, people, money, time, equipment, and associated processes. Industrial engineering draws upon a variety of disciplines, from mathematics to psychology, from communications to computer science, and from production management to process control. Industrial engineers design efficient, productive systems in a wide range of business, industrial, and governmental settings.

The technical portion of the Industrial Engineering curriculum is designed as a sequence of increasingly specialized experiences. The entering student's first year is spent mastering the basics of science: math, chemistry, and physics. Second-year students begin to take fundamental engineering courses such as statics, dynamics, statistics, and strength of materials. Third-year students take a core of industrial engineering courses and begin their chosen area of specialization in one of five tracks, including: Operations Research; Quality Engineering; Supply Chain, Manufacturing, and Logistics; Economics and Finance; and Industrial Engineering Fundamentals. During their senior year, students broaden and deepen their knowledge with additional technical elective courses. Finally, all students participate in the practice of engineering through the capstone senior design course in which they work in teams to solve problems submitted by industry partnering companies, and present their solutions in reports and presentations supported by complete economic analyses. Engineering design, communication, teamwork, and laboratory experiences are integrated throughout all four years of the curriculum.

for the degree of Bachelor of Science in Industrial Engineering

Graduation Requirements

Minimum Technical GPA (https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-TechnicalGPARequirement)**: 2.0**

TGPA is required for required Engineering and Technical Elective courses, as well as MATH 415. See **Technical GPA** to clarify requirements.

Minimum Overall GPA: 2.0
Minimum hours required for graduation: 128 hours
General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement. One of the SBS courses must be an introductory economics course (ECON 102 or ECON 103). Specific Advanced Composition courses required for this degree are listed below.**

Orientation and Professional Development

Code	Title	Hours
ENG 100	Engineering Orientation [1]	0
SE 100	Introduction to ISE	1
SE 290	ISE Undergraduate Seminar	0
Total Hours		1

Foundational Mathematics and Science

Code	Title	Hours
CHEM 102	General Chemistry I	3
CHEM 103	General Chemistry Lab I	1
MATH 221	Calculus I [2]	4
MATH 231	Calculus II	3
MATH 241	Calculus III	4
MATH 285	Intro Differential Equations	3
MATH 415	Applied Linear Algebra	3
PHYS 211	University Physics: Mechanics	4
PHYS 212	University Physics: Elec & Mag	4
PHYS 213	Univ Physics: Thermal Physics	2
Total Hours		31

Industrial Engineering Technical Core

Code	Title	Hours
CS 101	Intro Computing: Engrg & Sci	3
ECE 110	Introduction to Electronics	3
IE 300	Analysis of Data	3
IE 310	Deterministic Models in Optimization	3
IE 360	Facilities Planning and Design	3
IE 361	Production Planning & Control	3
IE 370	Stochastic Processes and Applications	3
IE 400	Design & Anlys of Experiments	3
IE 413	Simulation	3
ME 330	Engineering Materials	4
SE 101	Engineering Graphics & Design	3
SE 261	Business Side of Engineering	2
SE 494	Senior Engineering Project I [3]	3
SE 495	Senior Engineering Project II [3]	2
TAM 211	Statics	3
TAM 212	Introductory Dynamics	3
TAM 251	Introductory Solid Mechanics	3
Total Hours		50

Track Option Electives

Code	Title	Hours
Track option electives. Courses selected from departmentally approved lists of Track Option Electives or by petition to the department. The current Track options include:		12
Economics and Finance (E&F)		
Track Core - Complete at least 2 of the following 3 courses:		
ACE 427	Commodity Price Analysis	3
IE 420	Financial Engineering	3 or 4
SE 450	Decision Analysis I	3 or 4
Track Electives - Complete 2 of the following courses:		
ACCY 200	Fundamentals of Accounting	3
ACE 410	Energy Economics	3 or 4
ACE 427	Commodity Price Analysis	3
ACE 428	Commodity Futures and Options	3
ECON 302	Inter Microeconomic Theory	3
ECON 303	Inter Macroeconomic Theory	3
ECON 420	International Economics	2 to 4
ECON 471	Intro to Applied Econometrics	2 to 4
FIN 221	Corporate Finance	3
FIN 300	Financial Markets	3
FIN 411	Investment & Portfolio Mngt	3
FIN 412	Options and Futures Markets	3
FIN 415	Fixed Income Portfolios	3
FIN 461	Banking and Financial Regulation	3
Human Factors		**12**
Track Core - Complete the following course:		
IE 340	Human Factors	4
Track Electives - Complete at least 3 of the following courses:		
Physical Ergonomics Focus		
BIOE 461	Cellular Biomechanics	4
or TAM 461	Cellular Biomechanics	
KIN 355	Biomechanics of Human Movement	3
KIN 401	Measure & Eval in Kinesiology	3 or 4
ME 481	Whole-Body Musculoskel Biomech	3 or 4
ME 482	Musculoskel Tissue Mechanics	3 or 4
TSM 421	Ag Safety-Injury Prevention	3
TSM 422	Ag Health-Illnesses Prevention	3
TSM 425	Managing Ag Safety Risk	3
Cognitive Ergonomics Focus		
SE 450	Decision Analysis I	3 or 4
IE 445	Human Performance and Cognition in Context	3 or 4
Organizational Ergonomics Focus		
ANTH 411	Research Methods in Socio-Cultural Anthropology	3 or 4
ARCH 423	Soc/Beh Factors for Design	3
BADM 310	Mgmt and Organizational Beh	3

BADM 312	Designing and Managing Orgs	3
BADM 357	Digital Making Seminar	3
PSYC 245	Industrial Org Psych	3
Optional Health Focus		
CHLH 470	Technology, Health, and Aging	3 or 4
Industrial Engineering Fundamentals (IEF)		
Track Core - Complete the following 4 courses:		
IE 330	Industrial Quality Control	3
IE 411	Optimization of Large Systems	3 or 4
IE 412	OR Models for Mfg Systems	3 or 4
IE 340	Human Factors	4
Operations Research (OR)		
Track Core - Complete the following 2 courses:		
IE 410	Advanced Topics in Stochastic Processes & Applications	3 or 4
IE 411	Optimization of Large Systems	3 or 4
Track Electives - Complete 2 of the following courses:		
ECE 490	Introduction to Optimization	3 or 4
IE 420	Financial Engineering	3 or 4
MATH 444	Elementary Real Analysis	3-4
or MATH 447	Real Variables	
MATH 484	Nonlinear Programming	3 or 4
SE 411	Reliability Engineering	3 or 4
STAT 410	Statistics and Probability II	3-4
or MATH 464	Statistics and Probability II	
STAT 420/ ASRM 450	Methods of Applied Statistics	3 or 4
STAT 424	Analysis of Variance	3 or 4
STAT 425	Statistical Modeling I	3 or 4
Quality Engineering (QE)		
Track Core - Complete the following course:		
IE 330	Industrial Quality Control	3
Track Core - Complete 1 of the following courses:		
IE 431	Design for Six Sigma	3
SE 411	Reliability Engineering	3 or 4
Track Elective- Complete 1 of the following courses:		
STAT 410	Statistics and Probability II	3-4
or MATH 464	Statistics and Probability II	
STAT 420/ ASRM 450	Methods of Applied Statistics	3 or 4
STAT 424	Analysis of Variance	3 or 4
STAT 426	Statistical Modeling II	3 or 4
Supply Chain, Manufacturing and Logistics (SC&L)		
Track Core - Complete the following course:		
IE 412	OR Models for Mfg Systems	3 or 4
Track Electives - Complete 3 of the following courses:		
ECE 470	Introduction to Robotics	4
IE 330	Industrial Quality Control	3
ME 451	Computer-Aided Mfg Systems	3 or 4
ME 452	Num Control of Mfg Processes	3 or 4

Technical Electives

Code	Title	Hours
Computer science elective selected from the departmentally approved list of Computer Science Electives below:		**3**
CS 225	Data Structures	4
CS 357	Numerical Methods I	3
CS 411	Database Systems	3 or 4
CS 450	Numerical Analysis	3 or 4
IE 405	Computing for ISE	3 or 4
IE technical electives selected from the departmentally approved list of IE Technical Electives below:		**3**
IE 330	Industrial Quality Control	3
IE 340	Human Factors	4
IE 411	Optimization of Large Systems	3 or 4
IE 412	OR Models for Mfg Systems	3 or 4
IE 420	Financial Engineering	3 or 4
IE 431	Design for Six Sigma	3
IE 445	Human Performance and Cognition in Context	3 or 4
SE 310	Design of Structures and Mechanisms	3
SE 320	Control Systems	4
SE 424	State Space Design for Control	3

Electives

Code	Title	Hours
The Grainger College of Engineering Liberal Education course list, or additional courses from the campus General Education lists for Social and Behavioral Sciences or Humanities and the Arts [4]		6
Free electives. Additional unrestricted course work, subject to certain exceptions as noted by the College, so that there are at least 128 credit hours earned toward the degree. [5]		7
Total Hours of Curriculum to Graduate		**128**

[1] *External transfer students take* ENG 300 *instead.*

[2] MATH 220 *may be substituted, with four of the five credit hours applying toward the degree.* MATH 220 *is appropriate for students with no background in calculus.*

[3] *Advanced Composition satisfied by completing the combination of* SE 494 *and* SE 495*.*

[4] *The Grainger College of Engineering approved liberal education course list can be found* here *(*https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-GeneralEducationElectives*). Note that these credit hours could carry the required cultural studies designation required for campus general education requirements.*

[5] *The Grainger College of Engineering restrictions to free electives can be found* here *(*https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-FreeElectives*).*

for the degree of Bachelor of Science in Industrial Engineering

Suggested Sequence

The curriculum sequence below is a suggested sequence, as all Grainger Engineering students work with a department academic advisor to

achieve their educational goals, specific to their needs and preparation. Dynamic and Static curricular maps, which include prerequisite sequencing, can be found here (https://grainger.illinois.edu/academics/undergraduate/majors-and-minors/industrial-engineering-map/).

First Year

First Semester		**Hours**
SE 100	Introduction to ISE	1
ENG 100	Engineering Orientation	0
MATH 221[1]	Calculus I	4
CHEM 102	General Chemistry I	3
CHEM 103	General Chemistry Lab I	1
RHET 105 or SE 101[2]	Writing and Research	4-3
General Education elective[3]		3
	Semester Hours	16-15
Second Semester		
MATH 231	Calculus II	3
PHYS 211	University Physics: Mechanics	4
CS 101	Intro Computing: Engrg Sci	3
ECE 110	Introduction to Electronics	3
SE 101 or RHET 105[2]	Engineering Graphics Design	3-4
	Semester Hours	16-17

Second Year

First Semester		
PHYS 212	University Physics: Elec Mag	4
TAM 211	Statics	3
SE 261	Business Side of Engineering	2
MATH 241	Calculus III	4
General Education elective[3]		3
	Semester Hours	16
Second Semester		
IE 300	Analysis of Data	3
MATH 285	Intro Differential Equations	3
PHYS 213	Univ Physics: Thermal Physics	2
TAM 212	Introductory Dynamics	3
TAM 251	Introductory Solid Mechanics	3
SE 290	ISE Undergraduate Seminar	0
General Education elective[3]		3
	Semester Hours	17

Third Year

First Semester		
IE 310	Deterministic Models in Optimization	3
IE 360	Facilities Planning and Design	3
MATH 415	Applied Linear Algebra	3
ME 330	Engineering Materials	4
General Education elective[3]		3
	Semester Hours	16
Second Semester		
IE 361	Production Planning Control	3
IE 370	Stochastic Processes and Applications	3
IE Technical elective[4]		3
Track option electives[5]		6
	Semester Hours	15

Fourth Year

First Semester		
IE 400	Design Anlys of Experiments	3
SE 494 & SE 495[6,7]	Senior Engineering Project I	5-3
OR		
Free electives		
Computer Science elective[8]		3
Track option elective[5]		3
General Education elective[3]		3
	Semester Hours	17-15
Second Semester		
IE 413	Simulation	3
Free electives		
OR		
SE 494 & SE 495[6,7]	Senior Engineering Project I	3-5
Track option elective[5]		3
General Education elective[3]		3
Additional Free electives		3
	Semester Hours	15-17
	Total Hours:	128

1 *MATH 220 may be substituted, with four of the five credit hours applying toward the degree. MATH 220 is appropriate for students with no background in calculus.*

2 *RHET 105 (or an alternative Composition I sequence) is taken either in the first or second semester of the first year, according to the student's UIN (Spring if your UIN is Odd). SE 101 is taken the other semester. Composition I guidelines can be found at* http://catalog.illinois.edu/general-information/degree-general-education-requirements/ *under Written Communication Requirement.*

3 *Students must take 6 hours from the campus General Education Social and Behavioral Sciences list, 6 hours from campus General Education Humanities and the Arts list, and 6 hours from a liberal education list approved by the college or from the campus General Education lists for Social and Behavioral Sciences or Humanities and the Arts. ECON 102 or ECON 103 must be one of the Social and Behavioral Sciences courses. Students must also complete the campus cultural studies requirement by completing (i) one western/comparative culture(s) course, (ii) one non-western culture(s) course, and (iii) one U.S. Minority Culture(s) course from the General Education cultural studies lists. Most students select general education courses that simultaneously satisfy these cultural studies requirements.*

4 *Selected from the departmentally approved* list of IE Technical Electives *(*https://ise.illinois.edu/undergraduate/electives.html#ie*)*

5 *Selected from the departmentally approved* lists of Track Option Electives (https://ise.illinois.edu/undergraduate/industrial-engineering-degree/industrial-engineering-track-options.html*) or by petition to the department.*

6 *SE 494 and SE 495 may be taken in the first or second semester of the fourth year as authorized. The alternative is a free elective.*

[7] *Combination satisfies the General Education Advanced Composition requirement.*

[8] *Selected from the departmentally approved* list of Computer Science Electives *(*https://ise.illinois.edu/undergraduate/electives.html#ie*)*

Learning Outcomes: Industrial Engineering, BS

Learning Outcomes for the degree of Bachelor of Science Major in Industrial Engineering

Student learning outcomes are based on learning outcomes in line with the ABET accreditation process.

Industrial Engineering graduates will have:

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. An ability to communicate effectively with a range of audiences.
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Information Sciences, BS

For the Degree of Bachelor of Science in Information Sciences

Initial Admission Term: Fall 2020

school website: School of Information Sciences (https://ischool.illinois.edu/)
school faculty: iSchool Faculty (https://ischool.illinois.edu/people/faculty/)
overview of school admission & requirements: http://catalog.illinois.edu/schools/ischool/academic-units/#undergraduatetext
school office: 501 E. Daniel St., Champaign, IL 61820
email: ischool@illinois.edu

The Bachelor of Science in Information Sciences prepares students for a wide range of careers within the knowledge economy. In today's technology-centered job market, there is a high demand for information professionals. By earning a B.S. in Information Sciences (BS/IS) from the School of Information Sciences (iSchool), you will gain a competitive edge. Our interdisciplinary, STEM-designated degree will prepare students for careers in a variety of fields. As a BS/IS student, you'll learn how to manage data and other types of information to help organizations achieve their goals. You will become an information technology expert who understands the human perspective, social context, and policy implications.

degree website: School of Information Sciences (https://ischool.illinois.edu/degrees-programs/bs-information-sciences/), B.S.

Departmental Distinction: The top 10% of the graduating class will graduate with distinction.

For the Degree of Bachelor of Science in Information Sciences

Minimum required major and supporting course work: Students must earn at least 51 hours in the School of Information Sciences or in approved courses offered by other departments, approved by an IS advisor. Twelve hours of 300/400 level (advanced) courses in Information Sciences (IS) must be taken on this campus.
General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements .**
Minimum required major and supporting course work: Students must earn at least 51 hours in the School of Information Sciences or in approved courses offered by other departments. Students must demonstrate proficiency in at least one programming language.
General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements .**
GPA Requirement: 2.5 - Earn a cumulative grade point average of 2.50 (A = 4.00) in all courses presented for the degree and a cumulative 2.50 grade point average for all courses taken in the School.

Core Curriculum

Code	Title	Hours
Hours Required in Core Curriculum		**51**
IS 101	Introduction to Information Sciences	
IS 101 Introduction to Information Sciences		
IS 202	Social Aspects Info Tech	
IS 203	Analytical Foundations for Information Problems	
IS 203 Analytical Foundations for Information Problems		
IS 204	Research Design for Information Sciences	3
IS 204 Research Design in Information Sciences		
IS 205	Programming for Information Problems	3
IS 205		
IS 206	Introduction to Database Concepts & Applications	3
IS 206		
IS 307		
or IS 308 OR IS 309		
School of Information Sciences Electives or approved courses in other departments		**30**

Additional electives outside of the school and General Education Requirements	21
Hours required for graduation	**123**

Information Systems, BS

for the degree of Bachelor of Science Major in Information Systems

overview of college admissions & requirements: Gies Catalog (http://catalog.illinois.edu/schools/gies-business/academic-units/) **college website:** https://giesbusiness.illinois.edu/ (https://business.illinois.edu/)

The Information Systems major prepares students to comfortably navigate through the challenges posed by the new-age organizations and society that are increasingly getting digitized.

Students learn about the design, implementation, and protection of systems and technology to address the information processing needs of an organization, and provide data and information for managerial decision-making. IS majors take both, technology and business courses which equip them with the required skill-set to be able to design, develop and deploy computer and software-based solutions in order to help businesses attain their tactical and strategic objectives.

Some of the key courses taken by IS majors include information technology for networked organizations, systems analysis and design, and database management. Because computers and software are used in all functional areas of business today, IS majors may choose to take additional courses in data analytics, information security/cyber-security, project management, human-computer interaction, programming, and social media applications to strengthen their resume, gain a wider exposure to domains supported by IS specialists, and prepare themselves to face the challenges in the technology-driven business world of today. IS majors will have the required knowledge and skill-set to make decisions about the selection and implementation of information systems/information technology, be a liaison between non-technical managers, computer programmers, and technical managers, assume a wide variety of roles requiring computer-based solutions, and generally be business leaders of the digital era.

for the degree of Bachelor of Science Major in Information Systems

Core Curriculum

Normally, students must register for no fewer than 12 hours or more than 18 hours in each semester. Students should take mathematics, economics, and accountancy courses in the semesters indicated in the sample schedule of courses. The computer science course must be taken during the first year. The computer science requirement no longer allows ACE 161 as an equivalent course.

Up to 4 hours of Kinesiology activity courses, numbered 100-110 may be counted toward the 124 hours for the degree. The same section of a course may not be repeated for credit. Credit is limited to a maximum of 12 credit hours for 199 courses. Students may receive foreign language credit for courses only 2 levels below highest level taken in high school. For example: 4 years of high school French-no credit below FR 102.

Credit toward the 124 degree hours is not given for MATH 101. Once the math requirement is completed, lower level math courses cannot be taken for credit.

Any course used to fill a specific degree requirement may not be taken on the credit-no credit grade option. Only free electives may be taken on the credit-no credit option. All finance and accountancy courses must be taken for a grade. It is recommended that all courses taken in the business administration area be taken for a grade.

Minimum hours required for graduation: 124 hours.

University Composition Requirements

Code	Title	Hours
Composition I: Principles of Composition [1]		4-7
Advanced Composition		3

General Education Requirements

Code	Title	Hours
A minimum of six courses is required, as follows:		18
Humanities & the Arts: Literature & the Arts (1-2 courses) [4]		
Humanities & the Arts: Historical & Philosophical Perspectives (1-2 courses) [4]		
Natural Sciences & Technology: Physical Sciences (0-2 courses) [5]		
Natural Sciences & Technology: Life Sciences (0-2 courses) [5]		
Behavioral Sciences (1 course)		
Cultural Studies: Non-Western Cultures (1 course)		
Cultural Studies: U.S. Minorities Cultures (1 course)		
Cultural Studies: Western/Comparative Cultures (1 course)		
Quantitative Reasoning (2 courses) [7]		

Language Other Than English

Code	Title	Hours
Completion of the third semester or equivalent of a language other than English is required. Completion of three years of a single language in high school satisfies this requirement.		0-15

Business Core Requirements

Code	Title	Hours
ACCY 201 & ACCY 202	Accounting and Accountancy I and Accounting and Accountancy II	6
BUS 101	Professional Responsibility and Business [2]	3
BUS 201	Business Dynamics	3
BUS 301	Business in Action	3
BUS 401	Global Business Perspectives	3
BADM 210 & BADM 211	Business Analytics I and Business Analytics II	6
BADM 275	Fundamentals of Operations Management	3
BADM 300	The Legal Environment of Bus	3
BADM 310	Mgmt and Organizational Beh [6]	3
BADM 320	Principles of Marketing	3
BADM 449	Business Policy and Strategy	3
CMN 101	Public Speaking	3
CS 105	Intro Computing: Non-Tech	3

ECON 102 & ECON 103	Microeconomic Principles and Macroeconomic Principles	6
FIN 221	Corporate Finance	3
Total Hours		54

[1] *For a list of the specific courses that meet this requirement, see the college Office of Undergraduate Affairs in 1055 Business Instructional Facility or see the Course Explorer for a list of approved general education courses.*

[2] BUS 101, BUS 201, BUS 301 *and* BUS 401 *are required for all Gies College of Business students. Students who enter the College their first year take each sequential course every fall.*
Inter-College transfer students take BUS 301 *and* BUS 401 *in their sophomore year. Off-campus transfer students take* BUS 101 *and* BUS 201 *in their junior year.*

[4] *Three courses in the Humanities & the Arts area are required and students must complete at least one course in the Literature & the Arts and Historical & Perspectives subcategories. At least one of the courses must be a 200 or higher level course.*

[5] *Two courses in the Natural Sciences & Technology area are required. It is strongly recommended that students complete one course in the Physical Sciences and Life Sciences subcategories.*

[6] *This course includes limited voluntary participation as a subject in experiments.*

[7] CS 105 *fulfills a Quantitative Reasoning I requirement.*

Code	Title	Hours
BADM 350	IT for Networked Organizations	3
BADM 352	Database Design and Management	3
BADM 353	Info Sys Analysis and Design	3
Select three of the following IS Major electives:		9
BADM 351	E-Business Management	
BADM 356	Data Science and Analytics	
BADM 357	Digital Making Seminar	
BADM 453	Business Intelligence	
BADM 458	IT Governance (Prerequisite: BADM 350)	
BADM 395	Special Topics (Sec. BDI) [1]	
BADM 395	Special Topics (Sec. ISM) [1]	
BADM 395	Special Topics (Sec. ID) [1]	
BADM 395	Special Topics (Sec. IOP) [1]	
Select three of the following IS Program electives:		9
BADM 323	Marketing Communications (Prerequisite: BADM 320)	
BADM 324	Purchasing and Supply Mgmnt (Prerequisite: Credit or concurrent enrollment in BADM 320)	
BADM 326	Pricing Strategy (Prerequisite: BADM 320)	
BADM 329	New Product Development (Prerequisite: BADM 320)	
BADM 374	Management Decision Models (Prerequisite: BADM 210)	
BADM 375	Operations Strategy	
BADM 377	Project Management	
BADM 379	Business Process Improvement	
BADM 382	International Marketing (Prerequisite: BADM 320)	
BADM 395	Special Topics (Sec. BDI) [1]	
BADM 395	Special Topics (Sec. ISM) [1]	
BADM 395	Special Topics (Sec. ID) [1]	
BADM 395	Special Topics (Sec. IOP) [1]	
Total Hours		27

[1] *Each section of BADM 395 can only be applied to one (1) of the two (2) elective categories.*

Learning Outcomes: Information Systems, BS

Learning Outcomes for the degree of Bachelor of Science in Information Systems

1. Develop an understanding of fundamental concepts and key principles in the area of Management Information Systems.
2. The ability to analyze managerial and organizational issues, apply relevant knowledge to come up with solutions, and make recommendations.
3. The ability to use knowledge and skills related to digital technologies to enhance business administration and decision making.
4. The ability to collaborate as a team member in varying roles in a diverse group and communicate effectively.

Innovation, Leadership & Engineering Entrepreneurship (ILEE), BS

for the degree of Bachelor of Science in Innovation, Leadership & Engineering Entrepreneurship

center website: http://www.tec.illinois.edu
college website: https://grainger.illinois.edu/
overview of college admissions & requirements: The Grainger College of Engineering (https://grainger.illinois.edu/admissions/)

The Technology Entrepreneur Center offers studies leading to the Bachelor of Science in Innovation, Leadership and Engineering Entrepreneurship (ILEE). The BS in ILEE degree is intended for Grainger Engineering students to better understand the innovative processes involved in identifying problems and creating, developing, and leading efforts to provide their engineering solutions. The curriculum is based on a sound disciplinary engineering technical core with additional aspects of problem identification and innovation, and complex multidisciplinary engineering project management and leadership.

Currently, the BS in ILEE degree is only being offered as a dual degree for current Grainger Engineering students and Chemical Engineering students.

Students should follow their Grainger Engineering primary/first department's curriculum and take the additional 31 hours of ILEE Orientation and Technical Core.

Overview of Curricular Requirements

The curriculum requires 128 hours for graduation from student's Grainger Engineering primary/first department curriculum and take 31 additional hours of ILEE Technical core (total: 159 credit hours).

Innovation, Leadership and Engineering Entrepreneurship Orientation

Code	Title	Hours
TE 100	Introduction to Innovation, Leadership and Engineering Entrepreneurship	1
Total Hours		1

Innovation, Leadership and Engineering Entrepreneurship Technical Core

Code	Title	Hours
TE 250	From Idea to Enterprise	2
TE 333	Creativity, Innovation, Vision	4
TE 360	Lectures in Engineering Entrepreneurship	1
SE 361	Emotional Intelligence Skills	3
TE 398	Special Topics II (Innovation and Engineering Design)	2
TE 401	Developing Breakthrough Projects	4
TE 450	Startups: Incorporation, Funding, Contracts, & Intellectual Property	3
TE 461	Technology Entrepreneurship	3
TE 466	High-Tech Venture Marketing	2
TE 498	Special Topics III (Section GS)	3
TE 230	Design Thinking/Need-Finding	3
Total Hours		**30**

Code	Title	Hours
Total Hours of ILEE Curriculum to Graduate		**31**

Suggested Sequence

Students should follow their Grainger Engineering primary/first department's curriculum and take the additional 31 hours of ILEE curriculum as shown below.

First Year		
Second Semester		
TE 100 or 200	Introduction to Innovation, Leadership and Engineering Entrepreneurship	1
TE 250	From Idea to Enterprise	2
	Semester Hours	3
Second Year		
First Semester		
TE 230	Design Thinking/Need-Finding	3
	Semester Hours	3
Second Semester		
TE 333	Creativity, Innovation, Vision	4
TE 360	Lectures in Engineering Entrepreneurship	1
	Semester Hours	5
Third Year		
First Semester		
SE 361	Emotional Intelligence Skills	3
TE 398 (Innovation and Engineering Design)	Special Topics II	2
	Semester Hours	5
Second Semester		
TE 401	Developing Breakthrough Projects	4
	Semester Hours	4
Fourth Year		
First Semester		
TE 461	Technology Entrepreneurship	3
TE 466	High-Tech Venture Marketing	2
	Semester Hours	5
Second Semester		
TE 450	Startups: Incorporation, Funding, Contracts, Intellectual Property	3
TE 498 (Leading Sustainable Change)	Special Topics III	3
	Semester Hours	6
	Total Hours:	31

Integrative Biology, BSLAS

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Integrative Biology

department website: http://sib.illinois.edu/
department faculty: School of Integrative Biology Faculty (http://sib.illinois.edu/people/faculty_all/)
advising: SIB advising (http://sib.illinois.edu/undergraduate/advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: sib@illinois.edu

The Integrative Biology major provides students with a solid preparation in genetics, evolution, anatomy, physiology, ecology, and molecular biology. After completion of the foundational 100- and core 200-300-level courses in IB, students complete the required advanced coursework by taking a variety of IB and other courses or focusing on a limited area of IB. Plans for the student's combination of advanced courses are developed in consultation with an adviser.

All undergraduates in this field are required to have a strong background in the biological and physical sciences.

Students pursuing a degree in Integrative Biology will be allowed to earn a second degree in the Specialized Curriculum in Biochemistry. Students pursuing a degree in Integrative Biology will not be allowed to double major in Molecular and Cellular Biology.

For students interested in adding licensure to the BSLAS in Integrative Biology, please visit the Biology Teaching page: http://sib.illinois.edu/undergraduate/programs/teaching (http://sib.illinois.edu/undergraduate/programs/teaching/)

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Integrative Biology

Distinction for Excellence in Research: To be eligible for graduation with Distinction for excellence in Research a student must:
Complete 2 or more semesters of IB 390 or IB 490 for 2 credit hours or more each semester.
Be signed up for IB 490 prior to or during the semester the student is being considered for Distinction.
Maintain a minimum 3.25 GPA within the major at the end of the penultimate semester.
Give a poster presentation at the Undergraduate Research Symposium or other approved venue.
Have a completed distinction evaluation form submitted by their Faculty Research Advisor.Distinction will be determined by the SIB Distinction Committee based on the poster presentation and the Advisor's evaluation.
High or Highest Distinction for Excellence in Research: To be eligible for graduation with High or Highest Distinction for Excellence in Research a student must:
Complete 2 or more semesters of IB 390 or IB 490 for 2 credit hours or more each semester. Be signed up for IB 490 prior to or during the semester the student is being considered for Distinction.
Maintain a minimum 3.25 GPA within the major at the end of the penultimate semester.
Submit a written thesis and give an oral presentation at the Undergraduate Research Symposium or other approved venue.
Have a completed distinction evaluation form submitted by their Faculty Research Advisor.
The level of Distinction will be determined by the SIB Distinction Committee based on the written thesis, the oral presentation, and the Advisor's evaluation.
For additional information visit: http://sib.illinois.edu/undergraduate/distinction (http://sib.illinois.edu/undergraduate/distinction/)
General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to to 66-76 hours.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
MATH 220	Calculus [1]	4-5
or MATH 221	Calculus I	
STAT 212	Biostatistics	3
Select one group of courses:		8-10
CHEM 102	General Chemistry I	
CHEM 103	General Chemistry Lab I	
CHEM 104	General Chemistry II	
CHEM 105	General Chemistry Lab II	
or		
CHEM 202	Accelerated Chemistry I	
CHEM 203	Accelerated Chemistry Lab I	
CHEM 204	Accelerated Chemistry II	
CHEM 205	Accelerated Chemistry Lab II	
Select one group of courses:		5-6
CHEM 232 & CHEM 233	Elementary Organic Chemistry I and Elementary Organic Chem Lab I	
CHEM 236 & CHEM 237	Fundamental Organic Chem I and Structure and Synthesis	
Select one group of courses:		8-10
PHYS 101 & PHYS 102	College Physics: Mech & Heat and College Physics: E&M & Modern	
PHYS 211 & PHYS 212	University Physics: Mechanics and University Physics: Elec & Mag	
IB 150	Organismal & Evolutionary Biol	4
MCB 150	Molec & Cellular Basis of Life	4
IB 202	Physiology [2]	4
IB 203	Ecology	4
IB 204	Genetics [3]	4
IB 302	Evolution	4
At least 14 hours of coursework from the Approved List of Advanced Courses (http://sib.illinois.edu/courses/area (http://sib.illinois.edu/courses/area/)) for IB majors, including:		14
At least one course from two of the following three areas:		
Area I: Organismal and Evolutionary Biology		
Area II: Behavior, Ecology, and the Environment		
Area III: Integrative Anatomy, Physiology, and Molecular Biology		
One advanced course with a laboratory and/or field component.		

[1] The Biocalculus section of MATH 220 is strongly recommended for IB Majors.

[2] IB 202 *requires animal dissection and no equivalent alternative is available. IB majors are required to enroll in the 4-hour version of this course.*

[3] IB majors are required to enroll in the 4-hour version of IB 204.

Learning Outcomes: Integrative Biology, BSLAS

Learning Outcomes for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Integrative Biology

By the time they graduate, an Integrative Biology major should:

Content-related understandings

1. Possess a significant knowledge base in Integrative Biology, including but not limited to:
   a. Structure and function
   b. Ecology
   c. Genetics
   d. Evolution
   e. Molecular biology
   f. Statistical inference
2. Understand that biology is integrative and multidisciplinary
3. Show curiosity and caring about biology, and an awareness of and appreciation for the diversity of life

4. Understand how paradigms of biology relate to society and policy as well as their own lives

Competencies

1. Carry out the process of scientific inquiry
2. Use critical thinking skills and solve problems
3. Use quantitative reasoning and computation skills
4. Apply simple models (equations/math) to biological phenomena
5. Gain proficiency in scientific writing and speaking
6. Read and evaluate primary scientific literature
7. Critically evaluate science-related news and information
8. Work collaboratively

Integrative Biology: Honors Integrative Biology, BSLAS

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Integrative Biology, Honors Integrative Biology Concentration

department website: http://sib.illinois.edu/
department faculty: School of Integrative Biology Faculty (http://sib.illinois.edu/people/faculty_all/)
advising: SIB advising (http://sib.illinois.edu/undergraduate/advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: honors@sib.illinois.edu (ibhonors@life.illinois.edu)

Honors Integrative Biology is designed for superior students wishing to pursue an intensive program in integrative biology and, concurrently, to gain a strong background in the physical sciences and mathematics. Admission is by interview in spring of the freshman year prior to registration for fall. An overall 3.0 GPA is required to apply for admission. Honors Integrative Biology provides preparation suitable for graduate and professional training in biology, as well as for biology careers in the private and public sectors.

Students earning the Honors Integrative Biology Concentration will also earn the Chemistry minor.

Students pursuing a degree in Honors Integrative Biology will be allowed to earn a second degree in the Specialized Curriculum in Biochemistry. Students pursuing a degree in Honors Integrative Biology will not be allowed to double major in Molecular and Cellular Biology.

Substitutions or other changes in the requirements below may be made only by petition to and approval of the director of the Honors Integrative Biology Concentration.

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Integrative Biology, Honors Integrative Biology Concentration
Distinction for Excellence in Research: To be eligible for graduation with Distinction for excellence in Research a student must:
Complete 2 or more semesters of IB 390 **or** IB 490 **for 2 credit hours or more each semester.**
Be signed up for IB 490 **prior to or during the semester the student is being considered for Distinction.**
Maintain a minimum 3.25 GPA within the major at the end of the penultimate semester.
Give a poster presentation at the Undergraduate Research Symposium or other approved venue.
Have a completed distinction evaluation form submitted by their Faculty Research Advisor.Distinction will be determined by the SIB Distinction Committee based on the poster presentation and the Advisor's evaluation.
High or Highest Distinction for Excellence in Research: To be eligible for graduation with High or Highest Distinction for Excellence in Research a student must:
Complete 2 or more semesters of IB 390 or IB 490 for 2 credit hours or more each semester. Be signed up for IB 490 prior to or during the semester the student is being considered for Distinction.
Maintain a minimum 3.25 GPA within the major at the end of the penultimate semester.
Submit a written thesis and give an oral presentation at the Undergraduate Research Symposium or other approved venue.
Have a completed distinction evaluation form submitted by their Faculty Research Advisor.
The level of Distinction will be determined by the SIB Distinction Committee based on the written thesis, the oral presentation, and the Advisor's evaluation.
For additional information visit: http://sib.illinois.edu/undergraduate/distinction (http://sib.illinois.edu/undergraduate/distinction/)
General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 80-91 hours. Twelve hours of 300- and 400-level in the major must be taken on this campus.
No more than 8 hours of credit in 100-level courses in IB or MCB may be counted toward graduation.
Students may count toward graduation no more than a combined maximum of 10 hours of IB 390 **and** IB 490 **credit offered for independent study.**
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
IB 150	Organismal & Evolutionary Biol	4
MCB 150	Molec & Cellular Basis of Life	4
IB 270	Evolution of Molecules & Cells	5
IB 271	Organismal Biology	5
IB 372	Ecology and Evolution [1]	5
MATH 220	Calculus (Biocalculus section)	4-5
or MATH 221	Calculus I	
MATH 231	Calculus II [2]	3-4
or IB 494	Theoretical Biology + Models	
Select one group of courses:		8-10
CHEM 202	Accelerated Chemistry I	

CHEM 203	Accelerated Chemistry Lab I	
CHEM 204	Accelerated Chemistry II	
CHEM 205	Accelerated Chemistry Lab II	
OR		
CHEM 102	General Chemistry I [3]	
CHEM 103	General Chemistry Lab I	
CHEM 104	General Chemistry II	
CHEM 105	General Chemistry Lab II	
Select one group of courses:		6
CHEM 236	Fundamental Organic Chem I	
CHEM 237	Structure and Synthesis	
OR		
CHEM 232	Elementary Organic Chemistry I	
CHEM 233	Elementary Organic Chem Lab I	
At least six hours of advanced courses in Chemistry [4]		6-8
MCB 450	Introductory Biochemistry	3
Select one group of courses		8-14
PHYS 211	University Physics: Mechanics	
PHYS 212	University Physics: Elec & Mag	
OR		
PHYS 101	College Physics: Mech & Heat	
PHYS 102	College Physics: E&M & Modern	
An approved 300- or 400-level course that includes physical/math principles [5]		
An approved 300- or 400- level course in statistics [6]		3
IB 490	Independent Study (2 semesters) [7]	6
300- or 400- level courses in the biological sciences		10

1 *Continuation in the Integrative Biology Honors Concentration requires a grade of B or better in each of* IB 270, IB 271, *and* IB 372 *and a 3.0 overall cumulative GPA.*

2 *If* IB 494 *is taken instead of* MATH 231, *it will not count towards the requirement of 10 hours of 300- or 400-level courses in the biological sciences.*

3 *Introductory chemistry should be completed prior to enrolling in* IB 270.

4 *Recommended courses are:* CHEM 312, CHEM 332, CHEM 360, CHEM 437, CHEM 440. *Students should discuss alternate choices with the IB advising office. To earn the Chemistry minor students must choose 3 or 4 hour Chemistry courses, excluding research or independent study.*

5 Recommended courses are: ATMS 421, ANSC 448, MCB 432 or IBH Director approved.

6 NRES 421 *is recommended. Other suitable courses are* CPSC 440 *or* STAT 400.

7 *Independent study equivalent to* IB 490 *in non-IB programs must first be approved by Director of IBH Concentration.*

Learning Outcomes: Honors Integrative Biology, BSLAS

Learning Outcomes for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Integrative Biology, Honors Integrative Biology Concentration

By graduation we want all Integrative Biology Honors students to have acquired:

Content-related understandings

1. Possess a significant knowledge base in Integrative Biology and Chemical Sciences, including but not limited to:
   a. Molecular genetics and biology
   b. Diversity and structures and physiological functions of plants and animals
   c. Ecology and evolution
   d. Biochemical and chemical bases of life and/or systems
   e. Statistical inference and modeling of systems
2. Understand that biology is integrative and multidisciplinary
3. Show curiosity and caring about biology, and an awareness of and appreciation for the diversity of life
4. Understand how paradigms of biology relate to society and policy as well as their own lives

Competencies

1. Carry out the process of scientific inquiry
2. Use critical thinking skills and solve problems
3. Use quantitative reasoning and computation skills
4. Apply models (equations/math) to biological phenomena
5. Gain proficiency in scientific writing and speaking
6. Read and evaluate primary scientific literature
7. Critically evaluate science-related news and information
8. Work collaboratively

Interdisciplinary Health Sciences, BS

for the degree of Bachelor of Science Major in Interdisciplinary Health Sciences

Department website: http://ihealth.illinois.edu/
Department faculty: I-Health Faculty and Staff (https://ahs.illinois.edu/ihealth-directory/)
College catalog page: Applied Health Sciences Catalog (p. 1187)
College website: http://www.ahs.illinois.edu/

The Interdisciplinary Health Sciences, BS degree program includes a set of three concentrations, of which a student must complete at least one:

Health & Aging Concentration (p. 243)

Health Behavior Change Concentration (p. 244)

Health Diversity Concentration (http://catalog.illinois.edu/undergraduate/ahs/interdisciplinary-health-sciences/health-diverse/)

Interdisciplinary Health Sciences: Health & Aging, BS

for the degree of Bachelor of Science Major in Interdisciplinary Health Science, Health & Aging Concentration

Department website: http://ihealth.illinois.edu/
Department faculty: I-Health Faculty and Staff (http://ihealth.illinois.edu/faculty-staff/)
College catalog page: Applied Health Sciences Catalog (p. 1187)
College website: http://www.ahs.illinois.edu/

Summary of Degree Requirements

Code	Title	Hours
General Education		36-39
Health Major Requirements		42
Concentration Requirements		22-23
Free Electives		24-28
Total Hours		128

The curriculum requires certain existing courses from the approved lists be taken as noted below. The prescribed courses prepare the student for upper division study and may be used to satisfy General Education Requirements provided they are on the appropriate General Education List.

General Education Requirements

Code	Title	Hours
Communication Arts		
Composition I		3-6
Advanced Composition		3
Quantitative Reasoning I & II		
From approved campus list		6
Humanities and the Arts		
From approved campus list		6
Social and Behavioral Sciences		
From approved campus list		6
Natural Sciences and Technology		
From approved campus list		6
Cultural Studies [1]		
From Western cultures approved campus list		3
From non-Western cultures approved campus list		3
From U.S. minority cultures approved campus list		3
Total Hours		39-42

[1] *Courses in cultural studies may be completed through other categories where appropriate.*

Code	Title	Hours
Health Major Requirements		
CHLH 101	Introduction to Public Health	3
CHLH 274	Introduction to Epidemiology	3
CHLH 456	Organization of Health Care	2-4
KIN 122	Physical Activity and Health	3
RST 100	Recreation, Sport, and Tourism in Modern Society	3
SHS 170	Intro Hum Comm Sys & Disorders	3
FSHN 120	Contemporary Nutrition	3
PSYC 100	Intro Psych	4
STAT 100	Statistics	3
REHB 330	Disability in American Society	3
IHLT 101	Introduction to i-Health	1
IHLT 102	Survey of Interdisc Health	1
IHLT 375	Interdis Collab in Health Serv	4
IHLT 474	Pre-Field Experience in Health	1
IHLT 475	Field Experience in i-Health	4
Total Hours		42

Free Electives

Code	Title	Hours
Free Electives		24-28
Total Hours		24-28

Health and Aging Concentration

Code	Title	Hours
KIN 262	Motor Develop, Growth & Form	3
CHLH 404	Gerontology	3,4
SHS 271	Communication and Aging	3
PSYC 361	The Psychology of Aging	3
Select three of the following (at least two at the 300- or 400-level):		9
CHLH 494	Special Topics	
EPSY 407	Adult Learning and Development	
EPSY 430	Early Adolescent Development	
HDFS 310	Adult Development	
IHLT 240	Aging and Health Policy	
IHLT 498	Interdisciplinary Health Study Abroad	
KIN 365	Civic Engagement in Wellness	
KIN 386	Exercise Instruction & Elderly	
KIN 459	Physical Activity & Aging	
RST 316	Human Development and Recreation, Sport and Tourism	
SHS 320	Development of Spoken Language	
SHS 375	Comm Partners & Health	
SOCW 240	Death & Dying	
SOCW 315	Social Work Services for Older Adults	
UP 340	Planning for Healthy Cities	
Total Hours		21-22

Interdisciplinary Health Sciences: Health Behavior Change, BS

for the degree of Bachelor of Science Major in Interdisciplinary Health Sciences, Health Behavior Change Concentration

Department website: http://ihealth.illinois.edu/
Department faculty: I-Health Faculty and Staff (https://ahs.illinois.edu/ihealth-directory/)
College catalog page: Applied Health Sciences Catalog (p. 1187)
College website: http://www.ahs.illinois.edu/

Summary of Degree Requirements

Code	Title	Hours
General Education		36-39
Health Major Requirements		42

Concentration Requirements	22-23
Free Electives	24-28
Total Hours	128

The curriculum requires certain existing courses from the approved lists be taken as noted below. The prescribed courses prepare the student for upper division study and may be used to satisfy General Education Requirements provided they are on the appropriate General Education List.

General Education Requirements

Code	Title	Hours
Communication Arts		
Composition I		3-6
Advanced Composition		3
Quantitative Reasoning I & II		
From approved campus list		6
Humanities and the Arts		
From approved campus list		6
Social and Behavioral Sciences		
From approved campus list		6
Natural Sciences and Technology		
From approved campus list		6
Cultural Studies [1]		
From Western cultures approved campus list		3
From non-Western cultures approved campus list		3
From U.S. minority cultures approved campus list		3
Total Hours		39-42

[1] *Courses in cultural studies may be completed through other categories where appropriate.*

Code	Title	Hours
Health Major Requirements		
CHLH 101	Introduction to Public Health	3
CHLH 274	Introduction to Epidemiology	3
CHLH 456	Organization of Health Care	2-4
KIN 122	Physical Activity and Health	3
RST 100	Recreation, Sport, and Tourism in Modern Society	3
SHS 170	Intro Hum Comm Sys & Disorders	3
FSHN 120	Contemporary Nutrition	3
PSYC 100	Intro Psych	4
STAT 100	Statistics	3
REHB 330	Disability in American Society	3
IHLT 101	Introduction to i-Health	1
IHLT 102	Survey of Interdisc Health	1
IHLT 375	Interdis Collab in Health Serv	4
IHLT 474	Pre-Field Experience in Health	1
IHLT 475	Field Experience in i-Health	4
Total Hours		42

Free Electives

Code	Title	Hours
Free Electives		24-28
Total Hours		24-28

Health Behavior Change Concentration

Code	Title	Hours
KIN 340	Social & Psychological Aspects of Physical Activity	3
CHLH 304	Foundations of Health Behavior	4
RST 316	Human Development and Recreation, Sport and Tourism	3
SHS 352	Hearing Health and Society	3
Select three of the following (at least two at the 300- or 400-level):		9
ANTH 143	Biology of Human Behavior	
CHLH 469	Environmental Health	
CMN 260	Intro to Health Communication	
CMN 336	Family Communication	
CMN 462	Interpersonal Health Comm	
CMN 463	Organizational Health Comm	
CMN 464	Health Communication Campaigns	
CMN 467	Communication & Health Equity	
EPSY 407	Adult Learning and Development	
IHLT 230	Leadership in Health	
IHLT 498	Interdisciplinary Health Study Abroad	
KIN 365	Civic Engagement in Wellness	
KIN 448	Exercise & Health Psychology	
PSYC 201	Intro to Social Psych	
PSYC 322	Introduction to Intellectual Disability	
PSYC 352	Attitude Theory and Change	
SHS 375	Comm Partners & Health	
SOC 273	Social Perspectives on the Family	
Total Hours		22

Interdisciplinary Health Sciences: Health Diversity, BS

for the degree of Bachelor of Science Major in Interdisciplinary Health Sciences, Health Diversity Concentration

Department website: http://ihealth.illinois.edu/
Department faculty: I-Health Faculty and Staff (https://ahs.illinois.edu/ihealth-directory/)
College catalog page: Applied Health Sciences Catalog (p. 1187)
College website: http://www.ahs.illinois.edu/

Summary of Degree Requirements

Code	Title	Hours
General Education		36-39
Health Major Requirements		42
Concentration Requirements		22-23

Free Electives	24-28
Total Hours	128

The curriculum requires certain existing courses from the approved lists be taken as noted below. The prescribed courses prepare the student for upper division study and may be used to satisfy General Education Requirements provided they are on the appropriate General Education List.

General Education Requirements

Code	Title	Hours
Communication Arts		
Composition I		3-6
Advanced Composition		3
Quantitative Reasoning I & II		
From approved campus list		6
Humanities and the Arts		
From approved campus list		6
Social and Behavioral Sciences		
From approved campus list		6
Natural Sciences and Technology		
From approved campus list		6
Cultural Studies [1]		
From Western cultures approved campus list		3
From non-Western cultures approved campus list		3
From U.S. minority cultures approved campus list		3
Total Hours		39-42

[1] *Courses in cultural studies may be completed through other categories where appropriate.*

Code	Title	Hours
Health Major Requirements		
CHLH 101	Introduction to Public Health	3
CHLH 274	Introduction to Epidemiology	3
CHLH 456	Organization of Health Care	2-4
KIN 122	Physical Activity and Health	3
RST 100	Recreation, Sport, and Tourism in Modern Society	3
SHS 170	Intro Hum Comm Sys & Disorders	3
FSHN 120	Contemporary Nutrition	3
PSYC 100	Intro Psych	4
STAT 100	Statistics	3
REHB 330	Disability in American Society	3
IHLT 101	Introduction to i-Health	1
IHLT 102	Survey of Interdisc Health	1
IHLT 375	Interdis Collab in Health Serv	4
IHLT 474	Pre-Field Experience in Health	1
IHLT 475	Field Experience in i-Health	4
Total Hours		42

Free Electives

Code	Title	Hours
Free Electives		24-28
Total Hours		24-28

Health Diversity Concentration

Code	Title	Hours
SOC 162	Intro to Intl Health Policy	3
or GLBL 240	Global Health	
CHLH 409	Women's Health	3
EPS 310	Race and Cultural Diversity	4
SHS 222	Language & Culture of Deaf Communities	3
Select three of the following (at least two at the 300- or 400-level):		8-9
AFRO 421	Racial and Ethnic Families	
ANTH 143	Biology of Human Behavior	
CHLH 415	International Health	
GLBL 100	Intro to Global Studies	
HDFS 322	US Latina and Latino Families	
HIST 263	History of Medicine in the United States	
HIST 281	Constructing Race in America	
IHLT 232	Health Disparities in the U.S.	
IHLT 498	Interdisciplinary Health Study Abroad	
LLS 387	Race, Gender and the Body	
LLS 473	Immigration, Health & Society	
LLS 479	Race, Medicine, and Society	
MACS 356	Sex & Gender in Popular Media	
RSOC 110	Intro to Rural Society	
RST/KIN 230	Diversity in Recreation, Sport, and Tourism	
PSYC 312	Psychology of Race & Ethnicity	
SHS 271	Communication and Aging	
SOCW 300	Diversity: Identities & Issues	
Total Hours		21-22

Learning Outcomes: Interdisciplinary Health Sciences, BS

Learning outcomes for the degree of Bachelor of Science Major in Interdisciplinary Health Sciences

1. Students will understand the influence of behavior and culture on health and well-being.
2. Students will gain a comprehensive and holistic perspective of health which will prepare them to enter a variety of health related careers.
3. Students will apply health-related knowledge through community service and experientially-based opportunities.
4. Students will be able to identify various health determinants in order to improve equity and access for vulnerable populations.

Interdisciplinary Studies, BALAS

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Interdisciplinary Studies

overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/

Students pursuing this major select one of two concentrations:

- Jewish Studies Concentration (p. 247)
- Medieval Studies Concentration (http://catalog.illinois.edu/undergraduate/las/academic-units/interdisc-studies/medieval-civilization-concentration/)

Requirements
Elect one of the concentrations offered within the major and file a concentration declaration with the LAS Student Academic Affairs Office no later than the end of the first semester of the junior year. Students who do not begin work on concentration requirements by the junior year will be at a disadvantage.

Select specific courses counted toward completion of a concentration with the advice and approval of the concentration advisor, subject to specific concentration requirements. Students are strongly encouraged also to enroll in 6-7 hours of Western civilization (HIST 140 or HIST 141 and HIST 142 or HIST 143, or CWL 241 and CWL 242).

For the elected concentration, complete the stated minimum number of hours in courses applicable toward the major and in accord with the concentration requirements; at least 25 hours must be at the 200, 300 or 400 level.

Interdisciplinary Studies: Jewish Studies, BALAS

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Interdisciplinary Studies, Jewish Studies Concentration

program website: https://jewishculture.illinois.edu/
program faculty: Jewish Culture & Society Faculty (https://jewishculture.illinois.edu/directory/affiliate-faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/

The Program in Jewish Culture & Society (https://jewishculture.illinois.edu/) sponsors this concentration. This concentration provides the student with knowledge of the Hebrew language, the opportunity to begin a study of Yiddish, and a broad appreciation of Jewish religion, culture, and history.

A Major Plan of Study Form must be completed and submitted to the LAS Student Academic Affairs Office before the end of the fifth semester (60-75 hours). Please see your advisor.

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Interdisciplinary Studies, Jewish Studies Concentration

All substitutions must be approved by the Advisor in the Program in Jewish Culture and Society Office (https://jewishculture.illinois.edu/academics/undergraduate/jewish-studies-major/). Substitution for specific courses listed will be approved by the concentration advisor only in exceptional cases.

A Major Plan of Study Form must be completed and submitted to the LAS Student Academic Affairs Office before the end of the fifth semester (60-75 hours). Please see your advisor.

Departmental distinction: To be eligible for graduation with distinction, a student must have a college grade point average of 3.5, a major concentration grade point average of 3.5, completion of HUM 498 **with a grade of A, and completion of a semester paper in** HUM 498 **that is judged to be deserving of "distinction" by a committee of at least two faculty members.**
High distinction: To be eligible for graduation with high distinction, a student must have a college grade point average of 3.5, a major concentration grade point average of 3.7, and must have completed HUM 492 **(instead of** HUM 498**) with a grade of A and a thesis in** HUM 492 **that is judged to be deserving of "high distinction" by a committee of at least two faculty members.**

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 45-51 hours. Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
JS 199	Undergraduate Open Seminar (An Independent Study experience to be arranged with a Jewish Studies affiliated faculty member)	3
Hebrew and/or Yiddish language courses, including:		26-29
HEBR 201	Elementary Modern Hebrew I	
HEBR 202	Elementary Modern Hebrew II	
HEBR 403	Intermediate Modern Hebrew I	
HEBR 404	Intermediate Modern Hebrew II	
HEBR 405	Advanced Modern Hebrew I	
or YDSH 101	Beginning Yiddish I	
REL 205	Intensive Biblical Hebrew	
or HEBR 406	Advanced Modern Hebrew II	
or YDSH 102	Beginning Yiddish II	
One course at the 100 or 200 level from each of the following clusters in the Jewish Studies Minor: Religion, Culture, and History. List maintained by the Advisor in the Program in Jewish Culture and Society Office.		9
Three courses at the 300 level or above from any of the four clusters in the Jewish Studies Minor: Religion, Culture, History, and Language. List maintained by the Advisor in the Program in Jewish Culture and Society Office.		9

Interdisciplinary Studies: Medieval Studies, BALAS

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Interdisciplinary Studies, Medieval Studies Concentration

program website: http://www.medieval.illinois.edu/education/undergrad/
program faculty: Medieval Studies Faculty (http://www.medieval.illinois.edu/people/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: medievalstudies@illinois.edu

The Program in Medieval Studies (http://www.medieval.illinois.edu/education/undergrad/) sponsors this concentration.

This concentration introduces students to medieval (ca. 500- ca. 1500 CE) cultures across the world, providing them with an understanding of periods and movements, institutions, material culture, ideas, beliefs, and values of the diverse cultures that comprise the medieval globe. The coursework spans both geographic regions and disciplines to introduce students to the breadth of medieval cultures as well as to the diversity of methods and perspectives for their study.

The concentration includes a minimum of 45 hours, divided into (I) an introductory course in global medieval literatures and cultures; (II) geographical distribution coursework as specified below; (III) advanced medieval coursework selected by the student in consultation with a Medieval Studies faculty advisor; and (IV) a capstone experience involving an intensive writing and research project. Because Medieval Studies is an interdisciplinary field of study, students are urged to consult with a Medieval Studies faculty advisor to ensure that they take a diverse range of courses providing some exposure to the fields of History and Anthropology; Literature; the Arts; and Philosophy or Religion. Although study of medieval languages is not a requirement, students who intend to pursue graduate study in Medieval Studies should complete at least two courses in an appropriate language; up to twelve hours of appropriate language study can be applied to the Additional Medieval Studies Coursework.

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Interdisciplinary Studies, Medieval Studies Concentration

A Major Plan of Study Form must be completed and submitted to the LAS Student Academic Affairs Office before the end of the fifth semester (60-75 hours). Please see your advisor.

Substitution for specific courses listed below will be approved by the concentration advisor only in exceptional cases.

Departmental distinction: To be eligible for graduation with distinction, a student must have a college grade point average of 3.5, a major concentration grade point average of 3.5, completion of HUM 498 **with a grade of A, and completion of a semester paper in** HUM 498 **that is judged to be deserving of "distinction" by a committee of at least two faculty members.**

> **High distinction: To be eligible for graduation with high distinction, a student must have a college grade point average of 3.5, a major concentration grade point average of 3.7, and must have completed** HUM 492 **(instead of** HUM 498**) with a grade of A and a thesis in** HUM 492 **that is judged to be deserving of "high distinction" by a committee of at least two faculty members.**

Medieval Studies Concentration Requirements
General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 45-51 hours. Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Introduction to Medieval Studies [1]		
ENGL 202/ MDVL 201	Medieval Literature and Culture	3
Geographical Distribution Coursework [2]		
Select two of the following (Medieval Europe):		6
ARTH 111/ MDVL 222	Ancient to Medieval Art	
ARTH/MDVL 222	Medieval Art	
ARTH/MDVL 231	Northern Renaissance Art	
ITAL/MDVL 240	Italy Middle Ages & Renaiss	
HIST/MDVL 245	Wives, Workers and Witches in Pre-Modern Europe	
HIST/MDVL 247	Medieval Europe	
SCAN/MDVL 251	Viking Mythology	
SCAN/MDVL 252	Viking Sagas in Translation	
HIST/MDVL 255	British Isles to 1688	
ARCH/MDVL 412	Medieval Architecture	
Select two of the following (Classical and medieval East Asia):		6
HIST 220	Traditional China	
HIST 226	Premodern Japanese History	
EALC 240	Chinese Civilization	
EALC 275	Masterpieces of East Asian Lit	
REL 287	Introduction to Buddhism	
Select two of the following (Medieval Central Asia, South Asia, or the Middle East):		6
HIST 130	History of South Asia	
HIST 135	History of Islamic Middle East	
LA 218	S Asian Cultural Landscapes	
LA 222	Islamic Gardens & Architecture	
REL 213 or REL 214	Introduction to Islam	
REL 223	The Qur'an (Koran)	
REL 260	Mystics and Saints in Islam	
REL 283	Jewish Sacred Literature	
CWL 208	Cultures & Literatures of South Asia	
Additional Medieval Studies Coursework		

Medieval-related coursework from participating departments selected in consultation with the concentration advisor. At least 12 hours must be at the 300- or 400-level. A list of courses in Medieval Studies is maintained on the Medieval Studies Program website. Up to 12 hours of appropriate language study can be applied to meet this requirement with approval of a Medieval Studies faculty advisor. [3]	21
Capstone Experience	
A capstone experience (normally in the student's senior year) involving intensive interdisciplinary research and writing on a medieval topic. Any 400-level MDVL course (or medieval-related course not cross-listed with MDVL, with the approval of a Medieval Studies faculty advisor) can be designated as a capstone experience with approval of the instructor. For the course to qualify as a capstone experience, the student must undertake a substantial research project that supplements the standard course requirements, in the form either of an additional project or of a longer and more research-intensive version of an existing course project. The project must involve both primary and secondary research using advanced disciplinary methodologies and resources. [4]	3
Total Hours	45

[1] *A student may substitute the "Medieval World" section of* HIST 100*, by petition to a Medieval Studies faculty advisor. Only the section of* HIST 100 *devoted to the Middle Ages may be substituted.*

[2] *A student may substitute up to 6 hours in geographical distribution coursework with courses on the medieval civilizations of the Americas:* ANTH 277*,* ANTH 278*, or both. However, at least one course must still be taken from each of the three regional areas.*

[3] List of courses to fulfill Additional Medieval Studies Coursework. (http://www.medieval.illinois.edu/education/undergrad/)

[4] A student may also petition to satisfy the capstone experience by enrolling in MDVL 500, Seminar in Medieval Studies . Enrollment requires approval of the instructor and Director of the Program in Medieval Studies.

Italian, BALAS

for the degree of Bachelor of Arts in Liberal Arts and Sciences Major in Italian

department website: https://frit.illinois.edu/academics/italian/undergraduate-studies (https://frit.illinois.edu/academics/italian/undergraduate-studies/)
department faculty: French & Italian Faculty (https://frit.illinois.edu/directory/faculty/)
advising: French & Italian advising (https://frit.illinois.edu/academics/advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: french-italian@illinois.edu

Undergraduate degree programs in French & Italian:

French, BALAS (p. 201)

Teaching of French, BA (p. 421)

Italian, BALAS (p. 249)

5 Year BALAS /MA in Italian and European Union Studies

The Department of French and Italian with the European Union Center offers a 5-year BALAS/MA degree program in Italian and the Master of Arts in European Union Studies (MAEUS). In order to be admitted to this degree program, students apply through a joint application process to their BALAS–granting program and the European Union Center during their third year of studies. Requirements for this degree program are identical to those for the stand-alone BALAS and for the stand-alone MAEUS. Students will receive both degrees when the requirements are met for the degrees; the BALAS and MA degrees will be conferred separately and independently. More detailed information may be obtained from department and EUC offices.

for the degree of Bachelor of Arts in Liberal Arts and Sciences Major in Italian

A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office before the end of the fifth semester (60-75 hours). Please see your adviser.

Departmental distinction: To be considered for departmental distinction, a student must maintain a 3.5 grade point average and fulfill special additional requirements. See the department's honors adviser.

Code	Title	Hours
Select 18 credits (max) from the following:		18
ITAL 200	Italian Studies in a Mediterranean Context	
ITAL 210	Practical Review Italian	
ITAL 220	Contemporary Italian, Oral and Written	
ITAL 240	Italy Middle Ages & Renaiss	
ITAL 270	Introduction to Italian Cinema	
ITAL 310	Advanced Grammar	
ITAL 380	Ital Business & Profess	
ITAL 390	Spec Topics Italian Studies	
ITAL 491	Honors Senior Thesis	
Select 12 credits (min) from the following:		12
ITAL 406	Italian Culture and Globalization	
ITAL 413	Dante	
ITAL 414	Petrarch & Boccaccio	
EURO 415	Europe and the Mediterranean	
ITAL 420	Masterpieces Renaiss Lit	
ITAL 440	Modern Italian Novel	
ITAL 450	Italian Syntax & Phonology	
ITAL 470	Topics in Italian Cinema	
ITAL 490	Italian Critical Theory	
Supporting course work or a minor chosen in consultation with an adviser, in one related area (or a combination, with no fewer than 8 hours in each). Areas may include, for example, any other language and literature, history, political science, biology (premed), international law (prelaw), economics, finance, business administration, education, architecture, fine arts, journalism. [1]		15-18

[1] *A minor consists of 16-21 hours.*

Learning Outcomes: Italian, BALAS

Learning Outcomes for the degree of Bachelor of Arts in Liberal Arts and Sciences Major in Italian

Upon graduating with a major in Italian, students shall be able to do the following:

1. **Language proficiency and accuracy:** reach proficiency and accuracy in written and oral comprehension and production of Italian (based on proficiency guidelines outlined by the American Council on the Teaching of Foreign Languages [ACTFL] and the Common European Framework of Reference for Languages [CEFRL]).
2. **Research skills and literacy in text, media, and technology in Italian:** access, manage, evaluate, and effectively use culturally relevant sources according to the standards of professional conduct; understand how these resources relate to language and culture; use appropriate tools when interpreting sources, interacting with others, and producing written, oral, or visual content; develop sensitivity to the changes in cultures and languages produced by emerging technologies.
3. **Intercultural awareness, knowledge, and competence:** develop an awareness of differences between Italian and their own cultures.Identify implicit assumptions present in Italian linguistic practices and relate them to their own cultural conventions. Learn how to identify the cultural component of everyday practices, from food to body language, and recognize difference as culturally specific.
4. **Proficiency in Italian Literature and Culture:** acquire familiarity with Italian literature and culture, their history and their contexts, as well as the critical tools used in their analysis.
5. **Competence in Italian linguistics:** acquire competence in the structure and history of the Italian language.

Journalism, BS

for the degree of Bachelor of Science Major in Journalism

department website: https://media.illinois.edu/journalism (https://media.illinois.edu/journalism/)
department faculty: https://media.illinois.edu/journalism/faculty (https://media.illinois.edu/journalism/faculty/)
department email: journ@illinois.edu
overview of college admissions & requirements: College of Media (p. 1198)
college website: https://media.illinois.edu/

JOURNALISM (JOUR), prepares students for exciting and fulfilling careers in broadcast journalism, news-editorial journalism, and emerging media. The primary professional aim is to train students as public affairs and enterprise journalists. The Journalism Department seeks to prepare broadly educated professionals who will assume decision-making and leadership roles in a variety of media organizations.

Programs in Journalism

Undergraduate Programs:
- **major:** Journalism, BS (p. 250)
- **major:** Journalism, BS-MJ (p. 460)
- **minors:** Journalism (p. 506) | Media (p. 513)

Graduate Programs:
- **degree:** Journalism, BS-MJ (p. 460)
- **degree:** Journalism, MS (p. 828)
- **joint degree:** Journalism, MS and Law, JD (p. 1156)

The department does not offer a Ph.D. degree. For the program leading to the Doctor of Philosophy in Communications, see Communications and Media, PhD (p. 672).

for the degree of Bachelor of Science Major in Journalism

Code	Title	Hours
Required Major Courses All required courses must be taken for a letter grade.		**44-47**
JOUR 200	Introduction to Journalism	3
JOUR 205	History of American Journalism	3
or JOUR 452	Great Books of Journalism	
JOUR 210	Newsgathering Across Platforms	4
JOUR 215	Multimedia Reporting	4
JOUR 220	News Editing	4
JOUR 250	Journalism Ethics & Diversity	3
JOUR 311	Media Law	3
Select two of the following:		8
JOUR 315	Adv Public Affairs Reporting	
JOUR 340	Video Reporting & Storytelling	
JOUR 425	Multimedia Editing and Design	
Select three of the following:		9-12
JOUR 335	Audio Journalism	
JOUR 430	Augmented and Virtual Reality	
JOUR 445	Video Storytelling 2-Producing	
JOUR 471	Science Journalism	
JOUR 472	Business Reporting	
JOUR 480	Advanced Reporting Topics	
JOUR 482	Immersion Journalism	
JOUR 483	Investigative Journalism	
Select one of the following:		3
JOUR 450	Media and Public Opinion	
JOUR 451	Research Methods in Journalism (or equivalent)	
JOUR 454	Propaganda & the News Media	
JOUR 460	Special Topics (department approval required)	
Journalism Electives		**9**
Any Journalism course at the 200-level or above. Courses from the list above not used to complete requirements may be taken as electives.		
Minor or Specialization		**18**
A campus-approved minor, or one 18-hour specialization, or two 9-hour specializations (with at least 6 hours at the 300-level or above), approved by advisor.		

Statistical Methods Course (Choose 1)		**3-4**
STAT 107	Data Science Discovery (recommended)	4
STAT 100	Statistics	3
SOC 280	Intro to Social Statistics	4
PSYC 235	Intro to Statistics	3
ECON 202	Economic Statistics I	3
EPSY 280	Elements of Statistics	4
UP 116	Urban Informatics I	3
or other approved statistical methods course		
General Education Requirements		**29-41**
The department maintains a list of recommended courses to fulfill General Education requirements. Some courses may fulfill multiple General Education categories. Courses may also fulfill both major requirements and General Education categories.		
Composition I		4
Advanced Composition (JOUR 200 can fulfill)		3
Quantitative Reasoning I (statistical methods courses listed above can fulfill)		3-4
Quantitative Reasoning II (JOUR 451 can fulfill)		3
Humanities and the Arts (JOUR 205, JOUR 452 can fulfill)		3
Cultural Studies: Western Comparative		3
Cultural Studies: US Minority Cultures		3
Cultural Studies: Non-Western Cultures		3
Natural Science and Technology		6
Social and Behavioral Sciences		6
Minimum Total Hours required for graduation		**124**

Learning Outcomes: Journalism, BS

Learning outcomes for the degree of Bachelor of Science Major in Journalism

Student Learning Outcomes are adapted from requirements of the accrediting body for the Department of Journalism (ACEJMC)

1. Understand and apply principles and laws related to media and freedom of information
2. Write correctly and clearly in appropriate forms and styles
3. Apply basic numerical and statistical concepts
4. Apply current tools and technologies appropriate for the communications profession and to understand the digital world.
5. Demonstrate understanding of the history of journalism development and the role of professionals and institutions in shaping communications
6. Demonstrate an understanding of journalism ethical principles
7. Demonstrate understanding of diversity, both domestic and global
8. Understand concepts and apply theories in the use and presentation of images
9. Conduct research and evaluate information by methods appropriate to the profession
10. Demonstrate an ability to think critically and evaluate their own work and that of others
11. Document professional practice through internships, student media and other publication of student work.

Kinesiology, BS

for the Bachelor of Science Major in Kinesiology

Department Website: http://www.kch.illinois.edu/
Department Faculty: Kinesiology & Community Health Faculty (https://ahs.illinois.edu/kch-directory/)
College Catalog Page: Applied Health Sciences (http://catalog.illinois.edu/schools/ahs/academic-units/)
College Website: http://www.ahs.illinois.edu/

Programs in Community Health and Kinesiology

Undergraduate Programs:

- **major:** Community Health, BS (p. 105)
  - **concentration:** Community Health: Health Education & Promotion, BS (p. 106)
  - **concentration:** Community Health: Health Planning & Administration, BS (p. 110)
  - **concentration:** Community Health: Rehabilitation Studies, BS (p. 114)
- **major:** Kinesiology, BS (p. 251)
  - **concentration:** Kinesiology: Teacher Certification, BS (p. 253)
- **minor:** Kinesiology (p. 507)
- **minor:** Disability Studies (http://catalog.illinois.edu/undergraduate/ahs/minors/disability-studies/)
- **joint degree:** Community Health, BS and Public Health, MPH (p. 118)
- **joint degree:** Community Health, BS and Epidemiology, MPH (p. 462)
- **joint degree:** Kinesiology, BS and Public Health, MPH (p. 465)
- **joint degree:** Kinesiology, BS and Epidemiology, MPH (p. 463)
- **joint degree:** Interdisciplinary Health Sciences, BS & Epidemiology, MPH (p. 458)

Graduate Programs:

- **degree:** Kinesiology, MS (http://catalog.illinois.edu/graduate/ms_kines/)
- **degree:** Kinesiology, PhD (http://catalog.illinois.edu/graduate/graduate-majors/kinesiology/#doctoratestext)
- **degree:** Community Health, MS (http://catalog.illinois.edu/graduate/graduate-majors/community-health/ms-comm-health/)
- **degree:** Rehabilitation, MS (http://catalog.illinois.edu/graduate/graduate-majors/community-health/ms-rehab/)
- **degree:** Public Health, MPH (http://catalog.illinois.edu/graduate/graduate-majors/community-health/master-pub-health/)
- **joint degree:** Community Health, BS and Public Health, MPH (p. 118)
- **joint degree:** Kinesiology, BS and Public Health, MPH (p. 465)

The Kinesiology curriculum leads to a bachelor of science degree that will prepare students for careers in human movement-related fields and/or advanced professional or graduate study. The undergraduate program provides the student with a broad general education, a departmental core integral to the understanding of the diverse aspects of human movement, and a correlate area of courses specific to the student's area of concentration within Kinesiology.

The Kinesiology program is committed to the study and research of human movement in all its dimensions. Undergraduate study focuses

on exercise stress, movement efficiency, and fitness; the social, cultural, and psychological aspects of participation in physical activity and sport; coordination, control, and skill of physical activity; physical growth, development, and body form throughout the lifespan; the effects of therapeutic techniques of Kinesiology upon recovery from physical injury; and the instructional process of teaching/coaching of physical activity and sport.

The curriculum combines a comprehensive liberal arts and sciences education with in-depth study in a particular area of interest. The program of study provides knowledge and understanding essential for human movement and sport careers in either public or private agencies. The hours required for graduation include prescribed courses for all students as well as requirements determined by the various areas of emphasis selected by the student. Teaching and research emphasize hands-on learning through the use of technology and modern laboratory equipment. Graduates find employment in a variety of fields including teaching, corporate fitness, coaching, and athletic training. Many students continue their education and become physical therapists, physicians, exercise physiologists, and sport psychologists.

A 5 year BS MPH joint degree program is available for students majoring in Community Health, I-Health, or Kinesiology. Students apply for the program in the latter part of their third year (junior year) of study. Students accepted into the BS MPH joint degree program take 12 credit hours of coursework in their senior year that apply to both BS and MPH degrees. In the 5th year of study, students complete the remaining requirements for the MPH degree, and graduate simultaneously with both BS and MPH degrees. The requirements are explained in more detail on the MPH program website: http://www.mph.illinois.edu/Program/.

for the Bachelor of Science Major in Kinesiology

Requirements Including General Education

The Kinesiology Program requires that General Education requirements must be selected from the Campus General Education course list. The prescribed courses prepare the student for upper division study and may be used to satisfy General Education requirements provided they are on the appropriate General Education list. Specifically required General Education courses are listed below.

Code	Title	Hours
Communication Arts		
Composition I and an approved speech performance course; or CMN 111 and CMN 112		6-7
Advanced Composition (KIN 340 fulfills requirement)		3
Quantitative Reasoning I & II		
From the approved campus list		6
Humanities and Arts		
From the approved campus list		6
Behavioral and Social Sciences [1]		
KIN 140	Social Sci of Human Movement (Social Science)	3
KIN 259	Motor Development and Control	3
Natural Sciences		
KIN 150	Bioscience of Human Movement (Life Science)	3
From the approved campus physical science list		3
Cultural Studies [2]		
From Western Cultures approved campus list		3
From Non-Western Cultures approved campus list		3
From U.S. Minority Cultures approved campus list		3
Foreign language: Completion through the third level of the same language in high school or college		
Anatomy		
MCB 244 & MCB 245	Human Anatomy & Physiology I and Human Anat & Physiol Lab I	5
MCB 246 & MCB 247	Human Anatomy & Physiology II and Human Anat & Physiol Lab II	5
Kinesiology and Community Health Department Core		
CHLH 101	Introduction to Public Health	3
KIN 122	Physical Activity and Health	3
Kinesiology Core Requirements		
KIN 125	Orientation KIN & Comm Health	1
KIN 140	Social Sci of Human Movement [3]	3
KIN 150	Bioscience of Human Movement [3]	3
KIN 201	Physical Activity Research Methods	3
KIN 259	Motor Development and Control [3]	3
KIN 340	Social & Psychological Aspects of Physical Activity [3]	3
KIN 352	Bioenergetics of Movement	3
KIN 355	Biomechanics of Human Movement	3

1 *Students pursuing teacher licensure must complete* PSYC 100 *or* PSYC 103 in addition to KIN 259.

2 *Courses in cultural studies may be completed through other categories where appropriate.*

3 *Fulfills University General Education Requirements*

Kinesiology Program Guided Electives

Code	Title	Hours
Elective Kinesiology Courses		
All courses must be at the 200, 300, or 400 level. At least six or more hours must be at the 400 level (at least 12 hours).		12
Correlate Area Studies		
Students select a standardized correlate that will prepare them for further education toward their career goals (at least 18 hours).		18

Summary of Degree Requirements

Code	Title	Hours
General Education and supporting coursework		49
Kinesiology and Community Health Department Core		6
Kinesiology Core		22
Elective Kinesiology courses		12
Correlate Area		18
Free electives		21
Total Hours		128

Kinesiology: Teacher Certification, BS

for the Bachelor of Science Major in Kinesiology, Teacher Certification Concentration

Programs in Community Health and Kinesiology

Undergraduate Programs:

- **major:** Community Health, BS (p. 105)
  - **concentration:** Community Health: Health Education & Promotion, BS (p. 106)
  - **concentration:** Community Health: Health Planning & Administration, BS (p. 110)
  - **concentration:** Community Health: Rehabilitation Studies, BS (p. 114)
- **major:** Kinesiology, BS (p. 251)
  - **concentration:** Kinesiology: Teacher Certification, BS (p. 253)
- **minor:** Kinesiology (p. 507)
- **minor:** Disability Studies (http://catalog.illinois.edu/undergraduate/ahs/minors/disability-studies/)
- **joint degree:** Community Health, BS and Public Health, MPH (p. 118)
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- **joint degree:** Kinesiology, BS and Epidemiology, MPH (p. 463)
- **joint degree:** Interdisciplinary Health Sciences, BS & Epidemiology, MPH (p. 458)

Graduate Programs:

- **degree:** Kinesiology, MS (http://catalog.illinois.edu/graduate/ms_kines/)
- **degree:** Kinesiology, PhD (http://catalog.illinois.edu/graduate/graduate-majors/kinesiology/#doctoratestext)
- **degree:** Community Health, MS (http://catalog.illinois.edu/graduate/graduate-majors/community-health/ms-comm-health/)
- **degree:** Rehabilitation, MS (http://catalog.illinois.edu/graduate/graduate-majors/community-health/ms-rehab/)
- **degree:** Public Health, MPH (http://catalog.illinois.edu/graduate/graduate-majors/community-health/master-pub-health/)
- **joint degree:** Community Health, BS and Public Health, MPH (p. 118)
- **joint degree:** Kinesiology, BS and Public Health, MPH (p. 465)

Application to the Teacher Licensure curriculum is made at the end of the sophomore year. Admission depends on meeting minimum grade point average requirements. In order to remain in good standing in this program and be recommended for licensure, candidates are required to maintain UIUC, cumulative, and content area grade point averages of 2.5 (A=4.0), and a professional education grade point average of 3.0. Candidates should consult their advisor or the Council on Teacher Education for the list of courses used to compute these grade point averages.

Code	Title	Hours
Required Electives and Correlate Area Studies		
KIN 360	Adapted Physical Education	3
KIN 361	Curriculum in Grades K-6	3
KIN 362	Curriculum in Grades 7-12	3
KIN 363	Instructional Strategies in PE	3
KIN 364	Exper in the Common School	3
KIN 401	Measure & Eval in Kinesiology	3
KIN 460	Technology & Pedagogical KINES	3
KIN 260	Teaching Activities I	3
KIN 261	Teaching Activities II	2
CI 473	Disciplinary Literacy	2
EPS 201	Foundations of Education	3
EPSY 201	Educational Psychology	3
EDPR 438	Educational Practice in Special Fields	8
EDPR 442	Educational Practice in Secondary Education	8

Learning Outcomes: Kinesiology, BS

Learning outcomes for the Bachelor of Science Major in Kinesiology

1. **Content Knowledge**: Students will know and comprehend the significant theories, models, themes, and ideas in the biomechanical, physiological, behavioral, pedagogical, biological, socioeconomic, environmental, and sociocultural correlates of Kinesiology and Community Health.
2. **Critical Thinking and Discovery**: Students will comprehend and demonstrate ethical practices and the application of scientific findings and/or critical analysis in order to interpret, promote inquiry, propose solutions, and/or create new ideas related to health, rehabilitation, and/or human movement.
3. **Awareness and Understanding**: Students will understand and appreciate the diverse socioeconomic, behavioral, sociocultural, biological, environmental, philosophical, and historical factors that influence health, rehabilitation, and human movement.
4. **Programming and Assessment**: Students will apply best practices in developing, implementing, assessing, and evaluating programs and interventions related to health promotion, physical activity adoption and adherence, and the prevention and treatment of diseases.
5. **Leadership and Engagement**: Students will demonstrate leadership and effective communication skills, showcasing an appreciation and commitment to health and physical activity as they develop and sustain productive relationships and work for the common good at local, national, and global levels.

Landscape Architecture, BLA

for the degree of Bachelor of Landscape Architecture

department website: https://landarch.illinois.edu/

department faculty: https://landarch.illinois.edu/faculty/
overview of college admissions & requirements: http://catalog.illinois.edu/schools/faa/academic-units/
college website: https://faa.illinois.edu/
email: ladept@illinois.edu

The department's administrative office, upper-level studios, faculty offices, and classrooms are located in Temple Hoyne Buell Hall. The department also has a studio is located in Mumford Hall.

for the degree of Bachelor of Landscape Architecture

A student must have and maintain a minimum 2.00 cumulative grade point average.

University of Illinois transfer applicants must have completed 30 or more semester hours of undergraduate course work with an earned GPA of at least 2.0 (A = 4.0). Transfer students from other institutions must have earned a GPA of at least 2.5 (A = 4.0). Prerequisite credits in composition and pre-calculus or introductory statistics are required. Courses in physical geography and plant or environmental biology are highly recommended.

General Education Requirements

Code	Title	Hours
Some courses may fulfill multiple General Education categories. Courses may also fulfill both major requirements and Gen Ed categories.		
Composition I		4
Advanced Composition (LA 314 fulfills)		
Quantitative Reasoning I (specific course required):		3
STAT 100	Statistics	
or MATH 115	Preparation for Calculus	
Quantitative Reasoning II		3
Humanities and the Arts (LA 314 fulfills)		
Humanities and the Arts (some courses in Social/Cultural Factors in Design Elective category will fulfill this)		0-3
Cultural Studies: Western Comparative Cultures (LA 314 fulfills)		
Cultural Studies: U.S. Minority Culture(s)		3
Cultural Studies: Non-Western Cultures (some courses in Social/Cultural Factors in Design Elective category will fulfill this)		0-3
Natural Sciences & Technology (specific courses required)		6-8
GEOG 103	Earth's Physical Systems	
or GEOL 100	Planet Earth	
IB 103	Introduction to Plant Biology	
or IB 105	Environmental Biology	
Social and Behavioral Sciences		6
Total		**25-33**
Language Other than English [1]		**0-12**

[1] *General Education Language Requirement: Options to satisfy this requirement are noted in the* Course Explorer. *(*https://courses.illinois.edu/gened/DEFAULT/DEFAULT/*)*

Landscape Architecture Curriculum

Code	Title	Hours
College Orientation		**1**
FAA 101	Arts at Illinois	1
Construction, Plant Materials & Design, History, & Design Communications		**29**
LA 101	Introduction to Landscape Arch	2
LA 241	Landform Design & Construction	3
LA 250	Environmental Site Analysis	3
LA 280	Design Communications I	3
LA 281	Design Communications II	3
LA 314	History of World Landscapes	4
LA 342	Site Engineering	4
LA 343	Landscape Construction	4
LA 452	Natural Precedent in Planting	3
Design Studio Courses		**30**
LA 233	Foundation Design Studio	5
LA 234	Site Design Studio	5
LA 335	Community & Open Space Studio	5
LA 336	Design Workshop Studio I	5
LA 437	Regional Design Studio	5
LA 438	Design Workshop Studio II	5
Professional Preparation		**7**
LA 345	Professional Internship	5
LA 346	Professional Practice	2
Supporting Electives (chosen from list in tab above: three credit hours in each of the categories of history, communications, techniques, and environment)		**12**
Social/Cultural Factors in Design Elective (pick one):		**3**
LA 212	Water and Society	
LA 218	S Asian Cultural Landscapes	
LA 220	Exploring African Cities	
LA 221	History of the Prison	
LA 222	Islamic Gardens & Architecture	
LA 242	Nature and American Culture	
LA 270	Behavioral Factors in Design	
LA 470	Social/Cultural Design Issues	
Urban & Regional Planning		**3**
UP 101	Introduction to City Planning	3
Horticulture		**4**
HORT 301		

Code	Title	Hours
Total Credits for BLA		
General Education		25-33
Language Other than English [1]		0-12
Landscape Architecture Curriculum		89
Free Electives		0-10
Total		124

for the degree of Bachelor of Landscape Architecture

Professional Supporting Electives

A student in landscape architecture must complete a minimum of 12 hours of professional supporting electives, with a minimum of at least three hours selected from each of four categories: COMMUNICATIONS, HISTORY, TECHNIQUE, and ENVIRONMENT.

Code	Title	Hours
Category I COMMUNICATIONS:		
Courses for the development of graphic, visual, verbal and written communication skills.		
ART 100	Understanding Visual Culture	3
ART 102	Drawing for Non-Majors	3
ART 103	Painting for Non-Majors	3

ART 105	Visual Design for Non-Majors	3
ART 310	Design Thinking	3
BTW 250	Principles Bus Comm	3
BTW 272	Report Writing	3
CMN 101	Public Speaking	3
CMN 211	Business and Professional Communication	3
CMN 230	Intro to Interpersonal Comm	3
RHET 233	Adv Rhetoric & Composition	3

Code	Title	Hours
Category II HISTORY:		
Courses providing a historical perspective in art, architecture, urban planning, or cultural development.		
ANTH 102	Human Origins and Culture	4
ANTH 103	Anthro in a Changing World	3
ANTH 220	Introduction to Archaeology	3
ANTH 230	Sociocultural Anthropology	3
ARCH 210	Introduction to the History of World Architecture	3
ARCH 410	Ancient Egyptian & Greek Arch	3
ARCH 411	Ancient Roman Architecture	3
ARCH 412	Medieval Architecture	3
ARCH 413	Renaissance Architecture	3
ARCH 414	Baroque & Rococo Arch	3
ARCH 415	Modernity's Mirror: Nineteenth-Century Architecture 1750-1900	3
ARCH 416	The Architecture of the United States, c.1650 to Present	3
ARCH 417	Modern and Contemporary Global Architecture	3
ARCH 418	History of the Urban Environment	3
ART 140	Introduction to Art	3
ARTH 111	Ancient to Medieval Art	4
ARTH 112	Renaissance to Modern Art	4
ARTH 113	Introduction to African Art	4
ARTH 114		4
ARTH 115		4
ARTH 217	Development of Ancient Cities	3
ARTH 235	Art, Power and Culture in 17th-Century Europe	3
ARTH 241	Modern Art, 1880-1940	3
ARTH 350	American Art 1750-1900	3
ARTH 445	European Art Between the Wars	3 or 4
LA 242	Nature and American Culture	3
LA 315	History of Modern Landscape Architecture	3
LA 427	Amer Vernacular Cultural Land	4

Code	Title	Hours
Category III TECHNIQUE:		
Professional courses dealing with subject matter of a scientific or technical nature.		
ACCY 200	Fundamentals of Accounting	3
ACE 100	Introduction to Applied Microeconomics	4
ACE 161	Microcomputer Applications	3
ACE 210	Environmental Economics	3
ACE 310	Natural Resource Economics	3
ACE 403	Agricultural Law	3 to 4
ACE 406	Environmental Law	3 to 4
ARCH 419	Historic Building Preservation	3
BADM 300	The Legal Environment of Bus	3
BADM 310	Mgmt and Organizational Beh	3
BADM 320	Principles of Marketing	3
BADM 377	Project Management	3
BADM 446	Entrepreneurship: New Venture Creation	4
CS 105	Intro Computing: Non-Tech	3
ECON 102	Microeconomic Principles	3
FIN 241	Fundamentals of Real Estate	3
GEOG 280	Intro to Social Statistics	4
GEOG 371	Spatial Analysis	4
GEOG 379	Intro to GIS Systems	4
GEOG 473	Digital Cartography & Map Design	4
GEOG 477	Introduction to Remote Sensing	3
GEOL 107	Physical Geology	4
GEOL 208	History of the Earth System	4
GEOL 401	Geomorphology	4
HDFS 262	Motor Develop, Growth & Form	3
HDFS 404	Gerontology	3 or 4
HORT 240	Plant Propagation	3
HORT 344	Planting for Biodiversity and Aesthetics	3
NRES 201	Introductory Soils	4
NRES 471	Pedology	3
NRES 474	Soil and Water Conservation	3
UP 116	Urban Informatics I	3

Code	Title	Hours
Category IV ENVIRONMENT:		
Courses that investigate the environment, natural systems, and environmental planning.		
ANTH 103	Anthro in a Changing World	3
ANTH 143	Biology of Human Behavior	3
ANTH 230	Sociocultural Anthropology	3
ANTH 423	Economic Anthropology	3 or 4
ENVS 101	Introduction to Energy Sources	3
ENVS 336	Tomorrow's Environment	3
GEOG 204	Cities of the World	3
GEOG 210	Social & Environmental Issues	3
GEOG 224	Environmental Data Science	3
GEOG 384	Population Geography	3
GEOG 410	Green Development	4
GEOG 483	Urban Geography	3
GEOL 104	Geology of the National Parks	3
GEOL 118	Natural Disasters	3
GEOL 143	History of Life	3
IB 150	Organismal & Evolutionary Biol	4
IB 203	Ecology	4
LA 450	Ecology for Land Restoration	4
LA 470	Social/Cultural Design Issues	3

NRES 100	Fundamentals of Env Sci	3
NRES 109	Global Environmental Issues	3
NRES 219	Applied Ecology	3
NRES 419	Env and Plant Ecosystems	3
RST 140	Nature and Wilderness	2
SOC 375	Criminal Justice System	3
UP 205	Ecology & Environmental Sustainability	3
UP 260	Social Inequality and Planning	3
UP 405	Watershed Ecology and Planning	4

for the degree of Bachelor of Landscape Architecture

A student must have and maintain a minimum 2.00 cumulative grade point average.

University of Illinois transfer applicants must have completed 30 or more semester hours of undergraduate course work with an earned GPA of at least 2.0 (A = 4.0). Transfer students from other institutions must have earned a GPA of at least 2.5 (A = 4.0). Prerequisite credits in composition and pre-calculus or introductory statistics are required. Courses in physical geography and plant or environmental biology are highly recommended.

Curriculum in Landscape Architecture

First Year

First Semester		Hours
FAA 101	Arts at Illinois	1
GEOG 103 or GEOL 100[1]	Earth's Physical Systems	3-4
RHET 105	Writing and Research	4
STAT 100 or MATH 115 (To fulfill the Quantitative Reasoning I requirement)	Statistics	3
General Education Elective or Foreign Language		4
	Semester Hours	15

Second Semester		
LA 101	Introduction to Landscape Arch	2
Social/Cultural Factors in Design Elective[3]		3
IB 103 or 105[1]	Introduction to Plant Biology	3
General Education Electives[2]		7
	Semester Hours	15

Second Year

First Semester		
LA 233	Foundation Design Studio	5
LA 241	Landform Design Construction	3
LA 280	Design Communications I	3
UP 101	Introduction to City Planning	3
General Education Elective		3
	Semester Hours	17

Second Semester		
LA 234	Site Design Studio	5
LA 250	Environmental Site Analysis	3
LA 281	Design Communications II	3
LA 314	History of World Landscapes	4
	Semester Hours	15

Third Year

First Semester		
LA 335	Community Open Space Studio	5
LA 342	Site Engineering	4
HORT 301		
LA 346	Professional Practice	2
	Semester Hours	11

Second Semester		
LA 336	Design Workshop Studio I	5
LA 343	Landscape Construction	4
General Education Elective		3
Supporting Elective[4]		3
	Semester Hours	15

Summer Semester		
LA 345	Professional Internship	5
	Semester Hours	5

Fourth Year

First Semester		
LA 437	Regional Design Studio	5
LA 452	Natural Precedent in Planting	3
Supporting elective[4]		3
Quantitative Reasoning II		3
	Semester Hours	14

Second Semester		
LA 438	Design Workshop Studio II	5
Supporting electives[4]		6
Elective		2
	Semester Hours	13
	Total Hours:	120

1 *IB 103 or IB 105 and GEOG 103 or GEOL 100 fulfill the natural sciences and technology general education requirements for this curriculum.*

2 *General Education: See current University of Illinois* General Education requirements (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/). *Foreign Language Requirement 0 - 12 hours: Students entering the University of Illinois as freshmen in fall 2000 or later need to complete the foreign language requirement in order to graduate. To satisfy this requirement, students must complete a third semester level college foreign language course. This requirement may also be satisfied by three years of the same foreign language in high school. Students entering the University of Illinois without three years of the same foreign language in high school must take a foreign language placement test to determine the courses in which to enroll.*

3 *Social/Cultural factors elective course options are LA 212, LA 218, LA 220, LA 221, LA 222, LA 242, LA 270, and LA 470.*

[4] *A minimum of 12 credit hours of professionally related courses selected from the department's recommended list of supporting electives is required, with a minimum of three credit hours in each of the categories of history, communications, techniques, and environment.*

Learning Outcomes: Landscape Architecture, BLA

Learning outcomes for the degree of Bachelor of Landscape Architecture

Bachelor of Landscape Architecture students will:

1. **Build Knowledge & Develop Reasoning Skills** in applying broad and deep knowledge across academic disciplines and fields and using this knowledge to develop design proposals.
2. Apply knowledge of the **Natural World** to guide design decisions and activities taking into account natural resource constraints that impact land use.
3. **Strengthen Social Awareness** to better understand the social and cultural influences on human behavior and the social, political, economic, and legal institutions which influence land-use and design decisions.
4. Employ **Creative Inquiry and Discovery** in addition to a range of analytical skills, and general knowledge to develop design proposals, solve problems, generate new ideas, and produce creative work.
5. Demonstrate **Responsible Leadership** in working with the land and the people for whom we design.

Latin American Studies, BALAS

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Latin American Studies

center website: http://www.clacs.illinois.edu/academics/undergrad/und_major.aspx
center faculty: Latin American Studies Faculty (http://www.clacs.illinois.edu/about/people/faculty.aspx)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: clacs@illinois.edu

A major in Latin American Studies, which is administered by the Center for Latin American and Caribbean Studies, provides an integrated exploration of a major world area. Depending upon the student's interests and career aspirations, individual programs of study are designed in close consultation with the Associate Director of the Center, who also serves as the academic adviser. Consultation revolves around the career goals of the student. The undergraduate program reflects an integrative, cross-disciplinary approach, and courses must be taken from these categories:

1. LAST 170 (http://catalog.illinois.edu/search/?P=LAST%20170)- Introduction to Latin American Studies;
2. Approved courses with content focused on Latin America;
3. Approved courses with content focused on Latin America in a global context;
4. LAST 490 (http://catalog.illinois.edu/search/?P=LAST%20490) - Independent Study, or approved Study Abroad course, or approved service-learning course.

Courses for the major must be selected in consultation with the Associate Director of the Center.

Students are also expected to demonstrate a substantial command of a Latin American language (Spanish, Portuguese, Quechua or other Native American language indigenous to MesoAmerica or South America), either by passing a proficiency examination or through advanced courses of Latin American language(s) beyond the general Liberal Arts and Sciences language requirement.

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Latin American Studies

Each student's course of study is devised in consultation with the Associate Director of the Center for Latin American and Caribbean Studies and is subject to the Associate Director's approval.

A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office before the end of the fifth semester (60-75 hours). Please see your adviser.

Departmental distinction: To be eligible, a student must achieve at least a 3.5 grade point average in the major, complete a senior thesis, and receive the approval of the center's research committee.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 33 hours. Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
LAST 170	Introduction to Latin America [1]	3
Approved courses with primary focus on Latin America.		12
Approved courses with primary focus on Latin America in a global context.		12
LAST 490	Individual Study (or an approved study abroad course or an approved service-learning course.) [2]	3
Advanced language course in a Latin American language (Spanish, Portuguese, Quechua, or other Native American language indigenous to Mexico, Central, or South America) beyond the level specified by the LAS language requirement, or the equivalent as demonstrated by special examination. At the end of their language study, all students are urged to take an oral proficiency test based on ACTFL guidelines.		3
Total Hours		33

[1] *Normally taken in the freshman or sophomore year.*

[2] *Normally taken in the senior year.*

Learning Outcomes: Latin American Studies, BALAS

Learning Outcomes for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Latin American Studies

1. **Strong Declarative Knowledge Base** on Latin American Culture and its position in the broader global world
   - Students should understand the diversity and complexity of Latin American cultures and languages and their historical, cultural, political, and economic development.
   - Students should develop appropriate expertise on a sub-region or culture of Latin America and/or a thematic topic related to Latin America
   - Students should also be able to place their knowledge of Latin American in a broader global context.
2. **Critical Thinking**
   - Students should be able to critically and reasonably evaluate and formulate claims about social, cultural, political, historic, and economic issues related to Latin America in both academic and popular media.
   - Students should be able to critically and reasonably evaluate and apply their knowledge to real world problems.
3. **Effective Written Communication**
   - Students should be able to identify research problems, approach these problems with appropriate methodologies and effectively communicate the results. They should be able to apply their knowledge to real world situations.
   - Students should be able to effectively communicate their knowledge of Latin American culture and language to a broad non-specialist audience.
4. **Advanced Proficiency in Spanish or Portuguese OR Intermediate – High proficiency in an Indigenous Latin American Language** - This will be assessed through completion of appropriate level course work and through OPI or equivalent testing.

Latina/Latino Studies, BALAS

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Latina/Latino Studies

department website: https://lls.illinois.edu/
department faculty: Latina/Latino Faculty (https://lls.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: lls-studies@illinois.edu **or** aprodrig@illinois.edu

The Undergraduate Major in Latina/Latino Studies explores the experiences and lives of Latinas/os in the context of the United States. The major provides a broad and deep approach to theory, research, and multidisciplinary study of the Latina/o experience. Students will complete 34 hours of required and elective courses, and a minimum of 18 hours of supporting course work or a minor in an area outside of the major. Students majoring in Latina/Latino Studies receive excellent preparation for graduate study or careers in education, social and welfare policy, counseling, law, public policy, and other fields that address Latino issues.

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Latina/Latino Studies

Advising: The Department of Latina/Latino Studies provides advising for students. Students will also be assigned a faculty advisor to help plan a coherent program in their selected area of study.

Departmental distinction: To graduate with distinction in Latina/Latino Studies, a student must have at least a 3.25 overall GPA, a minimum 3.5 GPA in the major, and complete a senior honors thesis. To complete the honors thesis requires a student to enroll in four hours of LLS 495, normally distributed evenly across two consecutive semesters. Students graduating with at least a 3.5 GPA in the major (and meeting the other conditions) will be awarded Distinction; those with at least a 3.7 GPA in the major will be given High Distinction.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: 52 hours required, including 34 hours in Latina/Latino Studies courses. Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
LLS 100	Intro Latina/Latino Studies	3
LLS 385	Theory and Methods in LLS	3
Thematic Areas		
Students must take two courses in each of the following three areas:		
A. Literature, Media and Culture		6
LLS 240	Latina/o Popular Culture	
LLS 242	Intro to Latina/o Literature	
LLS 250	Latina/os on the Bronze Screen	
LLS 259	Latina/o Anthropology	
LLS 301	19thC US Latina/o Lit-ACP	
LLS 357	Literatures of the Displaced	
LLS 360	Contemporary US Latina/o Lit	
LLS 365	Chicana/Latina Autobiography, Memoir, Testimonio	
LLS 375	Latina/o Media in the US	
LLS 410	Writing Latina/o Chicago	
LLS 435	Commodifying Difference	
LLS 458	Latina/o Performance	

LLS 472	Border Latina, Latino Cultures	
B. Race, Gender, and Sexuality		6
LLS 230	Latina/o Genders & Sexualities	
LLS 235	Race and the Politics of Reproduction	
LLS 265	Politics of Hip Hop	
LLS 320	Gender & Latina/o Migration	
LLS 355	Race and Mixed Race	
LLS 387	Race, Gender and the Body	
LLS 392	Chicanas&Latinas: Self&Society	
LLS 442	Latina Literature	
LLS 465	Race, Sex, and Deviance	
LLS 479	Race, Medicine, and Society	
C. History, Politics, and Society		6
LLS 220	Latina/o Migration	
LLS 238	Latina/o Social Movements	
LLS 278	Mapping Latina/o Inequalities	
LLS 279	Mexican-American History	
LLS 280	Caribbean Latina/o Migration	
LLS 343	Criminalization and Punishment	
LLS 368	Latinas/os & Public Policy	
LLS 370	Latina/o Ethnography	
LLS 379	Latina/os and the City	
LLS 382	Race and Migration in Chicago	
LLS 468	Latinas/os & the Law	
LLS 473	Immigration, Health & Society	
LLS 490	Research and Writing Seminar	4
or LLS 495	Senior Honors Thesis	
LLS Electives selected from the list of all LLS and cross-listed LLS classes		6
Supporting coursework chosen in consultation with an advisor; may be a campus approved minor		18
Total Hours		52

Learning Outcomes: Latina/Latino Studies, BALAS

Learning Outcomes for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Latina/Latino Studies

1. **Intellectual Reasoning and Knowledge:** Students will become proficient in the field of Latina/Latino Studies, which includes, but is not limited to, interdisciplinary, intersectional, and transnational knowledge about:
   a. sociohistorical, political, economic and cultural processes that affect Latina/Latino groups in contemporary society;
   b. Latina/Latino social movements;
   c. Latina/Latino cultural productions;
   d. the relationship between class, gender, sexuality, race/ethnicity and migration in the construction of Latina/Latino cultural and racial formations; and
   e. Latina/Latino Studies theories and methods. Students will learn that Latina/Latino Studies is a body of critical inquiry that encompasses a wide range of topics and objects of study, and that leverages multiple forms of knowledge production.
2. **Critical and Creative Inquiry:** Students will apply Latina/Latino Studies theories in developing their capacities for critical and creative inquiry. Specifically, students will exercise their oral and written communication skills as they express new ideas and generate projects that build upon Latina/Latino Studies theories and draw from the range of interdisciplinary Latina/Latino Studies methods.
3. **Self-Reflexivity and Community Engagement:** To help promote effective leadership and community engagement, students will demonstrate self-reflexivity about their ideas as well as about their social and political positions in their classrooms and communities. They will also learn to build and sustain relationships and take leadership towards the elimination of social inequities at the local, national, and global levels.
4. **Social Awareness and Understanding Power:** Student will recognize that Latina/Latino lives and communities unfold within historically unequal and racialized social, cultural, economic, and political power relations. Students will become familiar with Latina/Latino theories and social movements that consider indigeneity, race, class, gender, sexuality and citizenship to understand and intervene on historical and contemporary power formations.
5. **Global Consciousness:** Students will understand how complex and interdependent historical and contemporary global forces—environmental, social, cultural, economic, and political— impact and are impacted by Latinas/Latinos. They will learn to apply Latina/Latino Studies critiques to these forces, including but not limited to those related to migration and transnationalism.

Learning & Education Studies, BS

for the degree of Bachelor of Science Major in Learning & Education Studies

assistant dean for academic affairs: Kathy Ryan
department office: 110 Education Building
1310 South Sixth
Champaign, IL 61820
phone: (217) 333-2800
email: saao@education.illinois.edu
program website: Learning and Education Studies (https://education.illinois.edu/programs/undergrad/learning-and-education-studies/)
faculty: College of Education Faculty (https://education.illinois.edu/faculty-finder/)
overview of college admissions & requirements: U (https://admissions.illinois.edu/myillini-apply/)ndergraduate Admissions (https://education.illinois.edu/programs/undergrad/)
college website: https://education.illinois.edu/

This curriculum prepares individuals for positions requiring expertise in formal and non-formal learning and educational settings that do NOT require licensure (becoming a licensed teacher). Students interested in becoming a licensed teacher should consider the licensure program in the majors of Elementary Education, Early Childhood Education, Special Education, or Middle Grades Education.

A minimum of 120 semester hours is necessary for graduation in the Learning and Education Studies program. Students will spend much of the first two years with general education courses, achieving a solid preparation in the humanities, social and natural sciences, technology and mathematics. In the final two years of the major, students will take

a set of core courses, as well as coursework in one of the following concentrations:

- Applied Learning Science (p. 260)
- Educational Equality and Cultural Understanding (p. 264)
- Workplace Training and Development (p. 266)
- Digital Environments for Learning, Teaching and Agency (p. 262)

for the degree of Bachelor of Science Major in Learning & Education Studies

A minimum of 120 semester hours is necessary for graduation in the Learning and Education Studies program. Students will spend much of the first two years with general education courses, achieving a solid preparation in the humanities, social and natural sciences, technology and mathematics. In the final two years of the major, students will take a set of core courses, as well as coursework in one of the following concentrations:

- Applied Learning Science (p. 260)
- Educational Equality and Cultural Understanding (p. 264)
- Workplace Training and Development (p. 266)
- Digital Environments for Learning, Teaching and Agency (p. 262)

Degree Requirements

Code	Title	Hours
Orientation Seminar		
EDUC 101	Education Orientation Seminar	1

The following degree requirements also meet general education course requirements and must be selected from the campus general education (https://courses.illinois.edu/) course list. Selections of core requirements courses should be made in consultation with the adviser.

Code	Title	Hours
Composition [1]		
Composition I		4-6
Advanced Composition		3-4
Quantitative Reasoning [1]		
An approved basic course in statistical methods such as STAT 100, SOC 280, or PSYC 235		3-4
From approved campus list		3
Natural Sciences and Technology [1]		
From approved campus list		6
Humanities and the Arts [1]		
From approved campus list		6
Social and Behavioral Sciencess [1]		
From approved campus list (must include PSYC 100)		6
Cultural Studies [1]		
From Western Culture(s) approved campus list		3
From U.S. Minority Culture(s) approved campus list		3
From Non-Western Culture(s) approved campus list		3
Language other than English		
Three years of one language other than English in high school or competion of the third semester of college-level language		0-12
Core Requirements [2]		
Choose 2 from the following Education Foundations:		6-7
EPS 201, Foundations of Education; EPS 202, Foundations of Education Advanced Composition; or EDUC 201, Identity and Difference in Edu		
EPSY 220	Career Theory and Practice	
EPSY 236	Child Development in Education	
SPED 117	The Culture of Disability	
Choose 6 from the following, with at least 2 in each area:		18-20
Learning and Instruction:		
CI 210	Introduction to Digital Learning Environments	
CI 415	Language Varieties, Cultures and Learning	
EPOL 350	Social Learning and Knowledge	
EPSY 201	Educational Psychology	
EPSY 400	Psychology of Learning in Education	
EPSY 401	Child Language and Education	
Leadership in a Diverse Global Economy:		
EDUC 202	Social Justice, School and Society [3]	
EPS 310	Race and Cultural Diversity	
EPS 402	Asian American Education [3]	
EPS 405	Historical and Social Barriers	
HRD 414	Facilitation Skills	
HRD 415	Diversity in the Workplace	
Concentration [2]		
Students must complete 24 credit hours within one of the following areas of concentration: 1) Applied Learning Science, 2) Educational Equality and Cultural Understanding, 3) Workplace Training and Development, or 4) Digital Environments for Learning, Teaching and Agency.		24
Electives		
Electives (including minor, if taken)		12-31
Total Hours		120

Total minimum hours include general education, language other than English, concentration and core credits.

1. General Education Requirement. Courses must be selected from the Campus General Education Approved Course List (https://courses.illinois.edu/).
2. Concentration and Core Requirement courses found on the General Education Approved Course List (https://courses.illinois.edu/) may also be credited toward the General Education requirements.
3. Courses except EDUC 202 and EPS 402 may be counted toward both the Core and Concentration requirements.

Learning & Education Studies: Applied Learning Science, BS (AppLeS)

for the degree of Bachelor of Science Major in Learning & Education Studies, Applied Learning Science concentration

assistant dean for academic affairs: Kathy Ryan
department office: 110 Education Building
1310 South Sixth
Champaign, IL 61820
phone: (217) 333-2800
email: saao@education.illinois.edu
program website: Learning and Education Studies (https://education.illinois.edu/programs/undergrad/learning-and-education-studies/)
faculty: College of Education Faculty (https://education.illinois.edu/faculty-finder/)
overview of college admissions & requirements: U (https://admissions.illinois.edu/myillini-apply/)ndergraduate Admissions (https://education.illinois.edu/programs/undergrad/)
college website: https://education.illinois.edu/

The undergraduate non-licensure concentration in Applied Learning Science (AppLeS) will provide a thorough grounding in the learning sciences through an innovative program that includes courses in learning, language understanding, quantitative reasoning and statistics, designing learning environments, and human performance. The program culminates in a capstone course in which the student works on a research project under the direction of one or more faculty members. Graduating students will have a solid preparation for graduate study in this emerging area of scholarship (such as the new Learning Science and Engineering Professional MS Program at Carnegie-Mellon University), as well as in education, psychology, business, law, and other more traditional areas of study. In addition, through their coursework and research experience, international and domestic students will be prepared for a wide range of current (and future) jobs that require expertise in design, analysis, and evaluation of learning environments, as teachers, policy makers, analysts, and professionals in government, healthcare, business, and nonprofit organizations.

Students in the AppLeS concentration will:

- Explore theories, phenomena, and methods in the learning sciences (i.e., the biological, cognitive, dispositional, and sociocultural underpinnings of learning).
- Identify general principles of learning, their contextual variations, and how they can be applied in the classroom, at work and home, and diverse settings of daily life.
- Acquire flexible learning and problem solving skills that can be broadly applied in diverse contexts, including research, quantitative reasoning, communication, and collaborative problem solving.

Students are encouraged to pursue a minor or a coherent set of electives from several departments as approved by their adviser. Suggested minors are: Communication, Computer Science, Informatics, Linguistics, Mathematics or Statistics.

for the degree of Bachelor of Science Major in Learning & Education Studies, Applied Learning Sciences concentration

A minimum of 120 semester hours is necessary for graduation in the Learning and Education Studies program. Students will spend much of the first two years with general education courses, achieving a solid preparation in the humanities, social and natural sciences, technology and mathematics. In the final two years of the major, students will take a set of core courses, as well as coursework in one of the concentrations.

Degree Requirements

Code	Title	Hours
Orientation Seminar		
EDUC 101	Education Orientation Seminar	1

The following degree requirements also meet general education course requirements and must be selected from the campus general education (https://courses.illinois.edu/) course list. Selections of core requirements courses should be made in consultation with the adviser.

Code	Title	Hours
Composition [1]		
Composition I		4-6
Advanced Composition		3-4
Quantitative Reasoning [1]		
An approved basic course in statistical methods such as STAT 100, SOC 280, or PSYC 235		3-4
From approved campus list		3
Natural Sciences and Technology [1]		
From approved campus list		6
Humanities and the Arts [1]		
From approved campus list		6
Social and Behavioral Sciencess [1]		
From approved campus list (must include PSYC 100)		6
Cultural Studies [1]		
From Western Culture(s) approved campus list		3
From U.S. Minority Culture(s) approved campus list		3
From Non-Western Culture(s) approved campus list		3
Language other than English		
Three years of one language other than English in high school or competion of the third semester of college-level language		0-12
Core Requirements [2]		
Choose 2 from the following Education Foundations:		6-7
EPS 201, Foundations of Education; EPS 202, Foundations of Education Advanced Composition; or EDUC 201, Identity and Difference in Edu		
EPSY 220	Career Theory and Practice	
EPSY 236	Child Development in Education	
SPED 117	The Culture of Disability	
Choose 6 from the following, with at least 2 in each area:		18-20
Learning and Instruction:		
CI 210	Introduction to Digital Learning Environments	
CI 415	Language Varieties, Cultures and Learning	
EPOL 350	Social Learning and Knowledge	
EPSY 201	Educational Psychology	
EPSY 400	Psychology of Learning in Education	
EPSY 401	Child Language and Education	
Leadership in a Diverse Global Economy:		
EDUC 202	Social Justice, School and Society [3]	
EPS 310	Race and Cultural Diversity	
EPS 402	Asian American Education [3]	
EPS 405	Historical and Social Barriers	
HRD 414	Facilitation Skills	

HRD 415	Diversity in the Workplace	
Concentration [2]		
Students must complete 24 credit hours within one of the following areas of concentration: 1) Applied Learning Science, 2) Educational Equality and Cultural Understanding, 3) Workplace Training and Development, or 4) Digital Environments for Learning, Teaching and Agency.		24
Electives		
Electives (including minor, if taken)		12-31
Total Hours		120

Total minimum hours include general education, language other than English, concentration and core credits.

1 General Education Requirement. Courses must be selected from the Campus General Education Approved Course List (https://courses.illinois.edu/).

2 Concentration and Core Requirement courses found on the General Education Approved Course List (https://courses.illinois.edu/) may also be credited toward the General Education requirements.

3 Courses except EDUC 202 and EPS 402 may be counted toward both the Core and Concentration requirements.

Applied Learning Science (AppLeS) Concentration

The following courses are required for this concentration. Changes/additions to this list can be obtained from the College office. Approvals for substitution must be submitted by petition to the College office for approval by the Assistant Dean for Academic Affairs.

Code	Title	Hours
EPSY 403	Research Methods in Learning Sciences	3
EPSY 480	Educational Statistics	3
Capstone Research Project		3
EPSY 395	Independent Study (1 hour)	
EPSY 398	Thesis (2 hours)	
Choose 2 from the Cognitive Science of Learning area:		6
BCOG 458	Advances in Brain and Cognitive Science	
EPSY 427	Learning from Text	
EPSY 456	Human Performance and Cognition in Context	
EPSY 490	Developments in Educational Psychology (Learning in Everyday Contexts section)	
EPSY 490	Developments in Educational Psychology (Multimedia Comprehension section)	
Choose 2 from the Learning in Social and Developmental Contexts area:		6
CI 424	Child Development & Technology	
EPSY 402	Sociocultural Influence on Learning	
EPSY 404	Adjustment in School Settings	
EPSY 407	Adult Learning and Development	
EPSY 431	Cognitive Development in Educational Context	
Choose 1 from the Learning and Technology area:		3
CI 437	Educational Game Design	
CI 482	Social Learning and Multimedia	
CI 499	Issues and Development in Education (Attention, Learning, and Technology section)	
CI 499	Issues and Development in Education (Designing Learning Spaces section)	
Total Hours		24

Learning & Education Studies: Digital Environments for Learning, Teaching & Agency, BS (DELTA)

for the degree of Bachelor of Science Major in Learning & Education Studies, Digital Environments for Learning, Teaching & Agency concentration

assistant dean for academic affairs: Kathy Ryan
department office: 110 Education Building
1310 South Sixth
Champaign, IL 61820
phone: (217) 333-2800
email: saao@education.illinois.edu
program website: Learning and Education Studies (https://education.illinois.edu/programs/undergrad/learning-and-education-studies/)
faculty: College of Education Faculty (https://education.illinois.edu/faculty-finder/)
overview of college admissions & requirements: U (https://admissions.illinois.edu/myillini-apply/)ndergraduate Admissions (https://education.illinois.edu/programs/undergrad/)
college website: https://education.illinois.edu/

The undergraduate non-licensure concentration in Digital Environments for Learning, Teaching, and Agency (DELTA) will provide students with a strong background in the design, development and implementation of technology for a range of learning environments. Courses will introduce students to learning theory, designing and using technology to support learning, and issues encountered when deploying technology to schools, workplaces and informal learning spaces. The program culminates in a capstone course in which students work on a design project under the direction of one or more faculty members.

Graduating students will be prepared to engage with various stakeholders interested in using technology to support learning in a range of different contexts. Examples include selecting and deploying appropriate technology to support pedagogic goals for schools, corporations, or informal learning environments such as museums and afterschool clubs, designing educational games or toys and educational application development. One of the main objectives for students in DELTA is to build new ways to support learning, and prepare them for leadership roles in formal and informal environments, technology design and implementation strategies. They will also be prepared to pursue graduate study in a range of programs, such as educational technology, learning sciences, or instructional technology at the University of Illinois or elsewhere.

Students are encouraged to pursue a relevant minor or coherent set of electives from several related departments. Suggested minors include: computer science, communication, psychology, informatics, media and cinema studies or sociology. Students may also consider a minor in a

specific content area from the arts and sciences to develop expertise in a particular field.

The DELTA concentration consists of 24 hours of course work. Students are required to take a minimum of two foundations courses, three core courses and three elective courses. The core courses are designed to ensure students leave the program with foundational knowledge and skills necessary to design, develop, implement, manage, and evaluate digital environments. The elective courses allow students to tailor the concentration to fit individual career goals and areas of interest. Students should take the foundation course *Introduction to Digital Environments* in the first semester they join DELTA. Similarly, the *Capstone Research Project* should be taken in the last semester after the majority of DELTA-related course work is complete.

for the degree of Bachelor of Science Major in Learning & Education Studies, Digital Environments for Learning, Teaching & Agency concentration

A minimum of 120 semester hours is necessary for graduation in the Learning and Education Studies program. Students will spend much of the first two years with general education courses, achieving a solid preparation in the humanities, social and natural sciences, technology and mathematics. In the final two years of the major, students will take a set of core courses, as well as coursework in one of the concentrations.

Degree Requirements

Code	Title	Hours
Orientation Seminar		
EDUC 101	Education Orientation Seminar	1

The following degree requirements also meet general education course requirements and must be selected from the campus general education (https://courses.illinois.edu/) course list. Selections of core requirements courses should be made in consultation with the adviser.

Code	Title	Hours
Composition [1]		
Composition I		4-6
Advanced Composition		3-4
Quantitative Reasoning [1]		
An approved basic course in statistical methods such as STAT 100, SOC 280, or PSYC 235		3-4
From approved campus list		3
Natural Sciences and Technology [1]		
From approved campus list		6
Humanities and the Arts [1]		
From approved campus list		6
Social and Behavioral Sciencess [1]		
From approved campus list (must include PSYC 100)		6
Cultural Studies [1]		
From Western Culture(s) approved campus list		3
From U.S. Minority Culture(s) approved campus list		3
From Non-Western Culture(s) approved campus list		3
Language other than English		
Three years of one language other than English in high school or competion of the third semester of college-level language		0-12
Core Requirements [2]		
Choose 2 from the following Education Foundations:		6-7
EPS 201, Foundations of Education; EPS 202, Foundations of Education Advanced Composition; or EDUC 201, Identity and Difference in Edu		
EPSY 220	Career Theory and Practice	
EPSY 236	Child Development in Education	
SPED 117	The Culture of Disability	
Choose 6 from the following, with at least 2 in each area:		18-20
Learning and Instruction:		
CI 210	Introduction to Digital Learning Environments	
CI 415	Language Varieties, Cultures and Learning	
EPOL 350	Social Learning and Knowledge	
EPSY 201	Educational Psychology	
EPSY 400	Psychology of Learning in Education	
EPSY 401	Child Language and Education	
Leadership in a Diverse Global Economy:		
EDUC 202	Social Justice, School and Society [3]	
EPS 310	Race and Cultural Diversity	
EPS 402	Asian American Education [3]	
EPS 405	Historical and Social Barriers	
HRD 414	Facilitation Skills	
HRD 415	Diversity in the Workplace	
Concentration [2]		
Students must complete 24 credit hours within one of the following areas of concentration: 1) Applied Learning Science, 2) Educational Equality and Cultural Understanding, 3) Workplace Training and Development, or 4) Digital Environments for Learning, Teaching and Agency.		24
Electives		
Electives (including minor, if taken)		12-31
Total Hours		120

Total minimum hours include general education, language other than English, concentration and core credits.

1. General Education Requirement. Courses must be selected from the Campus General Education Approved Course List (https://courses.illinois.edu/).
2. Concentration and Core Requirement courses found on the General Education Approved Course List (https://courses.illinois.edu/) may also be credited toward the General Education requirements.
3. Courses except EDUC 202 and EPS 402 may be counted toward both the Core and Concentration requirements.

Digital Environments for Learning, Teaching and Agency (DELTA) Concentration

The following courses are required for this concentration. Changes/additions to this list can be obtained from the College office. Approvals for substitution must be submitted by petition to the College office for approval by the Assistant Dean for Academic Affairs.

Code	Title	Hours
CI 210	Introduction to Digital Learning Environments	3

CI 489	DELTA Capstone Project	3
Choose 1 from the Learning and Cognition area:		3
BCOG 458	Advances in Brain and Cognitive Science	
EPSY 427	Learning from Text	
EPSY 490	Developments in Educational Psychology (Multimedia Comprehension section)	
EPSY 491	Educational Psychology Field Instruction	
Choose 2 from the Learning in Social and Developmental Contexts area:		6
CI 424	Child Development & Technology	
CI 446	Culture in the Classroom	
CI 482	Social Learning and Multimedia	
EPSY 407	Adult Learning and Development	
EPSY 490	Developments in Educational Psychology (Learning in Everyday Contexts section)	
SPED 312	Introduction to Educational Technology	
Choose 3 from the Learning and Technology Electives area:		9
CI 437	Educational Game Design	
CI 438	Computer Programming and the Classroom	
CI 482	Social Learning and Multimedia	
CI 499	Issues and Development in Education (Attention, Learning and Technology section)	
CI 499	Issues and Development in Education (Designing Learning Spaces section)	
CI 499	Issues and Development in Education (Critiques of Educational Technology section)	
Total Hours		24

Learning & Education Studies: Educational Equality & Cultural Understanding, BS

for the degree of Bachelor of Science Major in Learning & Education Studies, Educational Equality & Cultural Understanding concentration

assistant dean for academic affairs: Kathy Ryan
department office: 110 Education Building
1310 South Sixth
Champaign, IL 61820
phone: (217) 333-2800
email: saao@education.illinois.edu
program website: Learning and Education Studies (https://education.illinois.edu/programs/undergrad/learning-and-education-studies/)
faculty: College of Education Faculty (https://education.illinois.edu/faculty-finder/)
overview of college admissions & requirements: U (https://admissions.illinois.edu/myillini-apply/)ndergraduate Admissions (https://education.illinois.edu/programs/undergrad/)
college website: https://education.illinois.edu/

This undergraduate non-licensure concentration will prepare students to better understand the role of education in enabling equality and cultural understanding in domestic and international perspectives. Focusing on equality, diversity, and cultural understanding will give students a unique perspective on the historical place of education in both challenging inequities and helping to justify social divisions. Understanding how education as an institution operates to perpetuate social and economic stratification will give students a perspective on the challenges of creating a more equitable distribution of education. Classes will cover a wide range of disciplinary approaches, including history, social science, educational policy analysis, and theory. Students will understand the contemporary and historical barriers to the distribution of education and examine recent human rights-based demands for extending education to people of all social classes, regions, ethnicity, language groups, and genders.

Knowing how equity, social justice, and cultural understanding are enabled through education requires an in-depth understanding of domestic and international contexts. Introductory courses will cover basic definitions of educational justice and educational equality, survey international minorities in the United States or minorities in other countries in relationship to education, and explore political, economic, and social contexts for education.

Intermediary classes will invite students to apply their basic understanding of such processes to more local and detailed contexts, like shifts in the U.S. that have extended public schooling and higher education opportunities to historically marginalized populations such as people of color, immigrants, women and citizens from low socioeconomic status. Advanced classes will introduce students to the theoretical approaches to studying social justice and difference, including Critical Race Theory, transnational and global theory, and globalized critical pedagogy.

These courses will be designed to appeal to international and domestic students seeking employment in both the United States and international educational settings, including teaching English as a second language. In addition, understanding the role of education in fostering the expansion of universal human rights will enable students interested in international business and NGOs to explore the problems and potentials of policies intent on improving conditions in the United States and abroad. As all areas of study and trade are increasingly situated in transnational networks, the concentration in Educational Equality and Cultural Understanding provides a firm grounding on key issues of rights, obligations, and new institutions that help maintain commitments for educational equity and justice under these new circumstances.

Students are encouraged to pursue a minor or a coherent set of electives from several departments as approved by their adviser. Suggested minors are: English as a Second Language, African-American Studies, Asian American Studies, Global Studies, Latina/Latino Studies, South Asian Studies, Gender and Women's Studies, or LGBT/Queer Studies.

for the degree of Bachelor of Science Major in Learning & Education Studies, Educational Equality & Cultural Understanding concentration

A minimum of 120 semester hours is necessary for graduation in the Learning and Education Studies program. Students will spend much of the first two years with general education courses, achieving a solid preparation in the humanities, social and natural sciences, technology and mathematics. In the final two years of the major, students will take a set of core courses, as well as coursework in one of the concentrations.

Degree Requirements

Code	Title	Hours
Orientation Seminar		
EDUC 101	Education Orientation Seminar	1

The following degree requirements also meet general education course requirements and must be selected from the campus general education (https://courses.illinois.edu/) course list. Selections of core requirements courses should be made in consultation with the adviser.

Code	Title	Hours
Composition [1]		
Composition I		4-6
Advanced Composition		3-4
Quantitative Reasoning [1]		
An approved basic course in statistical methods such as STAT 100, SOC 280, or PSYC 235		3-4
From approved campus list		3
Natural Sciences and Technology [1]		
From approved campus list		6
Humanities and the Arts [1]		
From approved campus list		6
Social and Behavioral Sciencess [1]		
From approved campus list (must include PSYC 100)		6
Cultural Studies [1]		
From Western Culture(s) approved campus list		3
From U.S. Minority Culture(s) approved campus list		3
From Non-Western Culture(s) approved campus list		3
Language other than English		
Three years of one language other than English in high school or competion of the third semester of college-level language		0-12
Core Requirements [2]		
Choose 2 from the following Education Foundations:		6-7
EPS 201, Foundations of Education; EPS 202, Foundations of Education Advanced Composition; or EDUC 201, Identity and Difference in Edu		
EPSY 220	Career Theory and Practice	
EPSY 236	Child Development in Education	
SPED 117	The Culture of Disability	
Choose 6 from the following, with at least 2 in each area:		18-20
Learning and Instruction:		
CI 210	Introduction to Digital Learning Environments	
CI 415	Language Varieties, Cultures and Learning	
EPOL 350	Social Learning and Knowledge	
EPSY 201	Educational Psychology	
EPSY 400	Psychology of Learning in Education	
EPSY 401	Child Language and Education	
Leadership in a Diverse Global Economy:		
EDUC 202	Social Justice, School and Society [3]	
EPS 310	Race and Cultural Diversity	
EPS 402	Asian American Education [3]	
EPS 405	Historical and Social Barriers	
HRD 414	Facilitation Skills	
HRD 415	Diversity in the Workplace	
Concentration [2]		
Students must complete 24 credit hours within one of the following areas of concentration: 1) Applied Learning Science, 2) Educational Equality and Cultural Understanding, 3) Workplace Training and Development, or 4) Digital Environments for Learning, Teaching and Agency.		24
Electives		
Electives (including minor, if taken)		12-31
Total Hours		120

Total minimum hours include general education, language other than English, concentration and core credits.

1. General Education Requirement. Courses must be selected from the Campus General Education Approved Course List (https://courses.illinois.edu/).
2. Concentration and Core Requirement courses found on the General Education Approved Course List (https://courses.illinois.edu/) may also be credited toward the General Education requirements.
3. Courses except EDUC 202 and EPS 402 may be counted toward both the Core and Concentration requirements.

Educational Equality and Cultural Understanding Concentration

The following courses are required for this concentration. Changes/additions to this list can be obtained from the College office. Approvals for substitution must be submitted by petition to the College office for approval by the Assistant Dean for Academic Affairs.

Code	Title	Hours
Choose 3 from the Social Foundations area:		9
EDUC 202	Social Justice, School and Society [1]	
EPS 380	Education and Social Justice	
EPS 400	History of American Education	
EPS 411	School and Society	
Choose 2 from the following Cultural Understanding area:		6
EPS 325	Social Media and Global Change	
EPS 402	Asian American Education [1]	
EPS 421	Racial and Ethnic Families	
EPSY 202	Exploring Cultural Diversity [2]	
Choose 2 from the following Educational Equality area:		6
EPS 405	Historical and Social Barriers	
EPS 412	Critical Thinking in Education	
EPS 420	Sociology of Education	
EPS 423	Politics of Education	
Elective class from GWS, LLS, AAS, AFRO, AIS, or GLBL		3
Total Hours		24

1. Course can be counted in the Core requirement or the Concentration requirement but not both.
2. Concentration courses found on the General Education Approved Course List may also be credited toward the General Education requirements.

Learning & Education Studies: Workplace Training & Development, BS

for the degree of Bachelor of Science Major in Learning & Education Studies, Workplace Training & Development concentration

assistant dean for academic affairs: Kathy Ryan
department office: 110 Education Building
1310 South Sixth
Champaign, IL 61820
phone: (217) 333-2800
email: saao@education.illinois.edu
program website: Learning and Education Studies (https://education.illinois.edu/programs/undergrad/learning-and-education-studies/)
faculty: College of Education Faculty (https://education.illinois.edu/faculty-finder/)
overview of college admissions & requirements: U (https://admissions.illinois.edu/myillini-apply/)ndergraduate Admissions (https://education.illinois.edu/programs/undergrad/)
college website: https://education.illinois.edu/

Workplace Training and Development is a non-licensure undergraduate concentration. The concentration will provide international and domestic students with the broad sets of knowledge and skills necessary to develop, deliver, and evaluate training and development programs across workplace settings, such as businesses and industries, two-year post-secondary schools, or community and government agencies. In addition, it will serve a growing demand for graduates who have an interest in helping adults learn about and seek to improve organizational performance. The demand comes from a range of business sectors, specifically health care, manufacturing, and logistics.

Students in this concentration will receive an overview of the human resource development field and specifically focus on the training and development aspects of the field. Students will acquire the knowledge and practical skills, in such areas as job and task analysis, training program design, and training program coordination. Students will also be introduced to learning management systems, which most organizations now use to track the learning progress of their employees.

An internship is recommended during the program, but it is not required. For internship credit, students can register in HRD 491 Professional Skill Development before the internship starts. At the end of the internship, a letter from the internship supervisor is submitted to the Workplace Training and Development departmental contact.

The concentration appeals to the following potential students:

- Individuals who wish to combine the study of organizations and learning in their academic studies;
- Individuals who currently work in a technical role, such as a lab tech or nurse in health care, and who want to become more involved in training others about their occupation;
- Individuals with an associates degree who work as information technology specialists and who are asked to develop and deliver training for others;
- Individuals who wish to work in the business and industry outreach departments of community colleges;
- Individuals who serve or wish to serve as instructors in post-secondary technical education schools;
- Individuals who wish to serve as a staff member in the human resource development department of an organization; and
- Individuals who wish to prepare for future graduate study in human resource development.

Students are encouraged to pursue a minor or a coherent set of electives from several departments as approved by their adviser. Suggested minors are: Business, Leadership, Communication, Technology and Management or Global Labor Studies.

for the degree of Bachelor of Science Major in Learning & Education Studies, Workplace Training & Development concentration

A minimum of 120 semester hours is necessary for graduation in the Learning and Education Studies program. Students will spend much of the first two years with general education courses, achieving a solid preparation in the humanities, social and natural sciences, technology and mathematics. In the final two years of the major, students will take a set of core courses, as well as coursework in one of the concentrations.

Degree Requirements

Code	Title	Hours
Orientation Seminar		
EDUC 101	Education Orientation Seminar	1

The following degree requirements also meet general education course requirements and must be selected from the campus general education (https://courses.illinois.edu/) course list. Selections of core requirements courses should be made in consultation with the adviser.

Code	Title	Hours
Composition [1]		
Composition I		4-6
Advanced Composition		3-4
Quantitative Reasoning [1]		
An approved basic course in statistical methods such as STAT 100, SOC 280, or PSYC 235		3-4
From approved campus list		3
Natural Sciences and Technology [1]		
From approved campus list		6
Humanities and the Arts [1]		
From approved campus list		6
Social and Behavioral Sciencess [1]		
From approved campus list (must include PSYC 100)		6
Cultural Studies [1]		
From Western Culture(s) approved campus list		3
From U.S. Minority Culture(s) approved campus list		3
From Non-Western Culture(s) approved campus list		3
Language other than English		
Three years of one language other than English in high school or competion of the third semester of college-level language		0-12
Core Requirements [2]		
Choose 2 from the following Education Foundations:		6-7

EPS 201, Foundations of Education; EPS 202, Foundations of Education Advanced Composition; or EDUC 201, Identity and Difference in Edu		
EPSY 220	Career Theory and Practice	
EPSY 236	Child Development in Education	
SPED 117	The Culture of Disability	
Choose 6 from the following, with at least 2 in each area:		18-20
Learning and Instruction:		
CI 210	Introduction to Digital Learning Environments	
CI 415	Language Varieties, Cultures and Learning	
EPOL 350	Social Learning and Knowledge	
EPSY 201	Educational Psychology	
EPSY 400	Psychology of Learning in Education	
EPSY 401	Child Language and Education	
Leadership in a Diverse Global Economy:		
EDUC 202	Social Justice, School and Society [3]	
EPS 310	Race and Cultural Diversity	
EPS 402	Asian American Education [3]	
EPS 405	Historical and Social Barriers	
HRD 414	Facilitation Skills	
HRD 415	Diversity in the Workplace	
Concentration [2]		
Students must complete 24 credit hours within one of the following areas of concentration: 1) Applied Learning Science, 2) Educational Equality and Cultural Understanding, 3) Workplace Training and Development, or 4) Digital Environments for Learning, Teaching and Agency.		24
Electives		
Electives (including minor, if taken)		12-31
Total Hours		120

Total minimum hours include general education, language other than English, concentration and core credits.

1. General Education Requirement. Courses must be selected from the Campus General Education Approved Course List (https://courses.illinois.edu/).
2. Concentration and Core Requirement courses found on the General Education Approved Course List (https://courses.illinois.edu/) may also be credited toward the General Education requirements.
3. Courses except EDUC 202 and EPS 402 may be counted toward both the Core and Concentration requirements.

Workplace Training and Development Concentration

The following courses are required for this concentration. Changes/additions to this list can be obtained from the College office. Approvals for substitution must be submitted by petition to the College office for approval by the Assistant Dean for Academic Affairs.

Code	Title	Hours
Human Resource Development Foundations area:		6
HRD 400	Principles of Human Resource Education	
HRD 402	Business Principles for Human Resource Development	
Choose 6 from the Human Resource Development Applications area:		18
HRD 400	Principles of Human Resource Education	
HRD 411	Instructional and Training System Design	
HRD 412		
HRD 414	Facilitation Skills	
HRD 415	Diversity in the Workplace	
HRD 440	Work Analysis	
HRD 470	Designing and Evaluating eLearning Systems	
HRD 472	Learning Technologies	
HRD 475	Project Management Principles and Applications	
HRD 480	Introduction to eLearning	
HRD 490	Issues and Developments in Human Resource Development	
Total Hours		24

Learning Outcomes: Learning & Education Studies, BS

Learning Outcomes for the degree of Bachelor of Science Major in Learning & Education Studies

1. Students will acquire deep knowledge of content in the workplace.
2. Students will effectively learn the skills and disposition to develop, plan, and implement culturally relevant and responsive outcomes in their respective professions and civic engagements.
3. Students will use data to drive decisions and solve problems in their professional careers.
4. Students will display the expectations of professionalism related to success in the field of education and beyond (fairness, commitment to collaboration, community, reflective practice, and attention to 21st century skills and practices).

Linguistics, BALAS

for the degree of Bachelor of Arts in Liberal Arts and Sciences Major in Linguistics

department website: https://linguistics.illinois.edu/
department faculty: Linguistics Faculty (https://linguistics.illinois.edu/directory/faculty/)
advising: Linguistics Advising (https://linguistics.illinois.edu/academics/undergraduate-program/undergraduate-advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/

The Department of Linguistics offers undergraduate instruction of four types: courses in linguistics, in English as an International Language, English as a Second Language, and in non-Western languages.

Linguistics courses focus on empirical and theoretical issues connected with how languages are structured, how they are used, and how they change through time. These courses are of interest not only to linguistics majors, but to students in any field where the analysis of languages

is important: anthropology, speech and hearing science, psychology, philosophy, computer science, foreign languages, and others.

English as an International Language courses are concerned with the teaching of English to speakers of other languages, and are useful to any students planning a career in language teaching.

English as a Second Language courses are for students whose first language is not English, to build up skills in speaking, understanding, reading, and writing English.

Non-Western Language courses build up skills in speaking, listening, reading and writing a specific language; familiarize students with literatures and cultures connected with the language; and examine linguistic issues peculiar to the language itself. These courses are of interest to students planning international careers, or simply desiring to broaden their perspective and learn about a different language and culture. Languages offered by the department are: African Languages (Bamana, Lingala, Swahili, Wolof, and Zulu), Arabic, Hindi, Modern Greek, Persian, Sanskrit, Turkish.

for the degree of Bachelor of Arts in Liberal Arts and Sciences Major in Linguistics

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A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office before the end of the fifth semester (60-75 hours). Please see your adviser.

Departmental distinction: Students are strongly encouraged to fulfill the requirements for completing their program with distinction. Candidates for the degree with distinction must register their candidacy with their advisers no later than the end of the second semester of the junior year. They must achieve a grade point average of at least 3.4 for the required 36 hours in linguistics, and register for at least 4 hours of LING 391 - Honors Individual Study, plus submit a senior honors thesis to the Department of Linguistics by the first day of the month preceding the month of graduation.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 50-52 hours.
Students must complete 21 hours of coursework at the 300- or 400-level, including at least 12 hours of 300- or 400-level linguistics courses on this campus. These courses may be included in the core courses or electives.
Twelve hours of 300- or 400-level courses in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Major core courses:		18
LING 100	Intro to Language Science	
LING 210	Language History	
LING 301	Elements of Syntax	
LING 302	Elements of Phonology	
LING 307	Elmnts Semantics & Pragmatics	
LING 401	Intro to General Phonetics	
Select one of the following:		3
LING 225	Language, Mind, and Brain	
LING 250	American Voices: Linguistic Diversity in the US	
Major electives: 15 hours of Linguistics courses at the 200- to 400-level, chosen in consultation with the student's advisor		15
Students must fulfill the LAS foreign language requirement, and in addition, complete at least 8 hours in a second foreign language. One of these languages must be a non-Western language chosen from the following list or approved in consultation with the student's advisor: American Sign Language, Arabic, Bamana, Basque, Chinese, Hebrew, Hindi/Urdu, Japanese, Korean, Lingala, Persian, Quechua, Sanskrit, Swahili, Turkish, Wolof, Zulu. Courses used to complete this requirement may also be used to meet the requirement of "Courses in linguistically relevant areas," below.		8-10
Courses in linguistically relevant areas chosen in consultation with the student's advisor. There are two ways of meeting this requirement:		14
A. The courses may come from any of the following disciplines: any foreign language, anthropology, classics, computer science, English, English as an international language, philosophy, psychology, speech and hearing science, communication.		
B. Students desiring to specialize in the linguistics of a particular language should complete at least four semesters of instruction in that language beyond the elementary level, and a linguistics course or independent study focusing on the selected language or its language family.		

Learning Outcomes: Linguistics, BALAS

Learning Outcomes for the degree of Bachelor of Arts in Liberal Arts and Sciences Major in Linguistics

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1. Students will acquire substantial understanding of how languages are structured, including the organization of phonological, morphological, syntactic, and semantic systems; of the ways such systems vary from language to language; and of how they change over time.
2. Students will gain a sense of how languages function: how they are processed psychologically, how they are learned, how they are effectively taught, how they express social identity, and/or how computational and other technologies may be applied to them.
3. Students will learn to think analytically about language, to present and justify analyses systematically, to support claims with sound arguments and empirical evidence, and to evaluate claims about language critically.

Linguistics & Teaching English as a Second Language, BALAS (TESL)

for the degree of Bachelor of Arts in Liberal Arts and Sciences Major in Linguistics & Teaching English as a Second Language (TESL)

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department website: https://linguistics.illinois.edu/
department faculty: Linguistics Faculty (https://linguistics.illinois.edu/directory/faculty/)
advising: Linguistics Advising (https://linguistics.illinois.edu/academics/undergraduate-program/undergraduate-advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/

The Department of Linguistics offers undergraduate instruction of three types: courses in linguistics, English as an International Language, English as a Second Language, and in non-Western languages.

Linguistics courses focus on empirical and theoretical issues connected with how languages are structured, how they are used, and how they change through time. These courses are of interest to students in the Linguistics, CS + Linguistics, as well as Linguistics + TESL majors. These courses will also be of interest to students in other fields where the analysis of languages is important: anthropology, speech and hearing science, education, psychology, philosophy, computer science, foreign languages, and others.

English as an International Language courses are concerned with the teaching of English to speakers of other languages. These courses are of interest to not only Linguistics + TESL majors, but to students planning a career in language teaching.

English as a Second Language courses are for students whose first language is not English, to build up skills in speaking, understanding, reading, and writing English.

Non-Western Language courses build up skills in speaking, listening, reading and writing a specific language; familiarize students with literatures and cultures connected with the language; and examine linguistic issues peculiar to the language itself. These courses are of interest to students planning international careers, or simply desiring to broaden their perspective and learn about a different language and culture. Languages offered by the department are: African Languages (Bamana, Lingala, Swahili, Wolof, and Zulu), Arabic, Hindi, Modern Greek, Persian, Sanskrit, Turkish.

for the degree of Bachelor of Arts in Liberal Arts and Sciences Major in Linguistics & Teaching English as a Second Language

General education: Students must complete the Campus General Education (https://courses.illinois.edu/) requirements including the campus general education language requirement.

Minimum required major and supporting course work: Minimum required course work equates to a total of 41 credit hours of Linguistics and TESL courses, including at least 8 hours of foreign languages. Please see your academic advisor. A Major Plan of Study Form must be completed and submitted to the LAS Student Academic Affairs Office before the end of the fifth semester (60-75 hours). Twelve hours of 300- and 400-level courses must be taken on this campus.

Minimum hours required for graduation: 120 hours. Students will complete 40 hours of upper-division coursework (these hours can be drawn from all elements of the degree).

Code	Title	Hours
LING Core Courses		**15**
LING 100	Intro to Language Science	
or EIL 486	Ling for Language Teachers	
LING 222	Language in Globalization	
or LING 250	American Voices: Linguistic Diversity in the US	
LING 301	Elements of Syntax	
LING 302	Elements of Phonology	
LING 307	Elmnts Semantics & Pragmatics	
TESL Core Courses		**15**
EIL 411	Intro to TESL Methodology (AND)	
Choose four (4) courses from the following list:		
EIL 422	Engl Grammar for ESL Teachers	
EIL 445	Second Lang Reading & Writing	
EIL 488	Phonology for Second Language Teachers	
EIL 456	Lang and Social Interaction I	
EIL 460	Principles of Language Testing	
LING 450	Sociolinguistics I	
LING 489	Theoretical Foundations of SLA	
Capstone Course		
EIL 465	TESL in the Community	3
Foreign Language Requirement		8
In addition the LAS foreign language language requirement, students must complete at least 8 hours in a second foreign language. One of the languages must be a non-Western language.		
Total Hours		41

Lyric Theatre, BMA

for the degree of Bachelor of Musical Arts Major in Lyric Theatre

department website: https://music.illinois.edu
department faculty: Music Faculty (https://music.illinois.edu/people/)
college catalog page: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/

Students pursuing this major select one of two concentrations:

Creative Concentration (p. 270)

Performance Concentration (p. 271)

The Bachelor of Musical Arts with a major in Lyric Theatre is an interdisciplinary degree designed for the singer-actor, which incorporates training in dance and theatre in addition to music. This degree requires students to choose one of two Concentrations: Performance (performer) or Creative (director, choreographer, dramaturg, set designer, composer).

The BMA Lyric Theatre curriculum is formed around courses in music, dance, and theatre. Advanced coursework includes a senior project. This degree requires a minimum of 129 semester hours of credit for graduation.

For admission requirements for the Bachelor of Musical Arts, please see the School of Music's Admissions website or contact the Music Admissions Office:

Music Admissions Office

School of Music
1114 W. Nevada Street
Urbana, IL 61801
Phone: (217) 244-7899
E-mail: musicadmissions@illinois.edu
(%20musicadmissions@illinois.edu)

Lyric Theatre: Creative, BMA

for the degree of Bachelor of Musical Arts Major in Lyric Theatre, Creative Concentration

department website: https://music.illinois.edu
department faculty: Music Faculty (https://music.illinois.edu/people/)
college catalog page: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/

In addition to the Music and Lyric Theatre core areas, students who choose the Creative Concentration must also complete a minimum of twelve (12) hours of coursework within the concentration. Students may choose a combination of the below courses in consultation with and approval of their advisor. At least six (6) hours must be taken from the first three (3) courses which deal with the performance of original work. With the other courses, similar type classes may be substituted with the approval of the Lyric Theatre faculty.

for the degree of Bachelor of Musical Arts Major in Lyric Theatre, Creative Concentration

General Education and College Orientation

Code	Title	Hours
Orientation to Arts at Illinois		
FAA 101	Arts at Illinois	1
General Education Requirements		
Composition I		4
Advanced Composition		3
Humanities and the Arts [1]		6
Cultural Studies: Western/Comparative Culture(s) [2]		3
Cultural Studies: Non-Western Culture(s) [2]		3
Cultural Studies: US Minority Culture(s) [2]		3
Natural Sciences and Technology		6
Social and Behavioral Sciences		6
Quantitative Reasoning I and II		6
Foreign Language		0-12
Total Hours		41-53

Music Core Coursework

Code	Title	Hours
Music Theory and Musicianship		
MUS 101	Music Theory and Practice I	2
MUS 102	Music Theory and Practice II	2
MUS 201	Music Theory and Practice III	2
MUS 107	Musicianship I	2
MUS 108	Musicianship II	2
MUS 207	Musicianship III	2
MUS 208	Musicianship IV	1
Musicology		
MUS 110	Introd Art Mus: Intl Perspect	2
MUS 313	The History of Music I [1]	3
MUS 314	The History of Music II [1]	3
Performance Studies		
Ensemble [3]		8
MUS 181		8
MUS 172	Grp Instr Pno for Mus Major I [4]	2
MUS 173	Grp Instr Pno for Mus Maj II [4]	2
MUS 454	Advanced Keyboard Skills I [4]	2
Total Hours [5]		**39-41**

1. Completion of both MUS 313 and MUS 314 meets the general education requirement for Humanities and the Arts
2. At least one "Storytelling" course is to be selected in consultation with advisor from the general education requirements.
3. Select from approved Music major choral ensembles, such as MUS 260-263 and those in MUS 450.
4. All students must demonstrate keyboard competency by examination when they matriculate or by enrolling in MUS 172 and/or MUS 173. Keyboard majors enroll in MUS 454. It is possible to proficiency out of group piano courses through examination.
5. The 39-41 hours of the Music Core Requirements reflect 39 hours for keyboard majors, 41 hours for non-keyboard majors.

Lyric Theatre Core Coursework

Code	Title	Hours
Music		
MUS 121	Italian Diction	1
MUS 125	English Diction and Dialects	1
MUS 422	Musical Theatre Repertoire	2
MUS 467		8
MUS 468	(Section A)	8
MUS 472	Senior Project Showcase	2
Language		
ITAL 101	Elementary Italian I	4
Dance		
DANC 101 & DANC 102	Modern Dance I and Modern Dance II (or DANC 107 & DANC 108: Ballet I and II)	4
DANC 209	Lyric Theatre Dance	2
Theatre		
THEA 100	Practicum I	2
THEA 170	Fundamentals of Acting I	3
THEA 175	Fundamentals of Acting II	3
One Somatics class required from the below courses		**1**
DANC 245	Introduction to Somatics	
DANC 301	Yoga Fundamentals	
DANC 401	Alexander Tech for Dancers	
DANC 402	Alexander Technique Practicum	
Total Hours		41

Creative Concentration Requirements

Minimum required major and supporting course work: In addition to the Music and Lyric Theatre core areas, students who choose the Creative Concentration must also complete a minimum of twelve (12) hours of coursework within the concentration. Students may choose a combination of the below courses in consultation with and approval of their advisor. At least six (6) hours must be taken from the first three (3) courses which deal with the performance of original work. With the other courses, similar type classes may be substituted with the approval of the Lyric Theatre faculty.

Code	Title	Hours
Choose a minimum of six (6) hours from the courses below		
MUS 468	(Section C)	4
DANC 259	Contact Improvisation for Actors, Musicians and Dancers	1-4
DANC 424	Collaborative Performance	2

Code	Title	Hours
Choose from these courses to complete the Creative Concentration		
MUS 106	Beginning Composition	2
MUS 206	Intermediate Composition	2
MUS 209	Music, Sound, Technology	3
MUS 404	Contemp Compos Techniques	2
MUS 406	Advanced Composition	3
MUS 426	Orchestration	3
MUS 446	Songwriting	2
DANC 262	Choreographic Process I	2
THEA 211	Introduction to Playwriting	3
THEA 212	Introduction to Directing	3
THEA 220	Survey of Theatrical Design	3
THEA 410	Dramaturgs Workshop	3 or 4
THEA 411	Playwrights' Workshop	3
THEA 412	Directors Workshop	3
THEA 453	Introduction to Theatre Sound	3
THEA 454	Sound Design I	3
THEA 455	Sound Design II	2

Lyric Theatre: Performance, BMA

for the degree of Bachelor of Musical Arts Major in Lyric Theatre, Performance Concentration

department website: https://music.illinois.edu
department faculty: Music Faculty (https://music.illinois.edu/people/)
college catalog page: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/

In addition to the Music and Lyric Theatre core areas, students who choose the Performance Concentration must also complete a minimum of twelve (12) hours of coursework within the concentration. Students may choose a combination of the below courses in consultation with and approval of their advisor.

for the degree of Bachelor of Musical Arts Major in Performance

General Education and College Orientation

Code	Title	Hours
Orientation to Arts at Illinois		
FAA 101	Arts at Illinois	1
General Education Requirements		
Composition I		4
Advanced Composition		3
Humanities and the Arts [1]		6
Cultural Studies: Western/Comparative Culture(s) [2]		3
Cultural Studies: Non-Western Culture(s) [2]		3
Cultural Studies: US Minority Culture(s) [2]		3
Natural Sciences and Technology		6
Social and Behavioral Sciences		6
Quantitative Reasoning I and II		6
Foreign Language		0-12
Total Hours		41-53

Music Core Coursework

Code	Title	Hours
Music Theory and Musicianship		
MUS 101	Music Theory and Practice I	2
MUS 102	Music Theory and Practice II	2
MUS 201	Music Theory and Practice III	2
MUS 107	Musicianship I	2
MUS 108	Musicianship II	2
MUS 207	Musicianship III	2
MUS 208	Musicianship IV	1
Musicology		
MUS 110	Introd Art Mus: Intl Perspect	2
MUS 313	The History of Music I [1]	3
MUS 314	The History of Music II [1]	3
Performance Studies		
Ensemble [3]		8
MUS 181		8
MUS 172	Grp Instr Pno for Mus Major I [4]	2
MUS 173	Grp Instr Pno for Mus Maj II [4]	2
MUS 454	Advanced Keyboard Skills I [4]	2
Total Hours [5]		**39-41**

1. Completion of both MUS 313 and MUS 314 meets the general education requirement for Humanities and the Arts
2. At least one "Storytelling" course is to be selected in consultation with advisor from the general education requirements.
3. Select from approved Music major choral ensembles, such as MUS 260-263 and those in MUS 450.
4. All students must demonstrate keyboard competency by examination when they matriculate or by enrolling in MUS 172 and/or MUS 173. Keyboard majors enroll in MUS 454. It is possible to proficiency out of group piano courses through examination.

[5] The 39-41 hours of the Music Core Requirements reflect 39 hours for keyboard majors, 41 hours for non-keyboard majors.

Lyric Theatre Core Coursework

Code	Title	Hours
Music		
MUS 121	Italian Diction	1
MUS 125	English Diction and Dialects	1
MUS 422	Musical Theatre Repertoire	2
MUS 467		8
MUS 468	(Section A)	8
MUS 472	Senior Project Showcase	2
Language		
ITAL 101	Elementary Italian I	4
Dance		
DANC 101 & DANC 102	Modern Dance I and Modern Dance II (or DANC 107 & DANC 108: Ballet I and II)	4
DANC 209	Lyric Theatre Dance	2
Theatre		
THEA 100	Practicum I	2
THEA 170	Fundamentals of Acting I	3
THEA 175	Fundamentals of Acting II	3
One Somatics class required from the below courses		**1**
DANC 245	Introduction to Somatics	
DANC 301	Yoga Fundamentals	
DANC 401	Alexander Tech for Dancers	
DANC 402	Alexander Technique Practicum	
Total Hours		41

Performance Concentration

Minimum required major and supporting course work: In addition to the Music and Lyric Theatre core areas, students who choose the Performance Concentration must also complete a minimum of twelve (12) hours of coursework within the concentration. Students may choose a combination of the below courses in consultation with and approval of their advisor.

Code	Title	Hours
Required courses		
Additional Dance Courses (DANC)		4
THEA 270	Relationships in Acting I	3
an additional acting course		3
MUS 468	(Section B)	2
Total hours required for concentration		**12**

Code	Title	Hours
Suggested Electives for the Performance Concentration		
DANC 104	Making Dances	2
DANC 111	Dancing Techniques/Non-Majors:	2
DANC 212	Musical Theater Dance	1
DANC 259	Contact Improvisation for Actors, Musicians and Dancers	1
DANC 268	Music Theory for Dancers	3
KIN 130	Analysis of Basic Movement	2
MUS 122	German Diction	1
MUS 123	French Diction	1
MUS 242	Elements of Conducting	2
MUS 411	Genre Studies in Musicology	3
MUS 474	Vocal Repertoire I	1
MUS 475	Vocal Repertoire II	1
THEA 110	Broadway Musicals	3
THEA 220	Survey of Theatrical Design	3
THEA 360	History of Theatre I	4
THEA 361	History of Theatre II	4
Additional Foreign Language		

Management, BS

for the degree of Bachelor of Science Major in Management

department office: 330 Wohlers Hall, 1206 South Sixth Street, Champaign, IL 61820
phone: 217-333-4240
email: ba@business.illinois.edu (http://catalog.illinois.edu/undergraduate/bus/management-business-bs/ba@business.illinois.edu)
department website: https://giesbusiness.illinois.edu/business-administration (https://giesbusiness.illinois.edu/business-administration/)
overview of college admissions & requirements: Gies Catalog (http://catalog.illinois.edu/schools/gies-business/academic-units/)
college website: https://giesbusiness.illinois.edu/

The Management Major is designed to enable business students to be leaders and innovators in their work teams and organizations. You'll be trained to analyze and solve managerial problems – be they around people, organizations, or markets - that every organization faces in its day-to-day operations. You'll take courses about leading individuals and teams, designing and managing organizations, effective negotiation, and strategic human resource management. You'll also choose from a variety of electives, including new product development, project management, entrepreneurship, and international business.

for the degree of Bachelor of Science Major in Management

Minimum requirements for the major in the Bachelor of Science Degree in Management are:

Minimum hours required for graduation: 124 hours.

University Composition Requirements

Code	Title	Hours
Composition I: Principles of Composition [1]		4-7
Advanced Composition		3

General Education Requirements

Code	Title	Hours
A minimum of six courses is required, as follows:		18
Humanities & the Arts: Literature & the Arts (1-2 courses) [4]		
Humanities & the Arts: Historical & Philosophical Perspectives (1-2 courses) [4]		

Natural Sciences & Technology: Physical Sciences (0-2 courses) [5]	
Natural Sciences & Technology: Life Sciences (0-2 courses) [5]	
Behavioral Sciences (1 course)	
Cultural Studies: Non-Western Cultures (1 course)	
Cultural Studies: U.S. Minorities Cultures (1 course)	
Cultural Studies: Western/Comparative Cultures (1 course)	
Quantitative Reasoning (2 courses) [7]	

Language Other Than English

Code	Title	Hours
Completion of the third semester or equivalent of a language other than English is required. Completion of three years of a single language in high school satisfies this requirement.		0-15

Business Core Requirements

Code	Title	Hours
ACCY 201 & ACCY 202	Accounting and Accountancy I and Accounting and Accountancy II	6
BUS 101	Professional Responsibility and Business [2]	3
BUS 201	Business Dynamics	3
BUS 301	Business in Action	3
BUS 401	Global Business Perspectives	3
BADM 210 & BADM 211	Business Analytics I and Business Analytics II	6
BADM 275	Fundamentals of Operations Management	3
BADM 300	The Legal Environment of Bus	3
BADM 310	Mgmt and Organizational Beh [6]	3
BADM 320	Principles of Marketing	3
BADM 449	Business Policy and Strategy	3
CMN 101	Public Speaking	3
CS 105	Intro Computing: Non-Tech	3
ECON 102 & ECON 103	Microeconomic Principles and Macroeconomic Principles	6
FIN 221	Corporate Finance	3
Total Hours		54

1 *For a list of the specific courses that meet this requirement, see the college Office of Undergraduate Affairs in 1055 Business Instructional Facility or see the Course Explorer for a list of approved general education courses.*

2 BUS 101, BUS 201, BUS 301 *and* BUS 401 *are required for all Gies College of Business students. Students who enter the College their first year take each sequential course every fall.*
Inter-College transfer students take BUS 301 *and* BUS 401 *in their sophomore year. Off-campus transfer students take* BUS 101 *and* BUS 201 *in their junior year.*

4 *Three courses in the Humanities & the Arts area are required and students must complete at least one course in the Literature & the Arts and Historical & Perspectives subcategories. At least one of the courses must be a 200 or higher level course.*

5 *Two courses in the Natural Sciences & Technology area are required. It is strongly recommended that students complete one course in the Physical Sciences and Life Sciences subcategories.*

6 *This course includes limited voluntary participation as a subject in experiments.*

7 CS 105 *fulfills a Quantitative Reasoning I requirement.*

Code	Title	Hours
Required Courses		
BADM 311	Leading Individuals and Teams (Prerequisite: BADM 310)	3
BADM 312	Designing and Managing Orgs (Prerequisite: BADM 310)	3
BADM 313	Strategic Human Resource Management (Prerequisite: BADM 310)	3
BADM 314	Leading Negotiations	3
Select from the following Major Electives:		**12**
BADM 329	New Product Development (Prerequisite: BADM 320)	
BADM 340	Ethical Dilemmas of Business	
BADM 350	IT for Networked Organizations	
BADM 353	Info Sys Analysis and Design (Prerequisite: BADM 350)	
BADM 375	Operations Strategy	
BADM 377	Project Management	
BADM 378	Logistics Management	
BADM 380	International Business	
BADM 381	Multinational Management	
BADM 403	Corporate & Commercial Law	
BADM 445	Small Business Consulting	
BADM 446	Entrepreneurship: New Venture Creation	
Total Hours		24

Management: General Management, BS

for the degree of Bachelor of Science Major in Management, General Management Concentration

overview of college admissions & requirements: Gies Catalog (http://catalog.illinois.edu/schools/gies-business/academic-units/)
college website: https://giesbusiness.illinois.edu/ (https://business.illinois.edu/)

This program is no longer accepting applications, see Management, BS (p. 272)**.**

The General Management Concentration is designed to educate and train future business leaders, decision-makers and strategic thinkers to skillfully manage human capital in firms and organizations.

for the degree of Bachelor of Science Major in Management, General Management Concentration

Minimum hours required for graduation: 124 hours.

University Composition Requirements

Code	Title	Hours
Composition I: Principles of Composition [1]		4-7
Advanced Composition		3

General Education Requirements

Code	Title	Hours
A minimum of six courses is required, as follows:		18
Humanities & the Arts: Literature & the Arts (1-2 courses) [4]		
Humanities & the Arts: Historical & Philosophical Perspectives (1-2 courses) [4]		
Natural Sciences & Technology: Physical Sciences (0-2 courses) [5]		
Natural Sciences & Technology: Life Sciences (0-2 courses) [5]		
Behavioral Sciences (1 course)		
Cultural Studies: Non-Western Cultures (1 course)		
Cultural Studies: U.S. Minorities Cultures (1 course)		
Cultural Studies: Western/Comparative Cultures (1 course)		
Quantitative Reasoning (2 courses) [7]		

Language Other Than English

Code	Title	Hours
Completion of the third semester or equivalent of a language other than English is required. Completion of three years of a single language in high school satisfies this requirement.		0-15

Business Core Requirements

Code	Title	Hours
ACCY 201 & ACCY 202	Accounting and Accountancy I and Accounting and Accountancy II	6
BUS 101	Professional Responsibility and Business [2]	3
BUS 201	Business Dynamics	3
BUS 301	Business in Action	3
BUS 401	Global Business Perspectives	3
BADM 210 & BADM 211	Business Analytics I and Business Analytics II	6
BADM 275	Fundamentals of Operations Management	3
BADM 300	The Legal Environment of Bus	3
BADM 310	Mgmt and Organizational Beh [6]	3
BADM 320	Principles of Marketing	3
BADM 449	Business Policy and Strategy	3
CMN 101	Public Speaking	3
CS 105	Intro Computing: Non-Tech	3
ECON 102 & ECON 103	Microeconomic Principles and Macroeconomic Principles	6
FIN 221	Corporate Finance	3
Total Hours		54

[1] *For a list of the specific courses that meet this requirement, see the college Office of Undergraduate Affairs in 1055 Business Instructional Facility or see the Course Explorer for a list of approved general education courses.*

[2] BUS 101, BUS 201, BUS 301*and*BUS 401*are required for all Gies College of Business students. Students who enter the College their first year take each sequential course every fall.*
Inter-College transfer students take BUS 301 *and* BUS 401 *in their sophomore year. Off-campus transfer students take* BUS 101 *and* BUS 201 *in their junior year.*

[4] *Three courses in the Humanities & the Arts area are required and students must complete at least one course in the Literature & the Arts and Historical & Perspectives subcategories. At least one of the courses must be a 200 or higher level course.*

[5] *Two courses in the Natural Sciences & Technology area are required. It is strongly recommended that students complete one course in the Physical Sciences and Life Sciences subcategories.*

[6] *This course includes limited voluntary participation as a subject in experiments.*

[7] CS 105 *fulfills a Quantitative Reasoning I requirement.*

Code	Title	Hours
Required Courses		
PSYC 201	Intro to Social Psych	3
BADM 311	Leading Individuals and Teams (Prerequisite: BADM 310)	3
BADM 312	Designing and Managing Orgs (Prerequisite: BADM 310)	3
BADM 313	Strategic Human Resource Management (Prerequisite: BADM 310)	3
BADM 350	IT for Networked Organizations	3
BADM 374	Management Decision Models	3
BADM 375	Operations Strategy	3
Select two of the following:		6-8
BADM 329	New Product Development (Prerequisite: BADM 320)	
BADM 353	Info Sys Analysis and Design (Prerequisite: BADM 350)	
BADM 377	Project Management	
BADM 378	Logistics Management	
BADM 380	International Business	
BADM 403	Corporate & Commercial Law	
BADM 446	Entrepreneurship: New Venture Creation	
Total Hours		**27**

Management: International Business, BS

for the degree of Bachelor of Science Major in Management, International Business Concentration

overview of college admissions & requirements: Gies Catalog (http://catalog.illinois.edu/schools/gies-business/academic-units/)
college website: https://giesbusiness.illinois.edu/ (https://business.illinois.edu/)

This program is no longer accepting applications, see Management, BS (p. 272)**.**

The International Business Concentration is designed to educate and train future business leaders, decision-makers and strategic thinkers to skillfully manage human capital in firms and organizations. It particularly focuses on challenges associated with multinational firms and management in international contexts with different rules and cultures.

for the degree of Bachelor of Science Major in Management, International Business Concentration

Minimum hours required for graduation: 124 hours.

University Composition Requirements

Code	Title	Hours
Composition I: Principles of Composition [1]		4-7
Advanced Composition		3

General Education Requirements

Code	Title	Hours
A minimum of six courses is required, as follows:		18
Humanities & the Arts: Literature & the Arts (1-2 courses) [4]		
Humanities & the Arts: Historical & Philosophical Perspectives (1-2 courses) [4]		
Natural Sciences & Technology: Physical Sciences (0-2 courses) [5]		
Natural Sciences & Technology: Life Sciences (0-2 courses) [5]		
Behavioral Sciences (1 course)		
Cultural Studies: Non-Western Cultures (1 course)		
Cultural Studies: U.S. Minorities Cultures (1 course)		
Cultural Studies: Western/Comparative Cultures (1 course)		
Quantitative Reasoning (2 courses) [7]		

Language Other Than English

Code	Title	Hours
Completion of the third semester or equivalent of a language other than English is required. Completion of three years of a single language in high school satisfies this requirement.		0-15

Business Core Requirements

Code	Title	Hours
ACCY 201 & ACCY 202	Accounting and Accountancy I and Accounting and Accountancy II	6
BUS 101	Professional Responsibility and Business [2]	3
BUS 201	Business Dynamics	3
BUS 301	Business in Action	3
BUS 401	Global Business Perspectives	3
BADM 210 & BADM 211	Business Analytics I and Business Analytics II	6
BADM 275	Fundamentals of Operations Management	3
BADM 300	The Legal Environment of Bus	3
BADM 310	Mgmt and Organizational Beh [6]	3
BADM 320	Principles of Marketing	3
BADM 449	Business Policy and Strategy	3
CMN 101	Public Speaking	3
CS 105	Intro Computing: Non-Tech	3
ECON 102 & ECON 103	Microeconomic Principles and Macroeconomic Principles	6
FIN 221	Corporate Finance	3
Total Hours		54

1 *For a list of the specific courses that meet this requirement, see the college Office of Undergraduate Affairs in 1055 Business Instructional Facility or see the Course Explorer for a list of approved general education courses.*

2 BUS 101, BUS 201, BUS 301 *and* BUS 401 *are required for all Gies College of Business students. Students who enter the College their first year take each sequential course every fall.*
Inter-College transfer students take BUS 301 *and* BUS 401 *in their sophomore year. Off-campus transfer students take* BUS 101 *and* BUS 201 *in their junior year.*

4 *Three courses in the Humanities & the Arts area are required and students must complete at least one course in the Literature & the Arts and Historical & Perspectives subcategories. At least one of the courses must be a 200 or higher level course.*

5 *Two courses in the Natural Sciences & Technology area are required. It is strongly recommended that students complete one course in the Physical Sciences and Life Sciences subcategories.*

6 *This course includes limited voluntary participation as a subject in experiments.*

7 CS 105 *fulfills a Quantitative Reasoning I requirement.*

Management Major-International Business Concentration

Code	Title	Hours
PSYC 201	Intro to Social Psych (Preferred prerequisite: PSYC 100 or PSYC 103)	3
BADM 350	IT for Networked Organizations	3
BADM 374	Management Decision Models (Prerequisite: BADM 211)	3
BADM 375	Operations Strategy	3
BADM 380	International Business	3
BADM 381	Multinational Management	3
BADM 382	International Marketing (Prerequisite: BADM 320)	3
Choose one course from General International Elective: [1]		**3**
ACE 251	The World Food Economy	
ACE 435	Global Agribusiness Management	
ACE 451	Agriculture in Intl Dev	
ACE 455	International Trade in Food and Agriculture	
ECON 420	International Economics	
ECON 450	Development Economics	
GEOG 465	Transportation & Sustainability	
PS 240	Intro to Comp Politics	
PS 241	Comp Politics in Dev Nations	
PS 280	Intro to Intl Relations	
PS 281	Intro to Intl Relations-ACP	
PS 282	Governing Globalization	
PS 382	Intl Political Economy	
PS 386	International Law	
PS 387	National Security Policy	

SOC 364	Impacts of Globalization	
UP 423	Community Development in the Global South	
Choose one course from the Area Specific Electives: [1,2]		**3**
ACE 254	Economic Systems in Africa	
ACE 454	Econ Dev of Tropical Africa	
EALC 365	Contemporary Korean Society	
ECON 452	The Latin American Economies	
FR 485	Commercial & Econ French I	
FR 486	Commercial & Econ French II	
GER 320	German for Business	
GER 321	German for Economics	
ITAL 380	Ital Business & Profess	
PS 242	Introduction to Modern Africa	
PS 341	Gov & Pol in Africa	
PS 343	Gov & Pol of China	
PS 345	Gov & Pol of SE Asia	
PS 346	Gov & Pol of South Asia	
PS 347	Gov & Pol of Middle East	
PS 353	Gov & Pol of Latin America	
PS 385	Politics of the European Union	
REES 201	Introduction to Eastern Europe	
SPAN 202	Spanish for Business	
Total Hours		27

1 *The Elective Course Lists will be reviewed periodically and new courses may be added. A Management student may substitute a course not on the lists by obtaining consent in advance from the Department of Business Administration Head or designee.*

2 *Courses relating to 1) the European Union or other customs unions or 2) the economy, politics or sociology of a specific nation-state or geographical region.*

Learning Outcomes: Management, BS

Learning Outcomes for the degree of Bachelor of Science Major in Management

1. Critical Thinking and Problem Solving Skills
2. Leadership and Teamwork
3. Communication Skills
4. Multicultural Diversity & Managing Business Cross-Culturally
5. Managing Small Business Formation & Growth

Marketing, BS

for the degree of Bachelor of Science in Marketing

department website:https://business.illinois.edu/ba/undergraduate/marketing/
department faculty: Marketing Faculty (https://business.illinois.edu/ba/directories/marketing/)
overview of college admissions & requirements: Gies Catalog (http://catalog.illinois.edu/schools/gies-business/academic-units/)
college website: https://business.illinois.edu/
email: ba-undergrad@illinois.edu

The Marketing student studies business activities directly related to the process of developing, deciding, and placing meaningful assortments of goods and services in the hands of the consumer. The Marketing major is concerned with the efficient and effective performance of marketing activities and coordinating with the other operations of the firm. In addition to the Marketing Major's requirements, Business Administration students must also fulfill the Urbana-Champaign campus's General Education requirements and the Gies College of Business's Core Courses requirements (for more detail, refer to the Gies College of Business Undergraduate Section (http://catalog.illinois.edu/schools/gies-business/academic-units/)).

for the degree of Bachelor of Science in Marketing

Core Curriculum

Normally, students must register for no fewer than 12 hours or more than 18 hours in each semester. Students should take mathematics, economics, and accountancy courses in the semesters indicated in the sample schedule of courses. The computer science course must be taken during the first year.

Up to 4 hours of Kinesiology activity courses, numbered 100-110 may be counted toward the 124 hours for the degree. The same section of a course may not be repeated for credit. Credit is limited to a maximum of 12 credit hours for 199 courses. Students may receive foreign language credit for courses only 2 levels below highest level taken in high school. For example: 4 years of high school French-no credit below FR 102.

Credit toward the 124 degree hours is not given for MATH 101. Once the math requirement is completed, lower level math courses cannot be taken for credit.

Any course used to fill a specific degree requirement may not be taken on the credit-no credit grade option. Only free electives may be taken on the credit-no credit option. All finance and accountancy courses must be taken for a grade. It is recommended that all courses taken in the business administration area be taken for a grade.

Minimum hours required for graduation: 124 hours.

University Composition Requirements

Code	Title	Hours
Composition I: Principles of Composition [1]		4-7
Advanced Composition		3

General Education Requirements

Code	Title	Hours
A minimum of six courses is required, as follows:		18
Humanities & the Arts: Literature & the Arts (1-2 courses) [4]		
Humanities & the Arts: Historical & Philosophical Perspectives (1-2 courses) [4]		
Natural Sciences & Technology: Physical Sciences (0-2 courses) [5]		
Natural Sciences & Technology: Life Sciences (0-2 courses) [5]		

Behavioral Sciences (1 course)	
Cultural Studies: Non-Western Cultures (1 course)	
Cultural Studies: U.S. Minorities Cultures (1 course)	
Cultural Studies: Western/Comparative Cultures (1 course)	
Quantitative Reasoning (2 courses) [7]	

Language Other Than English

Code	Title	Hours
Completion of the third semester or equivalent of a language other than English is required. Completion of three years of a single language in high school satisfies this requirement.		0-15

Business Core Requirements

Code	Title	Hours
ACCY 201 & ACCY 202	Accounting and Accountancy I and Accounting and Accountancy II	6
BUS 101	Professional Responsibility and Business [2]	3
BUS 201	Business Dynamics	3
BUS 301	Business in Action	3
BUS 401	Global Business Perspectives	3
BADM 210 & BADM 211	Business Analytics I and Business Analytics II	6
BADM 275	Fundamentals of Operations Management	3
BADM 300	The Legal Environment of Bus	3
BADM 310	Mgmt and Organizational Beh [6]	3
BADM 320	Principles of Marketing	3
BADM 449	Business Policy and Strategy	3
CMN 101	Public Speaking	3
CS 105	Intro Computing: Non-Tech	3
ECON 102 & ECON 103	Microeconomic Principles and Macroeconomic Principles	6
FIN 221	Corporate Finance	3
Total Hours		54

[1] *For a list of the specific courses that meet this requirement, see the college Office of Undergraduate Affairs in 1055 Business Instructional Facility or see the Course Explorer for a list of approved general education courses.*

[2] BUS 101, BUS 201, BUS 301 *and* BUS 401 *are required for all Gies College of Business students. Students who enter the College their first year take each sequential course every fall.*
Inter-College transfer students take BUS 301 *and* BUS 401 *in their sophomore year. Off-campus transfer students take* BUS 101 *and* BUS 201 *in their junior year.*

[4] *Three courses in the Humanities & the Arts area are required and students must complete at least one course in the Literature & the Arts and Historical & Perspectives subcategories. At least one of the courses must be a 200 or higher level course.*

[5] *Two courses in the Natural Sciences & Technology area are required. It is strongly recommended that students complete one course in the Physical Sciences and Life Sciences subcategories.*

[6] *This course includes limited voluntary participation as a subject in experiments.*

[7] CS 105 *fulfills a Quantitative Reasoning I requirement.*

Code	Title	Hours
Marketing Core		**9**
BADM 322	Marketing Research (Prerequisite: BADM 320)	3
BADM 325	Consumer Behavior (Prerequisite: BADM 320)	3
BADM 420	Advanced Marketing Management (Prerequisite: BADM 320)	3
Marketing Electives		**18**
Choose from the list for a minimum of 18 hours:		
BADM 311	Leading Individuals and Teams	
BADM 312	Designing and Managing Orgs	
BADM 321	Principles of Retailing (Prerequisite: BADM 320)	
BADM 323	Marketing Communications (Prerequisite: BADM 320)	
BADM 324	Purchasing and Supply Mgmnt (Prerequisite: Credit or concurrent enrollment in BADM 320)	
BADM 326	Pricing Strategy (Prerequisite: BADM 320)	
BADM 327	Marketing to Business and Govt (Prerequisite: BADM 320)	
BADM 328	Advanced Sales Strategies (Course title changing to: Advanced sales Strategies)	
BADM 329	New Product Development (Prerequisite: BADM 320)	
BADM 330	Brand Management	
BADM 331	Making Things	
BADM 351	E-Business Management	
BADM 360	Digital Marketing	
BADM 361	Marketing Analytics	
BADM 374	Management Decision Models	
BADM 378	Logistics Management	
BADM 382	International Marketing	
BADM 395	Special Topics (Section SMM: Social Media Marketing)	
GEOG 440	Business Applications of GIS	
Total Hours		**27**

Learning Outcomes: Marketing, BS

Learning Outcomes for the degree of Bachelor of Science in Marketing

1. Master core concepts that pertain to contemporary marketing practices and technologies.
2. Demonstrate the ability to analyze real-world marketing problems, develop alternative solutions, evaluate the strengths and weaknesses of these solutions and choose and implement a solution.
3. Demonstrate the ability to collaborate and problem-solve in teams, and to collaborate with team members and clients across business functions and disciplines.
4. Cultivate a global mindset – an appreciation, curiosity, and empathy toward other cultures, and a capacity to develop innovative solutions to global as well as local marketing problems.

5. Communicate effectively in writing and orally across all modalities – written, oral, and digital.

Materials Science & Engineering, BS

for the degree of Bachelor of Science in Materials Science & Engineering

department website: https://matse.illinois.edu
department faculty: Materials Science & Engineering Faculty (https://matse.illinois.edu/people/faculty/)
overview of college admissions & requirements: The Grainger College of Engineering (https://grainger.illinois.edu/admissions/)
college website: https://grainger.illinois.edu/

Materials science and engineering is the basis for all engineering. Improvements in the quality of life require knowledge of the processing and properties of current materials and the design, development and application of new materials. The Materials Science and Engineering (MatSE) curriculum provides an understanding of the underlying principles of synthesis and processing of materials and of the interrelationships between structure, properties, and processing. Students learn how to create advanced materials and systems required, e.g., for flexible electronic displays and photonics that will change communications technologies, for site specific drug delivery, for self-healing materials, for enabling the transition to a hydrogen-based economy, and for more efficient photovoltaics and nuclear systems for energy production. The curriculum uses concepts from both basic physics and chemistry and provides a detailed knowledge of what makes the materials we use every day behave as they do.

Students in the first two years take courses in general areas of science and engineering as well as courses introducing the concepts in MatSE. In the third year, students study the common, central issues related to MatSE. In the senior year, students focus on an area of MatSE of their greatest interest, providing them with the detailed knowledge to be immediately useful to corporations, become entrepreneurs, or to provide the underpinning knowledge for graduate study. Note: students interested in biomaterials take a specific set of courses to provide them with a background in biology and chemistry while maintaining a strong engineering focus.

for the degree of Bachelor of Science in Materials Science & Engineering

Graduation Requirements

Minimum Overall GPA: 2.0
Minimum hours required for graduation: 128 hours
General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement. Specific Advanced Composition courses required for this degree are listed below.**

Orientation and Professional Development

Code	Title	Hours
ENG 100	Engineering Orientation [1]	0
MSE 183	Freshman Materials Laboratory [2]	1
Total Hours		1

Foundational Mathematics and Science

Code	Title	Hours
CHEM 102	General Chemistry I	3
CHEM 103	General Chemistry Lab I	1
CHEM 104	General Chemistry II	3
CHEM 105	General Chemistry Lab II	1
MATH 221	Calculus I [3]	4
MATH 225	Introductory Matrix Theory	2
MATH 231	Calculus II	3
MATH 241	Calculus III	4
MATH 285	Intro Differential Equations	3
PHYS 211	University Physics: Mechanics	4
PHYS 212	University Physics: Elec & Mag	4
PHYS 214	Univ Physics: Quantum Physics	2
Total Hours		34

Materials Science and Engineering Technical Core

For All Students

Code	Title	Hours
CS 101	Intro Computing: Engrg & Sci	3
ECE 205	Electrical and Electronic Circuits	3
IE 300	Analysis of Data [4]	3
or STAT 400	Statistics and Probability I	
MSE 182	Introduction to MatSE	2
MSE 201	Phases and Phase Relations	3
MSE 206	Mechanics for MatSE	4
MSE 307	Materials Laboratory I [5]	3
MSE 308	Materials Laboratory II [5]	3
MSE 395	Materials Design	3
MSE 401	Thermodynamics of Materials	3
MSE 402	Kinetic Processes in Materials	3
MSE 406	Thermal-Mech Behavior of Matls	3
Total Hours		36

For the Biomaterials Area

Code	Title	Hours
CHEM 232	Elementary Organic Chemistry I	3 or 4
MCB 150	Molec & Cellular Basis of Life	4
MCB 450	Introductory Biochemistry	3
MCB 252	Cells, Tissues & Development	3
Subtotal		13
Total for the Biomaterials Area		**49**

For All Other Areas

Code	Title	Hours
MSE 304	Electronic Properties of Matls	3
MSE 405	Microstructure Determination	3
Subtotal		6
Total for all non-Biomaterials Students		**42**

Technical Electives

For the Biomaterials Area

Code	Title	Hours
Biomaterials area topical lectures selected from the list of topical lectures established by the department. See Topical Lecture list below:		5
MSE 404	Laboratory Studies in Materials Science and Engineering (Each section of MSE 404 is 1.5 hours. Students take 2 unique sections of MSE 404 for 3 hours.)	3
MSE 470	Design and Use of Biomaterials	3
Topical lectures outside the biomaterials area. See Topical Lecture list below.		6
Total Hours		17

For All Other Areas

Code	Title	Hours
Topical lectures selected for the list of courses established by the department below. No more than 6 hours may be from introductory topical lectures		12
MSE 404	Laboratory Studies in Materials Science and Engineering (Each section of MSE 404 is 1.5 hours. Students take 4 unique sections of MSE 404 for 6 hours.)	6
Technical elective courses selected from the list of technical electives below.		6
Total Hours		24

Topical Lectures

Code	Title	Hours
Introductory - No more than 2 introductory courses can count for Topical Lecture		
MSE 420	Ceramic Materials & Properties	3
MSE 441	Metals Processing	3
MSE 450	Polymer Science & Engineering	3 or 4
MSE 470	Design and Use of Biomaterials	3
ECE 340	Semiconductor Electronics	3
Biomaterials		
MSE 473	Biomolecular Materials Science	3
MSE 474	Biomaterials and Nanomedicine	3
ABE 446	Biological Nanoengineering	3 or 4
BIOE 416	Biosensors	3
BIOE 461	Cellular Biomechanics	4
BIOE 476	Tissue Engineering	3
BIOE 487	Stem Cell Bioengineering	3 or 4
CHBE 473	Biomolecular Engineering	3 or 4
ECE 380	Biomedical Imaging	3
ECE 414	Biomedical Instrumentation	3
ECE 415	Biomedical Instrumentation Lab	2
ECE 472	Biomedical Ultrasound Imaging	3
ME 482	Musculoskel Tissue Mechanics	3 or 4
ME 483	Mechanobiology	4
Biomaterials Science - Can only count one science course for Topical Lecture Biomaterials		
BIOC 446	Physical Biochemistry	3
BIOC 455	Technqs Biochem & Biotech	4
BIOP 401	Introduction to Biophysics	3
All Other Areas		
MSE 403	Synthesis of Materials	3
MSE 421	Ceramic Processing	3 or 4
MSE 422	Electrical Ceramics	3
MSE 440	Mechanical Behavior of Metals	3
MSE 443	Design of Engineering Alloys	3
MSE 445	Corrosion of Metals	3 or 4
MSE 453	Plastics Engineering	3
MSE 455	Macromolecular Solids	3
MSE 456	Mechanics of Composites	3
MSE 457	Polymer Chemistry	3 or 4
MSE 458	Polymer Physics	3 or 4
MSE 460	Electronic Materials I	3
MSE 461	Electronic Materials II	3
MSE 466	Materials in Electrochem Syst	3
MSE 480	Surfaces and Colloids	3
MSE 481	Electron Microscopy	3
MSE 484	Composite Materials	3
MSE 485	Atomic Scale Simulations	3
MSE 487	Materials for Nanotechnology	3
MSE 488	Optical Materials	3 or 4
MSE 489	Matl Select for Sustainability	3
ABE 482	Package Engineering	3
CEE 401	Concrete Materials	4
CEE 460	Steel Structures I	3
CHBE 457	Microelectronics Processing	3
ECE 441	Physcs & Modeling Semicond Dev	3
ECE 443	LEDs and Solar Cells	4
ECE 444	IC Device Theory & Fabrication	4
ECE 481	Nanotechnology	4
ECE 485	MEMS Devices & Systems	3
ECE 487	Intro Quantum Electr for EEs	3
ECE 488	Compound Semicond & Devices	3
ECE 495	Photonic Device Laboratory	3
IE 431	Design for Six Sigma	3
ME 431	Mechanical Component Failure	3 or 4
ME 450		
ME 472	Introduction to Tribology	3 or 4
ME 487	MEMS-NEMS Theory & Fabrication	4
NPRE 470	Fuel Cells & Hydrogen Sources	3
SE 412	Nondestructive Evaluation	3 or 4
TAM 427		
TAM 451	Intermediate Solid Mechanics	4
TAM 456	Experimental Stress Analysis	3
Science - Can only count one science course for Topical Lecture		
CHEM 436	Fundamental Organic Chem II	3
PHYS 485	Atomic Phys & Quantum Theory	3
PHYS 486	Quantum Physics I	4
PHYS 487	Quantum Physics II	4

Technical Elective courses

Code	Title	Hours
Technical electives selected from the list below of approved courses established by the department:		6
AE 202	Aerospace Flight Mechanics	3
AE 302	Aerospace Flight Mechanics II	3
AE 311	Incompressible Flow	3
AE 312	Compressible Flow	3
AE 321	Mechs of Aerospace Structures	3
AE 323	Applied Aerospace Structures	3
AE 352	Aerospace Dynamical Systems	3
AE 353	Aerospace Control Systems	3
AE 370	Aerospace Numerical Methods	3
AE 402	Orbital Mechanics	3 or 4
AE 403	Spacecraft Attitude Control	3 or 4
AE 410	Computational Aerodynamics	3 or 4
AE 412	Viscous Flow & Heat Transfer	4
AE 416	Applied Aerodynamics	3 or 4
AE 419	Aircraft Flight Mechanics	3 or 4
AE 420	Finite Element Analysis	3 or 4
AE 427		
AE 428	Mechanics of Composites	3
AE 433	Aerospace Propulsion	3 or 4
AE 434	Rocket Propulsion	3 or 4
AE 435	Electric Propulsion	3 or 4
AE 442	Aerospace Systems Design I	3
AE 443	Aerospace Systems Design II	3
AE 451	Aeroelasticity	3 or 4
AE 454	Systems Dynamics & Control	3 or 4
AE 460	Aerodynamics & Propulsion Lab	2
AE 461	Structures & Control Lab	2
AE 468	Optical Remote Sensing	3
AE 482	Introduction to Robotics	4
AE 483	Autonomous Systems Lab	2
ABE 223	ABE Principles: Machine Syst	2
ABE 224	ABE Principles: Soil & Water	2
ABE 225	ABE Principles: Bioenvironment	2
ABE 226	ABE Principles: Bioprocessing	2
ABE 341	Transport Processes in ABE	3
ABE 361	Off-Road Machine Design	3
ABE 425	Engrg Measurement Systems	4
ABE 430	Project Management	2
ABE 436	Renewable Energy Systems	3 or 4
ABE 446	Biological Nanoengineering	3 or 4
ABE 454	Environmental Soil Physics	3
ABE 455	Erosion and Sediment Control	2
ABE 456	Land & Water Resources Engrg	3 or 4
ABE 457	NPS Pollution Processes	2
ABE 458	NPS Pollution Modeling	2
ABE 459	Drainage and Water Management	3 or 4
ABE 463	Electrohydraulic Systems	3
ABE 466	Engineering Off-Road Vehicles	3
ABE 469	Industry-Linked Design Project	4
ABE 474	Indoor Environmental Control	3 or 4
ABE 476	Indoor Air Quality Engineering	4
ABE 482	Package Engineering	3
ABE 483	Engineering Properties of Food Materials	3
ABE 488	Bioprocessing Biomass for Fuel	4
BIOC 446	Physical Biochemistry	3
BIOC 455	Technqs Biochem & Biotech	4
BIOE 201	Conservation Principles Bioeng	3
BIOE 202	Cell & Tissue Engineering Lab	2
BIOE 205	Signals & Systems in Bioengrg	3
BIOE 301		
BIOE 302	Modeling Human Physiology	3
BIOE 303	Quantitative Physiology Lab	2
BIOE 306	Biofabrication Lab	3
BIOE 360	Transport & Flow in Bioengrg	3
BIOE 380	Biomedical Imaging	3
BIOE 414	Biomedical Instrumentation	3
BIOE 415	Biomedical Instrumentation Lab	2
BIOE 416	Biosensors	3
BIOE 420	Intro Bio Control Systems	3
BIOE 430	Intro Synthetic Biology	3 or 4
BIOE 461	Cellular Biomechanics	4
BIOE 467	Biophotonics	3
BIOE 476	Tissue Engineering	3
BIOE 479	Cancer Nanotechnology	3
BIOE 480	Magnetic Resonance Imaging	3 or 4
BIOE 481	Whole-Body Musculoskel Biomech	3 or 4
BIOE 482	Musculoskel Tissue Mechanics	3 or 4
BIOE 487	Stem Cell Bioengineering	3 or 4
BIOP 401	Introduction to Biophysics	3
BIOP 419	Brain, Behavior & Info Process	3
BIOP 432	Photosynthesis	3
BTW 261	Principles Tech Comm	3
CHBE 221	Principles of CHE	3
CHBE 421	Momentum and Heat Transfer	4
CHBE 422	Mass Transfer Operations	4
CHBE 424	Chemical Reaction Engineering	3
CHBE 430	Unit Operations Laboratory	4
CHBE 431	Process Design	4
CHBE 440	Process Control and Dynamics	3
CHBE 451	Transport Phenomena	3
CHBE 452	Chemical Kinetics & Catalysis	3
CHBE 456	Polymer Science & Engineering	3
CHBE 457	Microelectronics Processing	3
CHBE 471	Biochemical Engineering	3 or 4
CHBE 472	Techniques in Biomolecular Eng	3 or 4
CHBE 473	Biomolecular Engineering	3 or 4
CHBE 474	Metabolic Engineering	3 or 4
CHBE 475	Tissue Engineering	3
CHBE 476	Biotransport	3
CHBE 478	Bioenergy Technology	3

CHEM 222	Quantitative Analysis Lecture	2
CHEM 223	Quantitative Analysis Lab	2
CHEM 232	Elementary Organic Chemistry I	3 or 4
CHEM 233	Elementary Organic Chem Lab I	2
CHEM 236	Fundamental Organic Chem I	4
CHEM 237	Structure and Synthesis	2
CHEM 312	Inorganic Chemistry	3
CHEM 315	Instrumental Chem Systems Lab	2
CHEM 317	Inorganic Chemistry Lab	3
CHEM 332	Elementary Organic Chem II	4
CHEM 360	Chemistry of the Environment	3
CHEM 420	Instrumental Characterization	2
CHEM 436	Fundamental Organic Chem II	3
CHEM 437	Organic Chemistry Lab	3
CHEM 438	Advanced Organic Chemistry	3
CHEM 440	Physical Chemistry Principles	4
CHEM 442	Physical Chemistry I	4
CHEM 445	Physical Principles Lab I	2
CHEM 447	Physical Principles Lab II	2
CHEM 450	Astrochemistry	4
CHEM 451	Astrochemistry Laboratory	3 or 4
CHEM 460	Green Chemistry	3 or 4
CHEM 472	Physical Biochemistry	3
CHEM 480	Polymer Chemistry	3 or 4
CHEM 482	Polymer Physics	3 or 4
CHEM 483	Solid State Structural Anlys	4
CHEM 488	Surfaces and Colloids	3 or 4
CEE 310	Transportation Engineering	3
CEE 320	Construction Engineering	3
CEE 330	Environmental Engineering	3
CEE 350	Water Resources Engineering	3
CEE 360	Structural Engineering	3
CEE 380	Geotechnical Engineering	3
CEE 401	Concrete Materials	4
CEE 405	Asphalt Materials I	3 or 4
CEE 406	Pavement Design I	3 or 4
CEE 407	Airport Design	3 or 4
CEE 408	Railroad Transportation Engrg	3 or 4
CEE 409	Railroad Track Engineering	3 or 4
CEE 410	Railway Signaling & Control	3 or 4
CEE 411	RR Project Design & Constr	3 or 4
CEE 412	High-Speed Rail Engineering	3 or 4
CEE 430	Ecological Quality Engineering	2
CEE 432	Stream Ecology	3 or 4
CEE 434	Environmental Systems I	3
CEE 437	Water Quality Engineering	3
CEE 440	Fate Cleanup Environ Pollutant	4
CEE 442	Environmental Engineering Principles, Physical	4
CEE 443	Env Eng Principles, Chemical	4
CEE 444	Env Eng Principles, Biological	4
CEE 445		
CEE 446	Air Quality Engineering	4
CEE 447	Atmospheric Chemistry	4
CEE 449	Environmental Engineering Lab	3
CEE 450	Surface Hydrology	3
CEE 451	Environmental Fluid Mechanics	3
CEE 452	Hydraulic Analysis and Design	3
CEE 453	Urban Hydrology and Hydraulics	4
CEE 457	Groundwater	3
CEE 460	Steel Structures I	3
CEE 461	Reinforced Concrete I	3
CEE 462	Steel Structures II	3 or 4
CEE 463	Reinforced Concrete II	3 or 4
CEE 465	Design of Structural Systems	3
CEE 467	Masonry Structures	3 or 4
CEE 468	Prestressed Concrete	3 or 4
CEE 469	Wood Structures	3 or 4
CEE 470	Structural Analysis	4
CEE 471	Structural Mechanics	3 or 4
CEE 472	Structural Dynamics I	3 or 4
CEE 480		
CEE 483	Soil Mechanics and Behavior	4
CEE 484	Applied Soil Mechanics	3 or 4
CEE 491	Decision and Risk Analysis	3 or 4
CSE 401	Numerical Analysis	3 or 4
CSE 402	Parallel Progrmg: Sci & Engrg	3 or 4
CSE 414	Algorithms	4
CSE 422	Computer System Organization	3 or 4
CSE 423	Operating Systems Design	3 or 4
CSE 426	Software Engineering I	3 or 4
CSE 427	Interactive Computer Graphics	3 or 4
CSE 429	Software Engineering II	3 or 4
CSE 441	Introduction to Optimization	3 or 4
CSE 450	Computational Mechanics	3 or 4
CSE 451	Finite Element Analysis	3 or 4
CSE 461	Computational Aerodynamics	3 or 4
CSE 485	Atomic Scale Simulations	3 or 4
CS 173	Discrete Structures	3
CS 210	Ethical & Professional Issues	2
CS 225	Data Structures	4
CS 233	Computer Architecture	4
CS 241	System Programming	4
CS 242	Programming Studio	3
CS 357	Numerical Methods I	3
CS 374	Introduction to Algorithms & Models of Computation	4
CS 410	Text Information Systems	3 or 4
CS 411	Database Systems	3 or 4
CS 412	Introduction to Data Mining	3 or 4
CS 413	Intro to Combinatorics	3 or 4
CS 414	Multimedia Systems	3 or 4
CS 418	Interactive Computer Graphics	3 or 4
CS 419	Production Computer Graphics	3 or 4

CS 420	Parallel Progrmg: Sci & Engrg	3 or 4
CS 421	Programming Languages & Compilers	3 or 4
CS 422	Programming Language Design	3 or 4
CS 423	Operating Systems Design	3 or 4
CS 424	Real-Time Systems	3 or 4
CS 425	Distributed Systems	3 or 4
CS 426	Compiler Construction	3 or 4
CS 427	Software Engineering I	3 or 4
CS 428	Software Engineering II	3 or 4
CS 429	Software Engineering II, ACP	3
CS 431	Embedded Systems	3 or 4
CS 433	Computer System Organization	3 or 4
CS 436	Computer Networking Laboratory	3 or 4
CS 438	Communication Networks	3 or 4
CS 439	Wireless Networks	3 or 4
CS 440	Artificial Intelligence	3 or 4
CS 446	Machine Learning	3 or 4
CS 447	Natural Language Processing	3 or 4
CS 450	Numerical Analysis	3 or 4
CS 457	Numerical Methods II	3
CS 460	Security Laboratory	3 or 4
CS 461	Computer Security I	4
CS 463	Computer Security II	3 or 4
CS 465	User Interface Design	4
CS 466	Introduction to Bioinformatics	3 or 4
CS 467	Social Visualization	3 or 4
CS 473	Algorithms	4
CS 475	Formal Models of Computation	3 or 4
CS 476	Program Verification	3 or 4
CS 477	Formal Software Development Methods	3 or 4
CS 481	Advanced Topics in Stochastic Processes & Applications	3 or 4
CS 482	Simulation	3 or 4
CS 483	Applied Parallel Programming	4
CS 484	Parallel Programming	3 or 4
ECE 206	Electrical and Electronic Circuits Lab	1
ECE 210	Analog Signal Processing	4
ECE 211	Analog Circuits & Systems	2
ECE 304	Photonic Devices	3
ECE 307	Techniques for Engrg Decisions	3
ECE 310	Digital Signal Processing	3
ECE 311	Digital Signal Processing Lab	1
ECE 329	Fields and Waves I	3
ECE 330	Power Ckts & Electromechanics	3
ECE 333	Green Electric Energy	3
ECE 340	Semiconductor Electronics	3
ECE 342	Electronic Circuits	3
ECE 343	Electronic Circuits Laboratory	1
ECE 350	Fields and Waves II	3
ECE 380	Biomedical Imaging	3
ECE 385	Digital Systems Laboratory	3
ECE 391	Computer Systems Engineering	4
ECE 395	Advanced Digital Projects Lab	2 or 3
ECE 401	Signal and Image Analysis	4
ECE 402	Electronic Music Synthesis	3
ECE 403	Audio Engineering	3
ECE 408	Applied Parallel Programming	4
ECE 411	Computer Organization & Design	4
ECE 412	Microcomputer Laboratory	3
ECE 414	Biomedical Instrumentation	3
ECE 415	Biomedical Instrumentation Lab	2
ECE 416	Biosensors	3
ECE 417	Multimedia Signal Processing	4
ECE 418	Image & Video Processing	4
ECE 419	Security Laboratory	3 or 4
ECE 420	Embedded DSP Laboratory	2
ECE 422	Computer Security I	4
ECE 424	Computer Security II	3 or 4
ECE 425	Intro to VLSI System Design	3
ECE 428	Distributed Systems	3 or 4
ECE 431	Electric Machinery	4
ECE 432	Advanced Electric Machinery	3
ECE 435	Computer Networking Laboratory	3 or 4
ECE 437	Sensors and Instrumentation	3
ECE 438	Communication Networks	3 or 4
ECE 439	Wireless Networks	3 or 4
ECE 441	Physcs & Modeling Semicond Dev	3
ECE 443	LEDs and Solar Cells	4
ECE 444	IC Device Theory & Fabrication	4
ECE 445	Senior Design Project Lab	4
ECE 446	Principles of Experimental Research in Electrical Engineering	4
ECE 447	Active Microwave Ckt Design	3
ECE 448	Artificial Intelligence	3 or 4
ECE 451	Adv Microwave Measurements	3
ECE 452	Electromagnetic Fields	3
ECE 453	Wireless Communication Systems	4
ECE 454	Antennas	3
ECE 455	Optical Electronics	3 or 4
ECE 456	Global Nav Satellite Systems	4
ECE 457	Microwave Devices & Circuits	3
ECE 458	Applic of Radio Wave Propag	3
ECE 459	Communications Systems	3
ECE 460	Optical Imaging	4
ECE 461	Digital Communications	3
ECE 462	Logic Synthesis	3
ECE 463	Digital Communications Lab	2
ECE 464	Power Electronics	3
ECE 465	Optical Communications Systems	3
ECE 466	Optical Communications Lab	1
ECE 467	Biophotonics	3
ECE 468	Optical Remote Sensing	3
ECE 469	Power Electronics Laboratory	2
ECE 470	Introduction to Robotics	4

ECE 472	Biomedical Ultrasound Imaging	3
ECE 473	Fund of Engrg Acoustics	3 or 4
ECE 476	Power System Analysis	3
ECE 478	Formal Software Development Methods	3 or 4
ECE 480	Magnetic Resonance Imaging	3 or 4
ECE 481	Nanotechnology	4
ECE 482	Digital IC Design	3
ECE 483	Analog IC Design	3
ECE 485	MEMS Devices & Systems	3
ECE 486	Control Systems	4
ECE 487	Intro Quantum Electr for EEs	3
ECE 488	Compound Semicond & Devices	3
ECE 489	Robot Dynamics and Control	4
ECE 490	Introduction to Optimization	3 or 4
ECE 491	Numerical Analysis	3 or 4
ECE 492	Parallel Progrmg: Sci & Engrg	3 or 4
ECE 493	Advanced Engineering Math	3 or 4
ECE 495	Photonic Device Laboratory	3
ABE 482	Package Engineering	3
IE 330	Industrial Quality Control	3
IE 340	Human Factors	4
IE 360	Facilities Planning and Design	3
IE 361	Production Planning & Control	3
IE 400	Design & Anlys of Experiments	3 or 4
IE 410	Advanced Topics in Stochastic Processes & Applications	3 or 4
IE 411	Optimization of Large Systems	3 or 4
IE 412	OR Models for Mfg Systems	3 or 4
IE 413	Simulation	3 or 4
IE 420	Financial Engineering	3 or 4
IE 430	Economic Found of Quality Syst	3 or 4
IE 431	Design for Six Sigma	3
IE 445	Human Performance and Cognition in Context	3 or 4
MATH 213	Basic Discrete Mathematics	3
MATH 347	Fundamental Mathematics	3
MATH 348	Fundamental Mathematics-ACP	4
MATH 357	Numerical Methods I	3
MATH 402	Non Euclidean Geometry	3 or 4
MATH 403	Euclidean Geometry	3 or 4
MATH 412	Graph Theory	3 or 4
MATH 413	Intro to Combinatorics	3 or 4
MATH 414	Mathematical Logic	3 or 4
MATH 416	Abstract Linear Algebra	3 or 4
MATH 417	Intro to Abstract Algebra	3 or 4
MATH 418	Intro to Abstract Algebra II	3 or 4
MATH 423	Differential Geometry	3 or 4
MATH 432	Set Theory and Topology	3 or 4
MATH 442	Intro Partial Diff Equations	3 or 4
MATH 444	Elementary Real Analysis	3 or 4
MATH 446	Applied Complex Variables	3 or 4
MATH 447	Real Variables	3 or 4
MATH 448	Complex Variables	3 or 4
MATH 450	Numerical Analysis	3 or 4
MATH 453	Number Theory	3 or 4
MATH 461	Probability Theory	3 or 4
MATH 464	Statistics and Probability II	3 or 4
MATH 473	Algorithms	4
MATH 475	Formal Models of Computation	3 or 4
MATH 481	Vector and Tensor Analysis	3 or 4
MATH 482	Linear Programming	3 or 4
MATH 484	Nonlinear Programming	3 or 4
MATH 487	Advanced Engineering Math	3 or 4
MATH 489	Dynamics & Differential Eqns	3 or 4
ME 170	Computer-Aided Design	3
ME 270	Design for Manufacturability	3
ME 310	Fundamentals of Fluid Dynamics	4
ME 320	Heat Transfer	4
ME 340	Dynamics of Mechanical Systems	3.5
ME 351		
ME 360	Signal Processing	3.5
ME 370	Mechanical Design I	3
ME 371	Mechanical Design II	3
ME 400	Energy Conversion Systems	3 or 4
ME 401	Refrigeration and Cryogenics	3 or 4
ME 402	Design of Thermal Systems	3 or 4
ME 403	Internal Combustion Engines	3 or 4
ME 410	Intermediate Gas Dynamics	3 or 4
ME 411	Viscous Flow & Heat Transfer	4
ME 412	Numerical Thermo-Fluid Mechs	2 to 4
ME 420	Intermediate Heat Transfer	4
ME 431	Mechanical Component Failure	3 or 4
ME 440	Kinem & Dynamics of Mech Syst	3 or 4
ME 445	Introduction to Robotics	4
ME 446	Robot Dynamics and Control	4
ME 450		
ME 451	Computer-Aided Mfg Systems	3 or 4
ME 452	Num Control of Mfg Processes	3 or 4
ME 455	Micromanufacturing Process & Automation	3 or 4
ME 460	Industrial Control Systems	4
ME 461	Computer Cntrl of Mech Systems	3 or 4
ME 471	Finite Element Analysis	3 or 4
ME 472	Introduction to Tribology	3 or 4
ME 481	Whole-Body Musculoskel Biomech	3 or 4
ME 482	Musculoskel Tissue Mechanics	3 or 4
ME 483	Mechanobiology	4
ME 485	MEMS Devices & Systems	3
ME 487	MEMS-NEMS Theory & Fabrication	4
MCB 150	Molec & Cellular Basis of Life	4
MCB 151	Molec & Cellular Laboratory	1
MCB 215	Foundation in Mol & Cell Bio	3
MCB 244	Human Anatomy & Physiology I	3
MCB 245	Human Anat & Physiol Lab I	2
MCB 246	Human Anatomy & Physiology II	3

MCB 247	Human Anat & Physiol Lab II	2
MCB 250	Molecular Genetics	3
MCB 251	Exp Techniqs in Molecular Biol	2
MCB 252	Cells, Tissues & Development	3
MCB 253	Exp Techniqs in Cellular Biol	2
MCB 270	Medical Genetics	3
MCB 300	Microbiology	3
MCB 301	Experimental Microbiology	3
MCB 314	Introduction to Neurobiology	3
MCB 316	Genetics and Disease	4
MCB 317	Genetics and Genomics	4
MCB 320	Mechanisms of Human Disease	3
MCB 354	Biochem & Phys Basis of Life	3
MCB 400	Cancer Cell Biology	3
MCB 401	Cellular Physiology	3
MCB 402	Sys & Integrative Physiology	3
MCB 403	Cell & Membrane Physiology Lab	1 or 2
MCB 404	Sys & Integrative Physiol Lab	1 to 2
MCB 406	Gene Expression & Regulation	3
MCB 408	Immunology	3
MCB 410	Developmental Biology, Stem Cells and Regenerative Medicine	3
MCB 413	Endocrinology	3
MCB 419	Brain, Behavior & Info Process	3
MCB 421	Microbial Genetics	3
MCB 424	Microbial Biochemistry	3
MCB 426	Bacterial Pathogenesis	3
MCB 428	Microbial Pathogens Laboratory	2
MCB 429	Cellular Microbiology &Disease	3
MCB 430	Molecular Microbiology	3
MCB 431	Microbial Physiology	3
MCB 432	Computing in Molecular Biology	3
MCB 433	Virology & Viral Pathogenesis	3
MCB 435	Evolution of Infectious Disease	3
MCB 442	Comparative Immunobiology	4
MCB 446	Physical Biochemistry	3
MCB 450	Introductory Biochemistry	3
MCB 458	Basic Human Pathology	3
MCB 461	Cell & Molecular Neuroscience	3
MCB 462	Integrative Neuroscience	3
MCB 465	Human Metabolic Disease	3
MCB 471	Cell Structure and Dynamics	3
MCB 480	Eukaryotic Cell Signaling	3
MSE 396	Introduction to Research (Maximum of 3 hours of technical elective credit for research (MSE 396 and MSE 499). All additional research credit counts for free elective.)	1 to 3
MSE 403	Synthesis of Materials	3
MSE 420	Ceramic Materials & Properties	3
MSE 421	Ceramic Processing	3 or 4
MSE 422	Electrical Ceramics	3
MSE 440	Mechanical Behavior of Metals	3
MSE 441	Metals Processing	3
MSE 443	Design of Engineering Alloys	3
MSE 445	Corrosion of Metals	3 or 4
MSE 450	Polymer Science & Engineering	3 or 4
MSE 453	Plastics Engineering	3
MSE 454		3
MSE 455	Macromolecular Solids	3
MSE 456	Mechanics of Composites	3
MSE 457	Polymer Chemistry	3 or 4
MSE 458	Polymer Physics	3 or 4
MSE 460	Electronic Materials I	3
MSE 461	Electronic Materials II	3
MSE 466	Materials in Electrochem Syst	3
MSE 470	Design and Use of Biomaterials	3
MSE 473	Biomolecular Materials Science	3
MSE 474	Biomaterials and Nanomedicine	3
MSE 480	Surfaces and Colloids	3
MSE 481	Electron Microscopy	3
MSE 484	Composite Materials	3
MSE 485	Atomic Scale Simulations	3
MSE 487	Materials for Nanotechnology	3
MSE 488	Optical Materials	3
MSE 489	Matl Select for Sustainability	3
MSE 499	Senior Thesis	3
NPRE 201	Energy Systems	2 or 3
NPRE 241	Intro to Radiation Protection	2
NPRE 247	Modeling Nuclear Energy System	3
NPRE 402	Nuclear Power Engineering	3 or 4
NPRE 412	Nuclear Power Econ & Fuel Mgmt	3 or 4
NPRE 421	Plasma and Fusion Science	3
NPRE 423	Plasma Laboratory	2
NPRE 429	Plasma Engineering	3
NPRE 431	Materials in Nuclear Engrg	3
NPRE 432	Nuclear Engrg Materials Lab	2
NPRE 435	Radiological Imaging	3
NPRE 441	Radiation Protection	4
NPRE 442	Radioactive Waste Management	3
NPRE 446	Radiation Interact w/Matter I	3
NPRE 447	Radiation Interact w/Matter II	3
NPRE 448	Nuclear Syst Engrg & Design	4
NPRE 451	NPRE Laboratory	3
NPRE 455	Neutron Diffusion & Transport	4
NPRE 461	Probabilistic Risk Assessment	3 or 4
NPRE 470	Fuel Cells & Hydrogen Sources	3
NPRE 475	Wind Power Systems	3 or 4
PHYS 213	Univ Physics: Thermal Physics	2
PHYS 225	Relativity & Math Applications	2
PHYS 325	Classical Mechanics I	3
PHYS 326	Classical Mechanics II	3
PHYS 329	Atmospheric Dynamics I	3
PHYS 330	Atmospheric Dynamics II	3
PHYS 401	Classical Physics Lab	3

PHYS 402	Light	3 or 4
PHYS 403	Modern Experimental Physics	4 or 5
PHYS 406	Acoustical Physics of Music	4
PHYS 419	Space, Time, and Matter-ACP	3 or 4
PHYS 420	Space, Time, and Matter	2
PHYS 435	Electromagnetic Fields I	3
PHYS 436	Electromagnetic Fields II	3
PHYS 466	Atomic Scale Simulations	3 or 4
PHYS 470	Subatomic Physics	4
PHYS 475	Introduction to Biophysics	3 or 4
PHYS 485	Atomic Phys & Quantum Theory	3
PHYS 486	Quantum Physics I	4
PHYS 487	Quantum Physics II	4
SE 101	Engineering Graphics & Design	3
SE 261	Business Side of Engineering	1 or 2
SE 310	Design of Structures and Mechanisms	3
SE 311	Engineering Design Analysis	3
SE 312	Instrumentation and Test Lab	1
SE 320	Control Systems	4
SE 361	Emotional Intelligence Skills	3
SE 400	Engineering Law	3 or 4
SE 402	Comp-Aided Product Realization	3 or 4
SE 410	Component Design	3
SE 411	Reliability Engineering	3 or 4
SE 412	Nondestructive Evaluation	3 or 4
SE 413	Engineering Design Optimization	3 or 4
SE 420	Digital Control Systems	4
SE 422	Robot Dynamics and Control	4
SE 423	Mechatronics	3
SE 424	State Space Design for Control	3
SE 450	Decision Analysis I	3 or 4
TSM 233	Metallurgy & Welding Process	3
TE 461	Technology Entrepreneurship	3
TAM 212	Introductory Dynamics	3
TAM 252	Solid Mechanics Design	1
TAM 302	Engineering Design Principles	3
TAM 335	Introductory Fluid Mechanics	4
TAM 412	Intermediate Dynamics	4
TAM 413	Fund of Engrg Acoustics	3 or 4
TAM 424	Mechanics of Structural Metals	3 or 4
TAM 427		
TAM 428	Mechanics of Composites	3
TAM 435	Intermediate Fluid Mechanics	4
TAM 445	Continuum Mechanics	4
TAM 451	Intermediate Solid Mechanics	4
TAM 456	Experimental Stress Analysis	3
TAM 461	Cellular Biomechanics	4
TAM 470	Computational Mechanics	3 or 4

Electives

Code	Title	Hours
The Grainger College of Engineering Liberal Education course list, or additional courses from the campus General Education lists for Social and Behavioral Sciences or Humanities and the Arts [6]		6
Free electives. Additional unrestricted course work, subject to certain exceptions as noted by the College, so that there are at least 128 credit hours earned toward the degree. [7]		6
Total Hours of Curriculum to Graduate		**128**

1 *External transfer students take* ENG 300 *instead.*

2 *This optional course may be used to help meet free elective requirements.*

3 MATH 220 *may be substituted, with four of the five credit hours applying toward the degree.* MATH 220 *is appropriate for students with no background in calculus.*

4 *The replacement of* IE 300 *with* STAT 400 *is not allowed for students in the Biomaterials Area unless one of their biomaterials area topical lectures and one of their topical lectures outside the biomaterials area are deemed by the Accreditation Board for Engineering and Technology (ABET) to be an engineering course. The extra hour of credit for STAT 400 may be used to help meet free elective requirements.*

5 *Advanced Composition satisfied by completing* MSE 307 *and* MSE 308.

6 *The Grainger College of Engineering approved liberal education course list can be found* here *(*https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-GeneralEducationElectives*). Note that these credit hours could carry the required cultural studies designation required for campus general education requirements.*

7 *The Grainger College of Engineering restrictions to free electives can be found* here *(*https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-FreeElectives*).*

for the degree of Bachelor of Science in Materials Science & Engineering

Suggested Sequence

The curriculum sequence below is a suggested sequence, as all Grainger Engineering students work with a department academic advisor to achieve their educational goals, specific to their needs and preparation. Dynamic and Static curricular maps, which include prerequisite sequencing, can be found here (biomaterials) (https://grainger.illinois.edu/academics/undergraduate/majors-and-minors/matse-biomaterials-map/) and here (all other areas) (https://grainger.illinois.edu/academics/undergraduate/majors-and-minors/matse-non-biomaterials-map/).

First Year

First Semester		Hours
MSE 182	Introduction to MatSE	2
ENG 100	Engineering Orientation	0
MATH 221 [1]	Calculus I	4
CHEM 102	General Chemistry I	3
CHEM 103	General Chemistry Lab I	1

RHET 105 (or General education elective)[2,3]	Writing and Research	4-3
	Semester Hours	14-13

Second Semester

MSE 183[4]	Freshman Materials Laboratory	1
MATH 231	Calculus II	3
MATH 225	Introductory Matrix Theory	2
CHEM 104	General Chemistry II	3
CHEM 105	General Chemistry Lab II	1
PHYS 211	University Physics: Mechanics	4
General education elective (or RHET 105)[2,3]		3-4
	Semester Hours	17-18

Second Year

First Semester

CS 101	Intro Computing: Engrg Sci	3
MATH 241	Calculus III	4
MSE 201	Phases and Phase Relations	3
PHYS 212	University Physics: Elec Mag	4
General education elective[3]		3
	Semester Hours	17

Second Semester

ECE 205	Electrical and Electronic Circuits	3
MATH 285	Intro Differential Equations	3
MSE 206	Mechanics for MatSE	4
PHYS 214	Univ Physics: Quantum Physics	2
General education elective[3]		3
	Semester Hours	15
	Total Hours:	63

All students except Biomaterials Area

Third Year

First Semester

		Hours
IE 300 or STAT 400[5]	Analysis of Data	3
MSE 307[6]	Materials Laboratory I	3
MSE 401	Thermodynamics of Materials	3
MSE 406	Thermal-Mech Behavior of Matls	3
General education elective[3]		3
	Semester Hours	15

Second Semester

MSE 304	Electronic Properties of Matls	3
MSE 308[6]	Materials Laboratory II	3
MSE 402	Kinetic Processes in Materials	3
MSE 405	Microstructure Determination	3
Topical lecture (intro level suggested)[7]		3
General education elective[3]		3
	Semester Hours	18

Fourth Year

First Semester

Topical lecture courses[7]		6
MSE 404[9]	Laboratory Studies in Materials Science and Engineering	3
Technical elective[8,10]		3
General education elective[3]		3
Free elective[8]		3
	Semester Hours	18

Second Semester

MSE 395	Materials Design	3
MSE 404[9]	Laboratory Studies in Materials Science and Engineering	3
Topical lecture[7]		3
Technical elective[8,10]		3
Free elective[8]		3
	Semester Hours	15
	Total Hours:	66

Biomaterials Area

Third Year

First Semester

		Hours
CHEM 232	Elementary Organic Chemistry I	3
MSE 307[6]	Materials Laboratory I	3
MSE 401	Thermodynamics of Materials	3
MSE 406	Thermal-Mech Behavior of Matls	3
MCB 150	Molec Cellular Basis of Life	4
	Semester Hours	16

Second Semester

MCB 252	Cells, Tissues Development	3
IE 300 or STAT 400[5]	Analysis of Data	3
MSE 308[6]	Materials Laboratory II	3
MSE 402	Kinetic Processes in Materials	3
General education elective[3]		3
	Semester Hours	15

Fourth Year

First Semester

MSE 470	Design and Use of Biomaterials	3
MCB 450	Introductory Biochemistry	3
Topical lecture in biomaterials area[7]		2
Topical lecture outside of biomaterials area[7]		3
General education elective[3]		3
Free Elective [8]		3
	Semester Hours	17

Second Semester

MSE 395	Materials Design	3
MSE 404[9]	Laboratory Studies in Materials Science and Engineering	3
Topical lecture in biomaterials area[7]		3
Topical lecture outside of biomaterials area[7]		3
General education elective[3]		3

Free elective [8]		3
	Semester Hours	18
	Total Hours:	66

Code	Title	Hours
Total Hours all semesters		**128**

[1] *MATH 220 may be substituted, with four of the five credit hours applying toward the degree. MATH 220 is appropriate for students with no background in calculus.*

[2] *RHET 105 (or an alternative Composition I sequence) is taken either in the first or second semester of the first year, according to the student's UIN (Spring if your UIN is Odd). General Education Elective is taken the other semester. Composition I guidelines can be found at* http://catalog.illinois.edu/general-information/degree-general-education-requirements/ *under Written Communication Requirement.*

[3] *Students must take 6 hours from the campus General Education Social and Behavioral Sciences list, 6 hours from campus General Education Humanities and the Arts list, and 6 hours from a liberal education list approved by the college or from the campus General Education lists for Social and Behavioral Sciences or Humanities and the Arts.*
Students must also complete the campus cultural studies requirement by completing (i) one western/comparative culture(s) course, (ii) one non-western culture(s) course, and (iii) one U.S. Minority Culture(s) course from the General Education cultural studies lists. Most students select general education courses that simultaneously satisfy these cultural studies requirements.

[4] *This course is highly recommended for freshmen, who may use it to help meet free elective requirements.*

[5] *The replacement of* IE 300 *with* STAT 400 *is not allowed for students in the Biomaterials Area unless one of their biomaterials area topical lectures and one of their topical lectures outside the biomaterials area are deemed by the Accreditation Board for Engineering and Technology (ABET) to be an engineering course. The extra hour of credit for STAT 400 may be used to help meet free elective requirements.*

[6] *Satisfies the General Education Advanced Composition requirement.*

[7] *To be selected from* list of topical lecture courses *(*https://matse.illinois.edu/academics/undergraduate-programs/topical-lectures/*) established by the department to provide an acceptable level of study in the student's chosen focus area.*

[8] *During fourth year, strongly recommended is incorporation of one or more of an internship, co-op position, and a research project during summers or an academic semester, or both. For students who intend to continue in graduate school, recommended additionally is the undertaking of a research project (Senior Thesis) in the senior year. The project may take the place of up to 3 hours of technical electives with the remainder counting for free electives.*

[9] Each section of MSE 404 is 1.5 hours. Students take 2 unique sections of MSE 404 for 3 hours.

[10] *Selected from the departmental* list of approved technical electives *(*https://matse.illinois.edu/academics/undergraduate-programs/undergraduate-curriculum/technical-electives/*).*

Learning Outcomes: Materials Science & Engineering, BS

Learning outcomes for the degree of Bachelor of Science Major in Materials Science & Engineering

Student learning outcomes are based on learning outcomes in line with the ABET accreditation process.

Materials Science & Engineering graduates will have:

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. An ability to communicate effectively with a range of audiences.
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Mathematics & Computer Science, BSLAS

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Mathematics & Computer Science

math website: Mathematics & Computer Science (https://math.illinois.edu/academics/undergraduate-program-mathematics/)
computer science website: Mathematics & Computer Science (https://cs.illinois.edu/academics/undergraduate/degree-program-options/bs-mathematics-computer-science/)
department website: Mathematics (https://math.illinois.edu/)
department faculty: Mathematics Faculty (https://math.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college websites: https://las.illinois.edu/ **and** https://engineering.illinois.edu
math email: mathadvising@illinois.edu
computer science email: undergrad@cs.illinois.edu (academic@cs.illinois.edu)

Undergraduate programs in Mathematics
Actuarial Science, BSLAS (p. 13)

Mathematics, BSLAS (p. 289)

Mathematics & Computer Science, BSLAS (p. 287)

for the degree of Bachelor of Science in Liberal Arts and Sciences: Major in Mathematics & Computer Science

Departmental distinction: To graduate with distinction requires a specified minimum grade point average in all Computer Science and Mathematics courses listed below. A GPA of 3.25 is required for Distinction, 3.5 for High Distinction, and 3.75 for Highest Distinction. In addition, students must complete at least three semester hours of additional Computer Science or Mathematics courses selected from the following:CS 196, CS 296, CS 397, CS 492, CS 493, CS 499, any CS course numbered 411 or higher, MATH 412, MATH 414, MATH 417, MATH 418, MATH 423, MATH 432, MATH 448, MATH 482, MATH 484, MATH 496.

NOTE: A student taking a cross-listed course in this major may designate it as either mathematics or computer science.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 70 hours. Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Requirements

Code	Title	Hours
CS 100	Freshman Orientation (recommended)	1
Calculus through MATH 241-Calculus III		11-12
CS 124	Introduction to Computer Science I	3
CS 128	Introduction to Computer Science II	3
MATH 347	Fundamental Mathematics	3
or MATH 348	Fundamental Mathematics-ACP	
CS 173	Discrete Structures	3
CS 225	Data Structures	4
CS 222	Software Design Lab	1
Choose one of the following combinations		8-11
CS 233 & CS 241	Computer Architecture and System Programming	
OR		
CS 240	Introduction to Computer Systems	
& two CS courses at the 400 level above CS 403, excluding CS 421 and CS 491. These two courses must be distinct from all other courses used to fulfill program requirements or options.		
CS/MATH 357	Numerical Methods I	3
CS 374	Introduction to Algorithms & Models of Computation	4
CS 421	Programming Languages & Compilers	3
CS 450	Numerical Analysis	3 or 4
MATH 415	Applied Linear Algebra	3
or MATH 416	Abstract Linear Algebra	
400-level mathematics and computer science requirements:		18
Students must select at least six 400-level mathematics and computer science courses, including one from each of the following groups:		
GROUP I		
CS 361	Probability & Statistics for Computer Science (recommended)	
MATH 461	Probability Theory	
STAT 400/ MATH 463	Statistics and Probability I	
GROUP II		
MATH 412	Graph Theory	
MATH 413	Intro to Combinatorics	
MATH 417	Intro to Abstract Algebra	
MATH 427	Honors Abstract Algebra	
GROUP III		
MATH 441	Differential Equations	
MATH 446	Applied Complex Variables	
MATH 484	Nonlinear Programming	
GROUP IV		
MATH 424	Honors Real Analysis	
MATH 444	Elementary Real Analysis	
MATH 447	Real Variables	
GROUP V		
MATH 414	Mathematical Logic	
CS/MATH 473	Algorithms	
CS/MATH 475	Formal Models of Computation	
CS 476	Program Verification	
CS 477	Formal Software Development Methods	
Total Hours		68-76

Learning Outcomes: Mathematics & Computer Science, BSLAS

Learning Outcomes for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Mathematics & Computer Science

By the time of graduation, students will have:

Computer Science:

1. An ability to apply knowledge of computing and mathematics appropriate to the discipline
2. An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution
3. An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs
4. An ability to function effectively on teams to accomplish a common goal
5. An understanding of professional, ethical, legal, security and social issues and responsibilities
6. An ability to communicate effectively with a range of audiences
7. An ability to analyze the local and global impact of computing on individuals, organizations, and society
8. A recognition of the need for and an ability to engage in continuing professional development
9. An ability to use current techniques, skills, and tools necessary for computing practice
10. An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the trade-offs involved in design choices
11. An ability to apply design and development principles in the construction of software systems of varying complexity

Mathematics:

1. An ability to construct proofs and recognize when proofs are complete
2. An ability to use theorems in order to solve problems
3. Technical proficiency in calculus and linear algebra

Mathematics, BSLAS

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Mathematics

department website: https://www.math.illinois.edu/
department faculty: Mathematics Faculty (https://math.illinois.edu/directory/faculty/)
advising: Math advising (https://math.illinois.edu/academics/undergraduate-program/undergraduate-advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: mathadvising@illinois.edu

Students in the Mathematics major can choose one of the following to complete the major:

Mathematics major (p. 289)
Mathematics major, Applied Mathematics concentration (p. 290)
Mathematics major, Graduate Preparation concentration (p. 291)
Mathematics major, Mathematics Teaching concentration (p. 292)
Mathematics major, Operations Research concentration (p. 293)

Mathematics is a broad discipline that contains a range of areas of specialization within it. The required core courses provide fundamental background for mathematics in general. The concentrations allow the student to broaden this background or begin to specialize. Students must complete the core courses and a concentration.

An entering student in mathematics should have academic preparation to enroll in MATH 220 (http://catalog.illinois.edu/search/?P=MATH%20220) during the first semester. Admission to MATH 220 (http://catalog.illinois.edu/search/?P=MATH%20220) requires an acceptable ALEKS score. A student should attain grades of B in calculus in order to complete the advanced courses successfully.

Undergraduate programs in Mathematics

Actuarial Science, BSLAS (p. 13)

Mathematics, BSLAS (p. 289)

Mathematics & Computer Science, BSLAS (p. 287)

for the degree of Bachelor of Science in Liberal Arts and Sciences Major in Mathematics

A Major Plan of Study form, declaring concentration and supporting coursework, must be completed and submitted to the LAS Student Academic Affairs Office except for students in the Teaching of Mathematics concentration. Please complete this form with an advisor in the Mathematics Undergraduate Office within 1-2 semesters of completing MATH 347 or MATH 348.

Departmental distinction: Distinction will be awarded on the basis of selection of 400-level courses in mathematics and the grade point average. Graduation with High Distinction or Highest Distinction in Mathematics requires participation in the Program for Distinction in Mathematics or Mathematics Education. Full details are available at the departmental website.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: normally equates to 46-57 hours including 27-35 hours of mathematics beyond calculus, 3-4 hours of computer science, and 12 hours of supporting coursework. Twelve (12) hours of 300- and 400-level courses in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Required Core Courses		
MATH 241	Calculus III [1]	4
MATH 347	Fundamental Mathematics	3-4
or MATH 348	Fundamental Mathematics-ACP	
MATH 416	Abstract Linear Algebra [2]	3
MATH 417	Intro to Abstract Algebra	3
or MATH 427	Honors Abstract Algebra	
MATH 424	Honors Real Analysis [3]	3
or MATH 444	Elementary Real Analysis	
or MATH 447	Real Variables	
MATH 461	Probability Theory [4]	3-4
or STAT 400	Statistics and Probability I	
CS 101	Intro Computing: Engrg & Sci	3-4
or CS 125	Introduction to Computer Science	
Approved supporting coursework or any minor		12
Mathematics Courses		
Select a total of two courses from two of the following three lists:		6
Geometry		
MATH 402	Non Euclidean Geometry	
MATH 403	Euclidean Geometry	
MATH 423	Differential Geometry	
MATH 481	Vector and Tensor Analysis	
Differential Equations and Complex Analysis		
MATH 441	Differential Equations	
MATH 446	Applied Complex Variables	
MATH 448	Complex Variables	
Number Theory		
MATH 453	Number Theory	
Two additional 400- or 500-level Math courses		6
Total Hours		46-49

[1] *Students should have credit for* MATH 220/MATH 221 *and* MATH 231 *before enrolling in* MATH 241.

[2] *Beginning in Fall 2012, students may not receive credit for both* MATH 416 *and either* ASRM 406*(formerly MATH 410) or* MATH 415*. However, if one course is taken prior to Fall 2012, credit may be earned for both* MATH 416 *and either of* ASRM 406 *(formerly MATH 410) or* MATH 415*.*

[3] *If* MATH 424 *or* MATH 447 *is completed, a requirement for the Graduate Preparatory concentration has been satisfied.*

[4] *If* STAT 400 *is completed, a requirement for the Operations Research concentration has been satisfied.*

Mathematics: Applied Mathematics , BSLAS

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Mathematics, Applied Mathematics Concentration

department website: https://math.illinois.edu/
department faculty: Mathematics Faculty (https://math.illinois.edu/directory/faculty/)
advising: Math advising (https://math.illinois.edu/academics/undergraduate-program/undergraduate-advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: mathadvising@illinois.edu

Mathematics is a broad discipline that contains a range of areas of specialization within it. The required core courses provide fundamental background for mathematics in general. The concentrations allow the student to broaden this background or begin to specialize. Students must complete the core courses and a concentration.

An entering student in mathematics should have academic preparation to enroll in MATH 220 (http://catalog.illinois.edu/search/?P=MATH%20220) during the first semester. Admission to MATH 220 (http://catalog.illinois.edu/search/?P=MATH%20220) requires an acceptable ALEKS score. A student should attain grades of B in calculus in order to complete the advanced courses successfully.

Undergraduate programs in Mathematics

Actuarial Science, BSLAS (p. 13)

Mathematics, BSLAS (p. 289)

Mathematics & Computer Science, BSLAS (p. 287)

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Mathematics, Applied Mathematics Concentration

A Major Plan of Study form, declaring concentration and supporting coursework, must be completed and submitted to the LAS Student Academic Affairs Office except for students in the Teaching of Mathematics concentration. Please complete this form with an advisor in the Mathematics Undergraduate Office within 1-2 semesters of completing MATH 347 or MATH 348.

Departmental distinction: Distinction will be awarded on the basis of selection of 400-level courses in mathematics and the grade point average. Graduation with High Distinction or Highest Distinction in Mathematics requires participation in the Program for Distinction in Mathematics or Mathematics Education. Full details are available at the departmental website.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 46-57 hours including 27-35 hours of mathematics beyond calculus, 3-4 hours of computer science, and 12 hours of supporting coursework.
Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Required Core Courses		
MATH 241	Calculus III [1]	4
MATH 347	Fundamental Mathematics	3-4
or MATH 348	Fundamental Mathematics-ACP	
MATH 416	Abstract Linear Algebra [2]	3
MATH 417	Intro to Abstract Algebra	3
or MATH 427	Honors Abstract Algebra	
MATH 424	Honors Real Analysis [3]	3
or MATH 444	Elementary Real Analysis	
or MATH 447	Real Variables	
MATH 461	Probability Theory [4]	3-4
or STAT 400	Statistics and Probability I	
CS 101	Intro Computing: Engrg & Sci	3-4
or CS 125	Introduction to Computer Science	
Approved supporting coursework or any minor		12
Applied Mathematics Courses		
MATH 441	Differential Equations	3
MATH 446	Applied Complex Variables	3
or MATH 448	Complex Variables	
CS 357	Numerical Methods I	3
or MATH 442	Intro Partial Diff Equations	
or MATH 489	Dynamics & Differential Eqns	
MATH 412	Graph Theory	3
or MATH 413	Intro to Combinatorics	
or MATH 482	Linear Programming	
One additional 400- or 500-level Math course		3
Total Hours		49-52

[1] Students should have credit for MATH 220/MATH 221 and MATH 231 before enrolling in MATH 241.

[2] Beginning in Fall 2012, students may not receive credit for both MATH 416 and either ASRM 406*(formerly MATH 410)* or MATH 415. However, if one course is taken prior to Fall 2012, credit may be earned for both MATH 416 and either of ASRM 406*(formerly MATH 410)* or MATH 415.

[3] If MATH 424 or MATH 447 is completed, a requirement for the Graduate Preparatory concentration has been satisfied.

[4] If STAT 400 is completed, a requirement for the Operations Research concentration has been satisfied.

Mathematics: Graduate Preparation, BSLAS

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Mathematics, Graduate Preparation Concentration

department website: https://math.illinois.edu/
department faculty: Mathematics Faculty (https://math.illinois.edu/directory/faculty/)
advising: Math advising (https://math.illinois.edu/academics/undergraduate-program/undergraduate-advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: mathadvising@illinois.edu

Mathematics is a broad discipline that contains a range of areas of specialization within it. The required core courses provide fundamental background for mathematics in general. The concentrations allow the student to broaden this background or begin to specialize. Students must complete the core courses and a concentration.

An entering student in mathematics should have academic preparation to enroll in MATH 220 (http://catalog.illinois.edu/search/?P=MATH%20220) during the first semester. Admission to MATH 220 (http://catalog.illinois.edu/search/?P=MATH%20220) requires an acceptable ALEKS score. A student should attain grades of B in calculus in order to complete the advanced courses successfully.

Undergraduate programs in Mathematics

Actuarial Science, BSLAS (p. 13)

Mathematics, BSLAS (p. 289)

Mathematics & Computer Science, BSLAS (p. 287)

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Mathematics, Graduate Preparation Concentration

A Major Plan of Study form, declaring concentration and supporting coursework, must be completed and submitted to the LAS Student Academic Affairs Office except for students in the Teaching of Mathematics concentration. Please complete this form with an advisor in the Mathematics Undergraduate Office within 1-2 semesters of completing MATH 347 or MATH 348.

Departmental distinction: Distinction will be awarded on the basis of selection of 400-level courses in mathematics and the grade point average. Graduation with High Distinction or Highest Distinction in Mathematics requires participation in the Program for Distinction in Mathematics or Mathematics Education. Full details are available at the departmental website.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to equates to 46-57 hours including 27-35 hours of mathematics beyond calculus, 3-4 hours of computer science, and 12 hours of supporting coursework. Twelve hours of 300- and 400-level in the major must be taken on this campus.

Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Required Core Courses		
MATH 241	Calculus III [1]	4
MATH 347	Fundamental Mathematics	3-4
or MATH 348	Fundamental Mathematics-ACP	
MATH 416	Abstract Linear Algebra [2]	3
MATH 417	Intro to Abstract Algebra	3
or MATH 427	Honors Abstract Algebra	
MATH 424	Honors Real Analysis	3
or MATH 447	Real Variables	
MATH 461	Probability Theory [3]	3-4
or STAT 400	Statistics and Probability I	
CS 101	Intro Computing: Engrg & Sci	3-4
or CS 125	Introduction to Computer Science	
Approved supporting coursework or any minor		12
Graduate Preparation Courses		
The courses chosen from the core and the Graduate Preparatory concentration must include at least two of MATH 424, MATH 425, MATH 427, MATH 428.		
MATH 418	Intro to Abstract Algebra II	3
or MATH 428	Honors Topics in Mathematics	
MATH 448	Complex Variables	3
MATH 423	Differential Geometry	3
or MATH 425	Honors Advanced Analysis	
or MATH 432	Set Theory and Topology	
MATH 441	Differential Equations	3 or 4
Two additional 400- or 500-level Math courses		6
Total Hours		52-56

[1] *Students should have credit for* MATH 220/MATH 221 *and* MATH 231 *before enrolling in* MATH 241.

[2] *Beginning in Fall 2012, students may not receive credit for both* MATH 416 *and either* ASRM 406*(formerly MATH 410) or* MATH 415*. However, if one course is taken prior to Fall 2012, credit may be earned for both* MATH 416 *and either of* ASRM 406*(formerly MATH 410) or* MATH 415*.*

[3] *If* STAT 400 *is completed, a requirement for the Operations Research concentration has been satisfied.*

Mathematics: Mathematics Teaching, BSLAS

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Mathematics, Mathematics Teaching Concentration

department website: https://math.illinois.edu/
department faculty: Mathematics Faculty (https://math.illinois.edu/directory/faculty/)
advising: Math advising (https://math.illinois.edu/academics/undergraduate-program/undergraduate-advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: mathadvising@illinois.edu

Mathematics is a broad discipline that contains a range of areas of specialization within it. The required core courses provide fundamental background for mathematics in general. The concentrations allow the student to broaden this background or begin to specialize. Students must complete the core courses and a concentration.

An entering student in mathematics should have academic preparation to enroll in MATH 220 (http://catalog.illinois.edu/search/?P=MATH%20220) during the first semester. Admission to MATH 220 (http://catalog.illinois.edu/search/?P=MATH%20220) requires an acceptable ALEKS score. A student should attain grades of B in calculus in order to complete the advanced courses successfully.

Undergraduate programs in Mathematics

Actuarial Science, BSLAS (p. 13)

Mathematics, BSLAS (p. 289)

Mathematics & Computer Science, BSLAS (p. 287)

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Mathematics, Mathematics Teaching Concentration

This concentration fulfills state certification requirements to teach high school math (grades 9-12) through the AP/honors level.

Time to degree completion varies. Minimum time to completion is 8 semesters, with some students requiring 10 semesters. Transfer students may need 10 total semesters combined to complete the program. Please see the LAS section in the transfer handbook (https://admissions.illinois.edu/Content/docs/Handbook_LAS.pdf) for more information.

To remain in good standing in this program and be recommended for certification, candidates are required to maintain UIUC, cumulative, content area, and professional education grade-point averages of 2.5 (A= 4.0). Candidates should consult their adviser or the Council on Teacher Education for the list of courses used to compute these grade-point averages.

Departmental distinction: Distinction will be awarded on the basis of selection of 400-level courses in mathematics and the grade point average. Graduation with High Distinction or Highest Distinction in Mathematics requires participation in the Program for Distinction in Mathematics or Mathematics Education. Full details are available at the departmental website.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 80-84 hours including 27-29 hours of mathematics beyond calculus, 3-4 hours of computer science, and 39 hours for the Teacher Education Minor in Secondary School Teaching.
Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.
Students in this concentration must complete the Teacher Education Minor in Secondary School Teaching (39 hours).

Code	Title	Hours
Foundation Courses		
The following courses must be completed or in progress when students apply to the Secondary Education minor.		
MATH 220	Calculus	4-5
or MATH 221	Calculus I	
MATH 231	Calculus II	3
MATH 241	Calculus III [1]	4
Three advanced mathematics courses, including		
MATH 347	Fundamental Mathematics	3-4
or MATH 348	Fundamental Mathematics-ACP	
Required Core Courses		
MATH 416	Abstract Linear Algebra [2]	3
MATH 417	Intro to Abstract Algebra	3
or MATH 427	Honors Abstract Algebra	
MATH 424	Honors Real Analysis [3]	3
or MATH 444	Elementary Real Analysis	
or MATH 447	Real Variables	
MATH 461	Probability Theory [4]	3-4
or STAT 400	Statistics and Probability I	
CS 101	Intro Computing: Engrg & Sci	3-4
or CS 125	Introduction to Computer Science	
Teacher Education Minor in Secondary School Teaching (http://catalog.illinois.edu/undergraduate/education/secondary/)		39
Mathematics Teaching Courses		
MATH 402	Non Euclidean Geometry	3
or MATH 403	Euclidean Geometry	
MATH 453	Number Theory	3
Two additional 400- or 500-level mathematics courses		6
Total Hours		80-84

[1] *Students should have credit for* MATH 220/MATH 221 *and* MATH 231 *before enrolling in* MATH 241.

[2] *Students may not receive credit for both* MATH 416 *and either* ASRM 406 *(formerly MATH 410) or* MATH 415.

[3] *If* MATH 424 *or* MATH 447 *is completed, a requirement for the Graduate Preparatory concentration has been satisfied.*

[4] *If* STAT 400 *is completed, a group requirement for the Operations Research concentration has been satisfied.*

Requirements for the Teacher Education in Secondary School Teaching Minor

Code	Title	Hours
Professional Education Required Courses		
EDUC 201	Identity and Difference in Education [1]	3
EDUC 202	Social Justice, School and Society [1]	3
CI 401	Introductory Teaching in a Diverse Society	3
CI 403	Teaching a Diverse High School Student Population	3
CI 404	Teaching and Assessing Secondary School Students	3
CI 473	Disciplinary Literacy	3
EPSY 201	Educational Psychology [1, 2]	3
EPSY 485	Assessing Student Performance	3
SPED 405	General Educator's Role in Special Education	3
EDPR 442	Educational Practice in Secondary Education	12
Total Hours		39-40

[1] EDUC 201, EDUC 202 and EPSY 201 can be completed at any time during the degree and are not pre-requisites to apply for the minor.

[2] PSYC 100 is a pre-requisite for EPSY 201.

Mathematics: Operations Research, BSLAS

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Mathematics, Operations Research Concentration

department website: https://math.illinois.edu/
department faculty: Mathematics Faculty (https://math.illinois.edu/directory/faculty/)
advising: Math advising (https://math.illinois.edu/academics/undergraduate-program/undergraduate-advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: mathadvising@illinois.edu

Mathematics is a broad discipline that contains a range of areas of specialization within it. The required core courses provide fundamental background for mathematics in general. The concentrations allow the student to broaden this background or begin to specialize. Students must complete the core courses and a concentration.

An entering student in mathematics should have academic preparation to enroll in MATH 220 (http://catalog.illinois.edu/search/?P=MATH%20220) during the first semester. Admission to MATH 220 (http://catalog.illinois.edu/search/?P=MATH%20220) requires an acceptable ALEKS score. A student should attain grades of B in calculus in order to complete the advanced courses successfully.

Undergraduate programs in Mathematics

Actuarial Science, BSLAS (p. 13)

Mathematics, BSLAS (p. 289)

Mathematics & Computer Science, BSLAS (p. 287)

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Mathematics, Operations Research Concentration

A Major Plan of Study form, declaring concentration and supporting coursework, must be completed and submitted to the LAS Student Academic Affairs Office except for students in the Teaching of Mathematics concentration. Please complete this form with an advisor in the Mathematics Undergraduate Office within 1-2 semesters of completing MATH 347 or MATH 348.

Departmental distinction: Distinction will be awarded on the basis of selection of 400-level courses in mathematics and the grade point average. Graduation with High Distinction or Highest Distinction in Mathematics requires participation in the Program for Distinction in Mathematics or Mathematics Education. Full details are available at the departmental website.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 46-57 hours including 27-35 hours of mathematics beyond calculus, 3-4 hours of computer science, and 12 hours of supporting coursework.
Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Required Core Courses		
MATH 241	Calculus III [1]	4
MATH 347	Fundamental Mathematics	3-4
or MATH 348	Fundamental Mathematics-ACP	
MATH 416	Abstract Linear Algebra [2]	3
MATH 417	Intro to Abstract Algebra	3
or MATH 427	Honors Abstract Algebra	
MATH 424	Honors Real Analysis [3]	3
or MATH 444	Elementary Real Analysis	
or MATH 447	Real Variables	
STAT 400	Statistics and Probability I	4
CS 101	Intro Computing: Engrg & Sci	3-4
or CS 125	Introduction to Computer Science	
Approved supporting coursework or any minor		12
Operations Research Courses		
CS 357	Numerical Methods I	3
MATH 412	Graph Theory	3
or MATH 484	Nonlinear Programming	
STAT 410	Statistics and Probability II	3
or STAT 420	Methods of Applied Statistics	
MATH 482	Linear Programming	3
Total Hours		47-49

[1] *Students should have credit for* MATH 220/MATH 221 *and* MATH 231 *before enrolling in* MATH 241.

[2] *Beginning in Fall 2012, students may not receive credit for both* MATH 416 *and either* ASRM 406*(formerly MATH 410) or* MATH 415. *However, if one course is taken prior to Fall 2012, credit may be earned for both* MATH 416 *and either of* ASRM 406*(formerly MATH 410) or* MATH 415.

[3] *If* MATH 424 *or* MATH 447 *is completed, a requirement for the Graduate Preparatory concentration has been satisfied.*

Learning Outcomes: Mathematics, BSLAS

Learning Outcomes for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Mathematics

1. Ability to construct proofs and recognize when proofs are complete.
2. Ability to use theorems in order to solve problems.
3. Technical proficiency in calculus and linear algebra
4. The ability to apply mathematics; translating real-world problems into mathematical problems and solving them.

Mechanical Engineering, BS

for the degree of Bachelor of Science in Mechanical Engineering

department website: http://mechse.illinois.edu/
department faculty: Mechanical Science & Engineering Faculty (https://mechse.illinois.edu/people/faculty/)
overview of college admissions & requirements: The Grainger College of Engineering (https://grainger.illinois.edu/admissions/)
college website: https://grainger.illinois.edu/

The Mechanical Engineering program at Illinois (accredited by the Engineering Accreditation Commission of ABET, www.abet.org) is one of the most diverse engineering majors and plays a major role in advancing almost every industry. Students study physical principles behind how forces act on bodies of solids or fluids and the interaction of these bodies with their environments through exchanges of energy. Further, Mechanical Engineering students learn how to apply these basic principles in designing, manufacturing, and controlling machines and complex systems. Examples include systems that apply loads, transport matter and energy, and convert one form of energy to another. Mechanical Engineering is a broad major that is well suited for students interested in how the world around them moves and changes.

for the degree of Bachelor of Science in Mechanical Engineering

Graduation Requirements

Minimum Technical GPA (https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-TechnicalGPARequirement)**: 2.0**
TGPA is required for required Engineering courses and any technical elective courses. See Technical GPA (https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-TechnicalGPARequirement) to clarify requirements.

Minimum Overall GPA: 2.0
Minimum hours required for graduation: 128 hours
General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement. One of the SBS courses must be an introductory economics course (ECON 102 or ECON 103). Specific Advanced Composition courses required for this degree are listed below.**

Orientation and Professional Development

Code	Title	Hours
ENG 100	Engineering Orientation [1]	0
ME 290	Seminar	0
Total Hours		0

Foundational Mathematics and Science

Code	Title	Hours
CHEM 102	General Chemistry I	3
CHEM 103	General Chemistry Lab I [2]	1
MATH 221	Calculus I [3]	4
MATH 231	Calculus II	3
MATH 241	Calculus III	4
MATH 257	Linear Algebra with Computational Applications [4]	3
MATH 285	Intro Differential Equations [5]	3
PHYS 211	University Physics: Mechanics	4
PHYS 212	University Physics: Elec & Mag	4
Total Hours		29

Mechanical Engineering Technical Core

Code	Title	Hours
CS 101	Intro Computing: Engrg & Sci [6]	3
ECE 205	Electrical and Electronic Circuits [7]	3
ECE 206	Electrical and Electronic Circuits Lab	1
ME 170	Computer-Aided Design	3
ME 270	Design for Manufacturability	3
ME 200	Thermodynamics	3
ME 310	Fundamentals of Fluid Dynamics	4
ME 320	Heat Transfer	4
ME 330	Engineering Materials	4
ME 340	Dynamics of Mechanical Systems	3.5
ME 360	Signal Processing	3.5
ME 370	Mechanical Design I	3
ME 371	Mechanical Design II	3
ME 470	Senior Design Project [8]	3
TAM 210	Introduction to Statics	2
TAM 212	Introductory Dynamics [9]	3
TAM 251	Introductory Solid Mechanics	3
Total Hours		52

Technical Electives

Code	Title	Hours
Science elective(s), chosen from one of the following:		4
CHEM 104 & CHEM 105	General Chemistry II and General Chemistry Lab II [2]	

MCB 150	Molec & Cellular Basis of Life	
PHYS 213 & PHYS 214	Univ Physics: Thermal Physics and Univ Physics: Quantum Physics	
Statistics elective, one course chosen from: [10]		3
IE 300	Analysis of Data	
STAT 400	Statistics and Probability I	
MechSE electives chosen from a departmentally approved list. See list below		6
Technical electives chosen from a departmentally approved list below.		6
ABE 430	Project Management [11]	2
ABE 436	Renewable Energy Systems	3 or 4
ABE 445	Statistical Methods	4
ABE 455	Erosion and Sediment Control	2
ABE 456	Land & Water Resources Engrg	3 or 4
ABE 459	Drainage and Water Management	3 or 4
ABE 463	Electrohydraulic Systems	3
ABE 466	Engineering Off-Road Vehicles	3
ABE 469	Industry-Linked Design Project	4
ABE 474	Indoor Environmental Control	3 or 4
ABE 476	Indoor Air Quality Engineering	4
ABE 483	Engineering Properties of Food Materials	3
ABE 488	Bioprocessing Biomass for Fuel	4
ABE 497	Independent Study [12]	1 to 4
ABE 498	Special Topics [13]	1 to 4
AE 352	Aerospace Dynamical Systems	3
AE 402	Orbital Mechanics	3 or 4
AE 403	Spacecraft Attitude Control	3 or 4
AE 410	Computational Aerodynamics	3 or 4
AE 412	Viscous Flow & Heat Transfer	4
AE 416	Applied Aerodynamics	3 or 4
AE 419	Aircraft Flight Mechanics	3 or 4
AE 420	Finite Element Analysis	3 or 4
AE 428	Mechanics of Composites	3
AE 433	Aerospace Propulsion	3 or 4
AE 434	Rocket Propulsion	3 or 4
AE 442	Aerospace Systems Design I	3
AE 443	Aerospace Systems Design II	3
AE 451	Aeroelasticity	3 or 4
AE 454	Systems Dynamics & Control	3 or 4
AE 456	Global Nav Satellite Systems	4
AE 460	Aerodynamics & Propulsion Lab	2
AE 461	Structures & Control Lab	2
AE 482	Introduction to Robotics	4
AE 483	Autonomous Systems Lab	2
AE 497	Independent Study [12]	1 to 4
AE 498	Special Topics (Depending on topic) [13]	1 to 4
ASRM 410	Investments and Financial Markets	3 or 4
ASRM 461	Loss Models	3
ASRM 469	Casualty Actuarial Mathematics	3 or 4
ASRM 471	Life Contingencies I	4
ASRM 472	Life Contingencies II	3
BIOC 406	Gene Expression & Regulation	3
BIOC 440	Physical Chemistry Principles	4
BIOC 446	Physical Biochemistry	3
BIOC 455	Technqs Biochem & Biotech	4
BIOE 380	Biomedical Imaging	3
BIOE 414	Biomedical Instrumentation	3
BIOE 415	Biomedical Instrumentation Lab	2
BIOE 416	Biosensors	3
BIOE 461	Cellular Biomechanics	4
BIOE 476	Tissue Engineering	3
BIOE 479	Cancer Nanotechnology	3
BIOE 481	Whole-Body Musculoskel Biomech	3 or 4
BIOE 482	Musculoskel Tissue Mechanics	3 or 4
BIOE 497	Individual Study [12]	1 to 4
BIOE 498	Special Topics [13]	1 to 4
BIOP 401	Introduction to Biophysics	3
BIOP 419	Brain, Behavior & Info Process	3
BIOP 432	Photosynthesis	3
CEE 310	Transportation Engineering	3
CEE 330	Environmental Engineering	3
CEE 340	Energy and Global Environment	3
CEE 350	Water Resources Engineering	3
CEE 360	Structural Engineering	3
CEE 380	Geotechnical Engineering	3
CEE 398	Special Topics [13]	0 to 4
CEE 401	Concrete Materials	4
CEE 405	Asphalt Materials I	3 or 4
CEE 406	Pavement Design I	3 or 4
CEE 407	Airport Design	3 or 4
CEE 408	Railroad Transportation Engrg	3 or 4
CEE 409	Railroad Track Engineering	3 or 4
CEE 410	Railway Signaling & Control	3 or 4
CEE 411	RR Project Design & Constr	3 or 4
CEE 412	High-Speed Rail Engineering	3 or 4
CEE 415	Geometric Design of Roads	4
CEE 416	Traffic Capacity Analysis	3 or 4
CEE 417	Urban Transportation Planning [11]	4
CEE 418	Public Transportation Systems	3 or 4
CEE 420	Construction Productivity	3 or 4
CEE 421	Construction Planning	3 or 4
CEE 422	Construction Cost Analysis	3 or 4
CEE 424	Sustainable Const Methods	4
CEE 430	Ecological Quality Engineering	2
CEE 434	Environmental Systems I	3
CEE 437	Water Quality Engineering	3
CEE 438	Science & Environmental Policy	3
CEE 440	Fate Cleanup Environ Pollutant	4
CEE 442	Environmental Engineering Principles, Physical	4
CEE 443	Env Eng Principles, Chemical	4
CEE 444	Env Eng Principles, Biological	4
CEE 445		4
CEE 446	Air Quality Engineering	4

CEE 447	Atmospheric Chemistry	4
CEE 449	Environmental Engineering Lab	3
CEE 450	Surface Hydrology	3
CEE 451	Environmental Fluid Mechanics	3
CEE 452	Hydraulic Analysis and Design	3
CEE 453	Urban Hydrology and Hydraulics	4
CEE 457	Groundwater	3
CEE 458	Water Resources Field Methods	4
CEE 460	Steel Structures I	3
CEE 461	Reinforced Concrete I	3
CEE 462	Steel Structures II	3 or 4
CEE 463	Reinforced Concrete II	3 or 4
CEE 465	Design of Structural Systems	3
CEE 467	Masonry Structures	3 or 4
CEE 468	Prestressed Concrete	3 or 4
CEE 469	Wood Structures	3 or 4
CEE 470	Structural Analysis	4
CEE 471	Structural Mechanics	3 or 4
CEE 472	Structural Dynamics I	3 or 4
CEE 483	Soil Mechanics and Behavior	4
CEE 484	Applied Soil Mechanics	3 or 4
CEE 491	Decision and Risk Analysis	3 or 4
CEE 497	Independent Study [12]	1 to 16
CEE 498	Special Topics [13]	1 to 4
CHBE 422	Mass Transfer Operations	4
CHBE 424	Chemical Reaction Engineering	3
CHBE 451	Transport Phenomena	3
CHBE 452	Chemical Kinetics & Catalysis	3
CHBE 453	Electrochemical Engineering	2 or 3
CHBE 456	Polymer Science & Engineering	3
CHBE 457	Microelectronics Processing	3
CHBE 471	Biochemical Engineering	3 or 4
CHBE 472	Techniques in Biomolecular Eng	3 or 4
CHBE 473	Biomolecular Engineering	3 or 4
CHBE 474	Metabolic Engineering	3 or 4
CHBE 475	Tissue Engineering	3
CHBE 476	Biotransport	3
CHEM 232	Elementary Organic Chemistry I	3 or 4
CHEM 233	Elementary Organic Chem Lab I	2
CHEM 236	Fundamental Organic Chem I	4
CHEM 237	Structure and Synthesis	2
CHEM 312	Inorganic Chemistry	3
CHEM 315	Instrumental Chem Systems Lab	2
CHEM 317	Inorganic Chemistry Lab	3
CHEM 332	Elementary Organic Chem II	4
CHEM 420	Instrumental Characterization	2
CHEM 436	Fundamental Organic Chem II	3
CHEM 437	Organic Chemistry Lab	3
CHEM 438	Advanced Organic Chemistry	3
CHEM 440	Physical Chemistry Principles	4
CHEM 442	Physical Chemistry I	4
CHEM 444	Physical Chemistry II	4
CHEM 445	Physical Principles Lab I	2
CHEM 447	Physical Principles Lab II	2
CHEM 450	Astrochemistry	4
CHEM 451	Astrochemistry Laboratory	3 or 4
CHEM 460	Green Chemistry	3 or 4
CHEM 472	Physical Biochemistry	3
CHEM 474	Drug Discovery & Development	3
CHEM 480	Polymer Chemistry	3 or 4
CHEM 482	Polymer Physics	3 or 4
CHEM 483	Solid State Structural Anlys	4
CHEM 488	Surfaces and Colloids	3 or 4
CHEM 497	Individual Study Senior [12]	1 to 3
CS 225	Data Structures	4
CS 233	Computer Architecture	4
CS 241	System Programming	4
CS 242	Programming Studio	3
CS 357	Numerical Methods I	3
CS 374	Introduction to Algorithms & Models of Computation	4
CS 410	Text Information Systems	3 or 4
CS 411	Database Systems	3 or 4
CS 412	Introduction to Data Mining	3 or 4
CS 413	Intro to Combinatorics	3 or 4
CS 414	Multimedia Systems	3 or 4
CS 418	Interactive Computer Graphics	3 or 4
CS 419	Production Computer Graphics	3 or 4
CS 420	Parallel Progrmg: Sci & Engrg	3 or 4
CS 421	Programming Languages & Compilers	3 or 4
CS 422	Programming Language Design	3 or 4
CS 423	Operating Systems Design	3 or 4
CS 424	Real-Time Systems	3 or 4
CS 425	Distributed Systems	3 or 4
CS 426	Compiler Construction	3 or 4
CS 427	Software Engineering I	3 or 4
CS 428	Software Engineering II	3 or 4
CS 429	Software Engineering II, ACP	3
CS 431	Embedded Systems	3 or 4
CS 433	Computer System Organization	3 or 4
CS 436	Computer Networking Laboratory	3 or 4
CS 438	Communication Networks	3 or 4
CS 439	Wireless Networks	3 or 4
CS 440	Artificial Intelligence	3 or 4
CS 445	Computational Photography	3 or 4
CS 446	Machine Learning	3 or 4
CS 447	Natural Language Processing	3 or 4
CS 450	Numerical Analysis	3 or 4
CS 457	Numerical Methods II	3
CS 460	Security Laboratory	3 or 4
CS 461	Computer Security I	4
CS 463	Computer Security II	3 or 4
CS 465	User Interface Design	4
CS 466	Introduction to Bioinformatics	3 or 4

CS 467	Social Visualization	3 or 4
CS 468	Tech and Advertising Campaigns	3
CS 473	Algorithms	4
CS 475	Formal Models of Computation	3 or 4
CS 476	Program Verification	3 or 4
CS 477	Formal Software Development Methods	3 or 4
CS 481	Advanced Topics in Stochastic Processes & Applications	3 or 4
CS 483	Applied Parallel Programming	4
CS 484	Parallel Programming	3 or 4
CS 498	Special Topics [13]	1 to 4
CSE 401	Numerical Analysis	3 or 4
CSE 402	Parallel Progrmg: Sci & Engrg	3 or 4
CSE 412	Numerical Thermo-Fluid Mechs	2 to 4
CSE 441	Introduction to Optimization	3 or 4
CSE 450	Computational Mechanics	3 or 4
CSE 451	Finite Element Analysis	3 or 4
CSE 461	Computational Aerodynamics	3 or 4
ECE 329	Fields and Waves I	3
ECE 330	Power Ckts & Electromechanics	3
ECE 333	Green Electric Energy	3
ECE 340	Semiconductor Electronics	3
ECE 342	Electronic Circuits	3
ECE 343	Electronic Circuits Laboratory	1
ECE 380	Biomedical Imaging	3
ECE 385	Digital Systems Laboratory	3
ECE 395	Advanced Digital Projects Lab	2 or 3
ECE 401	Signal and Image Analysis	4
ECE 402	Electronic Music Synthesis	3
ECE 403	Audio Engineering	3
ECE 408	Applied Parallel Programming	4
ECE 411	Computer Organization & Design	4
ECE 412	Microcomputer Laboratory	3
ECE 414	Biomedical Instrumentation	3
ECE 415	Biomedical Instrumentation Lab	2
ECE 416	Biosensors	3
ECE 417	Multimedia Signal Processing	4
ECE 418	Image & Video Processing	4
ECE 419	Security Laboratory	3 or 4
ECE 420	Embedded DSP Laboratory	2
ECE 422	Computer Security I	4
ECE 424	Computer Security II	3 or 4
ECE 425	Intro to VLSI System Design	3
ECE 428	Distributed Systems	3 or 4
ECE 431	Electric Machinery	4
ECE 432	Advanced Electric Machinery	3
ECE 435	Computer Networking Laboratory	3 or 4
ECE 437	Sensors and Instrumentation	3
ECE 438	Communication Networks	3 or 4
ECE 439	Wireless Networks	3 or 4
ECE 441	Physcs & Modeling Semicond Dev	3
ECE 444	IC Device Theory & Fabrication	4
ECE 447	Active Microwave Ckt Design	3
ECE 448	Artificial Intelligence	3 or 4
ECE 451	Adv Microwave Measurements	3
ECE 452	Electromagnetic Fields	3
ECE 453	Wireless Communication Systems	4
ECE 454	Antennas	3
ECE 455	Optical Electronics	3 or 4
ECE 456	Global Nav Satellite Systems	4
ECE 457	Microwave Devices & Circuits	3
ECE 458	Applic of Radio Wave Propag	3
ECE 459	Communications Systems	3
ECE 460	Optical Imaging	4
ECE 462	Logic Synthesis	3
ECE 463	Digital Communications Lab	2
ECE 464	Power Electronics	3
ECE 465	Optical Communications Systems	3
ECE 466	Optical Communications Lab	1
ECE 467	Biophotonics	3
ECE 468	Optical Remote Sensing	3
ECE 469	Power Electronics Laboratory	2
ECE 470	Introduction to Robotics	4
ECE 472	Biomedical Ultrasound Imaging	3
ECE 473	Fund of Engrg Acoustics	3 or 4
ECE 476	Power System Analysis	3
ECE 478	Formal Software Development Methods	3 or 4
ECE 480	Magnetic Resonance Imaging	3 or 4
ECE 481	Nanotechnology	4
ECE 482	Digital IC Design	3
ECE 483	Analog IC Design	3
ECE 485	MEMS Devices & Systems	3
ECE 486	Control Systems	4
ECE 487	Intro Quantum Electr for EEs	3
ECE 488	Compound Semicond & Devices	3
ECE 489	Robot Dynamics and Control	4
ECE 490	Introduction to Optimization	3 or 4
ECE 491	Numerical Analysis	3 or 4
ECE 492	Parallel Progrmg: Sci & Engrg	3 or 4
ECE 493	Advanced Engineering Math	3 or 4
ECE 495	Photonic Device Laboratory	3
ECE 498	Special Topics in ECE [13]	0 to 4
ECON 302	Inter Microeconomic Theory [11]	3
IE 310	Deterministic Models in Optimization	3
IE 311	Operations Research Lab	1
IE 330	Industrial Quality Control	3
IE 340	Human Factors	4
IE 360	Facilities Planning and Design	3
IE 410	Advanced Topics in Stochastic Processes & Applications	3 or 4
IE 411	Optimization of Large Systems	3 or 4
IE 412	OR Models for Mfg Systems	3 or 4
IE 413	Simulation	3 or 4
IE 420	Financial Engineering	3 or 4

IE 430	Economic Found of Quality Syst	3 or 4
IE 431	Design for Six Sigma	3
IE 445	Human Performance and Cognition in Context [11]	3 or 4
IE 497	Independent Study [12]	1 to 4
IE 498	Special Topics [13]	1 to 4
MATH 347	Fundamental Mathematics	3
MATH 357	Numerical Methods I	3
MATH 403	Euclidean Geometry	3 or 4
MATH 412	Graph Theory	3 or 4
MATH 413	Intro to Combinatorics	3 or 4
MATH 414	Mathematical Logic	3 or 4
MATH 417	Intro to Abstract Algebra	3 or 4
MATH 418	Intro to Abstract Algebra II	3 or 4
MATH 423	Differential Geometry	3 or 4
MATH 424	Honors Real Analysis	3
MATH 425	Honors Advanced Analysis	3
MATH 427	Honors Abstract Algebra	3
MATH 428	Honors Topics in Mathematics [13]	3
MATH 432	Set Theory and Topology	3 or 4
MATH 442	Intro Partial Diff Equations	3 or 4
MATH 444	Elementary Real Analysis	3 or 4
MATH 446	Applied Complex Variables	3 or 4
MATH 447	Real Variables	3 or 4
MATH 448	Complex Variables	3 or 4
MATH 450	Numerical Analysis	3 or 4
MATH 453	Number Theory	3 or 4
MATH 464	Statistics and Probability II	3 or 4
MATH 473	Algorithms	4
MATH 475	Formal Models of Computation	3 or 4
MATH 481	Vector and Tensor Analysis	3 or 4
MATH 482	Linear Programming	3 or 4
MATH 484	Nonlinear Programming	3 or 4
MATH 487	Advanced Engineering Math	3 or 4
MATH 489	Dynamics & Differential Eqns	3 or 4
MATH 490	Advanced Topics in Mathematics [13]	1 to 4
MATH 492	Undergraduate Research in Math [12]	1 to 3
MCB 401	Cellular Physiology	3
MCB 402	Sys & Integrative Physiology	3
MCB 403	Cell & Membrane Physiology Lab	1 or 2
MCB 404	Sys & Integrative Physiol Lab	1 to 2
MCB 450	Introductory Biochemistry	3
MCB 493	Special Topics Mol Cell Biol [13]	1 to 4
All 400 level ME courses, except 470 and potentially 497, 498 [12,13]		
MSE 304	Electronic Properties of Matls	3
MSE 307	Materials Laboratory I	3
MSE 308	Materials Laboratory II	3
MSE 401	Thermodynamics of Materials	3
MSE 402	Kinetic Processes in Materials	3
MSE 403	Synthesis of Materials	3
MSE 405	Microstructure Determination	3
MSE 406	Thermal-Mech Behavior of Matls	3
MSE 420	Ceramic Materials & Properties	3
MSE 421	Ceramic Processing	3 or 4
MSE 422	Electrical Ceramics	3
MSE 440	Mechanical Behavior of Metals	3
MSE 441	Metals Processing	3
MSE 443	Design of Engineering Alloys	3
MSE 445	Corrosion of Metals	3 or 4
MSE 450	Polymer Science & Engineering	3 or 4
MSE 453	Plastics Engineering	3
MSE 455	Macromolecular Solids	3
MSE 456	Mechanics of Composites	3
MSE 457	Polymer Chemistry	3 or 4
MSE 458	Polymer Physics	3 or 4
MSE 460	Electronic Materials I	3
MSE 461	Electronic Materials II	3
MSE 466	Materials in Electrochem Syst	3
MSE 470	Design and Use of Biomaterials	3
MSE 473	Biomolecular Materials Science	3
MSE 474	Biomaterials and Nanomedicine	3
MSE 480	Surfaces and Colloids	3 or 4
MSE 481	Electron Microscopy	3 or 4
MSE 484	Composite Materials	3 or 4
MSE 485	Atomic Scale Simulations	3 or 4
MSE 487	Materials for Nanotechnology	3 or 4
MSE 488	Optical Materials	3 or 4
MSE 489	Matl Select for Sustainability	3 or 4
MSE 497	Independent Study [12]	1 to 4
MSE 498	Special Topics [13]	1 to 4
NPRE 402	Nuclear Power Engineering	3 or 4
NPRE 412	Nuclear Power Econ & Fuel Mgmt	3 or 4
NPRE 421	Plasma and Fusion Science	3
NPRE 423	Plasma Laboratory	2
NPRE 429	Plasma Engineering	3
NPRE 431	Materials in Nuclear Engrg	3
NPRE 435	Radiological Imaging	3
NPRE 441	Radiation Protection	4
NPRE 442	Radioactive Waste Management	3
NPRE 444	Nuclear Analytical Methods Lab	2 or 3
NPRE 446	Radiation Interact w/Matter I	3
NPRE 447	Radiation Interact w/Matter II	3
NPRE 448	Nuclear Syst Engrg & Design	4
NPRE 451	NPRE Laboratory	3
NPRE 455	Neutron Diffusion & Transport	4
NPRE 457	Safety Anlys Nucl Reactor Syst	3 or 4
NPRE 461	Probabilistic Risk Assessment	3 or 4
NPRE 470	Fuel Cells & Hydrogen Sources	3
NPRE 475	Wind Power Systems	3 or 4
NPRE 498	Special Topics [13]	1 to 4
PHYS 330	Atmospheric Dynamics II	3
PHYS 401	Classical Physics Lab	3
PHYS 402	Light	3 or 4

PHYS 403	Modern Experimental Physics	4 or 5
PHYS 404	Electronic Circuits	4 or 5
PHYS 406	Acoustical Physics of Music	4
PHYS 427	Thermal & Statistical Physics	4
PHYS 435	Electromagnetic Fields I	3
PHYS 436	Electromagnetic Fields II	3
PHYS 460	Condensed Matter Physics	4
PHYS 466	Atomic Scale Simulations	3 or 4
PHYS 470	Subatomic Physics	4
PHYS 475	Introduction to Biophysics	3 or 4
PHYS 485	Atomic Phys & Quantum Theory	3
PHYS 486	Quantum Physics I	4
PHYS 487	Quantum Physics II	4
PHYS 496	Communicating in Physics—Writing Papers and Giving Talks [11]	3
PHYS 497	Individual Study [12]	1 to 4
PHYS 498	Special Topics in Physics [13]	1 to 4
SE 400	Engineering Law [11]	3 or 4
SE 402	Comp-Aided Product Realization	3 or 4
SE 411	Reliability Engineering	3 or 4
SE 412	Nondestructive Evaluation	3 or 4
SE 413	Engineering Design Optimization	3 or 4
SE 420	Digital Control Systems	4
SE 422	Robot Dynamics and Control	4
SE 423	Mechatronics	3
SE 424	State Space Design for Control	3
SE 450	Decision Analysis I [11]	3 or 4
SE 497	Independent Study [12]	0 to 4
SE 498	Special Topics [13]	1 to 4
STAT 409	Actuarial Statistics II	4
STAT 410	Statistics and Probability II	3 or 4
STAT 420	Methods of Applied Statistics	3 or 4
STAT 424	Analysis of Variance	3 or 4
STAT 425	Statistical Modeling I	3 or 4
STAT 426	Statistical Modeling II	3 or 4
STAT 428	Statistical Computing	3 or 4
STAT 429	Time Series Analysis	3 or 4
STAT 430	Topics in Applied Statistics [13]	3 or 4
STAT 440	Statistical Data Management	3 or 4
STAT 443	Professional Statistics [11]	3 or 4
STAT 448	Advanced Data Analysis	4
STAT 458	Math Modeling in Life Sciences	3 or 4
STAT 480	Data Science Foundations	3 or 4
All 400 level TAM courses, except potentially 497,498 [12,13]		
TE 461	Technology Entrepreneurship [11]	3
TMGT 460	Business Process Modeling	3
TMGT 461	Tech, Eng, & Mgt Final Project	2

Electives

Code	Title	Hours
The Grainger College of Engineering Liberal Education course list, or additional courses from the campus General Education lists for Social and Behavioral Sciences or Humanities and the Arts [14]		6
Free electives. Additional unrestricted course work, subject to certain exceptions as noted by the College, so that there are at least 128 credit hours earned toward the degree. [15]		6
Total Hours of Curriculum to Graduate		**128**

1 *External transfer students take* ENG 300 *instead.*

2 CHEM 103 *(*http://catalog.illinois.edu/search/?P=CHEM%20103*) requirement waived for students who received test-based credit (AP, IB, or proficiency) for* CHEM 102 *(*http://catalog.illinois.edu/search/?P=CHEM%20102*), similarly* CHEM 105 *(*http://catalog.illinois.edu/search/?P=CHEM%20105*) requirement waived for students who received test-based credit for* CHEM 104 *(*http://catalog.illinois.edu/search/?P=CHEM%20104*). Students are still required to have 128 hours minimum to graduate.*

3 MATH 220 *may be substituted, with four of the five credit hours applying toward the degree.* MATH 220 *is appropriate for students with no background in calculus.*

4 MATH 415 *(*http://catalog.illinois.edu/search/?P=MATH%20415*) may be substituted for students entering prior to Fall 2021.*

5 MATH 284 *(*http://catalog.illinois.edu/search/?P=MATH%20284*) may be substituted.*

6 CS 124 *(*http://catalog.illinois.edu/search/?P=CS%20124*) or* CS 125 *(*http://catalog.illinois.edu/search/?P=CS%20125*) or* ECE 220 *(*http://catalog.illinois.edu/search/?P=ECE%20220*) may be substituted.*

7 ECE 110 *(*http://catalog.illinois.edu/search/?P=ECE%20110*) and* ECE 210 *(*http://catalog.illinois.edu/search/?P=ECE%20210*) (or* ECE 211 *(*http://catalog.illinois.edu/search/?P=ECE%20211*)) combined may be substituted.*

8 *Advanced Composition satisfied by completing* ME 470*.*

9 *Transfers and Physics minor/dual degree students may substitute* PHYS 325 (http://catalog.illinois.edu/search/?P=PHYS%20325)*.*

10 *Transfers and ECE minor/dual degree students may substitute* ECE 313 *(*http://catalog.illinois.edu/search/?P=ECE%20313*).*

11 *A maximum of 3 hours of independent/individual study courses may be used to satisfy the MechSE Elective or Technical Elective requirements.*

12 *Depending on the technical content, some Special Topics courses may not be approved for Technical Elective credit. Please provide a syllabus of the course to the Mechanical Science and Engineering Undergraduate Programs Office to request use of the course for Technical Elective credit prior to registering for the course.*

13 *Professional Elective course. No more than 3 hours of professional elective credit may be used to satisfy the Technical Electives requirements.*

14 *The Grainger College of Engineering approved liberal education course list can be found* here *(*https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-GeneralEducationElectives*). Note that these credit hours could carry the required cultural studies designation required for campus general education requirements.*

15 *The Grainger College of Engineering restrictions to free electives can be found* here *(*https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-FreeElectives*).*

for the degree of Bachelor of Science in Mechanical Engineering

Suggested Sequence

The curriculum sequence below is a suggested sequence, as all Grainger Engineering students work with a department academic advisor to achieve their educational goals, specific to their needs and preparation. Dynamic and Static curricular maps, which include prerequisite and corequisite sequencing, can be found here (https://grainger.illinois.edu/academics/undergraduate/majors-and-minors/mechanical-map/).

First Year

First Semester		**Hours**
ENG 100	Engineering Orientation	0
MATH 221[1]	Calculus I	4
CHEM 102	General Chemistry I	3
CHEM 103	General Chemistry Lab I	1
RHET 105 or ME 170[2]	Writing and Research	4-3
General education elective[3]		3
	Semester Hours	15-14
Second Semester		
MATH 231	Calculus II	3
PHYS 211	University Physics: Mechanics	4
CS 101	Intro Computing: Engrg Sci	3
ME 170 or RHET 105[2]	Computer-Aided Design	3-4
Science electives[4]		4
	Semester Hours	17-18

Second Year

First Semester		
MATH 241	Calculus III	4
MATH 257	Linear Algebra with Computational Applications	3
PHYS 212	University Physics: Elec Mag	4
TAM 210	Introduction to Statics	2
ME 270	Design for Manufacturability	3
ME 290	Seminar	0
	Semester Hours	16
Second Semester		
ECE 205	Electrical and Electronic Circuits	3
MATH 285	Intro Differential Equations	3
ME 200	Thermodynamics	3
TAM 212	Introductory Dynamics	3
TAM 251	Introductory Solid Mechanics	3
General education elective[3]		3
	Semester Hours	18

Third Year

First Semester		
ME 310	Fundamentals of Fluid Dynamics	4
ME 330	Engineering Materials	4
ME 340	Dynamics of Mechanical Systems	3.5
ME 370	Mechanical Design I	3
ECE 206	Electrical and Electronic Circuits Lab	1
	Semester Hours	15.5
Second Semester		
ME 320	Heat Transfer	4
ME 360	Signal Processing	3.5
ME 371	Mechanical Design II	3
General education elective[3]		3
Free elective		3
	Semester Hours	16.5

Fourth Year

First Semester		
MechSE elective[5]		3
Statistics elective[6]		3
ME 470 (or Technical elective)[7]	Senior Design Project	3
General education elective[3]		6
	Semester Hours	15
Second Semester		
Technical Elective (or ME 470)[7]		3
MechSE elective[5]		3
Technical elective[7]		3
General education elective[3]		3
Free elective		3
	Semester Hours	15
	Total Hours:	128

1 *MATH 220 may be substituted, with four of the five credit hours applying toward the degree. MATH 220 is appropriate for students with no background in calculus.*

2 *RHET 105 (or an alternative Composition I sequence) is taken either in the first or second semester of the first year, according to the student's UIN (Spring if your UIN is Odd). ME 170 is taken the other semester. Composition I guidelines can be found at* http://catalog.illinois.edu/general-information/degree-general-education-requirements/ *under Written Communication Requirement.*

3 *Students must take 6 hours from the campus General Education Social and Behavioral Sciences list, 6 hours from campus General Education Humanities and the Arts list, and 6 hours from a liberal education list approved by the college or from the campus General Education lists for Social and Behavioral Sciences or Humanities and the Arts. ECON 102 or ECON 103 must be one of the Social and Behavioral Sciences courses. Students must also complete the campus cultural studies requirement by completing (i) one western/comparative culture(s) course, (ii) one non-western culture(s) course, and (iii) one U.S. Minority Culture(s) course from the General Education cultural studies lists. Most students select general education courses that simultaneously satisfy these cultural studies requirements.*

4 *Science elective(s) — 4 hours required. Choose from CHEM 104 + CHEM 105, MCB 150, or PHYS 213 + PHYS 214. If MCB 150 is taken, then MCB 151 is recommended. Note that PHYS 213 and PHYS 214 will normally be taken in the fourth semester or later, since they have PHYS 211 and PHYS 212, respectively, as prerequisites, in addition to MATH 241.*

[5] *MechSE electives — 6 hours required. Choose from a departmentally* approved list of MechSE Electives *(*http://mechanical.illinois.edu/undergraduate/bs-mechanical-engineering/#METechElectives*).*

[6] *Statistics elective—3 hours required. Choose either IE 300 or STAT 400.*

[7] *Technical electives—6 hours required. Choose from a departmentally approved* list of Technical Electives. *(*https://mechse.illinois.edu/undergraduate/bs-mechanical-engineering/#METechElectives*)*

Learning Outcomes: Mechanical Engineering, BS

Learning Outcomes for the degree of Bachelor of Science Major in Mechanical Engineering

Student learning outcomes are based on learning outcomes in line with the ABET accreditation process.

Mechanical Engineering graduates will have:

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. An ability to communicate effectively with a range of audiences.
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Media & Cinema Studies, BS

for the degree of Bachelor of Science Major in Media & Cinema Studies

department website: https://media.illinois.edu/media-cinema-studies (https://media.illinois.edu/media-cinema-studies/)
department faculty: https://media.illinois.edu/media-cinema-studies/faculty (https://media.illinois.edu/media-cinema-studies/faculty/)
overview of college admissions & requirements: College of Media (p. 1198)
college website: https://media.illinois.edu/

MEDIA AND CINEMA STUDIES (MACS), prepares students with dynamic skills for careers in media, information, creative, and visual industries, as well as informed interaction with everyday media technologies. Majors have the opportunity to participate in original research, mixed media production, internships, study abroad, and public engagement through a transformative learning environment.

Programs in Cinema Studies

Undergraduate Programs:
major: Media & Cinema Studies, BS (p. 301)
minors: Cinema Studies (p. 484) | Critical Film Production (p. 489) | Media (p. 513)
Graduate Programs:
minor: Cinema Studies (p. 1128)

for the degree of Bachelor of Science Major in Media & Cinema Studies

To graduate from the media and cinema studies curriculum, a student must meet all general University and College requirements for the degree and must complete the following courses, all of which must be taken for a traditional letter grade:

Code	Title	Hours
Core Curriculum		**16**
MACS 203	Contemporary Movies	3
MACS 264	Creative and Information Economies	4
MACS 317	Media History	3
MACS 320	Popular Culture	3
MACS 351	Social Aspects of Media	3
MACS 499	Senior Project [1]	0

[1] *Students will take MACS 499 concurrent with a 400-level course to complete a senior project.*

Code	Title	Hours
Thematic Areas		**15**
5 additional courses in at least 2 of the following thematic areas.		
In addition, students can declare a specialization by taking 4 courses in 1 thematic area or by completing the requirements of a related certificate program.		
Cinema Studies		
MACS 100	Intro to Popular TV & Movies	
MACS 205	Introduction to Documentary	
MACS 261	Survey of World Cinema I	
MACS 262	Survey of World Cinema II	
MACS 321	Film Culture	
MACS 361	Film Theory and Criticism	
MACS 464	Film Festivals	
See advisor for list of other approved classes or contact the department for approval of other classes.		
Media Industries & Cultures		
MACS 100	Intro to Popular TV & Movies	
MACS 224	Sportsmedia Technology & Culture	
MACS 321	Film Culture	
MACS 326	New Media, Culture & Society	
MDIA 380		
MACS 408	TV Studies	

See advisor for list of other approved classes or contact the department for approval of other classes.	
Difference & Power	
MACS 100	Intro to Popular TV & Movies
MACS 326	New Media, Culture & Society
LLS 435	Commodifying Difference
MACS/GWS 356	Sex & Gender in Popular Media
MACS/AAS 375	Latina/o Media in the US
MACS/AFRO 381	Black Women and Film
MACS 389	International Communications
See advisor for list of other approved classes or contact the department for approval of other classes.	
Science, Technology, and Visualization	
MACS 166	Contemporary Media Literacy
MACS 224	Sportsmedia Technology & Culture
MACS 326	New Media, Culture & Society
MACS/GWS 345	Digital & Gender Cultures
AGCM 430	Comm in Env Social Movements
See advisor for list of other approved classes or contact the department for approval of other classes.	
Global Media and Cinema	
MACS 261	Survey of World Cinema I
MACS 262	Survey of World Cinema II
MACS 389	International Communications
MACS/SLAV 419	Russian & East European Film
MACS/SCAN 492	Scandinavian Cinema
MACS/GER 493	German Cinema I
See advisor for list of other approved classes or contact the department for approval of other classes.	
Sports Media	
RST 130	Foundations of Sport Mgt
MACS 224	Sportsmedia Technology & Culture
MACS/KIN 346	Case Study: Endless Summer
MACS 408	TV Studies
JOUR 361	Classics of Sports Journalism
See advisor for list of other approved classes or contact the department for approval of other classes.	
Media Making, Design and Research	
MACS 100	Intro to Popular TV & Movies
MACS 166	Contemporary Media Literacy
MACS 323	Studies Film/Media Production
MACS 326	New Media, Culture & Society
MDIA 380	
MACS 464	Film Festivals
See list of other approved classes or contact the department for approval of other classes.	

Code	Title	Hours
College of Media Electives		**36**
Students must earn at least 36 hours in the College of Media. Remaining hours are completed with ADV, JOUR, MACS, or MDIA electives.		

Code	Title	Hours
Required Area of Study or Minor Outside the College of Media		**9**
In addition to the courses in the major plan described above, students must complete 9 hours in an approved area outside the College of Media. Approved areas include: African American Studies; American Indian Studies; Anthropology; Art History; Asian American Studies; Business Administration; Communication; Computer Science; Creative Writing; Economics; Food Science and Human Nutrition; Gender and Women's Studies; History; Kinesiology and Community Health; Latina/o Studies; Linguistics; Literature; Natural Resources and Environmental Sciences; Non-English Languages; Philosophy; Political Science; Psychology; Recreation, Sport and Tourism; Regional Area Studies; or Sociology. A university-approved minor may substitute for this requirement. Courses may, if they qualify, also count toward the requirement for advanced hours outside of the College.		

Code	Title	Hours
Advanced Hours Requirement		**20**
At least 20 hours in courses numbered 200 or above. These courses must be outside and not cross-listed with the College of Media. At least 9 of the 20 hours must be in courses numbered 300 and above.		

Code	Title	Hours
Total hours required for graduation		**124**

Learning Outcomes: Media & Cinema Studies, BS

Learning outcomes for the degree of Bachelor of Science Major in Media & Cinema Studies

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Student Learning Outcomes: Students in Media and Cinema Studies will be able to:

1. Demonstrate a thorough knowledge of media and cinema studies' subject matter areas.
   a. Students demonstrate a broad knowledge of the field by accurately identifying and defining the subject matter areas of media and cinema studies.
2. Demonstrate a comprehension of foundational media and cinema studies'theories and concepts.
   a. Students can identify, use, and relate key concepts and frameworks that are central to the field.
3. Demonstrate critical thinking skills.
   a. Students can reflexively apply concepts and frameworks to promote inquiry, understanding,and solutions.
4. Demonstrate the ability to critically evaluate media representations in relation to social justice issues.

a. Students apply methods to demonstrate, through a production-based activity,how representations are connected to social, political, economic, and cultural issues.

5. Demonstrate the ability to work collaboratively to successfully communicate ideas and outcomes of creative research across a range of modalities.
   a. Students present their senior projects using at least two different platforms.

Metropolitan Food & Environmental Systems, BS

for the degree of Bachelor of Science Major in Metropolitan Food & Environmental Systems

department website: https://mfst.illinois.edu/
overview of college admissions & requirements: https://academics.aces.illinois.edu/prospective-students (https://academics.aces.illinois.edu/prospective-students/)
college website: https://aces.illinois.edu/
program director: Megan Dailey, Ph.D., mdailey5@illinois.edu
program office: 215 Mumford Hall, 1301 W. Gregory Dr., Urbana IL
program phone: (217) 244-5567

The Metropolitan Food & Environmental Systems (MFST) program uses an interdisciplinary approach to understanding and implementing solutions in the area of urban food and environmental systems to ensure the sustainability of readily available nutritious foods for metropolitan populations. The students in this major will learn to understand the science and practice of food production and security across urban environmental, economic, social, and health contexts, while maintaining environmental sustainability. Students in this program will be prepared for jobs in impact areas related to food systems, such as government, non-governmental organizations, institutional food buyers, investment firms, financial and insurance companies, industry, retail, and food service. Alternatively, students may choose to pursue post-baccalaureate education, including law school and graduate school in food systems or in specific areas of the food system. Because the MFST curricula includes required training in STEM education, critical thinking, scientific literacy, communication and leadership, students will obtain the skills necessary to traverse an ever-changing job market and have the freedom to choose from many career-life options.

A minimum of 127 credit hours are required for graduation, including General Education Requirements and the MFST Core Curriculum. Because the core curriculum includes many College of Agricultural, Consumer and Environmental Sciences (ACES) departmental course requirements, the students in MFST have the unique opportunity to minor in many of the ACES departments or to delve deeper into a food system area of interest in addition to the core courses, including (but not limited to) advanced nutrition, plant or animal production, food processing, food safety, environmental sustainability, climate change, or landscape architecture.

for the degree of Bachelor of Science Major in Metropolitan Food & Environmental Systems

Prescribed Courses including Campus General Education

Code	Title	Hours
Composition I		4
RHET 105	Writing and Research	
Advanced Composition		3
LEAD 230	Leadership Communications	
Cultural Studies		9
LEAD 340	Leadership Ethics & Society: Addressing Contemporary Challenges (US Minority)	
ACE 251	The World Food Economy (Non-Western)	
or CPSC 116	The Global Food Production Web	
Western - select one course from campus approved list		
Humanities & the Arts		6
TSM 311	Humanity in the Food Web	
Select one course from campus approved list		
Natural Science and Technology		8
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	
CHEM 104 & CHEM 105	General Chemistry II and General Chemistry Lab II	
Quantitative Reasoning I		3-5
Select one course from campus approved list		
Quantitative Reasoning II		3-4
ACE 261	Applied Statistical Methods	
or CPSC 241	Intro to Applied Statistics	
Social & Behavioral Sciences		7
ACE 100	Introduction to Applied Microeconomics	4
ACE 255	Economics of Food and Environmental Justice	3

Core Curriculum

Code	Title	Hours
Required Introductory Courses		**6-8**
ACES 101	Contemporary Issues in ACES	0 or 2
or ACES 200	ACES Transfer Orientation	
ACES 102	Intro Sustainable Food Systems	3
MFST 101	Experiencing Food Systems	3
Understanding Abiotic-Biotic Interactions Necessary for Food		**14-15**
ANSC 100	Intro to Animal Sciences	4
CPSC 112	Introduction to Crop Sciences	3 or 4
or HORT 100	Introduction to Horticulture	
NRES 102	Introduction to NRES	3
NRES 201	Introductory Soils	4
Human Nutrition		
FSHN 120	Contemporary Nutrition	3
or FSHN 220	Principles of Nutrition	
Economics I and II		**7**
ACE 100	Introduction to Applied Microeconomics (fulfills SBS requirement)	4
ACE 255	Economics of Food and Environmental Justice (fulfills SBS requirement)	3
Food Production I and II - Choose two from the following list:		**5-8**

ANSC 301	Food Animal Production, Management, and Evaluation	
ANSC 309	Meat Production and Marketing (If you take ANSC 309, you must take a 4-hour upper-level course here or from another list)	
ANSC 400	Dairy Herd Management	
ANSC 401	Beef Production	
ANSC 402	Sheep and Goat Production	
ANSC 403	Pork Production	
ANSC 404	Poultry Science	
CPSC 418	Crop Growth and Management	
CPSC 437	Principles of Agroecology	
HORT 341	Greenhouse Mgmt and Production	
HORT 360	Vegetable Crop Production	
HORT 421	Horticultural Physiology	
HORT 435	Urban Food Production	
NRES 488	Soil Fertility and Fertilizers	
Urban Planning I - Choose one from the following list:		**3**
UP 101	Introduction to City Planning	
UP 116	Urban Informatics I	
UP 136	Urban Sustainability	
UP 203	Cities: Planning & Urban Life	
UP 204	Chicago: Planning & Urban Life	
UP 205	Ecology & Environmental Sustainability	
UP 260	Social Inequality and Planning	
Urban Planning II - Choose one from the following list:		**3-4**
UP 330	The Modern American City	
UP 340	Planning for Healthy Cities	
UP 345	Economic Development Planning	
UP 405	Watershed Ecology and Planning	
UP 406	Urban Ecology	
UP 473	Housing & Urban Policy	
UP 475	Real Estate Development Fundamentals	
Policy I - Choose one from the following list:		**3**
ACE 199	Undergraduate Open Seminar (Food Ag & Pol)	
ACE 291	Ag Policy & Leadership	
ACE 292	Farm, Food & Environmental Policy	
UP 211	Local Planning, Gov't and Law	
Policy II - Choose one from the following list:		**3-4**
ACE 306	Food Law	
ACE 403	Agricultural Law	
ACE 406	Environmental Law	
ACE 410	Energy Economics	
ACE 411	Environment and Development	
ACE 456	Agr and Food Policies	
NRES 424	US Environ, Justic & Policy	
UP 407	State and Local Public Finance	
Technology I - Choose one from the following list:		**2-4**
ABE 141	ABE Principles: Biological	
ABE 223	ABE Principles: Machine Syst	
ABE 224	ABE Principles: Soil & Water	
ABE 225	ABE Principles: Bioenvironment	
ABE 226	ABE Principles: Bioprocessing	
ANSC 110	Life With Animals and Biotech	
CPSC 226		
CPSC 261	Biotechnology in Agriculture	
CPSC 265	Genetic Engineering Lab	
CPSC 266	Data in Biology and Agriculture	
TSM 232	Materials and Construction Sys	
TSM 234	Wiring, Motors and Control Sys	
Technology II - Choose one from the following list:		**2-3**
ANSC 409	Meat Science	
CPSC 408	Integrated Pest Management	
CPSC 426	Weed Mgt in Agronomic Crops	
CPSC 428	Weed Science Practicum (If you take CPSC 428, you must take a 4-hour upper-level course from another list)	
CPSC 491	Ugrad Bioinformatics Seminar (Intro to R Programming - if you take CPSC 491, you must take a 4-hour upper-level course from another list)	
FSHN 460	Food Processing Engineering	
FSHN 465	Principles of Food Technology	
FSHN 469	Package Engineering	
TSM 352	Land and Water Mgt Systems	
TSM 371	Residential Housing Design	
TSM 372	Environ Control & HVAC Systems	
TSM 430	Project Management	
TSM 435	Elec Computer Ctrl Sys	
TSM 438	Renewable Energy Applications	
TSM 465	Chemical Applications Systems	
TSM 467	Precision Agric Technology	
TSM 486	Grain Bioprocessing Coproducts	
Advanced Scientific Literacy - Choose one from the following list:		**3-4**
ACE 431	Agri-food Strategic Management	
ANSC 444	Applied Animal Genetics	
ANSC 448	Math Modeling in Life Sciences	
CPSC 440	Applied Statistical Methods I	
FSHN 428	Community Nutrition	
HDFS 420	Inequality, Public Policy, and U.S. Families	
HDFS 461	Family Life Education	
NRES 421	Quantitative Methods in NRES	
NRES 427	Modeling Natural Resources	
NRES 340	Environ Social Sci Res Meth	
UP 316	Urban Informatics II	
UP 418	GIS for Planners	
UP 443	Scenarios, Plans & Future Cities	
UP 457	Small Town/Rural Planning Workshop	
UP 478	Community Development Workshop	
Social Ecology - Choose one from the following list:		**3**
ACE 335	Food Marketing and Behavior	
HDFS 420	Inequality, Public Policy, and U.S. Families	
NRES 428	Valuing Nature	
Social Impact in Practice - Choose one from the following list:		**3-9**

LEAD 480	Collaborative Leadership	
HDFS 494	Applied Research Methods	
MFST 450	Social Impact Learning Experience (MFST 450 & MFST 397 can only equal a total of 12 hours)	
Experiential Learning Series		**7-16**
MFST 301	Experiential Learning Preparedness & Planning	1
MFST 397	Experiential Learning	3 to 9
MFST 401	Experiential Learning Review and Reflection	3
Capstone		**3**
MFST 498	Metropolitan Food & Environmental Systems Capstone	3
Total hours		**127**

Middle Grades Education, BS

for the degree of Bachelor of Science in Middle Grades Education

department office: Curriculum & Instruction
311 Education Building
1310 South Sixth
Champaign, IL 61820
phone: (217) 244-8286

department website: https://education.illinois.edu/ci (http://education.illinois.edu/ci/)
department faculty: Curriculum & Instruction Faculty (https://education.illinois.edu/faculty-finder/ci/)
overview of college admissions & requirements: College of Education (https://education.illinois.edu/programs/undergrad/programs-degrees/middle-grades-education/)
college website: https://education.illinois.edu/ (http://education.illinois.edu/)

This program prepares teachers for grades five through eight. A minimum of 120 semester hours is necessary for graduation.

Students pursuing teacher licensure programs in the College of Education (COE) must meet requirements in a series of sequential gateways. Included in the gateway requirements are successful completion of specified coursework, achievement of appropriate grade point averages, requirements for clinical experiences, and appropriate tests for the licensure area. Meeting all Gateway requirements leads to degree and licensure completion.

Students are admitted to Middle Grades Education as freshmen. In order to be recommended for licensure, candidates are required to maintain University of Illinois at Urbana-Champaign, cumulative, content area, and professional grade point averages of 2.5 (A=4.0). Candidates should consult their adviser or the Council on Teacher Education for the list of courses used to compute these grade point averages. Candidates in teaching licensure programs must maintain a C or better in ALL content and professional education coursework. For teacher education licensure applicable to all curricula, see the Council on Teacher Education.

Licensure requirements are subject to change without notice as a result of new mandates from the Illinois State Board of Education or the Illinois General Assembly.

Students in the Middle Grades Education licensure program must complete the Campus General Education Requirements, the courses for one or more concentration (literacy, social sciences, science or math) and the professional education coursework.

for the degree of Bachelor of Science in Middle Grades Education

Code	Title	Hours
Orientation Seminar		
EDUC 101	Education Orientation Seminar	1
Total		**1**

The following degree requirements also meet general education course requirements and must be selected from the campus general education course list. Some professional education courses and concentration courses can count towards the general education requirements.

A minimum of 120 semester hours is necessary for graduation[1].

Code	Title	Hours
Composition I		
Composition I		4
Total		4

Code	Title	Hours
Advanced Composition		
Advanced Composition		3-4
Total		**3-4**

Code	Title	Hours
Natural Sciences & Technology [2]		
Life science		3-4
Physical science		3-4
Total		**6-8**

Code	Title	Hours
Cultural Studies		
Western/Comparative		3-4
U.S. Minority		3-4
Non-Western		3-4
Total		**9-12**

Code	Title	Hours
Social & Behavioral Sciences [3]		
Social & Behavioral Sciences		6-8
Total		**6-8**

Code	Title	Hours
Quantitative Reasoning		
Quantitative Reasoning I		3-4
Quantitative Reasoning II		3-4
Total		**6-8**

Code	Title	Hours
Humanities & the Arts		
Humanities & the Arts		6
Total		**6**

Code	Title	Hours
Total Hours of General Education Courses		37-46

Code	Title	Hours
Language Other Than English		
Three years of one language other than English in high school or completion of the third semester of college level language.		0-12

Code	Title	Hours
Electives		
Elective Hours (as needed to complete the 120 graduation requirement)		0-10

Code	Title	Hours
Concentrations		
Students must complete 24-27 credit hours within one of the following concentrations: 1) Social Science, 2) Science, 3) Mathematics, or 4) Literacy. Subsequent tables outline the required courses to complete requirements in specific concentrations.		24-27

Code	Title	Hours
Professional Education		
CI 404	Teaching and Assessing Secondary School Students	3
CI 410	Middle School Instruction, Philosophy and Structures	3
CI 415	Language Varieties, Cultures and Learning	3
CI 467	Principles in Teaching Literature to Children and Youth	3
CI 471	Principles and Practices to Foster Independence in Reading	3
CI 476	Teaching Elementary and Middle Grade Language Arts	3
EDPR 250	School & Community Experiences (Section MG)	4
EDPR 442	Educational Practice in Secondary Education (Section MG)	12
EDUC 201 & EDUC 202	Identity and Difference in Education and Social Justice, School and Society (or program approved equivalent courses)	6
EPSY 201	Educational Psychology	3
EPSY 430	Early Adolescent Development	3
SPED 405	General Educator's Role in Special Education	3
Total Hours		49

Code	Title	Hours
Total minimum hours for degree [4]		**120**

[1] Six hours of ROTC upper level courses (300 level or above) can count toward the degree as free electives.

[2] If seeking the Science concentration, exclusions apply including, but not limited to: Horticulture, Dance and Urban Planning. Must be a science rubric. Consult with adviser for further information.

[3] PSYC 100 is a prerequisite for EPSY 201.

[4] The total hours required for the degree may be higher for students who have not already completed the language other than English requirement.

Concentration Requirements

Some concentration courses can count towards the general education requirements. Courses in concentrations may not be allowed to count for more than two degree requirements. If you have questions, see your adviser.

Code	Title	Hours
Science Concentration		
CI 402	Teaching Diverse Middle Grade Students (Science Section)	3
Physical Science: Select a minimum of one course from CHEM and one from PHYS		6-9
CHEM 101	Introductory Chemistry	
or CHEM 102/103	General Chemistry I	
CHEM 108	Chemistry, Everyday Phenomena	
CHEM 123	Teaching Elementary & Middle School Chemistry	
PHYS 101	College Physics: Mech & Heat	
PHYS 102	College Physics: E&M & Modern	
PHYS 123	Physics Made Easy	
PHYS 140	How Things Work	
PHYS 211	University Physics: Mechanics	
PHYS 212	University Physics: Elec & Mag	
Life Science: Complete 6 hours with a minimum of 3 hours from the foundations list.		6-8
Foundations:		
IB 100	Biology in Today's World	
IB 103	Introduction to Plant Biology	
IB 104	Animal Biology	
IB 150	Organismal & Evolutionary Biol	
MCB 100	Introductory Microbiology	
MCB 150	Molec & Cellular Basis of Life	
Applications:		
IB 105	Environmental Biology	
MCB 170	Society and the Brain	
MCB 180	Human Reproduction & Society	
Earth and Space Science: Select one from the following Atmospheric Sciences rubric and one from the following Geology rubric:		6-7
ATMS 100	Introduction to Meteorology	
ATMS 120	Severe and Hazardous Weather	
ATMS 201	General Physical Meteorology	
GEOL 107	Physical Geology	
GEOL 117	The Oceans	
GEOL 118	Natural Disasters	

Science Electives: To complete any remaining required hours, select additional courses from the courses listed above.		0-3
Total		**24**

Code	Title	Hours
Social Science Concentration		
CI 402	Teaching Diverse Middle Grade Students (Social Sciences Section)	3
American History: Select one from the following:		3-4
HIST 170	US History to 1877-ACP	
HIST 171	US History to 1877	
HIST 172	US History Since 1877	
HIST 173	US History Since 1877-ACP	
HIST 270	United States History to 1815	
HIST 271	Nineteenth Century America	
HIST 272	Twentieth Century America	
Global or World History: Select one from the following:		3-4
HIST 100	Global History	
HIST 140	Western Civ to 1660-ACP	
HIST 141	Western Civ to 1660	
HIST 142	Western Civ Since 1660	
HIST 143	Western Civ Since 1660-ACP	
Select from one of the following Geography courses:		3-4
GEOG 101	Global Development&Environment	
GEOG 104	Social and Cultural Geography	
GEOG 106	Geographies of Globalization	
GEOG 210	Social & Environmental Issues	
GEOG 221	Geographies of Global Conflict	
PS 101	Intro to US Gov & Pol	3
ECON 102	Microeconomic Principles	3
Social Science Electives: To complete any remaining hours, select additional courses from the courses above or in sociology.		3-5
Total		**24**

Code	Title	Hours
Mathematics Concentration		
CI 401	Introductory Teaching in a Diverse Society (Math Section)	3
CI 402	Teaching Diverse Middle Grade Students (Math Section)	3
Note: Only CI 402, M (3 hours) counts toward ISBE content		
MATH 117	Elementary Mathematics	4
Theory of Numbers: Select one from the following:		3-4
MATH 103	Theory of Arithmetic	
MATH 453	Number Theory	
Geometry: Select one from the following:		3-4
MATH 119	Ideas in Geometry	
MATH 402	Non Euclidean Geometry	
MATH 403	Euclidean Geometry	
Statistics: Select one from the following:		3-4
STAT 100	Statistics	
STAT 200	Statistical Analysis	
STAT 400	Statistics and Probability I	
STAT 410	Statistics and Probability II	
Calculus: Select one from the following:		4-5
MATH 220	Calculus	
MATH 221	Calculus I	
Math Applications: Select one from the following:		3-4
CS 101	Intro Computing: Engrg & Sci	
CS 105	Intro Computing: Non-Tech	
CS 125	Introduction to Computer Science	
MATH 125	Elementary Linear Algebra	
MATH 181	A Mathematical World	
MATH 213	Basic Discrete Mathematics	
MATH 231	Calculus II	
MATH 241	Calculus III	
MATH 405	Teacher's Course	
MATH 406	History of Calculus	
MATH 415	Applied Linear Algebra	
Total: At least one course in the math content categories must be taken for more than the minimum hours to reach the ISBE requirement of 24 content hours.		**27-31**

Code	Title	Hours
Literacy Concentration		
CI 402	Teaching Diverse Middle Grade Students (Eng Lang Arts Section)	3
Composition I		minimum 3 hours
Advanced course: Select one from the following:		3
BTW 261	Principles Tech Comm	
ENGL 481	Composition Theory and Practice	
ENGL 482	Writing Technologies	
RHET 233	Adv Rhetoric & Composition	
WRIT 303	Writing Across Media	
Literature: Select one literature course at the 100 level and a second literature course at the 200 level. Must be an English or Comparative & World Literature rubric.		6
CI 467	Principles in Teaching Literature to Children and Youth	3
CI 471	Principles and Practices to Foster Independence in Reading	3
CI 476	Teaching Elementary and Middle Grade Language Arts	3
Total		**24**

Learning Outcomes: Middle Grades Education, BS

Learning Outcomes for the degree of Bachelor of Science in Middle Grades Education

1. Students will acquire deep knowledge of content in the field of Education
2. Students will effectively plan and implement relevant, culturally responsive and developmentally appropriate instruction for elementary students, grades 5-8.

3. Students will use data to drive decisions and solve problems in and out of the classroom.
4. Students will display the expectations of professionalism related to success in the field of education and beyond (fairness, commitment to collaboration, community, reflective practice, and attention to 21st century skills and practices).

Molecular & Cellular Biology, BSLAS

for the degree of Bachelor of Science in Liberal Arts and Sciences Major in Molecular & Cellular Biology

school website: https://mcb.illinois.edu/undergrad/
school faculty: School Faculty (https://mcb.illinois.edu/people/)
advising: MCB advising (https://mcb.illinois.edu/undergrad/advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: undergrad@mcb.illinois.edu

The Molecular and Cellular Biology major provides students with a solid preparation in molecular biology, molecular genetics, microbiology, cellular biology, biochemistry, physiology, and structural biology. Students will also acquire a strong background in chemistry, math and physical sciences. After completion of the core curriculum in MCB, students may complete the required advanced course work by taking a variety of MCB courses or by selecting a more focused group of courses in any of the following areas: biochemistry, cells and tissues, developmental biology, infection and immunity, microbiology, genetics, neurobiology and physiology. The MCB Advising Program (MAP) staff is available to help students plan their combination of advanced courses.

For students interested in adding licensure to the BSLAS in Molecular & Cellular Biology, please visit the Biology Teaching page: http://mcb.illinois.edu/undergrad/advising/teaching/

Undergraduate degree programs in Molecular & Cellular Biology

Biochemistry, BS (p. 71)

Molecular & Cellular Biology, BSLAS (p. 308)

Molecular & Cellular Biology Honors Concentration, BSLAS (p. 309)

for the degree of Bachelor of Science in Liberal Arts and Sciences Major in Molecular & Cellular Biology

Certain advanced courses may be taken prior to completion of the MCB 250-MCB 253, MCB 354 sequence with permission of an academic advisor. A minimum of 15 hours of 300- or 400-level courses in MCB from the approved list is required.

In addition, undergraduate research (MCB 290, or departmental equivalent) is strongly recommended for students planning to go to graduate school. No more than 10 hours of MCB 290, or departmental equivalent credit may be counted towards the 120 hours required for a degree in MCB.

Students earning a degree in Molecular and Cellular Biology may not also earn a second degree in the Specialized Curriculum in Biochemistry.

Students earning a degree in Molecular and Cellular Biology may not double major in Integrative Biology.

Distinction

Students in MCB can qualify for Distinction via one of the following:

Distinction for Excellence in Research:

To be eligible for graduation with Distinction a student must:

Complete 3 semesters of MCB 290 for 2 credit hours or more each semester. Maintain a minimum cumulative GPA of 3.25 at the end of penultimate semester. Give at least one poster presentation at the Undergraduate Research symposium or other approved venue. Obtain a letter of support from their Principal Investigator.

To be eligible for graduation with High Distinction a student must:

Complete 2 semesters of MCB 290 for 2 credit hours or more each semester. Complete 1 semester of MCB 492 for 3 credit hours or more. Maintain a minimum cumulative GPA of 3.25 at the end of penultimate semester. Give at least one poster presentation at the Undergraduate Research symposium or other approved venue. Obtain a letter of support from their Principal Investigator. Submit a written thesis that is approved by the Distinction Committee.

To be eligible for graduation with Highest Distinction a student must:

Complete 2 semesters of MCB 290 for 2 credit hours or more each semester. Complete 1 semester MCB 492 for 3 credit hours or more. Maintain a minimum cumulative GPA of 3.90 at the end of penultimate semester. Give at least one poster presentation at the Undergraduate Research symposium or other approved venue. Obtain a letter of support from their Principal Investigator. Submit a written thesis that is approved by the Distinction Committee. Distinction for Excellence in Academics:

To be eligible for graduation with Academic Distinction a student must:

Maintain a major GPA of 3.90 or higher in the MCB major (biology, chemistry, physics and math courses for the MCB major) at the end of their penultimate semester.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: 67-71 hours, including 21 hours of 300- or 400-level courses; 12 hours of 300- and 400-level courses in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
MATH 220	Calculus	4-5
or MATH 221	Calculus I	
MATH 231	Calculus II	3
or STAT 212	Biostatistics	
Select one group of courses:		8-10
CHEM 102	General Chemistry I	
& CHEM 103	and General Chemistry Lab I	
& CHEM 104	and General Chemistry II	
& CHEM 105	and General Chemistry Lab II	

CHEM 202 & CHEM 203 & CHEM 204 & CHEM 205	Accelerated Chemistry I and Accelerated Chemistry Lab I and Accelerated Chemistry II and Accelerated Chemistry Lab II	
CHEM 232	Elementary Organic Chemistry I	4
CHEM 233	Elementary Organic Chem Lab I	2
Select one group of courses:		10-12
PHYS 101 & PHYS 102	College Physics: Mech & Heat and College Physics: E&M & Modern	
PHYS 211 & PHYS 212 & PHYS 213 & PHYS 214	University Physics: Mechanics and University Physics: Elec & Mag and Univ Physics: Thermal Physics and Univ Physics: Quantum Physics	
IB 150	Organismal & Evolutionary Biol	4
MCB 150	Molec & Cellular Basis of Life	4
MCB 250	Molecular Genetics	3
MCB 251	Exp Techniqs in Molecular Biol	2
MCB 252	Cells, Tissues & Development	3
MCB 253	Exp Techniqs in Cellular Biol	2
MCB 354	Biochem & Phys Basis of Life	3
At least four additional courses at the 300- to 400-level from the Approved List of Advanced Courses for MCB Majors are also required, including one lab course. (http://mcb.illinois.edu/undergrad/courses/advanced/)		15-16

Molecular & Cellular Biology: Honors, BSLAS

for the degree of Bachelor of Science in Liberal Arts and Sciences Major in Molecular & Cellular Biology, Honors Concentration

school website: https://mcb.illinois.edu/undergrad/
school faculty: School Faculty (https://mcb.illinois.edu/people/)
advising: MCB advising (https://mcb.illinois.edu/undergrad/advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: undergrad@mcb.illinois.edu

The Molecular and Cellular Biology Honors Concentration is designed for students whose preparation and interests motivate them to desire a more intensive undergraduate biology experience and to prepare for graduate or professional school. The MCB Honors Concentration is based on the MCB concentration (http://catalog.illinois.edu/undergraduate/las/academic-units/molecular-cell-bio/molecular-cellular-biology-concentration/). Students must satisfy all of the requirements for the MCB concentration in addition to the requirements for the MCB Honors Concentration. Students interested in the MCB Honors Concentration (http://mcb.illinois.edu/undergrad/honors/) should contact the MCB Honors Concentration coordinator (shawna@illinois.edu) during the freshman year for more information.

Undergraduate degree programs in Molecular & Cellular Biology

Biochemistry, BS (p. 71)

Molecular & Cellular Biology, BSLAS (p. 308)

Molecular & Cellular Biology Honors Concentration, BSLAS (p. 309)

for the degree of Bachelor of Science in Liberal Arts and Sciences Major in Molecular & Cellular Biology, Honors Concentration

Certain advanced courses may be taken prior to completion of the MCB 250 MCB 250 -MCB 253, MCB 354 MCB 354 sequence with permission of an academic advisor. A minimum of 15 hours of 300- or 400-level courses in MCB from the approved list is required.

In addition, undergraduate research (MCB 290, or departmental equivalent) is strongly recommended for students planning to go to graduate school. No more than 10 hours of MCB 290, or departmental equivalent credit may be counted towards the 120 hours required for a degree in MCB.

Students earning a degree in Molecular and Cellular Biology may not also earn a second degree in the Specialized Curriculum in Biochemistry.

Students earning a degree in Molecular and Cellular Biology may not double major in Integrative Biology.

Distinction

Students in MCB can qualify for Distinction via one of the following:

Distinction for Excellence in Research:

To be eligible for graduation with Distinction a student must:

Complete 3 semesters of MCB 290 for 2 credit hours or more each semester. Maintain a minimum cumulative GPA of 3.25 at the end of penultimate semester. Give at least one poster presentation at the Undergraduate Research symposium or other approved venue. Obtain a letter of support from their Principal Investigator.

To be eligible for graduation with High Distinction a student must:

Complete 2 semesters of MCB 290 for 2 credit hours or more each semester. Complete 1 semester of MCB 492 for 3 credit hours or more. Maintain a minimum cumulative GPA of 3.25 at the end of penultimate semester. Give at least one poster presentation at the Undergraduate Research symposium or other approved venue. Obtain a letter of support from their Principal Investigator. Submit a written thesis that is approved by the Distinction Committee.

To be eligible for graduation with Highest Distinction a student must:

Complete 2 semesters of MCB 290 for 2 credit hours or more each semester. Complete 1 semester MCB 492 for 3 credit hours or more. Maintain a minimum cumulative GPA of 3.90 at the end of penultimate semester. Give at least one poster presentation at the Undergraduate Research symposium or other approved venue. Obtain a letter of support from their Principal Investigator. Submit a written thesis that is approved by the Distinction Committee. Distinction for Excellence in Academics:

To be eligible for graduation with Academic Distinction a student must:

Maintain a major GPA of 3.90 or higher in the MCB major (biology, chemistry, physics and math courses for the MCB major) at the end of their penultimate semester.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: 67-71 hours, including 21 hours of 300- or 400-level courses; 12 hours of 300- and 400-level courses in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
MATH 220	Calculus	4-5
or MATH 221	Calculus I	
MATH 231	Calculus II	3
or STAT 212	Biostatistics	
Select one group of courses:		8-10
CHEM 102 & CHEM 103 & CHEM 104 & CHEM 105	General Chemistry I and General Chemistry Lab I and General Chemistry II and General Chemistry Lab II	
CHEM 202 & CHEM 203 & CHEM 204 & CHEM 205	Accelerated Chemistry I and Accelerated Chemistry Lab I and Accelerated Chemistry II and Accelerated Chemistry Lab II	
CHEM 232	Elementary Organic Chemistry I	4
CHEM 233	Elementary Organic Chem Lab I	2
Select one group of courses:		10-12
PHYS 101 & PHYS 102	College Physics: Mech & Heat and College Physics: E&M & Modern	
PHYS 211 & PHYS 212 & PHYS 213 & PHYS 214	University Physics: Mechanics and University Physics: Elec & Mag and Univ Physics: Thermal Physics and Univ Physics: Quantum Physics	
IB 150	Organismal & Evolutionary Biol	4
MCB 150	Molec & Cellular Basis of Life	4
MCB 250	Molecular Genetics	3
MCB 251	Exp Techniqs in Molecular Biol	2
MCB 252	Cells, Tissues & Development	3
MCB 253	Exp Techniqs in Cellular Biol	2
MCB 354	Biochem & Phys Basis of Life	3
At least four additional courses at the 300- to 400-level from the Approved List of Advanced Courses for MCB Majors are also required, including one lab course. (http://mcb.illinois.edu/undergrad/courses/advanced/)		15-16

Code	Title	Hours
Complete 5 honors discussion sections in consecutive order:		
MCB 297	MCB Honors Discussion (Section A)	1
MCB 297	MCB Honors Discussion (Section B)	1
MCB 297	MCB Honors Discussion (Section C)	1
MCB 298	MCB Honors Lab Discussion (Section A)	1
MCB 298	MCB Honors Lab Discussion (Section B)	1
Complete 4 or more additional MCB Honors Option courses [1]		

[1] *Students must consult the Honors Coordinator about MCB Honors Option courses. Only* MCB 290 *may be repeated, to a maximum of twice, although continuing 290 beyond two semesters is encouraged.*

Learning Outcomes: Molecular & Cellular Biology, BSLAS

Learning Outcomes for the degree of Bachelor of Science in Liberal Arts and Sciences Major in Molecular & Cellular Biology

Upon successful completion of the Molecular & Cellular Biology undergraduate curriculum, students will be able to:

1. understand and appreciate the diversity of life as it evolved over time by processes of mutation, selection and genetic change.
2. illustrate that fundamental structural units define the function of all living things.
3. explain that the growth, development, and behavior of organisms are activated through the expression of genetic information in context.
4. summarize that biological systems grow and change by processes based upon chemical transformation pathways and are governed by the laws of physics.
5. illustrate that living systems are interconnected and interacting across scales of space and time.
6. design a scientific process and employ the scientific method, demonstrating that biology is evidence based and grounded in the formal practices of observation, experimentation, and hypothesis testing.
7. execute quantitative analysis to interpret biological data.
8. construct and utilize predictive models to study and describe complex biological systems.
9. apply concepts from other sciences in order to interpret biological phenomena.
10. communicate biological concepts and understanding to members of a diverse scientific community as well as to the general public.
11. identify social and historical dimensions of biological investigation.

Music Composition, BMUS

for the degree of Bachelor of Music Major in Music Composition

department website: https://music.illinois.edu
department faculty: Music Faculty (https://music.illinois.edu/people/)
college catalog page: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/

In this major, emphasis may be placed on music composition or on the theory of music. Necessary course adjustments require approval of the composition-theory division.

for the degree of Bachelor of Music Major in Music Composition

In this major, emphasis may be placed on music composition or on the theory of music. Necessary course adjustments require approval of the composition-theory division.

Minimum required major and supporting course work: If the emphasis is on composition, the fourth-year student must present a satisfactory senior recital of original compositions. If the emphasis is on theory, an advanced project (MUS 299**, Thesis, two semesters) approved by the composition-theory division is required in the fourth year.**

General Education and College Orientation

Code	Title	Hours
Orientation to Arts at Illinois		
FAA 101	Arts at Illinois	1
General Education Requirements		
Composiition I		4
Advanced Composition		3
Humanities and the Arts - fulfilled by MUS 313 and MUS 314		6
Cultural Studies: Western/Comparative Culture(s)		3
Cultural Studies: Non-Western Culture(s)		3
Cultural Studies: US Minority Culture(s)		3
Social and Behavioral Sciences		6
Quantitative Reasoning I and II		6
Natural Sciences and Technology		6
Foreign Language [1]		0-12
Total Hours [2]		**41-53**

[1] *The Language Requirement may be satisfied by successfully completing a third-semester college-level course in a language other than English; successful completion, in high school, of the third year of a language other than English; or demonstrating proficiency at the third-semester level in a language proficiency examination approved by the College of Liberal Arts and Sciences and the appropriate department.*

[2] *Six hours of general education requirements in the Humanities and the Arts are met by courses required in the BMUS degree (MUS 313 and MUS 314).*

Music Core and Composition-Theory Coursework

Code	Title	Hours
Music Theory and Musicianship		
MUS 101	Music Theory and Practice I	2
MUS 102	Music Theory and Practice II	2
MUS 201	Music Theory and Practice III	2
MUS 202	Music Theory and Practice IV	2
MUS 107	Musicianship I	2
MUS 108	Musicianship II	2
MUS 207	Musicianship III	2
MUS 208	Musicianship IV	1
Advanced Music Theory		6
Musicology		
MUS 110	Introd Art Mus: Intl Perspect	2
MUS 313	The History of Music I [1]	3
MUS 314	The History of Music II	3
Advanced Musicology		6
Performance Studies		
Applied Music Lessons		16
Ensemble [2]		8
MUS 172	Grp Instr Pno for Mus Major I [3]	2
MUS 173	Grp Instr Pno for Mus Maj II [3]	2
MUS 242	Elements of Conducting	2
Composition-Theory Studies Coursework		
MUS 106	Beginning Composition	4
MUS 206	Intermediate Composition	4
MUS 406	Advanced Composition	12
MUS 426	Orchestration	3
An additional 400-level advanced music history course		3
Music Theory Electives [4]		14
French, German, or Italian [5]		8
Electives as needed to total 130 hours		
Total Hours required for graduation		**130**

[1] *Completion of both* MUS 313 *and* MUS 314 *meets the general education Humanities and the Arts requirement.*

[2] *All students are required to enroll in at least one approved performance ensemble each semester in residence, with a maximum of 16 semester hours of such ensemble applicable to the Bachelor of Music degree. For a listing of approved ensembles, please refer to the Undergraduate Music Handbook.*

[3] *All students must demonstrate keyboard competency by examination when they matriculate or by enrolling in MUS 172 and/or MUS 173.*

[4] *The music theory electives for the third and fourth years are to be chosen from* MUS 404 *(may be repeated to a maximum of six semester hours),* MUS 405*,* MUS 407*,* MUS 408 *(may be repeated to a maximum of six semester hours in addition to* MUS 408*, sections D or E),* MUS 409*, and* MUS 499 *(may be repeated to a maximum of four semester hours; senior standing in music required). If the curricular emphasis is in music theory, the following will apply: juniors will substitute an additional three semester hours of* MUS 408 *for* MUS 406*; seniors will take* MUS 299 *(two semesters),* MUS 405*, and substitute an additional 400-level music history course for* MUS 406*. Note: The 14 hours of theory electives include the six hours of two courses that were retired in Fall 2017: MUS 402 and MUS 425.*

[5] *Students who completed two years of French, German, or Italian in high school have met this requirement. Other languages may be chosen with permission of the composition-theory adviser. Completion of this requirement does not complete the General Education language requirement.*

Learning Outcomes: Music Composition, BMUS

Learning outcomes for the degree of Bachelor of Music Major in Music Composition

Bachelor of Music graduates will:

1. Understand, apply, and integrate foundational concepts of musical study in theory, aural skills, history, composition, improvisation, and keyboard competency, and do so independently and cooperatively.
2. Demonstrate the ability to learn independently, make inquiries, think critically, discover solutions, and integrate knowledge across both similar and varied areas of musical study.
3. Develop and demonstrate effective performance skills (technical and expressive) using critical thinking to inform historical and stylistic performance practices and artistic expression.

4. Develop and demonstrate effective communication skills, including artistic self-expression, with diverse audiences through multiple media.
5. Acquire a basic understanding of diverse musical systems and traditions across the world, and develop a sensitivity to and awareness of cultural and societal differences, and their contribution to an interdependent global consciousness.
6. Acquire an understanding of professional and ethical responsibility as musicians and citizens, and demonstrate the ability to work professionally and effectively as leaders and collaborators.
7. Acquire a basic understanding of technology and professional skills, along with knowledge of specific technological developments within area of specialization.
8. Appreciate how music interacts with communities to enhance and engage social and cultural identities and enrich lifelong learning.

Music Education, BME

for the degree of Bachelor of Music Education Major in Music Education

department website: https://music.illinois.edu
department faculty: Music Faculty (https://music.illinois.edu/people/)
college catalog page: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/

Students pursuing this major select one of four concentrations:

- Choral Music Concentration (p. 312)
- General Music Concentration (p. 314)
- Instrumental Music Concentration (p. 316)
- Technology Concentration (p. 318)

A minimum of 130 hours of credit is required for graduation. This curriculum prepares its graduates for teaching music in grades kindergarten through twelve. For teacher education requirements applicable to all curricula, see the Council on Teacher Education (https://cte-s.education.illinois.edu/dotnet/webpages/webpage.aspx). Students complete a concentration in instrumental (band or strings), choral, technology, or general music education.

In order to be recommended for licensure, candidates are required to maintain a UIUC cumulative grade-point average of 2.5, content area (music courses) GPA of 2.75, and professional education course GPA of 3.0 (A=4.0). Candidates should consult the music education handbook, their advisor, or the Council on Teacher Education for a listing of courses used to compute these grade-point averages.

All music education students must earn a grade of C- or better in all music and education courses required for licensure.

Music Education: Choral Music, BME

For the Degree of Bachelor of Music Education Major in Music Education, Choral Music Concentration

department website: https://music.illinois.edu
department faculty: Music Faculty (https://music.illinois.edu/people/)
college catalog page: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/

A minimum of 130 hours of credit is required for graduation. This curriculum prepares its graduates for teaching music in grades kindergarten through twelve. For teacher education requirements applicable to all curricula, see the Council on Teacher Education (https://cte-s.education.illinois.edu/dotnet/webpages/webpage.aspx). Students complete a concentration in instrumental (band or strings), choral, technology, or general music education.

In order to be recommended for licensure, candidates are required to maintain a UIUC cumulative grade-point average of 2.5, content area (music courses) GPA of 2.75, and professional education course GPA of 3.0 (A=4.0). Candidates should consult the music education handbook, their advisor, or the Council on Teacher Education for a listing of courses used to compute these grade-point averages.

All music education students must earn a grade of C- or better in all music and education courses required for licensure.

for the degree of Bachelor of Music Education Major in Music Education, Choral Music Concentration

Minimum required major and supporting course work: In order to be recommended for licensure, candidates are required to maintain a UIUC cumulative grade-point average of 2.5, content area (music courses) GPA of 2.75, and professional education course GPA of 3.0 (A=4.0). Candidates should consult the music education handbook, their advisor, or the Council on Teacher Education for a listing of courses used to compute these grade-point averages.
Minimum hours required for graduation: 130 hours.

General Education and College Orientation

Code	Title	Hours
Orientation to Arts at Illinois		
FAA 101	Arts at Illinois	1
General Education Requirements		
Composition I		4
Advanced Composition - fulfilled by MUS 244		3
Humanities and the Arts - fulfilled by MUS 313 and MUS 314		6
Cultural Studies: Western/Comparative Culture(s)		3
Cultural Studies: Non-Western Culture(s) - fulfilled by MUS 133		3
Cultural Studies: US Minority Culture(s)		3
Social and Behavioral Sciences - fulfilled by PSYC 100 and EPSY 201 [1]		7
Quantitative Reasoning I and II [2]		6
Natural Sciences and Technology		6
Foreign Language [3]		0-12
Total Hours [4]		**42-54**

Music Core Coursework

Code	Title	Hours
Music Theory and Musicianship		
MUS 101	Music Theory and Practice I	2
MUS 102	Music Theory and Practice II	2
MUS 201	Music Theory and Practice III	2
MUS 202	Music Theory and Practice IV	2
MUS 107	Musicianship I	2
MUS 108	Musicianship II	2
MUS 207	Musicianship III	2
MUS 208	Musicianship IV	1
Musicology		
MUS 110	Introd Art Mus: Intl Perspect	2
MUS 133	Introduction to World Music	3
MUS 313	The History of Music I	3
MUS 314	The History of Music II	3
Performance Studies		
Applied Major Lessons [5]		12
Ensembles [6]		6
MUS 172	Grp Instr Pno for Mus Major I [7]	2
MUS 173	Grp Instr Pno for Mus Maj II [7]	2
Total Hours		48

Professional Education Core Coursework

Code	Title	Hours
MUS 090	Seminar in Music Education	0
MUS 240	Orientation Mus Tchg Lrng K-HS	1
MUS 242	Elements of Conducting	2
MUS 244	Social Foundations of Music Ed	3 or 4
or EPS 202	Foundations of Education-ACP	
MUS 434	Assessment and Evaluation in Music Education	3
MUS 439	Differentiating Music Instruction	3
CI 473	Disciplinary Literacy	2
EPSY 201	Educational Psychology	3
EDPR 438	Educational Practice in Special Fields [8]	4
EDPR 442	Educational Practice in Secondary Education [8]	4

Music Education Core Coursework

Code	Title	Hours
Technique Courses (listed in each concentration area)		**7-8**
MUS 243	Introductory Music Ed Tech	2
MUS 342	Music in Childhood	3
MUS 343	Music in Adolescence	3
MUS 350	Music Teaching in Ensemble Settings	5

Music Education Electives

Code	Title	Hours
Select credits to reach 130 from the following courses, if not taken to satisfy a requirement in one of the above sections:		
MUS 106	Beginning Composition	2
MUS 174	Grp Instr Pno for Mus Maj III	2
MUS 175	Grp Instr Pno for Mus Maj IV	2
MUS 252		1
MUS 330	Advanced Choral Conducting I	2
MUS 331	Advanced Choral Conducting II	2
MUS 332	Advanced Wind Band Conducting and Rehearsal Strategies	3
MUS 333	Cond/Teach Strings-Grp Setting	3
MUS 336	Service Learning in Music Education	3
MUS 344	Instrumental Methods for Secondary Ensembles	2
MUS 346	Choral Methods for Secondary Ensembles	2
MUS 348	Choral Literature	1
MUS 404	Contemp Compos Techniques	2
MUS 407	Elect Music Techniques I	3
MUS 409	Elec Music Techniques II	2
MUS 433	Music Interdisciplinary Curriculum	2
MUS 435	Jazz Aural Skills I	2
MUS 437	Popular Music Pedagogy	2
MUS 440	Marching Band Procedures	2
MUS 444	Healthy Music Practices	2
MUS 446	Songwriting	2
MUS 447	Advanced Music Ed Technology	2
MUS 448	Computer Music	3
MUS 449	Teaching Young Singers	2
MUS 499	Proseminar in Music (Section ART)	2
THEA 399	Undergraduate Group Seminar (Section RS)	3
THEA 453	Introduction to Theatre Sound	3
THEA 454	Sound Design I	3

1 PSYC 100 *is prerequisite to* EPSY 201*, required in all teacher education programs.*

2 *Quantitative Reasoning I is satisfied by students in the Technology concentration selecting CS 105 as a Technique course or elective.*

3 *The Language Requirement may be satisfied by successfully completing a third-semester college-level course in a language other than English; successful completion, in high school, of the third year of a language other than English; or demonstrating proficiency at the third-semester level in a language proficiency examination approved by the College of Liberal Arts and Sciences and the appropriate department.*

4 *At least 19 hours of general education requirements are met by courses required by the BME.*

5 *Enrollment in the applied major is normally expected during the first six semesters, 2 semester hours each.*

6 *All music education majors are required to participate in an approved ensemble every semester in residence.*

7 *All students must demonstrate keyboard competency by examination when they matriculate or by enrolling in* MUS 172 *and/or* MUS 173

8 *Student teaching coursework may be taken for 4-8 credits. Eight hours of student teaching apply toward graduation. Enrolling for at least 12 credits is needed to retain full-time status. You must register for both EDPR 438 and EDPR 442 during the semester of your student teaching. If public school licensure is not desired, the student selects alternative courses totaling 13 semester hours in consultation with the music education advisor, seven semester hours of which must be from the student's applied major, music theory, or music history.*

Choral Music Concentration Requirements

Code	Title	Hours
Technique Courses Requirements: 7 credit minimum to be selected with advisor, from Lists A and B.		
List A: Choose 3 credits (of the 7 total credits for Technique courses) from the list below:		
MUS 140	String Instrument Class	2
MUS 144	Supp WW Inst: Clarinet	.5
MUS 146	Supp WW Inst: Flute	.5
MUS 147	Supp WW Inst: Oboe	.5
MUS 148	Supp WW Inst: Saxophone	.5
MUS 149	Supp WW Inst: Bassoon	.5
MUS 151	Supp Brass Inst: Trumpet	.5
MUS 153	Supp Brass Inst: Horn	.5
MUS 154	Supp Brass Inst: Trombone	.5
MUS 155	Supp Brass Inst: Euph/Tuba	.5
MUS 158	Supp Percussion Instruments	2
List B: Choose 4 credits (of the 7 total required credits for Technique courses) from the list below:		
MUS 174	Grp Instr Pno for Mus Maj III [1]	2
MUS 175	Grp Instr Pno for Mus Maj IV [1]	2
MUS 180	(Secondary Piano Lessons) [1]	2
MUS 181	(Secondary Voice Lesson) [2]	2
MUS 252		1

[1] *Choral students take at least one diction course and secondary piano through MUS 174, or with advisor permission, applied lessons.*

[2] *Piano students must have at least 4 credits of secondary voice.*

Choral Music Education Specialized Coursework Requirements

Code	Title	Hours
MUS 121	Italian Diction	1
or MUS 122	German Diction	
or MUS 123	French Diction	
MUS 330	Advanced Choral Conducting I	2
MUS 346	Choral Methods for Secondary Ensembles	2
MUS 348	Choral Literature (taken twice)	2

Music Education: General Music, BME

for the degree of Bachelor of Music Education Major in Music Education, General Music Concentration

department website: https://music.illinois.edu
department faculty: Music Faculty (https://music.illinois.edu/people/)
college catalog page: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/

A minimum of 130 hours of credit is required for graduation. This curriculum prepares its graduates for teaching music in grades kindergarten through twelve. For teacher education requirements applicable to all curricula, see the Council on Teacher Education (https://cte-s.education.illinois.edu/dotnet/webpages/webpage.aspx). Students complete a concentration in instrumental (band or strings), choral, technology, or general music education.

In order to be recommended for licensure, candidates are required to maintain a UIUC cumulative grade-point average of 2.5, content area (music courses) GPA of 2.75, and professional education course GPA of 3.0 (A=4.0). Candidates should consult the music education handbook, their advisor, or the Council on Teacher Education for a listing of courses used to compute these grade-point averages.

All music education students must earn a grade of C- or better in all music and education courses required for licensure.

for the degree of Bachelor of Music Education Major in Music Education, Elementary General Music Concentration

Minimum required major and supporting course work: In order to be recommended for licensure, candidates are required to maintain a UIUC cumulative grade-point average of 2.5, content area (music courses) GPA of 2.75, and professional education course GPA of 3.0 (A=4.0). Candidates should consult the music education handbook, their advisor, or the Council on Teacher Education for a listing of courses used to compute these grade-point averages.
Minimum hours required for graduation: 130 hours.

General Education and College Orientation

Code	Title	Hours
Orientation to Arts at Illinois		
FAA 101	Arts at Illinois	1
General Education Requirements		
Composition I		4
Advanced Composition - fulfilled by MUS 244		3
Humanities and the Arts - fulfilled by MUS 313 and MUS 314		6
Cultural Studies: Western/Comparative Culture(s)		3
Cultural Studies: Non-Western Culture(s) - fulfilled by MUS 133		3
Cultural Studies: US Minority Culture(s)		3
Social and Behavioral Sciences - fulfilled by PSYC 100 and EPSY 201 [1]		7
Quantitative Reasoning I and II [2]		6
Natural Sciences and Technology		6
Foreign Language [3]		0-12
Total Hours [4]		**42-54**

Music Core Coursework

Code	Title	Hours
Music Theory and Musicianship		
MUS 101	Music Theory and Practice I	2
MUS 102	Music Theory and Practice II	2
MUS 201	Music Theory and Practice III	2
MUS 202	Music Theory and Practice IV	2
MUS 107	Musicianship I	2
MUS 108	Musicianship II	2
MUS 207	Musicianship III	2
MUS 208	Musicianship IV	1
Musicology		

MUS 110	Introd Art Mus: Intl Perspect	2
MUS 133	Introduction to World Music	3
MUS 313	The History of Music I	3
MUS 314	The History of Music II	3
Performance Studies		
Applied Major Lessons [5]		12
Ensembles [6]		6
MUS 172	Grp Instr Pno for Mus Major I [7]	2
MUS 173	Grp Instr Pno for Mus Maj II [7]	2
Total Hours		48

Professional Education Core Coursework

Code	Title	Hours
MUS 090	Seminar in Music Education	0
MUS 240	Orientation Mus Tchg Lrng K-HS	1
MUS 242	Elements of Conducting	2
MUS 244	Social Foundations of Music Ed	3 or 4
or EPS 202	Foundations of Education-ACP	
MUS 434	Assessment and Evaluation in Music Education	3
MUS 439	Differentiating Music Instruction	3
CI 473	Disciplinary Literacy	2
EPSY 201	Educational Psychology	3
EDPR 438	Educational Practice in Special Fields [8]	4
EDPR 442	Educational Practice in Secondary Education [8]	4

Music Education Core Coursework

Code	Title	Hours
Technique Courses (listed in each concentration area)		**7-8**
MUS 243	Introductory Music Ed Tech	2
MUS 342	Music in Childhood	3
MUS 343	Music in Adolescence	3
MUS 350	Music Teaching in Ensemble Settings	5

Music Education Electives

Code	Title	Hours
Select credits to reach 130 from the following courses, if not taken to satisfy a requirement in one of the above sections:		
MUS 106	Beginning Composition	2
MUS 174	Grp Instr Pno for Mus Maj III	2
MUS 175	Grp Instr Pno for Mus Maj IV	2
MUS 252		1
MUS 330	Advanced Choral Conducting I	2
MUS 331	Advanced Choral Conducting II	2
MUS 332	Advanced Wind Band Conducting and Rehearsal Strategies	3
MUS 333	Cond/Teach Strings-Grp Setting	3
MUS 336	Service Learning in Music Education	3
MUS 344	Instrumental Methods for Secondary Ensembles	2
MUS 346	Choral Methods for Secondary Ensembles	2
MUS 348	Choral Literature	1
MUS 404	Contemp Compos Techniques	2
MUS 407	Elect Music Techniques I	3
MUS 409	Elec Music Techniques II	2
MUS 433	Music Interdisciplinary Curriculum	2
MUS 435	Jazz Aural Skills I	2
MUS 437	Popular Music Pedagogy	2
MUS 440	Marching Band Procedures	2
MUS 444	Healthy Music Practices	2
MUS 446	Songwriting	2
MUS 447	Advanced Music Ed Technology	2
MUS 448	Computer Music	3
MUS 449	Teaching Young Singers	2
MUS 499	Proseminar in Music (Section ART)	2
THEA 399	Undergraduate Group Seminar (Section RS)	3
THEA 453	Introduction to Theatre Sound	3
THEA 454	Sound Design I	3

1 PSYC 100 *is prerequisite to* EPSY 201*, required in all teacher education programs.*

2 *Quantitative Reasoning I is satisfied by students in the Technology concentration selecting CS 105 as a Technique course or elective.*

3 *The Language Requirement may be satisfied by successfully completing a third-semester college-level course in a language other than English; successful completion, in high school, of the third year of a language other than English; or demonstrating proficiency at the third-semester level in a language proficiency examination approved by the College of Liberal Arts and Sciences and the appropriate department.*

4 *At least 19 hours of general education requirements are met by courses required by the BME.*

5 *Enrollment in the applied major is normally expected during the first six semesters, 2 semester hours each.*

6 *All music education majors are required to participate in an approved ensemble every semester in residence.*

7 *All students must demonstrate keyboard competency by examination when they matriculate or by enrolling in* MUS 172 *and/or* MUS 173

8 *Student teaching coursework may be taken for 4-8 credits. Eight hours of student teaching apply toward graduation. Enrolling for at least 12 credits is needed to retain full-time status. You must register for both EDPR 438 and EDPR 442 during the semester of your student teaching. If public school licensure is not desired, the student selects alternative courses totaling 13 semester hours in consultation with the music education advisor, seven semester hours of which must be from the student's applied major, music theory, or music history.*

General Music Concentration Requirements

Code	Title	Hours
Technique Courses Requirements: 8 credit minimum to be selected with advisor, from Lists A and B.		
List A: Choose 3 credits (of the 8 total credits for Technique courses) from the list below:		
MUS 140	String Instrument Class	2
MUS 144	Supp WW Inst: Clarinet	.5
MUS 146	Supp WW Inst: Flute	.5
MUS 147	Supp WW Inst: Oboe	.5
MUS 148	Supp WW Inst: Saxophone	.5
MUS 149	Supp WW Inst: Bassoon	.5
MUS 151	Supp Brass Inst: Trumpet	.5

MUS 153	Supp Brass Inst: Horn	.5
MUS 154	Supp Brass Inst: Trombone	.5
MUS 155	Supp Brass Inst: Euph/Tuba	.5
MUS 158	Supp Percussion Instruments	2
List B: Choose 5 credits (of the 8 total required credits for Technique courses) from the list below:		
MUS 121	Italian Diction	1
or MUS 122	German Diction	
or MUS 123	French Diction	
MUS 174	Grp Instr Pno for Mus Maj III	2
MUS 175	Grp Instr Pno for Mus Maj IV	2
MUS 180	(Secondary Piano Lessons)	2
MUS 181	(Secondary Voice Lessons)	2
MUS 252		1

Code	Title	Hours
General Music Education Specialized Coursework Requirements:		
MUS 433	Music Interdisciplinary Curriculum	2
MUS 437	Popular Music Pedagogy	2
MUS 449	Teaching Young Singers	2

Music Education: Instrumental Music, BME

for the degree of Bachelor of Music Education Major in Music Education, Instrumental Music Concentration

department website: https://music.illinois.edu
department faculty: Music Faculty (https://music.illinois.edu/people/)
college catalog page: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/

A minimum of 130 hours of credit is required for graduation. This curriculum prepares its graduates for teaching music in grades kindergarten through twelve. For teacher education requirements applicable to all curricula, see the Council on Teacher Education (https://cte-s.education.illinois.edu/dotnet/webpages/webpage.aspx). Students complete a concentration in instrumental (band or strings), choral, technology, or general music education.

In order to be recommended for licensure, candidates are required to maintain a UIUC cumulative grade-point average of 2.5, content area (music courses) GPA of 2.75, and professional education course GPA of 3.0 (A=4.0). Candidates should consult the music education handbook, their advisor, or the Council on Teacher Education for a listing of courses used to compute these grade-point averages.

All music education students must earn a grade of C- or better in all music and education courses required for licensure.

for the degree of Bachelor of Music Education Major in Music Education, Instrumental Music Concentration

Minimum required major and supporting course work: In order to be recommended for licensure, candidates are required to maintain a UIUC cumulative grade-point average of 2.5, content area (music courses) GPA of 2.75, and professional education course GPA of 3.0 (A=4.0). Candidates should consult the music education handbook, their advisor, or the Council on Teacher Education for a listing of courses used to compute these grade-point averages.
Minimum hours required for graduation: 130 hours.

General Education and College Orientation

Code	Title	Hours
Orientation to Arts at Illinois		
FAA 101	Arts at Illinois	1
General Education Requirements		
Composition I		4
Advanced Composition - fulfilled by MUS 244		3
Humanities and the Arts - fulfilled by MUS 313 and MUS 314		6
Cultural Studies: Western/Comparative Culture(s)		3
Cultural Studies: Non-Western Culture(s) - fulfilled by MUS 133		3
Cultural Studies: US Minority Culture(s)		3
Social and Behavioral Sciences - fulfilled by PSYC 100 and EPSY 201 [1]		7
Quantitative Reasoning I and II [2]		6
Natural Sciences and Technology		6
Foreign Language [3]		0-12
Total Hours [4]		**42-54**

Music Core Coursework

Code	Title	Hours
Music Theory and Musicianship		
MUS 101	Music Theory and Practice I	2
MUS 102	Music Theory and Practice II	2
MUS 201	Music Theory and Practice III	2
MUS 202	Music Theory and Practice IV	2
MUS 107	Musicianship I	2
MUS 108	Musicianship II	2
MUS 207	Musicianship III	2
MUS 208	Musicianship IV	1
Musicology		
MUS 110	Introd Art Mus: Intl Perspect	2
MUS 133	Introduction to World Music	3
MUS 313	The History of Music I	3
MUS 314	The History of Music II	3
Performance Studies		
Applied Major Lessons [5]		12
Ensembles [6]		6
MUS 172	Grp Instr Pno for Mus Major I [7]	2
MUS 173	Grp Instr Pno for Mus Maj II [7]	2
Total Hours		48

Professional Education Core Coursework

Code	Title	Hours
MUS 090	Seminar in Music Education	0
MUS 240	Orientation Mus Tchg Lrng K-HS	1

MUS 242	Elements of Conducting	2
MUS 244	Social Foundations of Music Ed	3 or 4
or EPS 202	Foundations of Education-ACP	
MUS 434	Assessment and Evaluation in Music Education	3
MUS 439	Differentiating Music Instruction	3
CI 473	Disciplinary Literacy	2
EPSY 201	Educational Psychology	3
EDPR 438	Educational Practice in Special Fields [8]	4
EDPR 442	Educational Practice in Secondary Education [8]	4

Music Education Core Coursework

Code	Title	Hours
Technique Courses (listed in each concentration area)		**7-8**
MUS 243	Introductory Music Ed Tech	2
MUS 342	Music in Childhood	3
MUS 343	Music in Adolescence	3
MUS 350	Music Teaching in Ensemble Settings	5

Music Education Electives

Code	Title	Hours
Select credits to reach 130 from the following courses, if not taken to satisfy a requirement in one of the above sections:		
MUS 106	Beginning Composition	2
MUS 174	Grp Instr Pno for Mus Maj III	2
MUS 175	Grp Instr Pno for Mus Maj IV	2
MUS 252		1
MUS 330	Advanced Choral Conducting I	2
MUS 331	Advanced Choral Conducting II	2
MUS 332	Advanced Wind Band Conducting and Rehearsal Strategies	3
MUS 333	Cond/Teach Strings-Grp Setting	3
MUS 336	Service Learning in Music Education	3
MUS 344	Instrumental Methods for Secondary Ensembles	2
MUS 346	Choral Methods for Secondary Ensembles	2
MUS 348	Choral Literature	1
MUS 404	Contemp Compos Techniques	2
MUS 407	Elect Music Techniques I	3
MUS 409	Elec Music Techniques II	2
MUS 433	Music Interdisciplinary Curriculum	2
MUS 435	Jazz Aural Skills I	2
MUS 437	Popular Music Pedagogy	2
MUS 440	Marching Band Procedures	2
MUS 444	Healthy Music Practices	2
MUS 446	Songwriting	2
MUS 447	Advanced Music Ed Technology	2
MUS 448	Computer Music	3
MUS 449	Teaching Young Singers	2
MUS 499	Proseminar in Music (Section ART)	2
THEA 399	Undergraduate Group Seminar (Section RS)	3
THEA 453	Introduction to Theatre Sound	3
THEA 454	Sound Design I	3

1 PSYC 100 *is prerequisite to* EPSY 201*, required in all teacher education programs.*

2 *Quantitative Reasoning I is satisfied by students in the Technology concentration selecting CS 105 as a Technique course or elective.*

3 *The Language Requirement may be satisfied by successfully completing a third-semester college-level course in a language other than English; successful completion, in high school, of the third year of a language other than English; or demonstrating proficiency at the third-semester level in a language proficiency examination approved by the College of Liberal Arts and Sciences and the appropriate department.*

4 *At least 19 hours of general education requirements are met by courses required by the BME.*

5 *Enrollment in the applied major is normally expected during the first six semesters, 2 semester hours each.*

6 *All music education majors are required to participate in an approved ensemble every semester in residence.*

7 *All students must demonstrate keyboard competency by examination when they matriculate or by enrolling in* MUS 172 *and/or* MUS 173

8 *Student teaching coursework may be taken for 4-8 credits. Eight hours of student teaching apply toward graduation. Enrolling for at least 12 credits is needed to retain full-time status. You must register for both EDPR 438 and EDPR 442 during the semester of your student teaching. If public school licensure is not desired, the student selects alternative courses totaling 13 semester hours in consultation with the music education advisor, seven semester hours of which must be from the student's applied major, music theory, or music history.*

Instrumental Music Concentration Requirements

Instrumental Music Concentration Requirements

Code	Title	Hours
Technique Courses Requirements: Choose a minimum of 8 credits, with advisor, from the list below:		
MUS 140	String Instrument Class	2
MUS 144	Supp WW Inst: Clarinet	.5
MUS 146	Supp WW Inst: Flute	.5
MUS 147	Supp WW Inst: Oboe	.5
MUS 148	Supp WW Inst: Saxophone	.5
MUS 149	Supp WW Inst: Bassoon	.5
MUS 151	Supp Brass Inst: Trumpet	.5
MUS 153	Supp Brass Inst: Horn	.5
MUS 154	Supp Brass Inst: Trombone	.5
MUS 155	Supp Brass Inst: Euph/Tuba	.5
MUS 158	Supp Percussion Instruments	2

Code	Title	Hours
Instrumental Music Education Specialized Coursework Requirements:		
MUS 332	Advanced Wind Band Conducting and Rehearsal Strategies	3
or MUS 333	Cond/Teach Strings-Grp Setting	
MUS 344	Instrumental Methods for Secondary Ensembles	2

Music Education: Technology, BME

for the degree of Bachelor of Music Education Major in Music Education, Technology Concentration

department website: https://music.illinois.edu
department faculty: Music Faculty (https://music.illinois.edu/people/)
college catalog page: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/

A minimum of 130 hours of credit is required for graduation. This curriculum prepares its graduates for teaching music in grades kindergarten through twelve. For teacher education requirements applicable to all curricula, see the Council on Teacher Education (https://cte-s.education.illinois.edu/dotnet/webpages/webpage.aspx). Students complete a concentration in instrumental (band or strings), choral, technology, or general music education.

In order to be recommended for licensure, candidates are required to maintain a UIUC cumulative grade-point average of 2.5, content area (music courses) GPA of 2.75, and professional education course GPA of 3.0 (A=4.0). Candidates should consult the music education handbook, their advisor, or the Council on Teacher Education for a listing of courses used to compute these grade-point averages.

All music education students must earn a grade of C- or better in all music and education courses required for licensure.

for the degree of Bachelor of Music Education Major in Music Education, Technology Concentration

Minimum required major and supporting course work: In order to be recommended for licensure, candidates are required to maintain a UIUC cumulative grade-point average of 2.5, content area (music courses) GPA of 2.75, and professional education course GPA of 3.0 (A=4.0). Candidates should consult the music education handbook, their advisor, or the Council on Teacher Education for a listing of courses used to compute these grade-point averages.
Minimum hours required for graduation: 130 hours.

General Education and College Orientation

Code	Title	Hours
Orientation to Arts at Illinois		
FAA 101	Arts at Illinois	1
General Education Requirements		
Composition I		4
Advanced Composition - fulfilled by MUS 244		3
Humanities and the Arts - fulfilled by MUS 313 and MUS 314		6
Cultural Studies: Western/Comparative Culture(s)		3
Cultural Studies: Non-Western Culture(s) - fulfilled by MUS 133		3
Cultural Studies: US Minority Culture(s)		3
Social and Behavioral Sciences - fulfilled by PSYC 100 and EPSY 201 [1]		7
Quantitative Reasoning I and II [2]		6
Natural Sciences and Technology		6
Foreign Language [3]		0-12
Total Hours [4]		**42-54**

Music Core Coursework

Code	Title	Hours
Music Theory and Musicianship		
MUS 101	Music Theory and Practice I	2
MUS 102	Music Theory and Practice II	2
MUS 201	Music Theory and Practice III	2
MUS 202	Music Theory and Practice IV	2
MUS 107	Musicianship I	2
MUS 108	Musicianship II	2
MUS 207	Musicianship III	2
MUS 208	Musicianship IV	1
Musicology		
MUS 110	Introd Art Mus: Intl Perspect	2
MUS 133	Introduction to World Music	3
MUS 313	The History of Music I	3
MUS 314	The History of Music II	3
Performance Studies		
Applied Major Lessons [5]		12
Ensembles [6]		6
MUS 172	Grp Instr Pno for Mus Major I [7]	2
MUS 173	Grp Instr Pno for Mus Maj II [7]	2
Total Hours		48

Professional Education Core Coursework

Code	Title	Hours
MUS 090	Seminar in Music Education	0
MUS 240	Orientation Mus Tchg Lrng K-HS	1
MUS 242	Elements of Conducting	2
MUS 244	Social Foundations of Music Ed	3 or 4
or EPS 202	Foundations of Education-ACP	
MUS 434	Assessment and Evaluation in Music Education	3
MUS 439	Differentiating Music Instruction	3
CI 473	Disciplinary Literacy	2
EPSY 201	Educational Psychology	3
EDPR 438	Educational Practice in Special Fields [8]	4
EDPR 442	Educational Practice in Secondary Education [8]	4

Music Education Core Coursework

Code	Title	Hours
Technique Courses (listed in each concentration area)		**7-8**
MUS 243	Introductory Music Ed Tech	2
MUS 342	Music in Childhood	3
MUS 343	Music in Adolescence	3
MUS 350	Music Teaching in Ensemble Settings	5

Music Education Electives

Code	Title	Hours
Select credits to reach 130 from the following courses, if not taken to satisfy a requirement in one of the above sections:		
MUS 106	Beginning Composition	2

MUS 174	Grp Instr Pno for Mus Maj III	2
MUS 175	Grp Instr Pno for Mus Maj IV	2
MUS 252		1
MUS 330	Advanced Choral Conducting I	2
MUS 331	Advanced Choral Conducting II	2
MUS 332	Advanced Wind Band Conducting and Rehearsal Strategies	3
MUS 333	Cond/Teach Strings-Grp Setting	3
MUS 336	Service Learning in Music Education	3
MUS 344	Instrumental Methods for Secondary Ensembles	2
MUS 346	Choral Methods for Secondary Ensembles	2
MUS 348	Choral Literature	1
MUS 404	Contemp Compos Techniques	2
MUS 407	Elect Music Techniques I	3
MUS 409	Elec Music Techniques II	2
MUS 433	Music Interdisciplinary Curriculum	2
MUS 435	Jazz Aural Skills I	2
MUS 437	Popular Music Pedagogy	2
MUS 440	Marching Band Procedures	2
MUS 444	Healthy Music Practices	2
MUS 446	Songwriting	2
MUS 447	Advanced Music Ed Technology	2
MUS 448	Computer Music	3
MUS 449	Teaching Young Singers	2
MUS 499	Proseminar in Music (Section ART)	2
THEA 399	Undergraduate Group Seminar (Section RS)	3
THEA 453	Introduction to Theatre Sound	3
THEA 454	Sound Design I	3

[1] PSYC 100 *is prerequisite to* EPSY 201*, required in all teacher education programs.*

[2] *Quantitative Reasoning I is satisfied by students in the Technology concentration selecting CS 105 as a Technique course or elective.*

[3] *The Language Requirement may be satisfied by successfully completing a third-semester college-level course in a language other than English; successful completion, in high school, of the third year of a language other than English; or demonstrating proficiency at the third-semester level in a language proficiency examination approved by the College of Liberal Arts and Sciences and the appropriate department.*

[4] *At least 19 hours of general education requirements are met by courses required by the BME.*

[5] *Enrollment in the applied major is normally expected during the first six semesters, 2 semester hours each.*

[6] *All music education majors are required to participate in an approved ensemble every semester in residence.*

[7] *All students must demonstrate keyboard competency by examination when they matriculate or by enrolling in* MUS 172 *and/or* MUS 173

[8] *Student teaching coursework may be taken for 4-8 credits. Eight hours of student teaching apply toward graduation. Enrolling for at least 12 credits is needed to retain full-time status. You must register for both EDPR 438 and EDPR 442 during the semester of your student teaching. If public school licensure is not desired, the student selects alternative courses totaling 13 semester hours in consultation with the music education advisor, seven semester hours of which must be from the student's applied major, music theory, or music history.*

Technology Concentration Requirements

Technology Concentration Requirements

Code	Title	Hours
Technique Course Requirements: 8 credit minimum to be selected with advisor, from lists A, B, and C.		
List A: Choose 2 credits (of the 8 total requirements for Techniques courses) from the list below:		
MUS 404	Contemp Compos Techniques	2
MUS 407	Elect Music Techniques I	3
MUS 409	Elec Music Techniques II	2
MUS 448	Computer Music	3
MUS 499	Proseminar in Music (Section ART)	2
THEA 399	Undergraduate Group Seminar (Section RS)	3
THEA 453	Introduction to Theatre Sound	3
THEA 454	Sound Design I	3
List B: Choose 3 credits (of the 8 total required credits for Techniques courses) from the list below:		
CI 210	Introduction to Digital Learning Environments	3
CI 424	Child Development & Technology	3
CI 437	Educational Game Design	3
CI 438	Computer Programming and the Classroom	3
CI 482	Social Learning and Multimedia	3
List C: Choose 3 credits (of the 8 total required credits for Techniques courses) from the list below:		
ARTS 243	Time Arts I	3
ARTS 244	Interaction I	3
CS 105	Intro Computing: Non-Tech	3
ECE 110	Introduction to Electronics	3
MUS 140	String Instrument Class	2
MUS 144	Supp WW Inst: Clarinet	.5
MUS 146	Supp WW Inst: Flute	.5
MUS 147	Supp WW Inst: Oboe	.5
MUS 148	Supp WW Inst: Saxophone	.5
MUS 149	Supp WW Inst: Bassoon	.5
MUS 151	Supp Brass Inst: Trumpet	.5
MUS 153	Supp Brass Inst: Horn	.5
MUS 154	Supp Brass Inst: Trombone	.5
MUS 155	Supp Brass Inst: Euph/Tuba	.5
MUS 158	Supp Percussion Instruments	2
MUS 121	Italian Diction	1
or MUS 122	German Diction	
or MUS 123	French Diction	
MUS 174	Grp Instr Pno for Mus Maj III	2
MUS 175	Grp Instr Pno for Mus Maj IV	2
MUS 180		2

MUS 181		2
MUS 252		1
MUS 446	Songwriting	2

Code	Title	Hours
Music Education Technology Specialized Coursework Requirements:		
MUS 199	Undergraduate Open Seminar (Section MET)	1
MUS 437	Popular Music Pedagogy	2
MUS 447	Advanced Music Ed Technology	2

Learning Outcomes: Music Education, BME

Learning outcomes for the degree of Bachelor of Music Education Major in Music Education

1. The well prepared music teacher has in-depth understanding of content area knowledge that includes central concepts, methods of inquiry, structures of the discipline, and multiple forms of music literacy.
2. The well prepared music teacher plans and designs instruction based on content area knowledge; diverse styles, genres, and repertoires; diverse student characteristics; student performance data; curriculum goals; and the community context.
3. The well prepared music teacher differentiates instruction by using a variety of strategies that support critical and creative thinking, problem-solving, and continuous musical growth and learning.
4. The well prepared music teacher understands and uses appropriate formative and summative assessments for determining student needs, monitoring student progress, measuring student growth, and evaluating student outcomes.
5. The well prepared music teacher is an ethical and reflective practitioner who promotes a culture of professional inquiry.

Music, BA

for the degree of Bachelor of Arts Major in Music

department website: https://music.illinois.edu
department faculty: Music Faculty (https://music.illinois.edu/people/)
college catalog page: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/

The Bachelor of Arts with a Major in Music is a 120-hour degree that is designed for students who wish to pursue a music degree with curricular flexibility to complete coursework in secondary and complementary areas of study. The BA in Music requires students to select a specific area of study, called an "option." An option consists of advanced music courses and supporting (non-Music) coursework. The coursework is determined in consultation with the student's advisor. Current options include music technology, music theory, composition, and various branches of musicology; or students may work with an advisor to explore alternate options not listed here (music + "your choice").

BA students work with their BA advisor to designate supplemental coursework to suit their interests and long-term goals. Students may indicate a specific area of study during the admissions process; some students may prefer to select an option after completing the first year of the music core. All BA students should designate their option by no later than the start of the spring semester of the sophomore year.

For admission requirements for the Bachelor of Arts in Music, please see the School of Music's Admissions website (http://www.music.illinois.edu/prospective-students/) or contact the Music Admissions Office: Music Admissions Office

School of Music: 1114 W. Nevada Street, Room 2014
Urbana, IL 61801
Phone: (217) 244-7899 | E-mail: musicadmissions@illinois.edu

for the degree of Bachelor of Arts Major in Music

Minimum required major and supporting course work: normally equates to 48-50 hours excluding the keyboard skills (MUS 172 and MUS 173) requirement, and includes 37-41 hours in music courses, 29-31 hours in core courses. Students who wish to study voice or an instrument for credit are required to satisfy the instrumental or vocal qualifying audition designed for students outside the School of Music. Credits earned in applied music lessons are generally considered elective.

General Education and College Orientation

Code	Title	Hours
Orientation to Arts at Illinois		
FAA 101	Arts at Illinois	1
General Education Requirements		
Composition I		4
Advanced Composition		3
Humanities and the Arts - fulfilled by MUS 313 and MUS 314		6
Cultural Studies: Western Comparative Culture(s)		3
Cultural Studies: Non-Western Culture(s)		3
Cultural Studies: US Minority Culture(s)		3
Social and Behavioral Sciences		6
Quantitative Reasoning I and II		6
Natural Sciences and Technology		6
Foreign Language		0-12
Total Hours [1]		**41-53**

[1] *6 hours of general education requirements (Humanities and the Arts) are met by courses required in the BMUS Music History and Literature Core (MUS 313 and MUS 314).*

Music Core and BA Option Coursework

Code	Title	Hours
Music Theory and Musicianship		
MUS 101	Music Theory and Practice I	2
MUS 102	Music Theory and Practice II	2
MUS 201	Music Theory and Practice III	2
MUS 202	Music Theory and Practice IV	2

MUS 107	Musicianship I	2
MUS 108	Musicianship II	2
MUS 207	Musicianship III	2
MUS 208	Musicianship IV	1
Advanced Music Theory		3
Musicology		
MUS 110	Introd Art Mus: Intl Perspect	2
MUS 313	The History of Music I [1]	3
MUS 314	The History of Music II [1]	3
Advanced Musicology		3
Performance Studies [2]		
MUS 172	Grp Instr Pno for Mus Major I	2
MUS 173	Grp Instr Pno for Mus Maj II	2
BA Option Coursework		
Major Plan of Study [3]		
Advanced Music Courses [4]		8-9
Supporting Coursework [5]		11-12
Total hours required for graduation		**120**

1. *Completion of both* MUS 313 *and* MUS 314 *meets the general education Humanities and the Arts requirement.*
2. *All students must demonstrate keyboard competency by examination when they matriculate or by enrolling in MUS 172 and/or MUS 173.*
3. *A Major Plan of Study Form must be completed and submitted to the School of Music Undergraduate Academic Advisor (Music Building 2058) before the end of the fifth semester (60-75 hours). Twelve hours of 400-level courses in music must be taken on the Urbana-Champaign campus. Please see your BA Music advisor, or the Undergraduate Academic Advisor, for assistance in completing the form.*
4. *Advanced music courses are at the 300- or 400-level. The Senior Project is generally included in this area.*
5. *Supporting Coursework is outside the School of Music and is chosen in consultation with an advisor.*

Learning Outcomes: Music, BA

Learning outcomes for the degree of Bachelor of Arts Major in Music

Bachelor of Arts in Music graduates will:

1. Understand, apply, and integrate foundational concepts of musical study in theory, aural skills, history, composition, improvisation, and keyboard competency, and do so independently and cooperatively.
2. Demonstrate the ability to learn independently, make inquiries, think critically, discover solutions, and integrate knowledge across both similar and varied areas of musical study.
3. Develop and demonstrate effective communication skills, including artistic self-expression, with diverse audiences through multiple media.
4. Acquire a basic understanding of diverse musical systems and traditions across the world, and develop a sensitivity to and awareness of cultural and societal differences, and their contribution to an interdependent global consciousness.
5. Acquire an understanding of professional and ethical responsibility as musicians and citizens, and demonstrate the ability to work professionally and effectively as leaders and collaborators.
6. Acquire a basic understanding of technology and professional skills, along with knowledge of specific technological developments within area of specialization.
7. Appreciate how music interacts in communities to enhance and engage social and cultural identities to enrich lifelong learning.

Computer Science + Music, BS

for the degree of Bachelor of Science in Computer Science and Music

Computer Science "CS + X" degree information: https://cs.illinois.edu/academics/undergraduate/degree-program-options/cs-x-degree-programs#requirements (https://cs.illinois.edu/academics/undergraduate/degree-program-options/cs-x-degree-programs/#requirements)
School of Music website: https://music.illinois.edu/
Overview of Music Admissions & Requirements: https://music.illinois.edu/application-process (https://music.illinois.edu/application-process/)
Music Admissions email: musicadmissions@illinois.edu

The Bachelor of Science in Computer Science & Music (CS + Music) is designed for students who plan to pursue a career in music technology, as well as students who want to push the state-of-the-art in music composition and explore new avenues of expression. This degree will prepare students for advanced study at the graduate level for many existing programs in music and audio technology, as well as equip them with the proper skills to successfully join and lead a vibrant workforce centered around the creation and distribution of entertainment media through constantly evolving technological platforms.

The CS + Music curriculum provides a broad knowledge of the theory, design, and application of computer systems integrated with the theory, history, and application of music. The curriculum is formed around courses in music, mathematics, science, and computation. Advanced coursework includes either a senior thesis or a senior project. A minimum of 120 hours is required for graduation.

For admission requirements for the Bachelor of Science in CS + Music, please see the School of Music's Admissions website (listed above) or contact the Music Admissions Office:

Music Admissions Office
School of Music
1114 West Nevada Street
Urbana, IL 61801
(217) 244-7899

for the degree of Bachelor of Science in Computer Science and Music

Minimum hours required for graduation: 120 hours

Code	Title	Hours
Orientation to Arts at Illinois		
FAA 101	Arts at Illinois	1
General Education Requirements		
Composition I		4
Advanced Composition		3
Humanities and the Arts [1]		6
Cultural Studies: Western/Comparative Culture(s)		3
Cultural Studies: Non-Western Culture(s)		3

Cultural Studies: U.S. Minority Culture(s)	3
Natural Sciences and Technology	6
Social and Behavioral Sciences	6
Quantitative Reasoning I and II [3]	6
Foreign Language	0-12
Total Hours	41-53

Music Core Coursework

Code	Title	Hours
Music Theory and Musicianship		
MUS 101	Music Theory and Practice I	2
MUS 102	Music Theory and Practice II	2
MUS 201	Music Theory and Practice III	2
MUS 107	Musicianship I	2
MUS 108	Musicianship II	2
MUS 207	Musicianship III	2
MUS 208	Musicianship IV	1
Musicology		
MUS 110	Introd Art Mus: Intl Perspect	2
MUS 313	The History of Music I [1]	3
MUS 314	The History of Music II [1]	3
Performance Studies [2]		
MUS 172	Grp Instr Pno for Mus Major I	2
MUS 173	Grp Instr Pno for Mus Maj II	2
Total Hours		25

CS + Music Core Coursework

Code	Title	Hours
Music		
MUS 105	Computation and Music I	2
MUS 205	Computation and Music II	2
MUS 299	Thesis/Adv UG Honors in Music	1 or 2
MUS 404	Contemp Compos Techniques	3
or MUS 448	Computer Music	
MUS 407	Elect Music Techniques I	3
MUS 409	Elec Music Techniques II	2
Advanced Music Theory		3
Advanced Musicology		3
Senior Project or Senior Thesis		
Computer Science		
CS 125	Introduction to Computer Science [3]	4
CS 126	Software Design Studio	3
CS 173	Discrete Structures	3
CS 225	Data Structures [3]	4
CS 233	Computer Architecture	4
CS 241	System Programming	4
CS 361	Probability & Statistics for Computer Science [4]	3
CS 374	Introduction to Algorithms & Models of Computation	4
CS 421	Programming Languages & Compilers	3
CS 498	Special Topics (Audio Signal Processing)	3
Engineering		
ECE 402	Electronic Music Synthesis	3
Math		
MATH 220	Calculus [5]	4 or 5
or MATH 221	Calculus I	
MATH 231	Calculus II	3
MATH 225	Introductory Matrix Theory	2
Total Hours		66-68

1. Completion of both MUS 313 and MUS 314 meets the general education requirement for Humanities and the Arts.
2. All students must demonstrate keyboard competency by examination when they matriculate or by enrolling in MUS 172 and/or MUS 173. It is possible to proficiency out of group piano courses through proficiency examination.
3. Completion of both CS 125 and CS 225 meets the general education requirement for Quantitative Reasoning I and Quantitative Reasoning II.
4. Students who are more interested in systems building can substitute CS 427 (Software Engineering I) for CS 361.
5. Students must take the ALEKS placement exam for course entry.

Instrumental Music, BMUS

for the degree of Bachelor of Music Major in Instrumental Music

department website: https://music.illinois.edu
department faculty: Music Faculty (https://music.illinois.edu/people/)
college catalog page: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/

Students may major in piano, organ, guitar, harpsichord, violin, viola, violoncello, double bass, harp, flute, oboe, bassoon, clarinet, saxophone, trumpet, horn, euphonium, trombone, tuba, or percussion.

for the degree of Bachelor of Music Major in Instrumental Music

Minimum required major and supporting course work: A student enrolled in this major normally takes two applied subjects, one a major (24-32 semester hours in the same applied area) and the other a minor (8 semester hours in the same applied area). Third- and fourth-year students must present satisfactory public junior and senior recitals as part of the requirements for the Instrumental Performance Major within the Bachelor of Music degree.

General Education and College Orientation

Code	Title	Hours
Orientation to Arts at Illinois		
FAA 101	Arts at Illinois	1
General Education Requirements		
Composition I		4
Advanced Composition		3
Humanities and the Arts - fulfilled by MUS 313 and MUS 314		6
Cultural Studies: Western/Comparative Culture(s)		3
Cultural Studies: Non-Western Comparative Culture(s)		3

Cultural Studies: US Minority Culture(s)	3
Social and Behavioral Sciences	6
Quantitative Reasoning I and II	6
Natural Sciences and Technology	6
Foreign Language [1]	0-12
Total Hours [2]	**41-53**

[1] *The Language Requirement may be satisfied by successfully completing a third-semester college-level course in a language other than English; successful completion, in high school, of the third year of a language other than English; or demonstrating proficiency at the third-semester level in a language proficiency examination approved by the College of Liberal Arts and Sciences and the appropriate department.*

[2] *Six hours of general education requirements in the Humanities and the Arts are met by courses required in the BMUS degree (MUS 313 and MUS 314).*

Music Core and Instrumental Performance Coursework

Code	Title	Hours
Music Theory and Musicianship		
MUS 101	Music Theory and Practice I	2
MUS 102	Music Theory and Practice II	2
MUS 201	Music Theory and Practice III	2
MUS 202	Music Theory and Practice IV	2
MUS 107	Musicianship I	2
MUS 108	Musicianship II	2
MUS 207	Musicianship III	2
MUS 208	Musicianship IV	1
Advanced Music Theory		6
Musicology		
MUS 110	Introd Art Mus: Intl Perspect	2
MUS 313	The History of Music I [1]	3
MUS 314	The History of Music II	3
Advanced Musicology		6
Performance Studies		
Major Applied Music Lessons [2,3]		24-32
Minor Applied Music Lessons [4]		8
Ensemble [5]		8
MUS 172	Grp Instr Pno for Mus Major I [6]	2
MUS 173	Grp Instr Pno for Mus Maj II [6]	2
MUS 242	Elements of Conducting	2
Junior Recital		
Senior Recital		
Keyboard Performance Majors only		
MUS 317	Intro to Piano Literature	3
MUS 431	Piano Pedagogy I	2
MUS 432	Piano Pedagogy II	2
Electives as needed to total 130 hours		
Total Hours required for graduation		**130**

[1] *Completion of both MUS 313 and MUS 314 meets the general education Humanities and the Arts requirement.*

[2] *String majors will register for four semester hours of applied music in the first year; thereafter, string majors will register for three semester hours of applied music and one semester hour of MUS 267 in the second, third, and fourth years. Brass majors will register for three semesters hours of applied music and one semester hour of MUS 267 each semester for all four years. All other instrumental majors register for four semester hours of applied music each semester.*

[3] *Concurrent registration in MUS 250 is required for all students who register for any of MUS 183-MUS 186 and MUS 483-MUS 486.*

[4] *Keyboard majors are required to complete only 6 hours of minor applied music.*

[5] *All music majors are required to participate in an approved ensemble every semester in residence. All string majors must audition for the orchestras at the beginning of each fall. For a complete list of approved ensembles, please refer to the Undergraduate Music Handbook.*

[6] *All students must demonstrate keyboard competency by examination when they matriculate or by enrolling in MUS 172 and/or MUS 173. Keyboard performance majors demonstrate keyboard competency by successfully completing MUS 454.*

Learning Outcomes: Instrumental Music, BMUS

Learning outcomes for the degree of Bachelor of Music Major in Instrumental Music

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Bachelor of Music graduates will:

1. Understand, apply, and integrate foundational concepts of musical study in theory, aural skills, history, composition, improvisation, and keyboard competency, and do so independently and cooperatively.
2. Demonstrate the ability to learn independently, make inquiries, think critically, discover solutions, and integrate knowledge across both similar and varied areas of musical study.
3. Develop and demonstrate effective performance skills (technical and expressive) using critical thinking to inform historical and stylistic performance practices and artistic expression.
4. Develop and demonstrate effective communication skills, including artistic self-expression, with diverse audiences through multiple media.
5. Acquire a basic understanding of diverse musical systems and traditions across the world, and develop a sensitivity to and awareness of cultural and societal differences, and their contribution to an interdependent global consciousness.
6. Acquire an understanding of professional and ethical responsibility as musicians and citizens, and demonstrate the ability to work professionally and effectively as leaders and collaborators.
7. Acquire a basic understanding of technology and professional skills, along with knowledge of specific technological developments within area of specialization.
8. Appreciate how music interacts with communities to enhance and engage social and cultural identities and enrich lifelong learning.

Jazz Performance, BMUS

for the degree of Bachelor of Music Major in Jazz Performance

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department website: https://music.illinois.edu
department faculty: Music Faculty (https://music.illinois.edu/people/)
college catalog page: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/

Students majoring in jazz performance may do so with piano, double bass, saxophone/clarinet, trumpet, trombone, percussion, guitar, or voice as the major instrument.

for the degree of Bachelor of Music Major in Jazz Performance

Minimum required major and supporting course work: Third- and fourth-year students must present satisfactory public junior and senior recitals as part of the requirements for the Bachelor of Music degree in jazz performance. All students must successfully complete one semester of Conducting, MUS 242**.**

General Education and College Orientation

Code	Title	Hours
Orientation to Arts at Illinois		
FAA 101	Arts at Illinois	1
General Education Requirements		
Composition I		4
Advanced Composition		3
Humanities and the Arts - fulfilled by MUS 313 and MUS 314		6
Cultural Studies: Western/Comparative Culture(s)		3
Cultural Studies: Non-Western Culture(s)		3
Cultural Studies: US Minority Culture(s)		3
Social and Behavioral Sciences		6
Quantitative Reasoning I and II		6
Natural Sciences and Technology		6
Foreign Language [1]		0-12
Total Hours [2]		**41-53**

[1] *The Language Requirement may be satisfied by successfully completing a third-semester college-level course in a language other than English; successful completion, in high school, of the third year of a language other than English; or demonstrating proficiency at the third-semester level in a language proficiency examination approved by the College of Liberal Arts and Sciences and the appropriate department.*

[2] *Six hours of general education requirements in the Humanities and the Arts are met by courses required in the BMUS degree (MUS 313 and MUS 314).*

Music Core and Jazz Performance Coursework

Code	Title	Hours
Music Theory and Musicianship		
MUS 101	Music Theory and Practice I	2
MUS 102	Music Theory and Practice II	2
MUS 201 & MUS 202	Music Theory and Practice III and Music Theory and Practice IV	4
MUS 202	Music Theory and Practice IV	2
MUS 107	Musicianship I	2
MUS 108	Musicianship II	2
MUS 207	Musicianship III	2
MUS 208	Musicianship IV	1
Advanced Music Theory		6
Musicology		
MUS 110	Introd Art Mus: Intl Perspect	2
MUS 313	The History of Music I [1]	3
MUS 314	The History of Music II	3
Advanced Musicology		6
Performance Studies		
Applied music lessons [2]		16
Jazz Ensemble [3]		8
MUS 172	Grp Instr Pno for Mus Major I [4]	2
MUS 173	Grp Instr Pno for Mus Maj II [4]	2
MUS 242	Elements of Conducting	2
Jazz Studies		
MUS 163	Jazz Keyboard Studies I	2
MUS 164	Jazz Keyboard Studies II	2
MUS 360	Jazz Improv:Theory and Prac I	2
MUS 361	Jazz Improv:Theory and Prac II	2
MUS 362	Jazz Arranging I	3
MUS 363	Jazz Arranging II	3
MUS 364	Jazz Composition I	2
MUS 365	Jazz Composition II	2
MUS 368	Jazz Improvisation Styles I	2
MUS 369	Jazz Improvisation Styles II	2
MUS 435	Jazz Aural Skills I	2
MUS 436	Jazz Aural Skills II [5]	2
Junior Recital		
Senior Recital		
Electives as needed to total 130 hours		
Total Hours required for graduation		**130**

[1] *Completion of both MUS 313 and MUS 314 meets the general education Humanities and the Arts requirement.*

[2] *Of the eight semesters of applied music, two semesters (4 hours) must be in classical applied study.*

[3] *All music majors are required to enroll in at least one approved performance ensemble each semester in residence. Jazz Performance majors register for at least one Jazz ensemble each semester. For a listing of approved ensembles, please refer to the Undergraduate Music Handbook.*

[4] *All students must demonstrate keyboard competency by examination when they matriculate or by enrolling in MUS 172 and/or MUS 173. For students with no keyboard skills,* MUS 172 *and* MUS 173 *taken in the first year, followed by Jazz Keyboard I and II in the second year will satisfy the secondary applied instrument requirement. For students whose principal instrument is piano, a secondary instrument or jazz voice may be chosen as a substitute for* MUS 172, MUS 173 *and Jazz Keyboard I and II, in consultation with the advisor.*

[5] *MUS 436 now replaces MUS 499 (Proseminar in Music).*

Learning Outcomes: Jazz Performance, BMUS

Learning outcomes for the degree of Bachelor of Music Major in Jazz Performance

Bachelor of Music graduates will:

1. Understand, apply, and integrate foundational concepts of musical study in theory, aural skills, history, composition, improvisation, and keyboard competency, and do so independently and cooperatively.
2. Demonstrate the ability to learn independently, make inquiries, think critically, discover solutions, and integrate knowledge across both similar and varied areas of musical study.
3. Develop and demonstrate effective performance skills (technical and expressive) using critical thinking to inform historical and stylistic performance practices and artistic expression.
4. Develop and demonstrate effective communication skills, including artistic self-expression, with diverse audiences through multiple media.
5. Acquire a basic understanding of diverse musical systems and traditions across the world, and develop a sensitivity to and awareness of cultural and societal differences, and their contribution to an interdependent global consciousness.
6. Acquire an understanding of professional and ethical responsibility as musicians and citizens, and demonstrate the ability to work professionally and effectively as leaders and collaborators.
7. Acquire a basic understanding of technology and professional skills, along with knowledge of specific technological developments within area of specialization.
8. Appreciate how music interacts with communities to enhance and engage social and cultural identities and enrich lifelong learning.

Musicology, BMUS

for the degree of Bachelor of Music Major in Musicology

department website: https://music.illinois.edu
department faculty: Music Faculty (https://music.illinois.edu/people/)
college catalog page: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/

This major offers a broad cultural education that unites academic and musical training. It also provides preparation for the graduate study required for research and teaching in musicology or ethnomusicology.

for the degree of Bachelor of Music Major in Musicology

department website: https://music.illinois.edu
department faculty: Music Faculty (https://music.illinois.edu/people/)
college catalog page: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://www.faa.illinois.edu/

This major offers a broad cultural education that unites academic and musical training. It also provides preparation for the graduate study required for research and teaching in musicology or ethnomusicology.

Minimum required major and supporting course work: The fourth-year student, working with an adviser, must complete a satisfactory thesis (MUS 299) as part of the requirements for the Musicology Major Bachelor of Music Degree.

General Education and College Orientation

Code	Title	Hours
Orientation to Arts at Illinois		
FAA 101	Arts at Illinois	1
General Education Requirements		
Composition I		4
Advanced Composition		3
Humanities and the Arts - fulfilled by MUS 313 and MUS 314		6
Cultural Studies: Western/Comparative Culture(s)		3
Cultural Studies: Non-Western Culture(s)		3
Cultural Studies: US Minority Culture(s)		3
Social and Behavioral Sciences		6
Quantitative Reasoning I and II		6
Natural Sciences and Technology		6
Foreign Language [1]		0-12
Total Hours [2]		**41-53**

[1] *The Language Requirement may be satisfied by successfully completing a third-semester college-level course in a language other than English; successful completion, in high school, of the third year of a language other than English; or demonstrating proficiency at the third-semester level in a language proficiency examination approved by the College of Liberal Arts and Sciences and the appropriate department.*

[2] *Six hours of general education requirements in the Humanities and the Arts are met by courses required in the BMUS degree (MUS 313 and MUS 314).*

Music Core and Musicology Coursework

Code	Title	Hours
Music Theory and Musicianship		
MUS 101	Music Theory and Practice I	2
MUS 102	Music Theory and Practice II	2
MUS 201	Music Theory and Practice III	2
MUS 202	Music Theory and Practice IV	2
MUS 107	Musicianship I	2
MUS 108	Musicianship II	2
MUS 207	Musicianship III	2
MUS 208	Musicianship IV	1
Advanced Music Theory		6
Musicology		
MUS 110	Introd Art Mus: Intl Perspect	2
MUS 313	The History of Music I [1]	3
MUS 314	The History of Music II	3
Advanced Musicology		6
Performance Studies		
Applied Music Lessons [2]		16
Ensemble [3]		8

MUS 172	Grp Instr Pno for Mus Major I [4]	2
MUS 173	Grp Instr Pno for Mus Maj II	2
MUS 242	Elements of Conducting	2
Other Required Coursework		
MUS 299	Thesis/Adv UG Honors in Music	1
MUS 419	Sr Seminar in Musicology	3
Additional advanced music theory course chosen in consultation with Musicology advisor		3
Additional advanced music history courses chosen in consultation with Musicology advisor		6
Four courses in relevant disciplines outside of music chosen in consultation with Musicology advisor [5]		12-16
Foreign language [6]		8
Electives as needed to total 130 hours		
Total Hours required for graduation		**130**

[1] *Completion of both* MUS 313 *and* MUS 314 *meets the general education Humanities and the Arts requirement.*

[2] *Students enroll in applied music in the same instrument or in voice each semester. It is strongly recommended that students in this major acquire a thorough practical knowledge of the piano beyond basic keyboard competency as part of the applied music study.*

[3] *All students are required to enroll in at least one approved performance ensemble each semester in residence, with a maximum of 16 semester hours of such ensemble applicable to the Bachelor of Music degree. For a listing of approved ensembles, please refer to the Undergraduate Music Handbook.*

[4] *All students must demonstrate keyboard competency by examination when they matriculate or by enrolling in MUS 172 and/or MUS 173.*

[5] *May not be used to satisfy general education requirements.*

[6] *Students must complete the equivalent of a fourth-level college foreign language course or demonstrate fourth-level proficiency for graduation. French, German, or Italian is strongly encouraged.*

Learning Outcomes: Musicology, BMUS

Learning outcomes for the degree of Bachelor of Music Major in Musicology

Bachelor of Music graduates will:

1. Understand, apply, and integrate foundational concepts of musical study in theory, aural skills, history, composition, improvisation, and keyboard competency, and do so independently and cooperatively.
2. Demonstrate the ability to learn independently, make inquiries, think critically, discover solutions, and integrate knowledge across both similar and varied areas of musical study.
3. Develop and demonstrate effective performance skills (technical and expressive) using critical thinking to inform historical and stylistic performance practices and artistic expression.
4. Develop and demonstrate effective communication skills, including artistic self-expression, with diverse audiences through multiple media.
5. Acquire a basic understanding of diverse musical systems and traditions across the world, and develop a sensitivity to and awareness of cultural and societal differences, and their contribution to an interdependent global consciousness.
6. Acquire an understanding of professional and ethical responsibility as musicians and citizens, and demonstrate the ability to work professionally and effectively as leaders and collaborators.
7. Acquire a basic understanding of technology and professional skills, along with knowledge of specific technological developments within area of specialization.
8. Appreciate how music interacts with communities to enhance and engage social and cultural identities and enrich lifelong learning.

Music-Open Studies, BMUS

for the degree of Bachelor of Music Major in Music-Open Studies

department website: https://music.illinois.edu
department faculty: Music Faculty (https://music.illinois.edu/people/)
college catalog page: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/

The Open Studies major allows students to focus on diverse fields such as music of other cultures, piano pedagogy, music technology, sound engineering, theatre, social or behavioral science, or any other areas of particular interest. Open Studies requires completion of the common requirements for all BMUS degrees and a minimum of 130 semester hours of credit for graduation.

Admission to Open Studies is initiated by petition to a committee of three faculty members, the open studies adviser, and the assistant dean of undergraduate affairs in the College of Fine and Applied Arts. Additional information may be obtained from the:

Music Admissions Office
School of Music: 1114 W. Nevada Street, Room 2014
Urbana, IL 61801
(217) 244-7899

Email: musicadmissions@illinois.edu (musicadmissions@illinois.edu)

for the degree of Bachelor of Music Major in Music - Open Studies

General Education and College Orientation

Code	Title	Hours
Orientation to Arts at Illinois		
FAA 101	Arts at Illinois	1
General Education Requirements		
Composition I		4
Advanced Composition		3
Humanities and the Arts - fulfilled by MUS 313 and MUS 314		6
Cultural Studies: Western/Comparative Culture(s)		3
Cultural Studies: Non-Western Culture(s)		3
Cultural Studies: US Minority Culture(s)		3
Social and Behavioral Sciences		6
Quantitative Reasoning I and II		6
Natural Sciences and Technology		
Foreign Language [1]		0-12
Total Hours [2]		**41-53**

[1] *The Language Requirement may be satisfied by successfully completing a third-semester college-level course in a language other than English; successful completion, in high school, of the third year of a language other than English; or demonstrating proficiency at the third-semester level in a language proficiency examination approved by the College of Liberal Arts and Sciences and the appropriate department.*

[2] *Six hours of general education requirements in the Humanities and the Arts are met by courses required in the BMUS degree (MUS 313 and MUS 314).*

Music Core and Open Studies Coursework

Code	Title	Hours
Music Theory and Musicianship		
MUS 101	Music Theory and Practice I	2
MUS 102	Music Theory and Practice II	2
MUS 201	Music Theory and Practice III	2
MUS 202	Music Theory and Practice IV	2
MUS 107	Musicianship I	2
MUS 108	Musicianship II	2
MUS 207	Musicianship III	2
MUS 208	Musicianship IV	1
Advanced Music Theory		6
Musicology		
MUS 110	Introd Art Mus: Intl Perspect	2
MUS 313	The History of Music I [1]	3
MUS 314	The History of Music II	3
Advanced Musicology		6
Performance Studies		
Applied Music Lessons		12
Ensemble [2]		8
MUS 172	Grp Instr Pno for Mus Major I [3]	2
MUS 173	Grp Instr Pno for Mus Maj II [3]	2
MUS 242	Elements of Conducting	2
Open Studies Coursework		
Major Plan of Study [4]		
Music Electives [5]		18
Professional Electives [6]		9-34
Senior Project		
Electives as needed to total 130 hours		

[1] *Completion of both MUS 313 and MUS 314 meets the general education Humanities and the Arts requirement.*

[2] *All music majors are required to enroll in at least one approved performance ensemble each semester in residence. For a listing of approved ensembles, please refer to the Undergraduate Music Handbook.*

[3] *All students must demonstrate keyboard competency by examination when they matriculate or by enrolling in MUS 172 and/or MUS 173.*

[4] *Students submit an Open Studies Plan of Study in consultation with their advisor.*

[5] *Music electives to be chosen from 100-, 200-, 300- and 400-level courses.*

[6] *Professional Electives are normally reserved for courses outside the School of Music. However, depending on the student's interest, and with advisor consultation, part or all of these electives may come from the School of Music.*

Learning Outcomes: Music-Open Studies, BMUS

Learning outcomes for the degree of Bachelor of Music Major in Music-Open Studies

Bachelor of Music graduates will:

1. Understand, apply, and integrate foundational concepts of musical study in theory, aural skills, history, composition, improvisation, and keyboard competency, and do so independently and cooperatively.
2. Demonstrate the ability to learn independently, make inquiries, think critically, discover solutions, and integrate knowledge across both similar and varied areas of musical study.
3. Develop and demonstrate effective performance skills (technical and expressive) using critical thinking to inform historical and stylistic performance practices and artistic expression.
4. Develop and demonstrate effective communication skills, including artistic self-expression, with diverse audiences through multiple media.
5. Acquire a basic understanding of diverse musical systems and traditions across the world, and develop a sensitivity to and awareness of cultural and societal differences, and their contribution to an interdependent global consciousness.
6. Acquire an understanding of professional and ethical responsibility as musicians and citizens, and demonstrate the ability to work professionally and effectively as leaders and collaborators.
7. Acquire a basic understanding of technology and professional skills, along with knowledge of specific technological developments within area of specialization.
8. Appreciate how music interacts with communities to enhance and engage social and cultural identities and enrich lifelong learning.

Voice, BMUS

for the degree of Bachelor of Music Major in Voice

department website: https://music.illinois.edu
department faculty: Music Faculty (https://music.illinois.edu/people/)
college catalog page: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/

The Voice Performance degree is designed to develop skilled performers in all areas of vocal techniques. Voice majors learn the appropriate stylistic approaches to the vocal literature of various historical periods and also study Italian, French, and German in order to better master the diction of works performed in these languages. There are opportunities to perform onstage throughout the degree program either in solo performance or in group productions with our Lyric Theatre program.

For Jazz Voice, please visit the BMUS-Jazz Performance pages.

for the degree of Bachelor of Music Major in Voice

Minimum required major and supporting course work: At least eight semester hours each in the Italian, French, and German languages are required for the voice major. A student who has not completed at least two years of Italian in high school should take Italian during the first year. Completion of this requirement does not complete the campus general education language requirement, which is twelve semester hours.
Third- and fourth-year students must present satisfactory public junior and senior recitals as part of the requirements for the Vocal Performance Major within the Bachelor of Music degree.

General Education and College Orientation

Code	Title	Hours
Orientation to Arts at Illinois		
FAA 101	Arts at Illinois	1
General Education Requirements		
Composition I		4
Advanced Composition		3
Humanities and the Arts - fulfilled by MUS 313 and MUS 314		6
Cultural Studies: Western/Comparative Culture(s)		3
Cultural Studies: Non-Western Culture(s)		3
Cultural Studies: US Minority Culture(s)		3
Social and Behavioral Sciences		6
Quantitative Reasoning I and II		6
Natural Sciences and Technology		6
Foreign Language [1]		0-12
Total Hours [2]		**41-53**

1 *The Language Requirement may be satisfied by successfully completing a third-semester college-level course in a language other than English; successful completion, in high school, of the third year of a language other than English; or demonstrating proficiency at the third-semester level in a language proficiency examination approved by the College of Liberal Arts and Sciences and the appropriate department.*

2 *Six hours of general education requirements in the Humanities and the Arts are met by courses required in the BMUS degree (MUS 313 and MUS 314).*

Music Core and Vocal Performance Coursework

Code	Title	Hours
Music Theory and Musicianship		
MUS 101	Music Theory and Practice I	2
MUS 102	Music Theory and Practice II	2
MUS 201	Music Theory and Practice III	2
MUS 202	Music Theory and Practice IV	2
MUS 107	Musicianship I	2
MUS 108	Musicianship II	2
MUS 207	Musicianship III	2
MUS 208	Musicianship IV	1
Advanced Music Theory		6
Musicology		
MUS 110	Introd Art Mus: Intl Perspect	2
MUS 313	The History of Music I [1]	3
MUS 314	The History of Music II	3
Advanced Musicology		6
Performance Studies		
MUS 181		12
MUS 481		12
Choral Ensemble [2]		8
MUS 172	Grp Instr Pno for Mus Major I [3]	2
MUS 173	Grp Instr Pno for Mus Maj II [3]	2
MUS 242	Elements of Conducting	2
Vocal Studies		
MUS 120	English Diction	1
MUS 121	Italian Diction	1
MUS 122	German Diction	1
MUS 123	French Diction	1
MUS 430	Applied Music Pedagogy	4
MUS 474	Vocal Repertoire I	1
MUS 475	Vocal Repertoire II	1
French		8
German		8
Italian		8
Piano [4]		8
Junior Recital		
Senior Recital		
Electives as needed to total 130 hours minimum		
Total hours		**130**

1 *Completion of both* MUS 313 *and* MUS 314 *meets the general education Humanities and the Arts requirement.*

2 *All students are required to enroll in at least one approved choral performance ensemble each semester in residence, with a maximum of 16 semester hours of such ensemble applicable to the Bachelor of Music degree. For a listing of approved ensembles, please refer to the Undergraduate Music Handbook.*

3 *All students must demonstrate keyboard competency by examination when they matriculate or by enrolling in MUS 172 and/or MUS 173.*

4 *Courses include MUS 174, MUS 175 and MUS 180.*

Learning Outcomes: Voice, BMUS

Learning outcomes for the degree of Bachelor of Music Major in Voice

Bachelor of Music graduates will:

1. Understand, apply, and integrate foundational concepts of musical study in theory, aural skills, history, composition, improvisation, and keyboard competency, and do so independently and cooperatively.
2. Demonstrate the ability to learn independently, make inquiries, think critically, discover solutions, and integrate knowledge across both similar and varied areas of musical study.
3. Develop and demonstrate effective performance skills (technical and expressive) using critical thinking to inform historical and stylistic performance practices and artistic expression.
4. Develop and demonstrate effective communication skills, including artistic self-expression, with diverse audiences through multiple media.
5. Acquire a basic understanding of diverse musical systems and traditions across the world, and develop a sensitivity to and awareness of cultural and societal differences, and their contribution to an interdependent global consciousness.

6. Acquire an understanding of professional and ethical responsibility as musicians and citizens, and demonstrate the ability to work professionally and effectively as leaders and collaborators.
7. Acquire a basic understanding of technology and professional skills, along with knowledge of specific technological developments within area of specialization.
8. Appreciate how music interacts with communities to enhance and engage social and cultural identities and enrich lifelong learning.

Natural Resources & Environmental Sciences, BS

for the degree of Bachelor of Science Major in Natural Resources & Environmental Sciences

department website: https://nres.illinois.edu/
department faculty: https://nres.illinois.edu/directory/faculty (https://nres.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college website: https://aces.illinois.edu/

Students pursuing this major select one of four concentrations:

Ecosystem Stewardship & Restoration Ecology (p. 329)
Environmental Science & Management (p. 330)
Fish, Wildlife & Conservation Biology (p. 332)
Human Dimensions of the Environment (p. 333)

Designed for students interested in careers leading the conservation, protection, and management of natural and environmental resources or in pursuing advanced education in one of its many disciplinary areas, the NRES baccalaureate provides a science-based, application-oriented education. The NRES major is unique in its integration of a comprehensive physical, life, and social sciences background with coursework providing the management, decision-making, and analytical knowledge and skills required to solve the world's most pressing problems.

Students in the NRES major begin their studies by taking a set of core courses that provides the background for more focused substantive study at the upper level. The NRES core introduces students to the range of physical, life, and social science content most relevant to their future professions and equips them with tools essential for the discovery, analysis, and application of knowledge important for successful environmental management. NRES students then build upon the core by completing one of four upper-level concentrations. Courses in the concentrations involve focused attention to the theories, data, and analytical tools of a particular set of natural resource and environmental science areas, helping students develop the necessary understanding of the complexities underlying resources management. All students in the major are required to complete a combination of field courses and at least one project-oriented capstone course.

All the concentrations prepare students for graduate study as well as for multiple career paths throughout the public and private sectors. Because of its unique orientation toward integrative application of disciplinary knowledge, the NRES major prepares students for a wide range of careers involving the conservation, protection, and management of natural resources. Many occur within business or government agencies that provide services related to environmental and natural resource management. Other careers are found within social, professional, and advocacy institutions that focus on human impacts and environmental sustainability. The major also prepares students for teaching, research, or other professional activities.

Graduates from the NRES major go on to pursue careers in the direction of environmental education centers; ecological management and restoration; enforcement of laws and regulations; environmental advocacy; environmental consulting; forest and environmental economics; land use analysis and management; law; local, state, and federal government; management of parks, forests and rangelands; plant physiology; policy development and implementation; resource planning and policy analysis; social and environmental impact analysis; soil conservation, science, and testing; technical sales; watershed management; and wildlife conservation and management.

Natural Resources & Environmental Sciences: Ecosystem Stewardship & Restoration Ecology, BS

for the degree of Bachelor of Science Major in Natural Resources & Environmental Sciences, Ecosystem Stewardship & Restoration Ecology Concentration

department website: https://nres.illinois.edu/
department faculty: https://nres.illinois.edu/directory/faculty (https://nres.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college website: https://aces.illinois.edu/

Ecosystem Stewardship and Restoration Ecology emphasizes the ecology, structure, and function of ecosystems, with a particular focus on plant communities and their interactions with the living and non-living parts of ecosystems. It is designed for students interested in the fundamental properties and practices underlying the restoration and management of soil, watershed, wetland, forest, and grassland ecosystems. The concentration includes coursework in the areas of restoration, landscape, and plant ecology, as well as courses focused on specific ecosystems (e.g. streams, wetlands, agroecosystems), invasive species, community ecology, and ecosystem science.

for the degree of Bachelor of Science Major in Natural Resources & Environmental Sciences, Ecosystem Stewardship & Restoration Ecology Concentration

Prescribed Courses including Campus General Education

Code	Title	Hours
Composition I and Speech		
Select one of the following:		6-7
RHET 105 & CMN 101	Writing and Research and Public Speaking (or equivalent) (see College Composition I requirement)	
CMN 111 & CMN 112	Oral & Written Comm I and Oral & Written Comm II	

Advanced Composition		
Select from campus approved list		3-4
Cultural Studies		
Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists.		9
Foreign Language		
Coursework at or above the third level is required for graduation.		
Quantitative Reasoning I		
Select one of the following:		4-5
MATH 220	Calculus	
MATH 221	Calculus I	
MATH 234	Calculus for Business I	
Quantitative Reasoning II		
Select one of the following:		3-4
ACE 261	Applied Statistical Methods	
CPSC 241	Intro to Applied Statistics	
ECON 202	Economic Statistics I	
PSYC 235	Intro to Statistics	
SOC 280	Intro to Social Statistics	
STAT 100	Statistics	
Natural Sciences and Technology		
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	4
CHEM 104 & CHEM 105	General Chemistry II and General Chemistry Lab II	4
IB 103	Introduction to Plant Biology	4
Select one of the following:		4-5
IB 104	Animal Biology	
or IB 150 & IB 151	Organismal & Evolutionary Biol and Organismal & Evol Biol Lab	
Select one of the following:		3-5
GEOG 103	Earth's Physical Systems	
GEOL 107	Physical Geology	
PHYS 101	College Physics: Mech & Heat	
PHYS 211	University Physics: Mechanics	
MCB 100	Introductory Microbiology	
Humanities and the Arts		
Select from campus approved list.		6
Social and Behavioral Sciences		
ACE 100	Introduction to Applied Microeconomics	3-4
or ECON 102	Microeconomic Principles	
Select one additional course from campus approved list.		3-4
Natural Resources and Environmental Sciences Required (Core)		
NRES 102	Introduction to NRES	3
NRES 201	Introductory Soils	4
NRES 219	Applied Ecology	3
NRES 287	Environment and Society	3
NRES 325	Natural Resource Policy Mgmt	3
NRES 348	Fish and Wildlife Ecology	3
NRES 421	Quantitative Methods in NRES	3
NRES 454	GIS in Natural Resource Mgmt	4
NRES 456	Integrative Ecosystem Management	3
NRES 285	Field Experience	1,2
One additional Field Experience course		1-2
NRES 285	Field Experience (repeatable)	
NRES 293	Professional Internship	
NRES 294	Resident Internship	
NRES 295	Undergrad Research or Thesis	
NRES 396	UG Honors Research or Thesis	
ACES Required		
ACES 101	Contemporary Issues in ACES	2
Required Concentration		
Concentration prescribed courses. See specific requirements for each concentration listed below.		19-29
Total Hours		**126**

Code	Title	Hours
Concentration Core Requirements		
NRES 419	Env and Plant Ecosystems	3
NRES 420	Restoration Ecology	4
NRES 465	Landscape Ecology	3
Concentration Elective Requirements		
Two Ecology Courses		6-7
NRES 302	Dendrology	
NRES 362	Ecology of Invasive Species	
NRES 415	Native Plant ID and Floristics	
CPSC 431	Plants and Global Change	
IB 452	Ecosystem Ecology	
IB 453	Community Ecology	
IB 439	Biogeography	
One Ecosystem or Management Course		3-4
NRES 401	Watershed Hydrology	
NRES 402	Ecohydrology and Water Management	
NRES 418	Wetland Ecology & Management	
NRES 427	Modeling Natural Resources	
NRES 429	Aquatic Ecosystem Conservation	
NRES 485	Stream Ecosystem Management	
CPSC 437	Principles of Agroecology	
CEE 432	Stream Ecology	
IB 361	Ecology and Human Health	
IB 451	Conservation Biology	
UP 405	Watershed Ecology and Planning	
UP 406	Urban Ecology	
Total Concentration-Required Hours:		**19-21**

Natural Resources & Environmental Sciences: Environmental Science & Management, BS

for the degree of Bachelor of Science Major in Natural Resources & Environmental Sciences, Environmental Science & Management Concentration

department website: https://nres.illinois.edu/
department faculty: https://nres.illinois.edu/directory/faculty (https://nres.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college website: https://aces.illinois.edu/

Environmental Science and Management emphasizes the biological, chemical, and physical features of the environment. It is designed for students interested in the management of soil and water resources and in understanding how to protect and improve environmental quality. The concentration includes coursework in environmental chemistry, environmental microbiology, ecohydrology, and environmental quality, as well as courses focused more specifically on soil and water sciences.

for the degree of Bachelor of Science Major in Natural Resources & Environmental Sciences, Environmental Science & Management Concentration

Prescribed Courses including Campus General Education

Code	Title	Hours
Composition I and Speech		
Select one of the following:		6-7
RHET 105 & CMN 101	Writing and Research and Public Speaking (or equivalent) (see College Composition I requirement)	
CMN 111 & CMN 112	Oral & Written Comm I and Oral & Written Comm II	
Advanced Composition		
Select from campus approved list		3-4
Cultural Studies		
Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists.		9
Foreign Language		
Coursework at or above the third level is required for graduation.		
Quantitative Reasoning I		
Select one of the following:		4-5
MATH 220	Calculus	
MATH 221	Calculus I	
MATH 234	Calculus for Business I	
Quantitative Reasoning II		
Select one of the following:		3-4
ACE 261	Applied Statistical Methods	
CPSC 241	Intro to Applied Statistics	
ECON 202	Economic Statistics I	
PSYC 235	Intro to Statistics	
SOC 280	Intro to Social Statistics	
STAT 100	Statistics	
Natural Sciences and Technology		
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	4
CHEM 104 & CHEM 105	General Chemistry II and General Chemistry Lab II	4
IB 103	Introduction to Plant Biology	4
Select one of the following:		4-5
IB 104	Animal Biology	
or IB 150 & IB 151	Organismal & Evolutionary Biol and Organismal & Evol Biol Lab	
Select one of the following:		3-5
GEOG 103	Earth's Physical Systems	
GEOL 107	Physical Geology	
PHYS 101	College Physics: Mech & Heat	
PHYS 211	University Physics: Mechanics	
MCB 100	Introductory Microbiology	
Humanities and the Arts		
Select from campus approved list.		6
Social and Behavioral Sciences		
ACE 100	Introduction to Applied Microeconomics	3-4
or ECON 102	Microeconomic Principles	
Select one additional course from campus approved list.		3-4
Natural Resources and Environmental Sciences Required (Core)		
NRES 102	Introduction to NRES	3
NRES 201	Introductory Soils	4
NRES 219	Applied Ecology	3
NRES 287	Environment and Society	3
NRES 325	Natural Resource Policy Mgmt	3
NRES 348	Fish and Wildlife Ecology	3
NRES 421	Quantitative Methods in NRES	3
NRES 454	GIS in Natural Resource Mgmt	4
NRES 456	Integrative Ecosystem Management	3
NRES 285	Field Experience	1,2
One additional Field Experience course		1-2
NRES 285	Field Experience (repeatable)	
NRES 293	Professional Internship	
NRES 294	Resident Internship	
NRES 295	Undergrad Research or Thesis	
NRES 396	UG Honors Research or Thesis	
ACES Required		
ACES 101	Contemporary Issues in ACES	2
Required Concentration		
Concentration prescribed courses. See specific requirements for each concentration listed below.		19-29
Total Hours		**126**

Code	Title	Hours
Concentration Core Requirements		
NRES 351	Introduction to Environmental Chemistry	3
NRES 402	Ecohydrology and Water Management	3
or NRES 401	Watershed Hydrology	
NRES 475	Environmental Microbiology	3
Concentration Elective Requirements		
Two Soil and Water Science Courses		6-8
NRES 429	Aquatic Ecosystem Conservation	

NRES 471	Pedology	
NRES 485	Stream Ecosystem Management	
NRES 487	Soil Chemistry	
NRES 488	Soil Fertility and Fertilizers	
NRES 490	Surface Water System Chemistry	
ABE 454	Environmental Soil Physics	
GEOG 406	Fluvial Geomorphology	
GEOG 459	Ecohydraulics	
One Environmental Quality Course		3-4
NRES 403	Watersheds and Water Quality	
NRES 438	Soil Nutrient Cycling	
NRES 474	Soil and Water Conservation	
CPSC 336	Tomorrow's Environment	
CPSC 431	Plants and Global Change	
TSM 352	Land and Water Mgt Systems	
UP 405	Watershed Ecology and Planning	
ATMS 449	Biogeochemical Cycles	
ESE 320	Water Planet, Water Crisis	
GEOL 380	Environmental Geology	
IB 485	Environ Toxicology & Health	
Total Concentration-Required Hours		**18-21**

Natural Resources & Environmental Sciences: Fish, Wildlife & Conservation Biology, BS

for the degree of Bachelor of Science Major in Natural Resources & Environmental Sciences, Fish, Wildlife & Conservation Biology Concentration

department website: https://nres.illinois.edu/
department faculty: https://nres.illinois.edu/directory/faculty (https://nres.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college website: https://aces.illinois.edu/

Fish, Wildlife and Conservation Biology emphasizes the ecology, conservation, and sustainable management of fish and wildlife species and communities. It is designed for students interested in understanding interactions among humans, wild animals, and their habitats. The concentration includes coursework in conservation of threatened and endangered species, management of harvested species, aquatic ecosystem conservation, animal behavior, vertebrate natural history, identification of animals and plants, and advanced ecology.

for the degree of Bachelor of Science Major in Natural Resources & Environmental Sciences, Fish, Wildlife & Conservation Biology Concentration

Prescribed Courses including Campus General Education

Code	Title	Hours
Composition I and Speech		
Select one of the following:		6-7
RHET 105 & CMN 101	Writing and Research and Public Speaking (or equivalent) (see College Composition I requirement)	
CMN 111 & CMN 112	Oral & Written Comm I and Oral & Written Comm II	
Advanced Composition		
Select from campus approved list		3-4
Cultural Studies		
Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists.		9
Foreign Language		
Coursework at or above the third level is required for graduation.		
Quantitative Reasoning I		
Select one of the following:		4-5
MATH 220	Calculus	
MATH 221	Calculus I	
MATH 234	Calculus for Business I	
Quantitative Reasoning II		
Select one of the following:		3-4
ACE 261	Applied Statistical Methods	
CPSC 241	Intro to Applied Statistics	
ECON 202	Economic Statistics I	
PSYC 235	Intro to Statistics	
SOC 280	Intro to Social Statistics	
STAT 100	Statistics	
Natural Sciences and Technology		
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	4
CHEM 104 & CHEM 105	General Chemistry II and General Chemistry Lab II	4
IB 103	Introduction to Plant Biology	4
Select one of the following:		4-5
IB 104	Animal Biology	
or IB 150 & IB 151	Organismal & Evolutionary Biol and Organismal & Evol Biol Lab	
Select one of the following:		3-5
GEOG 103	Earth's Physical Systems	
GEOL 107	Physical Geology	
PHYS 101	College Physics: Mech & Heat	
PHYS 211	University Physics: Mechanics	
MCB 100	Introductory Microbiology	
Humanities and the Arts		
Select from campus approved list.		6
Social and Behavioral Sciences		
ACE 100	Introduction to Applied Microeconomics	3-4
or ECON 102	Microeconomic Principles	
Select one additional course from campus approved list.		3-4
Natural Resources and Environmental Sciences Required (Core)		
NRES 102	Introduction to NRES	3
NRES 201	Introductory Soils	4
NRES 219	Applied Ecology	3

NRES 287	Environment and Society	3
NRES 325	Natural Resource Policy Mgmt	3
NRES 348	Fish and Wildlife Ecology	3
NRES 421	Quantitative Methods in NRES	3
NRES 454	GIS in Natural Resource Mgmt	4
NRES 456	Integrative Ecosystem Management	3
NRES 285	Field Experience	1,2
One additional Field Experience course		1-2
NRES 285	Field Experience (repeatable)	
NRES 293	Professional Internship	
NRES 294	Resident Internship	
NRES 295	Undergrad Research or Thesis	
NRES 396	UG Honors Research or Thesis	
ACES Required		
ACES 101	Contemporary Issues in ACES	2
Required Concentration		
Concentration prescribed courses. See specific requirements for each concentration listed below.		19-29
Total Hours		**126**

Code	Title	Hours
Concentration Core Requirements		
NRES 407	Wildlife Population Ecology	4
NRES 409	Fishery Ecol and Conservation	4
Concentration Elective Requirements		
One Organismal Biology/Identification Course		4
IB 461	Ornithology	
IB 462	Mammalogy	
IB 463	Ichthyology	
IB 464	Herpetology	
One Specialization Course		3-4
NRES 362	Ecology of Invasive Species	
NRES 418	Wetland Ecology & Management	
NRES 419	Env and Plant Ecosystems	
NRES 420	Restoration Ecology	
NRES 429	Aquatic Ecosystem Conservation	
NRES 465	Landscape Ecology	
NRES 485	Stream Ecosystem Management	
IB 329	Animal Behavior	
IB 451	Conservation Biology	
One Plant Classification/Identification Course		4
NRES 302	Dendrology	
NRES 415	Native Plant ID and Floristics	
HORT 301		
IB 335	Plant Systematics	
Total Concentration-Required Hours		**19-20**

Natural Resources & Environmental Sciences: Human Dimensions of the Environment, BS

for the degree of Bachelor of Science Major in Natural Resources & Environmental Sciences, Human Dimensions of the Environment Concentration

department website: https://nres.illinois.edu/ (https://ace.illinois.edu/)
department faculty: https://nres.illinois.edu/directory/faculty (https://nres.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/)
college website: https://aces.illinois.edu/

Human Dimensions of the Environment emphasizes the social scientific interpretations of human-environment interactions at multiple levels, as well as applied policy and management implications. This concentration requires advanced coursework in behavior change science, natural resource economics, environmental and conservation psychology, communications, social impact assessment, environmental policy, and environmental law. Students who have completed degrees in this concentration have gone on to careers in natural resource management, environmental policy, law, advocacy, and education.

for the degree of Bachelor of Science Major in Natural Resources & Environmental Sciences, Human Dimensions of the Environment Concentration

Prescribed Courses including Campus General Education

Code	Title	Hours
Composition I and Speech		
Select one of the following:		6-7
RHET 105 & CMN 101	Writing and Research and Public Speaking (or equivalent) (see College Composition I requirement)	
CMN 111 & CMN 112	Oral & Written Comm I and Oral & Written Comm II	
Advanced Composition		
Select from campus approved list		3-4
Cultural Studies		
Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists.		9
Foreign Language		
Coursework at or above the third level is required for graduation.		
Quantitative Reasoning I		
Select one of the following:		4-5
MATH 220	Calculus	
MATH 221	Calculus I	
MATH 234	Calculus for Business I	
Quantitative Reasoning II		
Select one of the following:		3-4

ACE 261	Applied Statistical Methods	
CPSC 241	Intro to Applied Statistics	
ECON 202	Economic Statistics I	
PSYC 235	Intro to Statistics	
SOC 280	Intro to Social Statistics	
STAT 100	Statistics	
Natural Sciences and Technology		
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	4
CHEM 104 & CHEM 105	General Chemistry II and General Chemistry Lab II	4
IB 103	Introduction to Plant Biology	4
Select one of the following:		4-5
IB 104	Animal Biology	
or IB 150 & IB 151	Organismal & Evolutionary Biol and Organismal & Evol Biol Lab	
Select one of the following:		3-5
GEOG 103	Earth's Physical Systems	
GEOL 107	Physical Geology	
PHYS 101	College Physics: Mech & Heat	
PHYS 211	University Physics: Mechanics	
MCB 100	Introductory Microbiology	
Humanities and the Arts		
Select from campus approved list.		6
Social and Behavioral Sciences		
ACE 100	Introduction to Applied Microeconomics	3-4
or ECON 102	Microeconomic Principles	
Select one additional course from campus approved list.		3-4
Natural Resources and Environmental Sciences Required (Core)		
NRES 102	Introduction to NRES	3
NRES 201	Introductory Soils	4
NRES 219	Applied Ecology	3
NRES 287	Environment and Society	3
NRES 325	Natural Resource Policy Mgmt	3
NRES 348	Fish and Wildlife Ecology	3
NRES 421	Quantitative Methods in NRES	3
NRES 454	GIS in Natural Resource Mgmt	4
NRES 456	Integrative Ecosystem Management	3
NRES 285	Field Experience	1,2
One additional Field Experience course		1-2
NRES 285	Field Experience (repeatable)	
NRES 293	Professional Internship	
NRES 294	Resident Internship	
NRES 295	Undergrad Research or Thesis	
NRES 396	UG Honors Research or Thesis	
ACES Required		
ACES 101	Contemporary Issues in ACES	2
Required Concentration		
Concentration prescribed courses. See specific requirements for each concentration listed below.		19-29
Total Hours		**126**

Code	Title	Hours
Concentration Core Requirements		
NRES 340	Environ Social Sci Res Meth	3
NRES 472	Environmental Psychology	4
ACE 310	Natural Resource Economics	3
Concentration Elective Requirements		
Two Social Science Courses		6-8
NRES 423	Politics of International Conservation and Development	
NRES 424	US Environ, Justic & Policy	
NRES 428	Valuing Nature	
NRES 430	Comm in Env Social Movements	
ACE 210	Environmental Economics	
ACE 406	Environmental Law	
GEOG 496	Climate & Social Vulnerability	
LA 370	Environmental Sustainability	
MDIA 223	Watching the Environment	
SOC 447	Environmental Sociology	
One Conservation/Development/Ecology Course		3-4
NRES 302	Dendrology	
NRES 362	Ecology of Invasive Species	
NRES 402	Ecohydrology and Water Management	
NRES 418	Wetland Ecology & Management	
NRES 423	Politics of International Conservation and Development	
NRES 485	Stream Ecosystem Management	
NRES 407	Wildlife Population Ecology	
NRES 409	Fishery Ecol and Conservation	
NRES 415	Native Plant ID and Floristics	
NRES 420	Restoration Ecology	
NRES 429	Aquatic Ecosystem Conservation	
NRES 474	Soil and Water Conservation	
UP 406	Urban Ecology	
Total Concentration-Required Hours		**19-22**

Learning Outcomes: Natural Resources & Environmental Sciences, BS

Learning outcomes for the degree of Bachelor of Science Major in Natural Resources & Environmental Sciences (NRES)

Students graduating with the B.S. in NRES should be able to:

1. Understand the scientific method/ways of knowing and critically evaluate information.
2. Integrate principles of biological, chemical, physical, and social sciences and apply them to resource and environmental issues using a systems approach.
3. Understand ecological principles underpinning management of resources, populations, communities, and ecosystems.
4. Use data collection and analysis tools (such as field methods, GIS, modeling, and statistics) to develop plans for managing resource/

environmental challenges and adapt plans in response to rapid change.
5. Understand the policies governing resources and the environment and identify social dimensions (stakeholders, interests, trade#offs, synergies, ethical principles) to consider in the development of management plans.
6. Communicate effectively with colleagues, stakeholders, and the public about environmental and resource management issues.
7. Recognize how diverse groups understand the environment, experience positive and negative environmental impacts, and perceive just and equitable solutions.

Nuclear, Plasma, & Radiological Engineering, BS

for the degree of Bachelor of Science in Nuclear, Plasma, & Radiological Engineering

department website: https://npre.illinois.edu/
department faculty: Nuclear, Plasma, & Radiological Engineering Faculty (https://npre.illinois.edu/directory/faculty/)
overview of college admissions & requirements: The Grainger College of Engineering (https://grainger.illinois.edu/admissions/)
college website: https://grainger.illinois.edu/

Nuclear, plasma, and radiological engineering is a branch of engineering that is concerned with the development and use of nuclear energy and radiation sources for a wide variety of applications in energy production, in materials processing and science, and for biomedical and industrial uses. Areas of interest include the continued safe and reliable application of fission reactors as central electric power plant thermal sources; plasma processing applications and the longer term development of fusion reactors for electric power generation; and the use of radiation sources in such areas as materials, biological systems, medical treatment, radiation instrumentation, environmental systems, and activation analysis.

The first two years of the curriculum provide a strong foundation in basic sciences (physics, mathematics, and chemistry), engineering sciences (analytical mechanics and thermodynamics), an introduction to computer use, and introduction to nuclear energy systems. Most technical concentration takes place in the third and fourth years of the curriculum according to the educational and career interest of the students. The curriculum provides three professional concentration areas: power, safety and the environment; plasma and fusion science and engineering; and radiological, medical, and instrumentation applications. Each concentration area allows flexibility in developing advanced technical expertise but also requires depth of understanding in the area. The third path meets pre-med requirements and facilitates the minor in bioengineering. To complete this concentration area, students should take certain chemistry and biology courses in the first two years of the curriculum.

for the degree of Bachelor of Science in Nuclear, Plasma, & Radiological Engineering

Graduation Requirements

Minimum Overall GPA: 2.0
Minimum hours required for graduation: 128 hours
General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement. One of the SBS courses must be an introductory economics course (ECON 102 or ECON 103).**

Orientation and Professional Development

Code	Title	Hours
ENG 100	Engineering Orientation [1]	0
NPRE 100	Orientation to NPRE	1
Total Hours		1

Foundational Mathematics and Science

Code	Title	Hours
CHEM 102	General Chemistry I	3
CHEM 103	General Chemistry Lab I	1
MATH 221	Calculus I [2]	4
MATH 231	Calculus II	3
MATH 241	Calculus III	4
MATH 285	Intro Differential Equations	3
PHYS 211	University Physics: Mechanics	4
PHYS 212	University Physics: Elec & Mag	4
PHYS 214	Univ Physics: Quantum Physics	2
Total Hours		28

Nuclear, Plasma, and Radiological Engineering Technical Core

Code	Title	Hours
CS 101	Intro Computing: Engrg & Sci [3]	3
ECE 205	Electrical and Electronic Circuits	3
ECE 206	Electrical and Electronic Circuits Lab	1
ME 200	Thermodynamics	3
NPRE 247	Modeling Nuclear Energy System	3
NPRE 431	Materials in Nuclear Engrg	3
NPRE 441	Radiation Protection	4
NPRE 446	Radiation Interact w/Matter I	3
NPRE 447	Radiation Interact w/Matter II	3
NPRE 448	Nuclear Syst Engrg & Design	4
NPRE 451	NPRE Laboratory	3
NPRE 455	Neutron Diffusion & Transport	4
NPRE 458	Design in NPRE	4
TAM 210	Introduction to Statics [3,4]	2
TAM 212	Introductory Dynamics [4]	3
Total Hours		46

Professional Concentration Area Electives

Code	Title	Hours
Students choose one of the Professional Concentration Areas below.		**25**
Power, Safety, and the Environment		
TAM 335	Introductory Fluid Mechanics	4

or ME 310	Fundamentals of Fluid Dynamics	
NPRE 421	Plasma and Fusion Science	3
NPRE 432	Nuclear Engrg Materials Lab	2
Technical electives broken down as follows:		16
Minimum of 6 hours from the list below:		
NPRE 201	Energy Systems	2 or 3
NPRE 398	Special Topics	1 to 4
NPRE 412	Nuclear Power Econ & Fuel Mgmt	3 or 4
NPRE 442	Radioactive Waste Management	3
NPRE 457	Safety Anlys Nucl Reactor Syst	3 or 4
NPRE 461	Probabilistic Risk Assessment	3 or 4
NPRE 480	Energy and Security	3
NPRE 481	Writing on Technol & Security	3 or 4
NPRE 483	Seminar on Security	1
NPRE 498	Special Topics	1 to 4
Remaining 10 credit hours of technical electives from list below. Technical electives selected from departmentally approved Power, Safety, and the Environment elective course work in Common Engineering and Technical Electives or one of the following subfields: Thermal Sciences; Power and Control Systems; Solid, Fluid and Continuum Mechanics; Computational Sciences and Engineering; Environmental Engineering and Science. The student's academic advisor must approve the chosen course set to insure that a strong program is achieved.		
Common Engineering and Technical Electives		
MATH 415	Applied Linear Algebra	3 or 4
NPRE 199	Undergraduate Open Seminar (May be taken up to 2 timse in separate seminars for credit towards concentration)	1
NPRE 470	Fuel Cells & Hydrogen Sources	3
NPRE 475	Wind Power Systems	3 or 4
STAT 400	Statistics and Probability I	4
Thermal Sciences		
ME 320	Heat Transfer	4
ME 400	Energy Conversion Systems	3 or 4
ME 402	Design of Thermal Systems	3 or 4
ME 404	Intermediate Thermodynamics	4
ME 410	Intermediate Gas Dynamics	3 or 4
ME 411	Viscous Flow & Heat Transfer	4
ME 420	Intermediate Heat Transfer	4
Power and Control Systems		
ECE 329	Fields and Waves I	3
ECE 310	Digital Signal Processing	3
ECE 330	Power Ckts & Electromechanics	3
ECE 476	Power System Analysis	3
ECE 486	Control Systems	4
Solid, Fluid and Continuum Mechanics		
TAM 251	Introductory Solid Mechanics	3
TAM 252	Solid Mechanics Design	1
TAM 424	Mechanics of Structural Metals	3 or 4
TAM 435	Intermediate Fluid Mechanics	4
TAM 445	Continuum Mechanics	4
TAM 451	Intermediate Solid Mechanics	4
TAM 456	Experimental Stress Analysis	3
Computational Sciences and Engineering		
CS 357	Numerical Methods I	3
CS 450	Numerical Analysis	3 or 4
ME 471	Finite Element Analysis	3 or 4
Environmental Engineering and Science		
CEE 201	Systems Engrg & Economics	3
CEE 330	Environmental Engineering	3
CEE 437	Water Quality Engineering	3
CEE 443	Env Eng Principles, Chemical	4
CEE 444	Env Eng Principles, Biological	4
CEE 445		
CEE 446	Air Quality Engineering	4
CEE 447	Atmospheric Chemistry	4
Plasma and Fusion Science and Engineering		
TAM 335	Introductory Fluid Mechanics	4
or ME 310	Fundamentals of Fluid Dynamics	
NPRE 421	Plasma and Fusion Science	3
NPRE 423	Plasma Laboratory	2
NPRE 429	Plasma Engineering	3
Remaining 13 credit hours of technical electives selected from departmentally approved Plasma and Fusion Science and Engineering elective course work in Common Engineering and Technical Electives or one of the following subfields: Physical Science, Electrical Engineering, or Electronic Materials. The student's academic advisor must approve the chosen course set to ensure that a strong program is achieved.		
Common Engineering and Technical Electives		
MATH 415	Applied Linear Algebra	3 or 4
NPRE 199	Undergraduate Open Seminar	1
NPRE 201	Energy Systems	2 or 3
NPRE 398	Special Topics	1 to 4
NPRE 461	Probabilistic Risk Assessment	3 or 4
NPRE 470	Fuel Cells & Hydrogen Sources	3
NPRE 481	Writing on Technol & Security	3 or 4
NPRE 498	Special Topics	1 to 4
STAT 400	Statistics and Probability I	4
Physical Science Electives		
CHEM 104	General Chemistry II	3
CHEM 105	General Chemistry Lab II	1
PHYS 435	Electromagnetic Fields I	3
PHYS 436	Electromagnetic Fields II	3
PHYS 460	Condensed Matter Physics	4
Electrical Engineering Electives		
ECE 329	Fields and Waves I	3
ECE 340	Semiconductor Electronics	3
ECE 441	Physcs & Modeling Semicond Dev	3
ECE 444	IC Device Theory & Fabrication	4
Electronic Materials Electives		
MSE 304	Electronic Properties of Matls	3
MSE 403	Synthesis of Materials	3
MSE 460	Electronic Materials I	3

MSE 461	Electronic Materials II	3
MSE 462		
Radiological, Medical and Instrumentation Applications		
NPRE 435	Radiological Imaging	3
Select one from:		
MCB 403	Cell & Membrane Physiology Lab	1 or 2
BIOE 415	Biomedical Instrumentation Lab	2
NPRE 444	Nuclear Analytical Methods Lab	2 or 3
Remaining 20 credit hours from the Technical electives on the departmentally approved Radiological, Medical and Instrumentation Applications elective course work in Common Engineering and Technical Electives or one of the following subfields: Biomolecular Engineering, Biomedical Engineering, and Radiation Detection and Analysis. The student's academic advisor must approve the chosen course set to ensure that a strong program is achieved.		
Common Engineering and Technical Electives		
BIOE 120	Introduction to Bioengineering	1
CHEM 104	General Chemistry II	3
CHEM 105	General Chemistry Lab II	1
CHEM 232	Elementary Organic Chemistry I	3 or 4
CHEM 233	Elementary Organic Chem Lab I	2
IB 150	Organismal & Evolutionary Biol	4
IB 151	Organismal & Evol Biol Lab	1
MATH 415	Applied Linear Algebra	3 or 4
ME 310	Fundamentals of Fluid Dynamics	4
MCB 150	Molec & Cellular Basis of Life	4
MCB 151	Molec & Cellular Laboratory	1
NPRE 199	Undergraduate Open Seminar ((May be taken up to 2 times in separate seminars for credit towards concentration))	1
NPRE 201	Energy Systems	2 or 3
NPRE 398	Special Topics	1 to 4
NPRE 421	Plasma and Fusion Science	3
NPRE 461	Probabilistic Risk Assessment	3 or 4
NPRE 481	Writing on Technol & Security	3 or 4
NPRE 498	Special Topics	1 to 4
STAT 400	Statistics and Probability I	4
TAM 335	Introductory Fluid Mechanics	4
Biomolecular Engineering Electives		
BIOE 120	Introduction to Bioengineering	1
BIOE 414	Biomedical Instrumentation	3-4
or CHBE 472	Techniques in Biomolecular Eng	
CHEM 232	Elementary Organic Chemistry I	3 or 4
MCB 450	Introductory Biochemistry	3
MCB 401	Cellular Physiology	3
or BIOP 401	Introduction to Biophysics	
MCB 403	Cell & Membrane Physiology Lab	1 or 2
Biomedical Engineering Electives		
BIOE 120	Introduction to Bioengineering	1
CHEM 232	Elementary Organic Chemistry I	3 or 4
ECE 380	Biomedical Imaging	3
BIOE 414	Biomedical Instrumentation	3-4
or CHBE 472	Techniques in Biomolecular Eng	
BIOE 415	Biomedical Instrumentation Lab	2
ECE 480	Magnetic Resonance Imaging	3 or 4
MCB 250	Molecular Genetics	3
MCB 252	Cells, Tissues & Development	3
MCB 401	Cellular Physiology	3
or BIOP 401	Introduction to Biophysics	
MCB 402	Sys & Integrative Physiology	3
MCB 403	Cell & Membrane Physiology Lab	1 or 2
MCB 404	Sys & Integrative Physiol Lab	1 to 2

Electives

Code	Title	Hours
The Grainger College of Engineering Liberal Education course list, or additional courses from the campus General Education lists for Social and Behavioral Sciences or Humanities and the Arts [5]		6
Free electives. Additional unrestricted course work, subject to certain exceptions as noted by the College, so that there are at least 128 credit hours earned toward the degree. [6]		6
Total Hours of Curriculum to Graduate		**128**

1 *External transfer students take* ENG 300 *instead.*

2 MATH 220 *may be substituted, with four of the five credit hours applying toward the degree.* MATH 220 *is appropriate for students with no background in calculus.*

3 *Students may elect to take* CS 125 *in place of* CS 101*, and* TAM 211 *in place of* TAM 210*. The extra hour will be applied toward the Professional Concentration Area electives.*

4 *Students in the Plasma and Fusion Science Engineering Professional Concentration Area may elect to take* PHYS 325 *in place of* TAM 212*. Further, students in this concentration may elect to take both* PHYS 325 *and* PHYS 326 *in place of* TAM 210 *and* TAM 212*. The extra hour from* PHYS 325 *and* PHYS 326 *will be applied toward the Professional Concentration Area electives.*

5 *The Grainger College of Engineering approved liberal education course list can be found* here *(*https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-GeneralEducationElectives*). Note that these credit hours could carry the required cultural studies designation required for campus general education requirements.*

6 *The Grainger College of Engineering restrictions to free electives can be found* here *(*https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-FreeElectives*).*

for the degree of Bachelor of Science in Nuclear, Plasma, & Radiological Engineering

Suggested Sequence

The curriculum sequence below is a suggested sequence, as all Grainger Engineering students work with a department academic advisor to achieve their educational goals, specific to their needs and preparation. Dynamic and Static curricular maps, which include prerequisite sequencing, can be found here (https://grainger.illinois.edu/academics/undergraduate/majors-and-minors/npre-map/).

First Year

First Semester		Hours
NPRE 100	Orientation to NPRE	1
ENG 100	Engineering Orientation	0
MATH 221[1]	Calculus I	4
CHEM 102	General Chemistry I	3
CHEM 103	General Chemistry Lab I	1
RHET 105 (or Free elective)[2]	Writing and Research	4-3
General education elective[3]		3
	Semester Hours	16-15

Second Semester		
MATH 231	Calculus II	3
PHYS 211	University Physics: Mechanics	4
CS 101[4]	Intro Computing: Engrg Sci	3
Free elective (or RHET 105)[2,5]		3-4
General education elective[3]		3
	Semester Hours	16-17

Second Year

First Semester		
MATH 241	Calculus III	4
PHYS 212	University Physics: Elec Mag	4
TAM 210[4,6]	Introduction to Statics	2
Professional Concentration Area elective[7]		3
General education elective[3]		3
	Semester Hours	16

Second Semester		
MATH 285	Intro Differential Equations	3
ME 200	Thermodynamics	3
PHYS 214	Univ Physics: Quantum Physics	2
NPRE 247	Modeling Nuclear Energy System	3
TAM 212[6]	Introductory Dynamics	3
General education elective[3]		3
	Semester Hours	17

Third Year

First Semester		
ECE 205	Electrical and Electronic Circuits	3
ECE 206	Electrical and Electronic Circuits Lab	1
NPRE 446	Radiation Interact w/Matter I	3
TAM 335 or ME 310 (or Professional Concentration Area elective in Radiological, Medical, and Instrumentation Applications)[8]	Introductory Fluid Mechanics	4
General education elective[3]		3
Free elective		3
	Semester Hours	17

Second Semester		
NPRE 421 (or Professional Concentration Area elective in Radiological, Medical, and Instrumentation Applications)[8]	Plasma and Fusion Science	3
NPRE 447	Radiation Interact w/Matter II	3
NPRE 451	NPRE Laboratory	3
NPRE 455	Neutron Diffusion Transport	4
Professional Concentration Area elective[7]		3
	Semester Hours	16

Fourth Year

First Semester		
NPRE 431	Materials in Nuclear Engrg	3
NPRE 448	Nuclear Syst Engrg Design	4
Professional Concentration Area electives[7]		6
General education elective[3]		3
	Semester Hours	16

Second Semester		
NPRE 441	Radiation Protection	4
NPRE 458	Design in NPRE	4
Professional Concentration Area electives		6
	Semester Hours	14
	Total Hours:	128

1 *MATH 220 may be substituted, with four of the five credit hours applying toward the degree. MATH 220 is appropriate for students with no background in calculus.*

2 *RHET 105 (or an alternative Composition I sequence) is taken either in the first or second semester of the first year, according to the student's UIN (Spring if your UIN is Odd). Free Electives are taken the other semester. Composition I guidelines can be found at* http://catalog.illinois.edu/general-information/degree-general-education-requirements/ *under Written Communication Requirement.*

3 *Students must take 6 hours from the campus General Education Social and Behavioral Sciences list, 6 hours from campus General Education Humanities and the Arts list, and 6 hours from a liberal education list approved by the college or from the campus General Education lists for Social and Behavioral Sciences or Humanities and the Arts. ECON 102 or ECON 103 must be one of the Social and Behavioral Sciences courses. Students must also complete the campus cultural studies requirement by completing (i) one western/comparative culture(s) course, (ii) one non-western culture(s) course, and (iii) one U.S. Minority Culture(s) course from the General Education cultural studies lists. Most students select general education courses that simultaneously satisfy these cultural studies requirements.*

4 *Students may elect to take CS 125 in place of CS 101, and TAM 211 in place of TAM 210. The extra hour will be applied toward the Professional Concentration Area electives.*

[5] *Consideration should be given to NPRE 101 as a free elective in the spring semester of the freshman or sophomore year. Alternately, free elective hours provide a means to fulfill requirements for campus minors such as Bioengineering, Computer Science, International Minor in Engineering, Mathematics, or Physics, without excessive additional hours beyond the normal degree requirements.*

[6] *Students in the Plasma and Fusion Science Engineering Professional Concentration Area may elect to take PHYS 325 in place of TAM 212. This facilitates the minor in Physics. Further, students in this concentration may elect to take both PHYS 325 and PHYS 326 in place of TAM 210 and TAM 212. The extra hour from PHYS 325 and PHYS 326 will be applied toward the Professional Concentration Area electives.*

[7] *A student must fulfill the* NPRE Professional Concentration Area requirement *(*https://npre.illinois.edu/academics/undergraduate/technical-electives/*) by taking the required technical courses and technical elective courses in one of the three professional concentration areas: Power, Safety, and the Environment; Plasma and Fusion Science Engineering; or Radiological, Medical, and Instrumentation Applications.*

[8] *Students in the Power, Safety, and the Environment and in the Plasma and Fusion Science Engineering Professional Concentration Areas must take a fluid mechanics course (TAM 335 or ME 310) and NPRE 421. Students in the Radiological, Medical, and Instrumentation Applications Concentration are not required to take these courses. They may instead use the hours otherwise filled with these courses to take electives in the Radiological, Medical and Instrumentation Applications Areas.*

Learning Outcomes: Nuclear, Plasma, & Radiological Engineering, BS

Learning Outcomes for the degree of Bachelor of Science Major in Nuclear, Plasma, & Radiological Engineering

Student learning outcomes are based on learning outcomes in line with the ABET accreditation process.

Nuclear, Plasma, & Radiological Engineering graduates will have:

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. An ability to communicate effectively with a range of audiences.
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Operations Management, BS

for the degree of Bachelor of Science in Operations Management

overview of college admissions & requirements: Gies Catalog (http://catalog.illinois.edu/schools/gies-business/academic-units/)
college website: https://giesbusiness.illinois.edu/ (https://business.illinois.edu/)

The Operations Management (OM) Major prepares students for careers in manufacturing and service management, operations strategy consulting, purchasing and supply management, project management, and quality management. OM professionals work with most other units in any organization, more so with engineering, human resource management, information systems, and marketing. The OM curriculum focuses on analytical decision-making, logistics, new product development, operations strategy, process improvement, project management, quality control, and supply chain management. Students are trained in ways of developing, making, and delivering goods and services efficiently and effectively – generating value by satisfying ever-changing customer needs while improving profitability.

for the degree of Bachelor of Science in Operations Management

Core Curriculum

Normally, students must register for no fewer than 12 hours or more than 18 hours in each semester. Students should take mathematics, economics, and accountancy courses in the semesters indicated in the sample schedule of courses. The computer science course must be taken during the first year. The computer science requirement no longer allows ACE 161 as an equivalent course.

Up to 4 hours of Kinesiology activity courses, numbered 100-110 may be counted toward the 124 hours for the degree. The same section of a course may not be repeated for credit. Credit is limited to a maximum of 12 credit hours for 199 courses. Students may receive foreign language credit for courses only 2 levels below highest level taken in high school. For example: 4 years of high school French-no credit below FR 102.

Credit toward the 124 degree hours is not given for MATH 101. Once the math requirement is completed, lower level math courses cannot be taken for credit.

Any course used to fill a specific degree requirement may not be taken on the credit-no credit grade option. Only free electives may be taken on the credit-no credit option. All finance and accountancy courses must be taken for a grade. It is recommended that all courses taken in the business administration area be taken for a grade.

Minimum hours required for graduation: 124 hours.

University Composition Requirements

Code	Title	Hours
Composition I: Principles of Composition [1]		4-7
Advanced Composition		3

General Education Requirements

Code	Title	Hours
A minimum of six courses is required, as follows:		18
Humanities & the Arts: Literature & the Arts (1-2 courses) [4]		
Humanities & the Arts: Historical & Philosophical Perspectives (1-2 courses) [4]		
Natural Sciences & Technology: Physical Sciences (0-2 courses) [5]		
Natural Sciences & Technology: Life Sciences (0-2 courses) [5]		
Behavioral Sciences (1 course)		
Cultural Studies: Non-Western Cultures (1 course)		
Cultural Studies: U.S. Minorities Cultures (1 course)		
Cultural Studies: Western/Comparative Cultures (1 course)		
Quantitative Reasoning (2 courses) [7]		

Language Other Than English

Code	Title	Hours
Completion of the third semester or equivalent of a language other than English is required. Completion of three years of a single language in high school satisfies this requirement.		0-15

Business Core Requirements

Code	Title	Hours
ACCY 201 & ACCY 202	Accounting and Accountancy I and Accounting and Accountancy II	6
BUS 101	Professional Responsibility and Business [2]	3
BUS 201	Business Dynamics	3
BUS 301	Business in Action	3
BUS 401	Global Business Perspectives	3
BADM 210 & BADM 211	Business Analytics I and Business Analytics II	6
BADM 275	Fundamentals of Operations Management	3
BADM 300	The Legal Environment of Bus	3
BADM 310	Mgmt and Organizational Beh [6]	3
BADM 320	Principles of Marketing	3
BADM 449	Business Policy and Strategy	3
CMN 101	Public Speaking	3
CS 105	Intro Computing: Non-Tech	3
ECON 102 & ECON 103	Microeconomic Principles and Macroeconomic Principles	6
FIN 221	Corporate Finance	3
Total Hours		54

1 *For a list of the specific courses that meet this requirement, see the college Office of Undergraduate Affairs in 1055 Business Instructional Facility or see the Course Explorer for a list of approved general education courses.*

2 BUS 101, BUS 201, BUS 301 *and* BUS 401 *are required for all Gies College of Business students. Students who enter the College their first year take each sequential course every fall.*
Inter-College transfer students take BUS 301 *and* BUS 401 *in their sophomore year. Off-campus transfer students take* BUS 101 *and* BUS 201 *in their junior year.*

4 *Three courses in the Humanities & the Arts area are required and students must complete at least one course in the Literature & the Arts and Historical & Perspectives subcategories. At least one of the courses must be a 200 or higher level course.*

5 *Two courses in the Natural Sciences & Technology area are required. It is strongly recommended that students complete one course in the Physical Sciences and Life Sciences subcategories.*

6 *This course includes limited voluntary participation as a subject in experiments.*

7 CS 105 *fulfills a Quantitative Reasoning I requirement.*

Code	Title	Hours
BADM 350	IT for Networked Organizations	3
BADM 374	Management Decision Models (Prerequisite: ECON 203)	3
BADM 375	Operations Strategy	3
BADM 377	Project Management	3
BADM 378	Logistics Management	3
BADM 379	Business Process Improvement	3
Choose two of the following elective courses [1]		
BADM 329	New Product Development (Prerequisite: BADM 320) [1]	
BADM 352	Database Design and Management [2]	
BADM 353	Info Sys Analysis and Design (Prerequisite: BADM 350)	
BADM 453	Business Intelligence [2]	
Chose one of the following elective courses: [1]		
BADM 311	Leading Individuals and Teams	3
BADM 312	Designing and Managing Orgs	3
BADM 445	Small Business Consulting [3]	4
BADM 446	Entrepreneurship: New Venture Creation [3]	4
BADM 199	Undergraduate Open Seminar (section: Business in Action) [3]	1 to 5
Total Hours		**27-29**

1 *One of the elective course requirements from either sub-list above may be satisfied by an appropriate internship, approved in advance by the Head of the Department of Business Administration or designee.*

2 *Only one of these two Advanced Information Systems classes may be used for fulfilling the requirement for the major.*

3 *Only one of these three Experiential Learning classes may be used for fulfilling the requirement for the major.*

Learning Outcomes: Operations Management, BS

Learning Outcomes for the degree of Bachelor of Science in Operations Management

1. Disciplinary Competence: Students demonstrate an understanding of fundamental operations concepts, key principles of its management, and relevant analysis approaches.
2. Critical Thinking: Students demonstrate the ability to understand a real-world unstructured problem, and gather necessary information and data to formulate into a structured problem.

3. Problem Solving: Students demonstrate ability to develop quantitative and qualitative analysis framework and solution methods, and appropriately implement them to obtain meaningful solutions.
4. Decision making: Students demonstrate ability to identify strengths and weaknesses of alternative solutions and obtain relevant managerial insights.
5. Communication: Students express themselves logically, persuasively and succinctly & using correct grammar and composition when communicating in oral or written form.

Philosophy, BALAS

for the degree of Bachelor of Arts in Liberal Arts and Sciences: Major in Philosophy

department website: http://www.philosophy.illinois.edu/
department faculty: Philosophy Faculty (https://philosophy.illinois.edu/directory/faculty/)
advising: Philosophy advising (https://philosophy.illinois.edu/academics/undergraduate-studies/advising/)
email: phildept@illinois.edu
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/

Philosophy is the oldest, broadest, and most fundamental form of inquiry. Some philosophical questions have to do with the understanding of ourselves and whatever else there may be. Others focus upon the nature of different forms of knowledge and experience, and upon ethical issues and problems of value. The study of philosophy is one of the most important elements in a good liberal education. It also improves one's ability to think clearly, and to construct, analyze, and criticize arguments of any kind. The major and minor are sponsored by the Department of Philosophy.

for the degree of Bachelor of Arts in Liberal Arts and Sciences: Major in Philosophy

A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office before the end of the fifth semester (60-75 hours). Please see your adviser.

Departmental distinction: Students who maintain a GPA ≥ 3.5 in the major and receive a grade of A– in PHIL 499 will graduate with distinction.

Students who maintain a GPA ≥ 3.5 but < 3.7 in the major and receive a grade of A or better in PHIL 499 will graduate with high distinction.

Students who maintain GPA ≥ 3.7 in the major and receive a grade of A or better in PHIL 499 will graduate with highest distinction.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work : normally equates to 44 hours including at least 32 hours of Philosophy courses. Twelve hours of 300- and 400-level courses in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours

Code	Title	Hours
PHIL 202	Symbolic Logic	3
PHIL 203	Ancient Philosophy	4
PHIL 206	Early Modern Philosophy	4
PHIL 421	Ethical Theories	3
PHIL 426	Metaphysics	3
or PHIL 430	Theory of Knowledge	
PHIL 499	Capstone Seminar	3
At least 12 additional hours of coursework in Philosophy, with 9 of those hours being above the 100-level (including at least two 300- or 400-level courses		12
A student may select either of two types of programs of supporting course work and should work out a specific program of the type chosen with the help and approval of a departmental adviser.		12
Twelve hours minimum. Select from:		
Option I: Intensive study in another discipline. Courses normally beyond the 100 level in one other discipline. Most approved minors satisfy this requirement. A second major may also be used to satisfy this requirement		
or		
Option II: A special program of study built around a unifying theme or topic. Course work outside philosophy in one or more other discipline(s), normally beyond the 100 level.		
Total Hours		**44**

Learning Outcomes: Philosophy, BALAS

Learning Outcomes for the degree of Bachelor of Arts in Liberal Arts and Sciences Major in Philosophy

The Philosophy Department aims to produce four main learning outcomes.

1. Philosophical Knowledge: Students will be familiar with major figures and movements in the history of western philosophy; familiar with central topics, theories, and debates in epistemology and metaphysics, in ethics and value theory, and in logic; and familiar with current developments in professional philosophy.
2. Philosophical Reading: Students will develop the ability to analyze persuasive and argumentative prose: identifying the main claims asserted, the reasons alleged to support those claims, and the logical relations between the claims and the reasons, including identifying any gaps in the arguments.
3. Philosophical Inquiry: Students will develop the ability to formulate abstract principles in epistemology and metaphysics, in ethics

and value theory, in logic, and in related special topic areas in philosophy; they will develop the ability to identify consequences of the principles they formulate; and they will develop the ability to construct arguments for those principles and compare them to competing principles.

4. Philosophical Writing: Students will develop the ability to write clearly and with logical precision on a wide range of important issues, including (but not limited to): civic and social challenges at local, national, and global levels; social and cultural issues related to race, indigeneity, gender, class, sexuality, language, and disability; and the ways that complex, interdependent global systems—natural, environmental, social, cultural, economic, and political—affect and are affected by the local identities and ethical choices of individuals and institutions.

Photography, BFA

for the Bachelor of Fine Arts Major in Photography

school office: 143 Art and Design Building, Champaign, IL 61820
contact: Mark Avery, Coordinator of Undergraduate Academic Affairs
email: mavery@illinois.edu
phone: (217) 333-6632
department website: School of Art & Design (https://art.illinois.edu/)
department faculty: Art & Design Faculty (https://art.illinois.edu/index.php/people/faculty-staff/)
overview of college admissions & requirements: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/

The curriculum in photography requires 122 credit hours; its purpose is to encourage the study of photographic media for personal expression, to explore the social implications of pictures, and to develop the skills needed for careers in photography. General art requirements and electives provide a broad foundation in the visual arts, and photography courses provide a strong background in the history, theory, and practice of photography as art.

A portfolio review is required for admission to the School of Art and Design.

for the Bachelor of Fine Arts Major in Photography

Students in the School of Art and Design must complete the Campus General Education requirements. Some Art and Design courses will also apply toward the General Education requirements.

A portfolio review is required for admission to the School of Art and Design.

First Year Curriculum

Code	Title	Hours
FAA 101	Arts at Illinois	1
ARTF 101	Contemporary Issues in Art	2
ARTE 101	Art, Design, and Society	2
ARTH 110	Introduction to the History of Art and Visual Culture	3
Select one Drawing course:		3
ARTF 102	Observational Drawing	
ARTF 104	Expressive Drawing	
ARTF 106	Visualization Drawing	
Select one course in 2D Category:		3
ARTD 151	Introduction to Graphic Design	
ARTS 205	Introduction to Printmaking (required for Studio Art: Printmaking)	
ARTS 221	Fashion Illustration (required for Studio Art: Fashion)	
ARTS 251	Beginning Painting (required for Studio Art: Painting)	
ARTS 264	Basic Photography (required for Studio Art: Photography)	
Select one course in 3D Category:		3
ARTD 101	Introduction to Industrial Design	
ARTS 210	Ceramics Sculpture I	
ARTS 230	Jewelry/Metals I	
ARTS 280	Beginning Sculpture (required for Studio Art: Sculpture)	
Select one course in 4D Category:		3
ARTS 241	Image Practice	
ARTS 243	Time Arts I	
ARTS 244	Interaction I	
Total Hours		**20**

Photography Requirements

Code	Title	Hours
ARTH 257	History of Photography	3
ARTD 260		3
or ARTS 264	Basic Photography	
ARTD 261		3
or ARTS 265	Photography II	
ARTD 360		3
or ARTS 364	Photography III	
ARTD 460	(repeat twice in senior year)	3 (6)
or ARTS 461	Advanced Photography	
ARTD 393		3
or ARTS 394	Special Topics in Photography	
Total Hours		**21**

Photography Electives

Code	Title	Hours
Select 18 hours from the following:		18
ARTS 391	Independent Study	
ARTD 262		
or ARTS 266	View Camera	
ARTD 263		
or ARTS 267	Digital Photographic Output	
ARTD 362	(May be repeated up to 12 hours)	
or ARTS 365	Photography Workshop	
ARTD 363		
or ARTS 367	RAW Photography	
Total Hours		18

Code	Title	Hours
Art History Requirements		**9**
Advanced art history (200-level or above)		

Electives

Code	Title	Hours
Art + Design electives (art + design courses not in photography requirements or used as photography electives)		15
Open electives as needed to total 122 hour degree		

Learning Outcomes: Photography, BFA

Learning outcomes for the Bachelor of Fine Arts Major in Photography

Undergraduate Photography graduates will have:

1. acquired the ability to control the procedural construct of an image via camera, software and darkroom techniques.
2. an understanding of and an ability to employ photography's unique narrative structure.
3. acquired a critical appreciation of the historical and social influences of the medium and the ability to evaluate their own work as well that of others via this construct.
4. developed a cohesive body of work demonstrating technical competency and conceptual awareness.

Physics

department website: Physics (https://physics.illinois.edu)
department faculty: Department of Physics Directory (https://physics.illinois.edu/people/directory/)
email: undergrad-info@physics.illinois.edu
overview of college admissions & requirements: LAS admissions information (https://www.las.illinois.edu/prospective/)
college website: Liberal Arts & Sciences (https://las.illinois.edu/)

Students interested in majoring in physics in the College of Liberal Arts & Sciences may choose the Specialized Curriculum in Physics (http://catalog.illinois.edu/undergraduate/las/physics-bs/), leading to the Bachelor of Science Major in Physics, or the Physics Major (http://catalog.illinois.edu/undergraduate/las/physics-bslas/#text), leading to the Bachelor of Science in Liberal Arts and Sciences.

The LAS Specialized Curriculum in Physics is designed for students who plan to pursue graduate study in physics or a closely allied field.

The Physics Major in the Sciences and Letters Curriculum is a flexible program for students who plan to pursue technical or professional careers in areas requiring a sound grounding in physical science and mathematics. Students can use the concentration to prepare for employment immediately upon graduation or for continuing on to graduate study in a wide variety of fields. Students who are certain that they want to go on to graduate study in physics or in a closely allied field should also consider the LAS Specialized Curriculum in Physics.

Engineering Physics, BS

for the degree of Bachelor of Science in Engineering Physics

department website: Department of Physics (https://physics.illinois.edu)
department faculty: Physics Faculty (https://physics.illinois.edu/people/directory/faculty/)
overview of college admissions & requirements: The Grainger College of Engineering (https://grainger.illinois.edu/admissions/)
college website: https://grainger.illinois.edu/

In the Physics (Engineering) program, students will study, measure, and manipulate the fundamental interactions of matter, energy, space, and time. This fundamental branch of science forms the foundation of all natural sciences and engineering disciplines. Students in this major will gain a deep conceptual and mathematical understanding of the world through their coursework and hands-on learning opportunities. This program will give students the tools to quantitatively break down complex problems to solve scientific mysteries and reveal the inner workings of nature. Further, the program will provide students with the keys to a wide range of challenging and fulfilling careers, whether they plan to enter a graduate or professional school or join the private-sector workforce after graduation. There is also the option for students to earn a Secondary Education minor and obtain certification to teach Physics in high schools.

The Physics (Engineering) program provides a solid training in fundamental physics, but also allows space for electives through a diverse range of technical options. This provides students flexibility to take more advanced Physics coursework or pursue other interests. Students may select from a list of pre-approved options or design a custom option, subject to departmental approval. The current pre-approved options, requiring 12-22 credit hours of course work, are:

- Acoustical Physics
- Astrophysics
- Atmospheric Science
- Biophysics
- Business
- Computational Physics
- Computer Engineering
- Energy/Sustainability
- Materials Science
- Nuclear Physics
- Optical Physics
- Law
- Professional Physics
- Solid State Electronics
- Pre-Med
- Pre-Law

The course work is selected in consultation with the student's advisor to address an intellectually coherent body of knowledge. The curriculum

is designed to prepare students for a wide variety of technical and professional careers, including graduate study in physics or a closely allied field.

for the degree of Bachelor of Science in Engineering Physics

Graduation Requirements

Minimum Technical GPA (https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-TechnicalGPARequirement)**: 2.0**
TGPA is required for Math and Physics courses. See Technical GPA (https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-TechnicalGPARequirement) to clarify requirements.

Minimum Overall GPA: 2.0
Minimum hours required for graduation: 128 hours
General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**

Orientation and Professional Development

Code	Title	Hours
ENG 100	Engineering Orientation [1]	0
PHYS 110	Physics Careers [1]	0
Total Hours		0

Foundational Mathematics and Science

Code	Title	Hours
MATH 221	Calculus I [2]	4
MATH 231	Calculus II	3
MATH 241	Calculus III	4
MATH 285	Intro Differential Equations [3]	3
PHYS 211	University Physics: Mechanics	4
PHYS 212	University Physics: Elec & Mag	4
PHYS 213	Univ Physics: Thermal Physics	2
PHYS 214	Univ Physics: Quantum Physics	2
CHEM 102	General Chemistry I	3
CHEM 103	General Chemistry Lab I	1
CS 101	Intro Computing: Engrg & Sci	3
Total Hours		33

Engineering Physics Technical Core

Code	Title	Hours
PHYS 225	Relativity & Math Applications	2
PHYS 325	Classical Mechanics I	3
PHYS 435	Electromagnetic Fields I	3
PHYS 486	Quantum Physics I [4]	4
or PHYS 485	Atomic Phys & Quantum Theory	
Total Hours		12

Flexible Physics Core Electives

Code	Title	Hours
Flexible physics core electives. Choose three courses from a departmentally approved list below, with at least one being a lab course (PHYS 401, PHYS 402, PHYS 403, PHYS 404, or PHYS 406). The number of hours varies depending upon the courses chosen.		9-15
PHYS 326	Classical Mechanics II	3
PHYS 401	Classical Physics Lab	3
PHYS 402	Light	3 or 4
PHYS 403	Modern Experimental Physics	4 or 5
PHYS 404	Electronic Circuits	4 or 5
PHYS 406	Acoustical Physics of Music	4
PHYS 427	Thermal & Statistical Physics	4
PHYS 436	Electromagnetic Fields II	3
PHYS 460	Condensed Matter Physics	4
PHYS 470	Subatomic Physics	4
PHYS 475	Introduction to Biophysics	3 or 4
PHYS 487	Quantum Physics II	4

Mathematics Elective

Code	Title	Hours
Mathematics elective, chosen from a departmentally approved list below:		3
CS 357	Numerical Methods I	3
CS 450	Numerical Analysis	3 or 4
MATH 415	Applied Linear Algebra	3 or 4
MATH 417	Intro to Abstract Algebra	3 or 4
MATH 453	Number Theory	3 or 4
MATH 412	Graph Theory	3 or 4
MATH 413	Intro to Combinatorics	3 or 4
MATH 414	Mathematical Logic	3 or 4
MATH 482	Linear Programming	3 or 4
MATH 347	Fundamental Mathematics	3
MATH 348	Fundamental Mathematics-ACP	4
MATH 424	Honors Real Analysis	3
MATH 441	Differential Equations	3 or 4
MATH 442	Intro Partial Diff Equations	3 or 4
MATH 444	Elementary Real Analysis	3 or 4
MATH 446	Applied Complex Variables	3 or 4
MATH 447	Real Variables	3 or 4
MATH 484	Nonlinear Programming	3 or 4
MATH 489	Dynamics & Differential Eqns	3 or 4
MATH 402	Non Euclidean Geometry	3 or 4
MATH 403	Euclidean Geometry	3 or 4
MATH 423	Differential Geometry	3 or 4
MATH 432	Set Theory and Topology	3 or 4
MATH 481	Vector and Tensor Analysis	3 or 4
MATH 461	Probability Theory	3 or 4
MATH 463	Statistics and Probability I	4
MATH 450	Numerical Analysis	3 or 4

Technical/Professional Option Electives

Code	Title	Hours
Technical/professional option electives for the option selected, chosen from a departmentally approved list of Technical/Professional Option Electives (or a list designed for a departmentally approved custom option) below. The number of hours varies depending upon the option chosen.		**12-22**
Acoustical Physics		
ECE 210	Analog Signal Processing	4
ECE 473	Fund of Engrg Acoustics	3 or 4
Choose 2 classes from the following:		
ECE 310	Digital Signal Processing	3
ECE 417	Multimedia Signal Processing	4
ECE 473	Fund of Engrg Acoustics	3
ECE 402	Electronic Music Synthesis	3
PHYS 402	Light	3 or 4
Astrophysics		
ASTR 210	Introduction to Astrophysics	3
ASTR 350	The Big Bang, Black Holes, and the End of the Universe (OR ASTR 406: Galaxies and the Universe)	3
ASTR 404	Stellar Astrophysics	3
ASTR 405	Planetary Systems	3
ASTR 414	Astronomical Techniques	4
Atmospheric Science		
ATMS 201	General Physical Meteorology	3
Choose 4 classes from the following:		
ATMS 301	Atmospheric Thermodynamics	3
ATMS 302	Atmospheric Dynamics I	3
ATMS 304	Radiative Transfer-Remote Sens	3
ATMS 305	Computing and Data Analysis	3
ATMS 306	Cloud Physics	3
ATMS 314	Mesoscale Dynamics	3
ATMS 405	Boundary Layer Processes	4
BioPhysics		
CHEM 104	General Chemistry II (OR CHEM 204)	3
CHEM 105	General Chemistry Lab II (OR CHEM 205)	1
CHEM 232	Elementary Organic Chemistry I (OR CHEM 236)	3 or 4
CHEM 233	Elementary Organic Chem Lab I	2
Choose 2 classes from the following:		
BIOP 401	Introduction to Biophysics	3
MCB 450	Introductory Biochemistry (OR MCB 354: Biochemistry and Physical Basis of Life)	3
PHYS 498	Special Topics in Physics (Quantiative Biology)	4
Business		
ENG 471	Seminar Energy & Sustain Engrg	1
IE 420	Financial Engineering	3 or 4
SE 400	Engineering Law	3 or 4
TE 100	Introduction to Innovation, Leadership and Engineering Entrepreneurship	1
TE 360	Lectures in Engineering Entrepreneurship	1
TE 333	Creativity, Innovation, Vision	4
TE 461	Technology Entrepreneurship	3
TE 450	Startups: Incorporation, Funding, Contracts, & Intellectual Property	3
TE 466	High-Tech Venture Marketing	2
Computational Physics		
CS 173	Discrete Structures (OR MATH 213: Basic Discrete Structures)	3
CS 225	Data Structures	4
Choose 3 classes from the following:		
CS 357	Numerical Methods I	3
CS 420	Parallel Progrmg: Sci & Engrg	3 or 4
CS 418	Interactive Computer Graphics	3 or 4
CS 450	Numerical Analysis	3 or 4
PHYS 298	Freshmen/Sophomore Special Topics in Physics (Computational Physics)	2
PHYS 498	Special Topics in Physics (Computation in Physics)	3
Electrical and Computer Engineering		
ECE 110	Introduction to Electronics (OR ECE 205: Electrical and Electronic Circuits)	1 to 3
ECE 120	Introduction to Computing	4
ECE 210	Analog Signal Processing	4
Take 1 class from the following:		
ECE 310	Digital Signal Processing	3
ECE 330	Power Ckts & Electromechanics	3
ECE 385	Digital Systems Laboratory	3
PHYS 404	Electronic Circuits (or ECE 342: Electronic Circuits)	4 or 5
Energy/Sustainability		
ATMS 201	General Physical Meteorology	3
ATMS 302	Atmospheric Dynamics I	3
ECE 205	Electrical and Electronic Circuits	3
ENG 471	Seminar Energy & Sustain Engrg	1
NRES 210	Environmental Economics	3
Choose 1 class from the following:		
ECE 333	Green Electric Energy	3
NPRE 402	Nuclear Power Engineering	3 or 4
NPRE 412	Nuclear Power Econ & Fuel Mgmt	3 or 4
NPRE 470	Fuel Cells & Hydrogen Sources	3
NPRE 475	Wind Power Systems	3 or 4
Materials Science		
MSE 206	Mechanics for MatSE	4
MSE 280	Engineering Materials	3
MSE 401	Thermodynamics of Materials (OR PHYS 427: Thermal & Statistical Physics)	3
Choose 1 class from the following:		
MSE 304	Electronic Properties of Matls	3
MSE 402	Kinetic Processes in Materials	3
MSE 403	Synthesis of Materials	3
MSE 405	Microstructure Determination	3
MSE 406	Thermal-Mech Behavior of Matls	3
Nuclear Physics		
NPRE 402	Nuclear Power Engineering	3 or 4

PHYS 470	Subatomic Physics	4
Choose 2 classes from the following:		
NPRE 435	Radiological Imaging	3
NPRE 441	Radiation Protection	4
NPRE 446	Radiation Interact w/Matter I	3
Optical Physics		
ECE 455	Optical Electronics	3 or 4
ECE 460	Optical Imaging	4
ECE 465	Optical Communications Systems	3
Choose 1 class from the following:		
PHYS 402	Light	3 or 4
PHYS 404	Electronic Circuits	4 or 5
PHYS 436	Electromagnetic Fields II	3
Law		
CMN 211	Business and Professional Communication	3
JOUR 200	Introduction to Journalism	3
LAW 301	Introduction to Law	2 or 3
Choose 2 classes from the following:		
ESE 320	Water Planet, Water Crisis	3
NPRE 480	Energy and Security	3
PS 225	Environmental Politics & Policy	3
PS 273	Environment and Society	3
SE 400	Engineering Law	3 or 4
Professional Option		
MATH 415	Applied Linear Algebra	3 or 4
PHYS 326	Classical Mechanics II	3
PHYS 436	Electromagnetic Fields II	3
PHYS 427	Thermal & Statistical Physics	4
PHYS 487	Quantum Physics II	4
Choose 1 lab from the following (cannot count toward Flexible Physics Core):		
PHYS 401	Classical Physics Lab	3
PHYS 402	Light	3 or 4
PHYS 403	Modern Experimental Physics	4 or 5
PHYS 404	Electronic Circuits	4 or 5
Solid State Electronics		
ECE 110	Introduction to Electronics	1 to 3
ECE 444	IC Device Theory & Fabrication	4
PHYS 404	Electronic Circuits	4 or 5
PHYS 460	Condensed Matter Physics	4

Electives

Code	Title	Hours
Free Electives		
The Grainger College of Engineering Liberal Education course list, or additional courses from the campus General Education lists for Social and Behavrioal Sciences or Humanities and the Arts [5]		6
Free electives. Additional unrestricted course work, subject to certain exceptions as noted by the College, so that there are at least 128 credit hours earned toward the degree. The number of hours varies depending upon the total hours earned in both the Flexible Physics Core and the Technical/Professional Option and whether or not MATH 415 and PHYS 486 are taken in place of PHYS 485. [6]		13-37
Total Hours of Curriculum to Graduate		**128**

1 *External transfer students take* ENG 300 *instead.*

2 MATH 220 *may be substituted, with four of the five credit hours applying toward the degree.* MATH 220 *is appropriate for students with no background in calculus.*

3 MATH 285 *may be replaced by* MATH 441 *followed by* MATH 442*.*

4 *If* PHYS 486 *is chosen, take prerequisite* MATH 415*, which may be used to meet free elective requirements.If* PHYS 485 *is taken, an additional free elective hour or a surplus flexible physics core course hour offsets the one-hour credit differential.*

5 *The Grainger College of Engineering approved liberal education course list can be found* here *(*https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-GeneralEducationElectives*). Note that these credit hours could carry the required cultural studies designation required for campus general education requirements.*

6 *The Grainger College of Engineering restrictions to free electives can be found* here *(*https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-FreeElectives*).*

for the degree of Bachelor of Science in Engineering Physics

Suggested Sequence

The curriculum sequence below is a suggested sequence, as all Grainger Engineering students work with a department academic advisor to achieve their educational goals, specific to their needs and preparation. Dynamic and Static curricular maps, which include prerequisite sequencing, can be found here (with Tech Electives) (https://grainger.illinois.edu/academics/undergraduate/majors-and-minors/physics-tech-map/) and here (Professional Track). (https://grainger.illinois.edu/academics/undergraduate/majors-and-minors/physics-prof-map/)

First Year

First Semester		Hours
PHYS 110	Physics Careers	0
ENG 100	Engineering Orientation	0
MATH 221[1,2]	Calculus I	4
CHEM 102	General Chemistry I	3
CHEM 103	General Chemistry Lab I	1
RHET 105 (or General education elective)[3,4]	Writing and Research	4-3
General education elective[4]		3
	Semester Hours	15-14
Second Semester		
CS 101	Intro Computing: Engrg Sci	3

MATH 231 Calculus II	3
PHYS 211[2] University Physics: Mechanics	4
General Education elective (or RHET 105)[3,4]	3-4
General Education elective[4]	3
Semester Hours	16-17

Second Year

First Semester

MATH 241 Calculus III	4
PHYS 212 University Physics: Elec Mag	4
PHYS 225 Relativity Math Applications	2
General education electives[4]	6
Semester Hours	16

Second Semester

MATH 285[5] Intro Differential Equations	3
PHYS 213 Univ Physics: Thermal Physics	2
PHYS 214 Univ Physics: Quantum Physics	2
PHYS 325 Classical Mechanics I	3
Technical/professional option elective[6]	3
General education elective[4]	3
Semester Hours	16

Third Year

First Semester

MATH 415 Applied Linear Algebra	3
PHYS 435 Electromagnetic Fields I	3
Flexible physics core elective[7,8]	3
Mathematics elective[9]	3
Technical/professional option elective[6]	3
Free elective	3
Semester Hours	18

Second Semester

Flexible physics core electives[7,8]	6
Technical/professional option electives[6]	10
Semester Hours	16

Fourth Year

First Semester

PHYS 485 Atomic Phys Quantum Theory or 486[10]	3-4
Technical/professional option electives or Free electives[6,11]	6
Flexible physics core electives or Free electives[7,8]	6
Semester Hours	15-16

Second Semester

Free electives	11-10
Technical/professional option electives or Free electives[6,11]	5
Semester Hours	16-15
Total Hours:	128

1 *MATH 220 may be substituted, with four of the five credit hours applying toward the degree. MATH 220 is appropriate for students with no background in calculus.*

2 *Students with proficiency or advanced placement (AP or IB) credit in MATH 221 are strongly encouraged to enroll in MATH 231 and PHYS 211 for the first semester.*

3 *RHET 105 (or an alternative Composition I sequence) is taken either in the first or second semester of the first year, according to the student's UIN (Spring if your UIN is Odd). General Education Elective is taken the other semester. Composition I guidelines can be found at* http://catalog.illinois.edu/general-information/degree-general-education-requirements/ *under Written Communication Requirement.*

4 *Students must take 6 hours from the campus General Education Social and Behavioral Sciences list, 6 hours from campus General Education Humanities and the Arts list, and 6 hours from a liberal education list approved by the college or from the campus General Education lists for Social and Behavioral Sciences or Humanities and the Arts.*
Students must also complete the campus cultural studies requirement by completing (i) one western/comparative culture(s) course, (ii) one non-western culture(s) course, and (iii) one U.S. Minority Culture(s) course from the General Education cultural studies lists. Most students select general education courses that simultaneously satisfy these cultural studies requirements.

5 *MATH 285 may be replaced by MATH 441 followed by MATH 442.*

6 *To be chosen from a departmentally approved* list of Technical/Professional Option Electives *(*http://physics.illinois.edu/current/undergrad/ep_options.asp*), in consultation with the student's advisor, for the option elected (or a list fashioned for a departmentally approved custom option). The number of credit hours varies 12-22 depending upon the option chosen.*

7 *The flexible physics core requirement consists of three courses chosen from a departmentally approved list of Flexible Physics Core Electives with at least one of them being a lab course, PHYS 401, PHYS 403, PHYS 404, or PHYS 406. The number of credit hours varies 9-15 depending upon the courses chosen.*

8 *For courses chosen with more than 3 hours credit, the surplus hours may be used to meet free elective requirements.*

9 *To be chosen from a departmentally approved* list of Mathematics Electives *(*http://physics.illinois.edu/undergrad/math-options.asp*). Any course satisfying the Mathematics Elective cannot be used to satisfy any other requirement.*

10 *If PHYS 485 is taken, an additional free elective hour or a surplus flexible physics core course hour offsets the one-hour credit differential.*

11 *Taken if needed to complete a technical/professional option requiring more than 12 hours of credit.*

Physics, BS (LAS Specialized Curriculum)

for the degree of Bachelor of Science Major in Physics (LAS Specialized Curriculum)

department website: https://physics.illinois.edu
department faculty: Physics Faculty (https://physics.illinois.edu/people/directory/)
overview of college admissions & requirements: College of Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: undergrad-info@physics.illinois.edu

The LAS Specialized Curriculum in Physics is designed for students who plan to pursue graduate study in physics or a closely allied field. However, students who want to pursue a combined major and minor, a double

major, or a double degree should consider the LAS Science and Letters Curriculum in Physics because of the greater flexibility it offers.

Entering freshmen typically take calculus, chemistry, rhetoric, and PHYS 110 during the first semester and begin the general physics sequence in the second semester. Students with advance placement in mathematics should begin the general physics sequence in the first semester. All students are strongly encouraged to plan ahead to allow space in their programs for undergraduate research.

for the degree of Bachelor of Science Major in Physics (LAS Specialized Curriculum)

Entering freshmen typically take calculus, chemistry, rhetoric, and PHYS 110 during the first semester and begin the general physics sequence in the second semester. Students with advance placement in mathematics should begin the general physics sequence in the first semester. All students are strongly encouraged to take a Freshman Discovery Seminar during the first year fall semester and plan ahead to allow space in their programs for undergraduate research.

Departmental distinction: Graduation with distinctions awarded to students who complete 8 additional hours of 300- or 400-level physics courses or advanced courses in closely related technical subjects and who have attained cumulative grade point averages as follows: distinction, 3.5; high distinction, 3.8; highest distinction, 3.8 plus acknowledgement of truly outstanding work/research.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/) **requirements including the campus general education language requirement.**

Minimum required major and supporting course work: A minimum of 126 hours required for graduation.
GPA requirements: Students in the Specialized Curriculum beyond the freshman year must maintain an overall grade point average of at least 2.5 and also a grade point average of 2.5 in all required mathematics and physics courses.

Code	Title	Hours
Fixed Physics Core		38
PHYS 110	Physics Careers	
PHYS 211	University Physics: Mechanics	
PHYS 212	University Physics: Elec & Mag	
PHYS 213	Univ Physics: Thermal Physics	
PHYS 214	Univ Physics: Quantum Physics	
PHYS 225	Relativity & Math Applications	
PHYS 325	Classical Mechanics I	
PHYS 326	Classical Mechanics II	
PHYS 435	Electromagnetic Fields I	
PHYS 436	Electromagnetic Fields II	
PHYS 427	Thermal & Statistical Physics	
PHYS 486	Quantum Physics I	
PHYS 487	Quantum Physics II	
Flexible Physics Core (Select two courses from the list below)		8-10
PHYS 401	Classical Physics Lab	
PHYS 402	Light (with lab)	
PHYS 403	Modern Experimental Physics	
PHYS 404	Electronic Circuits	
PHYS 406	Acoustical Physics of Music	
Supporting Technical Courses		24-26
MATH 221	Calculus I [1]	
MATH 231	Calculus II	
MATH 241	Calculus III	
MATH 285	Intro Differential Equations	
or MATH 286	Intro to Differential Eq Plus	
MATH 415	Applied Linear Algebra	
CHEM 102	General Chemistry I	
CHEM 103	General Chemistry Lab I	
CS 101	Intro Computing: Engrg & Sci	
General Education - Students must complete the Campus General Education requirements.		Variable
Free Electives (No restrictions on these courses.)		15-35
Minimum Hours		**85**

[1] MATH 220 *may be substituted with four of the five credit hours applying toward the degree.* MATH 220 *is appropriate for students with no background in calculus.*

Physics, BSLAS (Sciences & Letters)

for the degree of Bachelor of Science in Liberal Arts and Sciences: Major in Physics (Sciences and Letters)

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department website: https://physics.illinois.edu/
department faculty: Physics Faculty (https://physics.illinois.edu/people/directory/)

overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: undergrad-info@physics.illinois.edu

The Physics Major (Sciences and Letters) is a flexible program for students who plan to pursue technical or professional careers in areas requiring a sound grounding in physical science and mathematics. Students can use the concentration to prepare for employment immediately upon graduation or for continuing on to graduate study in a wide variety of fields. Students who are certain that they want to go on to graduate study in physics or in a closely allied field should also consider the LAS Specialized Curriculum in Physics. In some cases, however, the greater flexibility of the Science and Letters Curriculum may make it a better choice for graduate school preparation for those who want to pursue a combined major and minor, a double major, or double degrees.

Students in this major must choose an approved elective technical or professional option no later than the end of the second semester of the sophomore year. A set of pre-approved options is available via the departmental web site (http://physics.illinois.edu/undergrad/las-options.asp) and from the departmental undergraduate studies office. Students may also design and follow a "custom option" subject to departmental approval. Students completing the Astrophysics option will earn a minor in Astronomy, if appropriate Minor form is filed.

Entering freshmen typically take calculus, chemistry, rhetoric, and PHYS 110 during the first semester and begin the general physics sequence in the second semester. Students with advance placement

in mathematics should begin the general physics sequence in the first semester. All students are strongly encouraged to plan ahead to allow space in their programs for undergraduate research.

for the degree of Bachelor of Science in Liberal Arts and Sciences: Major in Physics (Sciences and Letters)

A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office before the end of the fifth semester (60-75 hours). Please see your adviser.

Departmental distinction: Graduation with distinction is awarded to students who complete 8 additional hours of 300- or 400- or 500-level physics courses or advanced courses in closely related technical subjects, and who have attained cumulative grade point averages as follows: distinction, 3.5; high distinction, 3.8; highest distinction, 3.8 plus acknowledgement of truly outstanding work/research.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/) **requirements including the campus general education language requirement.**

Minimum required major and supporting course work: Minimum required major and supporting course work normally equates to 65-73 hours. Twelve hours of 300- and 400-level courses in the major must be taken on this campus. Minimum hours required for graduation: 120 hours.
GPA requirements: Students in the major must maintain an overall grade point average of at least 2.0 and also a grade point average of at least 2.0 in all required physics and mathematics courses. To be permitted to enroll in advanced physics courses in this major a student must maintain at least a 2.0 average in all attempts at science and mathematics courses taken at the University of Illinois.

Code	Title	Hours
Fixed Physics Core		23-24
PHYS 110	Physics Careers	
PHYS 211	University Physics: Mechanics	
PHYS 212	University Physics: Elec & Mag	
PHYS 213	Univ Physics: Thermal Physics	
PHYS 214	Univ Physics: Quantum Physics	
PHYS 225	Relativity & Math Applications	
PHYS 325	Classical Mechanics I	
PHYS 435	Electromagnetic Fields I	
PHYS 486	Quantum Physics I	
or PHYS 485	Atomic Phys & Quantum Theory	
Flexible physics core electives. Choose three courses from a departmentally approved list, with at least one being PHYS 401, PHYS 403, PHYS 404, or pHYS 406. The number of hours varies depending upon the courses chosen. (http://physics.illinois.edu/undergrad/las-sl-flexcore.asp)		9-15
Supporting Technical Courses		21-22
MATH 221	Calculus I [1]	
MATH 231	Calculus II	
MATH 241	Calculus III	
MATH 285	Intro Differential Equations	
or MATH 286	Intro to Differential Eq Plus	
CHEM 102	General Chemistry I	
CHEM 103	General Chemistry Lab I	
CS 101	Intro Computing: Engrg & Sci	
Elective Technical or Professional Option		12
A set of technical or professional courses that addresses an intellectually coherent body of knowledge. At least 9 hours should be at the 200-level or higher. Required courses may not be included in the set. Students may select from a list of pre-approved options or design a custom option, subject to departmental approval.		

[1] MATH 220 *may be substituted with four of the five credit hours applying toward the degree.* MATH 220 *is appropriate for students with no background in calculus.*

Physics: Physics Teaching, BSLAS

for the degree of Bachelor of Science in Liberal Arts and Sciences: Major in Physics (Sciences and Letters), Physics Teaching Concentration

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department website: https://physics.illinois.edu/
department faculty: Physics Faculty (https://physics.illinois.edu/people/directory/)

overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: undergrad-info@physics.illinois.edu

This concentration fulfills state certification requirements to teach high school physics (grades 9-12) through the AP/honors level and general science (high school biology, chemistry, earth and space science, and environmental science up to but not including the AP/honors level).

Time to degree completion varies. Minimum time to completion is 8 semesters, some students may require 10 semesters. Transfer students may need 10 total semesters combined to complete the program. Please see the LAS section in the transfer handbook for more information.

for the degree of Bachelor of Science in Liberal Arts and Sciences, Major in Physics (Sciences and Letters), Physics Teaching Concentration

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A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office before the end of the fifth semester (60-75 hours). Please see your adviser.

Departmental distinction: Distinction is determined by a combination of grade point average and achievement in student teaching. The student's practice teaching experience will be evaluated by the departmental honors adviser and the teaching supervisor. Distinction requires a 3.2 grade point average; high distinction, 3.4; highest distinction, 3.6. Students desiring distinction should consult with the departmental honors adviser during the junior year.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/) **requirements including the campus general education language requirement.**

Minimum required major and supporting course work: Minimum required major and supporting course work normally equates to 65-73 hours. Twelve hours of 300- and 400-level courses in the major must be taken on this campus.

Teacher Education requirements: Students in this concentration must complete the Teacher Education Minor in Secondary School Teaching. See the College of Education section for requirements of the minor (http://catalog.illinois.edu/undergraduate/education/secondary/) **(39 hours).**
GPA requirements: To remain in good standing in this program and be recommended for certification, candidates are required to maintain UIUC, cumulative, content area, and professional education, grade-point averages of 2.5 (A= 4.0). Candidates should consult their advisor or the Council on Teacher Education for the list of courses used to compute these grade-point averages. http://www.cote.illinois.edu/
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Foundation Courses		
The following courses must be completed or in progress when students apply to the Secondary Education minor.		
MATH 221	Calculus I [1]	4
or MATH 220	Calculus	
MATH 231	Calculus II	3
MATH 241	Calculus III	4
MATH 285	Intro Differential Equations	3
or MATH 286	Intro to Differential Eq Plus	
PHYS 211	University Physics: Mechanics	4
PHYS 212	University Physics: Elec & Mag	4
PHYS 213	Univ Physics: Thermal Physics	2
PHYS 214	Univ Physics: Quantum Physics	2
Select one group of Chemistry courses:		4-5
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	
or		
CHEM 202 & CHEM 203	Accelerated Chemistry I and Accelerated Chemistry Lab I	
Additional required coursework		
Teacher Education Minor in Secondary School Teaching (http://catalog.illinois.edu/undergraduate/education/secondary/)		39
Physics Core		
PHYS 110	Physics Careers	0
PHYS 325	Classical Mechanics I	3
PHYS 435	Electromagnetic Fields I	3
PHYS 485	Atomic Phys & Quantum Theory	3
or PHYS 486	Quantum Physics I	
Choose at least three courses from List A and List B below. At least one course must come from List B.		9-14
A		
PHYS 326	Classical Mechanics II	
PHYS 436	Electromagnetic Fields II	
PHYS 427	Thermal & Statistical Physics	
PHYS 470	Subatomic Physics	
PHYS 487	Quantum Physics II	
PHYS 460	Condensed Matter Physics	
PHYS 475	Introduction to Biophysics	
B		
PHYS 401	Classical Physics Lab	
PHYS 403	Modern Experimental Physics	
PHYS 404	Electronic Circuits	
PHYS 406	Acoustical Physics of Music	
Additional Technical Courses		
IB 100	Biology in Today's World	3
GEOL 107	Physical Geology	4
ASTR 210	Introduction to Astrophysics	3

1 MATH 220 *may be substituted with four of the five credit hours applying toward the degree.* MATH 220 *is appropriate for students with no background in calculus.*

Requirements for the Teacher Education in Secondary School Teaching Minor

Code	Title	Hours
Professional Education Required Courses		
EDUC 201	Identity and Difference in Education [1]	3
EDUC 202	Social Justice, School and Society [1]	3
CI 401	Introductory Teaching in a Diverse Society	3
CI 403	Teaching a Diverse High School Student Population	3
CI 404	Teaching and Assessing Secondary School Students	3
CI 473	Disciplinary Literacy	3
EPSY 201	Educational Psychology [1, 2]	3
EPSY 485	Assessing Student Performance	3
SPED 405	General Educator's Role in Special Education	3
EDPR 442	Educational Practice in Secondary Education	12
Total Hours		39-40

1 EDUC 201, EDUC 202 and EPSY 201 can be completed at any time during the degree and are not pre-requisites to apply for the minor.

2 PSYC 100 is a pre-requisite for EPSY 201.

Plant Biotechnology, BS

for the degree of Bachelor of Science Major in Plant Biotechnology

department website: https://cropsciences.illinois.edu/
department faculty: https://cropsciences.illinois.edu/people/faculty (https://cropsciences.illinois.edu/people/faculty/)/
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college website: https://aces.illinois.edu/

With a degree in Plant Biotechnology you can help feed billions sustainably, improve our planet's health, and make a direct impact on agriculture and the world. Advance plant breeding and plant improvement by learning critical skills in molecular biology, genetics, and genomics.

Plant Biotechnology is a part of our daily lives in applications such as developing nutritionally enhanced foods, enabling sustainable agricultural production, and engineering plants for industrial and medical purposes.

The plant biotechnology major provides an interdisciplinary curriculum integrating the science and practice of crop production through courses in molecular biology, genetics and genomics, biochemistry, plant protection, data analysis and more.

for the degree of Bachelor of Science Major in Plant Biotechnology

General Education Requirements

Code	Title	Hours
Requirement		**Hours**
Composition I and Speech		**6 to 7**
RHET 105 & CMN 101	Writing and Research and Public Speaking	
OR		
CMN 111 & CMN 112	Oral & Written Comm I and Oral & Written Comm II	
Advanced Composition		**3 to 4**
Cultural Studies		**9**
Western/Comparative Cultures		
Non-Western Cultures		
US Minority Cultures		
Foreign Language	**Third Level or Above**	
Quantitative Reasoning I		**4 to 5**
MATH 220	Calculus	
or MATH 221	Calculus I	
or MATH 234	Calculus for Business I	
Quantitative Reasoning II		**3**
CPSC 241	Intro to Applied Statistics	
Natural Sciences and Technology		**8**
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	
CHEM 104 & CHEM 105	General Chemistry II and General Chemistry Lab II	
Humanities and the Arts		**6**
Social and Behavioral Sciences		**7 to 8**
ACE 100	Introduction to Applied Microeconomics [1]	
Total Hours for Gen Ed Requirements		**46-50**

Code	Title	Hours
ACES Requirements		**0-2**
ACES 101	Contemporary Issues in ACES	
or ACES 200	ACES Transfer Orientation	

Major Requirements

Code	Title	Hours
Non-Departmental Core Requirements		**11**
IB 103	Introduction to Plant Biology	4
IB 150	Organismal & Evolutionary Biol	4
MCB 450	Introductory Biochemistry	3
Crop Sciences Core Requirements		**13-14**
CPSC 102	Foundational Skills in Crop Sciences	2
CPSC 112	Introduction to Crop Sciences	4
CPSC 382	Organic Chem of Biol Processes	4
Internship or Research/Thesis (choose one):		2-3
CPSC 393	Crop Sciences Internship	
or HORT 393	Horticulture Internship	
CPSC 395	Undergrad Research or Thesis	
or HORT 395	Undergrad Research or Thesis	
or PLPA 395	Undergrad Research or Thesis	
CPSC 498	Crop Sci Professional Develpmt	1
Biotechnology Requirements		**13-14**
CPSC 261	Biotechnology in Agriculture	3
CPSC 265	Genetic Engineering Lab	3
CPSC 352	Plant Genetics	4
CPSC 452	Advanced Plant Genetics	3-4
or CPSC 453	Principles of Plant Breeding	
Plant Protection and Data Analysis Requirements		**6-7**
Select two of the following:		6
CPSC 226		3
CPSC 266	Data in Biology and Agriculture	4
CPSC 270	Applied Entomology	3
PLPA 204		
Major Electives		**8**
Choose from any 300- or 400- level CPSC, HORT, or PLPA courses, excluding: CPSC 393, HORT 393, CPSC 395, HORT 395 & PLPA 395.		
Total Hours		**126**

Political Science, BALAS

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Political Science

department website: https://www.pol.illinois.edu
department faculty: Political Science Faculty (https://pol.illinois.edu/directory/faculty/)
advising: Political Science advising (https://pol.illinois.edu/academics/undergraduate-program/advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: pol@illinois.edu

Students must complete one concentration in consultation with an academic advisor.

- Citizen Politics Concentration (p. 352)
- Civic Leadership Concentration (p. 353)
- General Political Science Concentration (p. 354)
- International Relations Concentration (p. 355)
- Law & Power Concentration (p. 356)
- Public Policy & Democratic Institutions Concentration (p. 356)
- World Politics Concentration (p. 357)

5 Year BALAS /MA in Political Science and European Union Studies

The Department of Political Science, along with the European Union Center, offers a **5 year BALAS/MA in Political Science and European Union Studies**. In order to be admitted to this degree program, students apply through a joint application process to their BALAS –granting program and the European Union Center during their third year of studies. Requirements for this degree program are identical to those for the stand-alone BALAS and for the stand-alone MAEUS. Students will receive both degrees when the requirements are met for the degrees; BALAS and MA degrees will be conferred separately and independently. More detailed information may be obtained from department and EUC offices.

Departmental distinction

To be eligible for distinction, a student majoring in Political Science must complete one of the following two tracks:

1. Individual Study Track. On this track, a student must:
   a. Complete a senior thesis,
   b. Earn a political science major grade point average on this campus of at least 3.25 or higher, and
   c. Earn a grade point average in of 3.67 or higher.
2. Honors Program Track. On this track, a student must:
   a. Complete a senior thesis,
   b. Earn a political science major grade point average on this campus of at least 3.25 or higher,
   c. Be admitted to and maintain good standing within the departmental honors program, and
   d. Complete required coursework in the departmental honors program with a grade point average in and between 2.67 and 3.66.

Admission to the departmental honors program requires the following:

1. Completion of or or an acceptable substitute,
2. An on-campus political science major grade point average of 3.5,
3. Completion of nine hours (including at least three advanced hours) of political science on this campus,
4. Application and affirmative vote of a departmental committee.

High Distinction

To be eligible for high distinction, a student majoring in Political Science must:

1. Complete a senior thesis,
2. Earn a political science major grade point average on this campus of at least 3.25 or higher,
3. Be admitted to and maintain good standing in the departmental honors program, and
4. Complete required coursework in the departmental honors program with a grade point average in and of 3.67 or higher.

Political Science: Citizen Politics, BALAS

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Political Science, Citizen Politics Concentration

department website: https://www.pol.illinois.edu
department faculty: Political Science Faculty (https://pol.illinois.edu/directory/faculty/)
advising: Political Science advising (https://pol.illinois.edu/academics/undergraduate-program/advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: pol@illinois.edu

Citizen politics is the study of mass politics. Topics include how and why citizens form political attitudes, beliefs, and identities; how people engage in political decision-making; and what political behaviors individuals choose to participate in.

See the Political Science BALAS page (p. 351) for departmental distinction information.

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Political Science, Citizen Politics Concentration

See the Political Science BALAS page (p. 351) for departmental distinction information.

A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office before the end of the fifth semester (60-75 hours). Please see your advisor. The plan will consist of the selection of a concentration and 12 hours of supporting coursework approved by an advisor.

Restrictions: Except as otherwise noted, or by petition to the department, PS 191, PS 291, PS 292, PS 490, PS 491, and PS 492 are excluded from all concentration lists maintained by the department. These courses may be used only for requirements of courses “at any level” without respect to concentration. As an exception, these courses may be used toward the General Concentration or the Civic Leadership Concentration.

Students may include in the major no more than nine hours from any combination of PS 291, PS 292, PS 490, PS 491, and PS 492. Of these, only six hours from PS 490, PS 491, and PS 492 within that group can count toward the major.

Students may count a maximum of six (6) hours of credit of any combination of hours from PS 494 toward the advanced hours requirement. Not more than 6 hours of individual study courses in political science (PS 490) or 6 hours of internships (PS 491) or 6 hours of supervised research (PS 492) may be included in the major; a student

with any mix of independent study hours and internship hours and supervised research hours may include a maximum of 9 hours of such credit in the major. (PS 496) is reserved for those seniors doing honors theses for distinction in political science and may not be counted in the 45-hour minimum required for the major.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 70 hours. Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.
Citizen Politics Concentration Requirements

Code	Title	Hours
PS 100	Intro to Political Science	3
Select at least one course from the following:		3
PS 101	Intro to US Gov & Pol	
PS 240	Intro to Comp Politics	
PS 241	Comp Politics in Dev Nations	
Select any additional 100- or 200-level Political Science Courses		6
Select 300- or 400-level Political Science courses, at least nine hours of which comes from the Citizen Politics Concentration list (below). The other six hours may be any 300- or 400-level Political Science course.		15
Select Political Science courses at any level, at least three hours of which comes from the Citizen Politics Concentration list. The other three hours may be any Political Science course.		6
Students will select a second major, or a minor, or a set of courses of at least 12 hours of thematically-related coursework outside political science, developed in conjunction with an academic advisor.		12
Total Hours		45

Code	Title	Hours
Citizen Politics Course List		
PS 101	Intro to US Gov & Pol	3
PS 201	US Racial & Ethnic Politics	3
PS 202	Religion & Politics in the US	3
PS 230	Intro to Pol Research	3
PS 231	Strategic Models	3
PS 240	Intro to Comp Politics	3
PS 241	Comp Politics in Dev Nations	3
PS 300	Special Topics (as appropriate)	3
PS 311	Political Parties in the US	3
PS 312	Politics and the Media	3
PS 314	Political Psychology	3
PS 315	African American Politics	3
PS 316	Latina/Latino Politics	3
PS 317	Asian American Politics	3
PS 318	Interests Grps & Soc Movements	3
PS 319	Campaigns and Elections	3
PS 320	Public Opinion	3
PS 323	Law and Representation	3
PS 328	Introduction to Biology and Politics	3
PS 329	Immigration & Citizenship	3
PS 330	Intro to Political Behavior	3
PS 331	Intro to Electoral Behavior	3
PS 357	Ethnic Conflict	3
PS 358	Comparative Political Behavior	3
PS 411	Campaigning to Win	3 or 4
PS 456	Democracy and Identity	3 or 4
PS 494	Junior Honors Seminar (as appropriate)	3

Political Science: Civic Leadership, BALAS

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Political Science, Civic Leadership Concentration

department website: https://www.pol.illinois.edu
department faculty: Political Science Faculty (https://pol.illinois.edu/directory/faculty/)
advising: Political Science advising (https://pol.illinois.edu/academics/undergraduate-program/advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: pol@illinois.edu

The Civic Leadership concentration aims to provide students interested in careers in public life with an informed appreciation for American democracy, the values and structures on which it is based, and the challenges and opportunities it faces in the 21st century.

See the Political Science BALAS page (p. 351) for departmental distinction information.

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Political Science, Civic Leadership Concentration

See the Political Science Distinction page (p. 351) for departmental distinction information.

Students may count a maximum of six (6) hours of credit of any combination of hours from PS 494 toward the advanced hours requirement. Not more than 6 hours of individual study courses in political science (PS 490) or 6 hours of internships (PS 491) or 6 hours of supervised research (PS 492) may be included in the major; a student with any mix of independent study hours and internship hours and supervised research hours may include a maximum of 9 hours of such credit in the major. (PS 496) is reserved for those seniors doing honors theses for distinction in political science and may not be counted in the 45-hour minimum required for the major.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 70 hours. Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Civic Leadership Concentration Requirements

Code	Title	Hours
PS 100	Intro to Political Science	3
PS 101	Intro to US Gov & Pol	3
Select one course from the following:		1-3
PS 125	Washington Experience	
PS 191	Topics in Civic Leadership	
Select any additional 100- or 200-level Political Science courses		6
Select one course from the following:		3
PS 291	Intro Internship Seminar	
PS 491	Internship	
Select 300- or 400-level Political Science courses, at least nine hours of which come from the Civic Leadership Concentration list (below). The other six hours may be any 300- or 400-level Political Science course.		15
To reach 33 hours of Political Science coursework, select up to two additional hours of any Political Science course at any level.		0-2
Students will select a second major, or a minor, or a set of courses of at least 12 hours of thematically-related coursework outside political science, developed in conjunction with an academic advisor.		12
Total Hours		45

Code	Title	Hours
Civic Leadership Course List		
PS 201	US Racial & Ethnic Politics	3
PS 202	Religion & Politics in the US	3
PS 220	Intro to Public Policy	3
PS 270	Intro to Political Theory	3
PS 300	Special Topics (as appropriate)	3
PS 315	African American Politics	3
PS 316	Latina/Latino Politics	3
PS 317	Asian American Politics	3
PS 321	Principles of Public Policy	3
PS 322	Law and Public Policy	3
PS 371	Classical Political Theory	3
PS 372	Modern Political Theory	3
PS 373	Democratic Theory	3
PS 374	Future Politics	3
PS 376	American Political Theory	3
PS 494	Junior Honors Seminar	3

Political Science: General Political Science, BALAS

for the degree of Bachelor of Liberal Arts & Sciences Major in Political Science, General Political Science concentration

department website: https://www.pol.illinois.edu
department faculty: Political Science Faculty (https://pol.illinois.edu/directory/faculty/)
advising: Political Science advising (https://pol.illinois.edu/academics/undergraduate-program/advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: pol@illinois.edu

See the Political Science BALAS page (p. 351) for departmental distinction information.

for the degree of Bachelor of Liberal Arts & Sciences Major in Political Science, General Political Science concentration

See the Political Science Distinction page (p. 351) for departmental distinction information.

Political Science Core Requirements

Students may count a maximum of six (6) hours of credit of any combination of hours from PS 494 toward the advanced hours requirement. Not more than 6 hours of individual study courses in political science (PS 490) or 6 hours of internships (PS 491) or 6 hours of supervised research (PS 492) may be included in the major; a student with any mix of independent study hours and internship hours and supervised research hours may include a maximum of 9 hours of such credit in the major. (PS 496) is reserved for those seniors doing honors theses for distinction in political science and may not be counted in the 45-hour minimum required for the major.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 70 hours. Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

General Political Science Concentration Requirements

Code	Title	Hours
PS 100	Intro to Political Science	3
Select any additional 100- or 200-level Political Science courses		9
Select any 300- or 400-level Political Science courses		15
Select Political Science courses at any level		6

Students will select a second major, or a minor, or a set of courses of at least 12 hours of thematically-related coursework outside political science, developed in conjunction with an academic advisor.	12
Total Hours	45

Political Science: International Relations, BALAS

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Political Science, International Relations Concentration

department website: https://www.pol.illinois.edu
department faculty: Political Science Faculty (https://pol.illinois.edu/directory/faculty/)
advising: Political Science advising (https://pol.illinois.edu/academics/undergraduate-program/advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: pol@illinois.edu

International relations (IR) is the study of interactions across borders of nation-states. Students explore how global, regional, and domestic factors influence relations among states as well as non-state actors across the interstate system.

Students take advanced courses in two or more of the following topics: international law and organization, international cooperation, international political economy, globalization, foreign policy, diplomacy, political strategy in IR, conflict, interstate war, civil war, terrorism, global environmental politics, and international human rights.

See the Political Science BALAS page (p. 351) for departmental distinction information.

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Political Science, International Relations Concentration

See the Political Science Distinction page (p. 351) for departmental distinction information.

Students may count a maximum of six (6) hours of credit of any combination of hours from PS 494 toward the advanced hours requirement. Not more than 6 hours of individual study courses in political science (PS 490) or 6 hours of internships (PS 491) or 6 hours of supervised research (PS 492) may be included in the major; a student with any mix of independent study hours and internship hours and supervised research hours may include a maximum of 9 hours of such credit in the major. (PS 496) is reserved for those seniors doing honors theses for distinction in political science and may not be counted in the 45-hour minimum required for the major.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 70 hours. Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

International Relations Concentration Requirements

Code	Title	Hours
PS 100	Intro to Political Science	3
Select at least one course from the following:		3
PS 280	Intro to Intl Relations	
PS 281	Intro to Intl Relations-ACP	
PS 282	Governing Globalization	
Select any additional 100- or 200-level Political Science courses		6
Select 300- or 400-level Political Science courses, at least nine hours of which come from the International Relations Concentration list (below). The other six hours may be any 300- or 400-level Political Science course.		15
Select any additional Political Science courses at any level.		6
Students will select a second major, or a minor, or a set of courses of at least 12 hours of thematically-related coursework outside political science, developed in conjunction with an academic advisor.		12
Total Hours		45

Code	Title	Hours
International Relations Course List		
PS 180	IntroPolitics of Globalization	3
PS 230	Intro to Pol Research	3
PS 231	Strategic Models	3
PS 280	Intro to Intl Relations	3
PS 281	Intro to Intl Relations-ACP	3
PS 282	Governing Globalization	3
PS 283	Intro to Intl Security	3
PS 300	Special Topics (as appropriate)	3
PS 313	Congress and Foreign Policy	3
PS 340	Politics in Intl Development	3
PS 379	Intl Rel & Domestic Politics	3
PS 380	International Cooperation	3
PS 382	Intl Political Economy	3
PS 384	Politics of Globalization	3
PS 386	International Law	3
PS 387	National Security Policy	3
PS 390	American Foreign Policy	3
PS 391	Soviet & Post-Sov Foreign Pol	3
PS 392	Intl Organizations&Regionalism	3
PS 393	Diplomatic Studies Practicum	4
PS 394	Crisis Diplomacy	3
PS 395	International Organization	3
PS 396	International Conflict	3
PS 398	Strategic Interntl Relations	3
PS 399	Politics of International Treaties	3

PS 457	Dem Gov in a Global Setting	3 or 4
PS 480	Energy and Security	3
PS 494	Junior Honors Seminar (as appropriate)	3

Political Science: Law & Power, BALAS

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Political Science, Law and Power Concentration

department website: https://www.pol.illinois.edu
department faculty: Political Science Faculty (https://pol.illinois.edu/directory/faculty/)
advising: Political Science advising (https://pol.illinois.edu/academics/undergraduate-program/advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: pol@illinois.edu

The Law and Power concentration teaches students about how power, law, and ideas about justice shape political life. Courses cover questions concerning the procedures for social and legal change, the status of citizens in social and political institutions in society, and the ways that ideology and identity categories shape the pursuit of equality and justics.

See the Political Science BALAS page (p. 351) for departmental distinction information.

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Political Science, Law and Power Concentration

See the Political Science Distinction page (p. 351) for departmental distinction information.

Students may count a maximum of six (6) hours of credit of any combination of hours from PS 494 toward the advanced hours requirement. Not more than 6 hours of individual study courses in political science (PS 490) or 6 hours of internships (PS 491) or 6 hours of supervised research (PS 492) may be included in the major; a student with any mix of independent study hours and internship hours and supervised research hours may include a maximum of 9 hours of such credit in the major. (PS 496) is reserved for those seniors doing honors theses for distinction in political science and may not be counted in the 45-hour minimum required for the major.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 70 hours. Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Law and Power Concentration Requirements

Code	Title	Hours
PS 100	Intro to Political Science	3
PS 270	Intro to Political Theory	3
Select any additional 100- or 200-level Political Science courses		6
Select 300- or 400-level Political Science courses, at least nine hours of which come from the Law and Power Concentration list (below), which must include at least one course from Law/Judicial Politics and one course from Political Theory. The other six hours may be any 300- or 400-level Political Science course.		15
Select Political Science courses at any level, at least three hours of which comes from the Law and Power Concentration list maintained by the department. The other three hours may come from any Political Science course at any level.		6
Students will select a second major, or a minor, or a set of courses of at least 12 hours of thematically-related coursework outside political science, developed in conjunction with an academic advisor.		12
Total Hours		45

Code	Title	Hours
Law & Power Course List		
PS 170	Power, Politics, and Protest	3
PS 230	Intro to Pol Research	3
PS 231	Strategic Models	3
Law/Judicial Politics		
PS 300	Special Topics (as appropriate)	3
PS 301	The US Constitution I	3
PS 302	The US Constitution II	3
PS 305	The US Supreme Court	3
PS 306	Judicial Politics	3
PS 322	Law and Public Policy	3
PS 323	Law and Representation	3
PS 386	International Law	3
PS 494	Junior Honors Seminar (as appropriate)	3
Political Theory		
PS 370	Justice in the Law	3
PS 371	Classical Political Theory	3
PS 372	Modern Political Theory	3
PS 373	Democratic Theory	3
PS 374	Future Politics	3
PS 375	Feminist Political Theory	3
PS 376	American Political Theory	3
PS 377	Topics Contemp Pol Theory	3
PS 413	Sex, Power and Politics	3 or 4
PS 494	Junior Honors Seminar (as appropriate)	3

Political Science: Public Policy and Democratic Institutions, BALAS

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Political Science, Public Policy and Democratic Institutions Concentration

department website: https://www.pol.illinois.edu
department faculty: Political Science Faculty (https://pol.illinois.edu/directory/faculty/)
advising: Political Science advising (https://pol.illinois.edu/academics/undergraduate-program/advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: pol@illinois.edu

This concentration explores political institutions and processes and how and why they work as they do. Courses use historical and contemporary examples to understand the political system the founders established and the ways it has shaped modern politics. Students study institutions such as the presidency, Congress, courts, the bureaucracy,and political parties, with a focus on their organization and on important patterns of behavior within them, such as interest group lobbying and campaigning.

See the Political Science BALAS page (p. 351) for departmental distinction information.

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Political Science, Public Policy and Democratic Institutions Concentration

See the Political Science Distinction page (p. 351) for departmental distinction information.

Students may count a maximum of six (6) hours of credit of any combination of hours from PS 494 toward the advanced hours requirement. Not more than 6 hours of individual study courses in political science (PS 490) or 6 hours of internships (PS 491) or 6 hours of supervised research (PS 492) may be included in the major; a student with any mix of independent study hours and internship hours and supervised research hours may include a maximum of 9 hours of such credit in the major. (PS 496) is reserved for those seniors doing honors theses for distinction in political science and may not be counted in the 45-hour minimum required for the major.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 70 hours. Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Public Policy and Democratic Institutions Concentration Requirements

Code	Title	Hours
PS 100	Intro to Political Science	3
PS 101	Intro to US Gov & Pol	3
Select any additional 100- or 200-level Political Science courses		6
Select 300- or 400-level Political Science courses, at least nine hours of which come from the Public Policy and Democratic Institutions Concentration list maintained by the department. The other six hours may be any 300- or 400-level Political Science course.		15
Select any Political Science courses at any level		6
Students will select a second major, or a minor, or a set of courses of at least 12 hours of thematically-related coursework outside political science, developed in conjunction with an academic advisor.		12
Total Hours		45

Code	Title	Hours
Public Policy Course List		
PS 220	Intro to Public Policy	3
PS 224	Politics of the National Parks	2 or 3
PS 225	Environmental Politics & Policy	3
PS 230	Intro to Pol Research	3
PS 231	Strategic Models	3
PS 282	Governing Globalization	3
PS 300	Special Topics (as appropriate)	3
PS 301	The US Constitution I	3
PS 302	The US Constitution II	3
PS 303	The US Congress	3
PS 304	The US Presidency	3
PS 305	The US Supreme Court	3
PS 306	Judicial Politics	3
PS 307	Separation of Powers	3
PS 309	State Gov in the US	3
PS 310	Politics of Organizations	3
PS 311	Political Parties in the US	3
PS 313	Congress and Foreign Policy	3
PS 321	Principles of Public Policy	3
PS 322	Law and Public Policy	3
PS 323	Law and Representation	3
PS 355	Democratization	3
PS 356	Comparative Political Economy	3
PS 379	Intl Rel & Domestic Politics	3
PS 385	Politics of the European Union	3
PS 395	International Organization	3
PS 457	Dem Gov in a Global Setting	3 or 4
PS 494	Junior Honors Seminar (as appropriate)	3

Political Science: World Politics, BALAS

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Political Science, World Politics Concentration

department website: https://www.pol.illinois.edu
department faculty: Political Science Faculty (https://pol.illinois.edu/directory/faculty/)
advising: Political Science advising (https://pol.illinois.edu/academics/undergraduate-program/advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: pol@illinois.edu

The World Politics concentration compares internal political dynamics of and patterns of political behavior in the world's more than 200 countries.

Major comparative themes include democracy, dictatorship and regime change; political institutions (parties, elections, and decision-making); voting behavior, attitudes, and the creation and dissemination of political information; religious and ethnic identity politics; political economy of development and developing countries; social change and political violence; and the impact of globalization and transnational forces such as migration.

See the Political Science BALAS page (p. 351) for departmental distinction information.

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for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Political Science, World Politics Concentration

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See the Political Science Distinction page (p. 351) for departmental distinction information.

Students may count a maximum of six (6) hours of credit of any combination of hours from PS 494 toward the advanced hours requirement. Not more than 6 hours of individual study courses in political science (PS 490) or 6 hours of internships (PS 491) or 6 hours of supervised research (PS 492) may be included in the major; a student with any mix of independent study hours and internship hours and supervised research hours may include a maximum of 9 hours of such credit in the major. (PS 496) is reserved for those seniors doing honors theses for distinction in political science and may not be counted in the 45-hour minimum required for the major.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 70 hours. Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.
World Politics Concentration Coursework Requirements

Code	Title	Hours
PS 100	Intro to Political Science	3
Select at least one course from the following:		3
PS 240	Intro to Comp Politics	
PS 241	Comp Politics in Dev Nations	
Select any additional 100- or 200-level Political Science courses		6
Select 300- or 400-level Political Science courses, at least nine hours of which come from the World Politics Concentration list maintained by the department. The other six hours may be any 300- or 400-level Political Science course.		15
Select any additional Political Science courses at any level		6
Students will select a second major, or a minor, or a set of courses of at least 12 hours of thematically-related coursework outside political science, developed in conjunction with an academic advisor.		12
Total Hours		45

Code	Title	Hours
World Politics Course List		
PS 152	The New Middle East	3
PS 180	IntroPolitics of Globalization	3
PS 230	Intro to Pol Research	3
PS 231	Strategic Models	3
PS 242	Introduction to Modern Africa	3
PS 282	Governing Globalization	3
PS 300	Special Topics (as appropriate)	3
PS 340	Politics in Intl Development	3
PS 341	Gov & Pol in Africa	3
PS 343	Gov & Pol of China	3
PS 344	Government and Politics of Japan	3
PS 345	Gov & Pol of SE Asia	3
PS 346	Gov & Pol of South Asia	3
PS 347	Gov & Pol of Middle East	3
PS 348	Gov & Pol in Western Europe	3
PS 351	Gov & Pol Post-Soviet States	3
PS 352	Gov & Pol of East Europe	3
PS 353	Gov & Pol of Latin America	3
PS 355	Democratization	3
PS 356	Comparative Political Economy	3
PS 357	Ethnic Conflict	3
PS 358	Comparative Political Behavior	3
PS 379	Intl Rel & Domestic Politics	3
PS 385	Politics of the European Union	3
PS 397	Authoritarian Regimes	3
PS 456	Democracy and Identity	3 or 4
PS 457	Dem Gov in a Global Setting	3 or 4
PS 494	Junior Honors Seminar (as appropriate)	3

Learning Outcomes: Political Science, BALAS

Learning Outcomes for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Political Science

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1. Students will be able to apply central concepts of the scientific method to the study of politics, and demonstrate an ability to draw inferences from data.
2. Students will have a foundational knowledge of facts, concepts, and typologies in their chosen subfield in political science.
3. Students will be able to demonstrate basic knowledge of central theories in their chosen subfield and show how to evaluate those theories.
4. Students will be able to define political science and its subfields, drawing contrasts with other social sciences.
5. Students will be able to apply concepts, methods, and theories to research projects, internships, and/or off-campus experiences.

Portuguese, BALAS

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Portuguese

department website: https://spanport.illinois.edu/
department faculty: Portuguese Faculty (https://spanport.illinois.edu/academics/portuguese-undergraduate/portuguese-faculty/)
advising: Portuguese advising (https://spanport.illinois.edu/academics/portuguese-undergraduate/portuguese-advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: span-port@illinois.edu

Undergraduate degree programs in Spanish & Portuguese
Spanish, BALAS (p. 381)

Teaching of Spanish, BA (p. 423)

Portuguese, BALAS (p. 359)

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Portuguese

A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office before the end of the fifth semester (60-75 hours). Please see your adviser.

In order to remain in good standing in this program and be recommended for certification, candidates are required to maintain UIUC, cumulative, content area, and professional education, grade-point averages of 2.5 (A= 4.0). Candidates should consult their advisor or the Council on Teacher Education for the list of courses used to compute these grade-point averages.

Departmental distinction: To be considered for departmental distinction, a student must maintain a 3.5 grade point average and fulfill special additional requirements. See the department's honors adviser.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: 42-45 hours including at least 27 hours in Portuguese courses beyond the 100 level.
Twelve hours of 300- and 400-level courses in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours

Code	Title	Hours
PORT 402	Advanced Grammar	3
PORT 403	Readings in Portuguese	3
PORT 404	Studies in Luso-Brazilian Culture	3
PORT 406	Brazilian Film	3
PORT 410	Topics in Brazilian Literature	3
Additional courses in Portuguese literature/culture beyond the 100 level		12
Supporting course work or a minor in a related area of study chosen by the student and approved by the adviser. There is a wide choice of supporting courses because the student's interests may vary from Iberian literature to animal husbandry in Angola and urbanology in Brazil. Supporting areas may include humanities (comparative literature, comparative religion, linguistics, philosophy), social sciences (anthropology, geography, history, Latin American studies, political science, sociology), education, fine and applied arts, and/or journalism. Other fields, or groups of fields, may be approved by the Portuguese undergraduate adviser. [1]		15-18
Total Hours required for graduation		**120**

[1] *A minor consists of a minimum of 18 hours.*

Learning Outcomes: Portuguese, BALAS

Learning Outcomes for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Portuguese

1. Students learn and practice the nuances of the language in all of its written and spoken modes, formally and informally
2. Students demonstrate special cultural and linguistic literacy in relation to Portuguese and the ability to use concepts and methods from multiple disciplines
3. Students know the history of Brazil's interplay with Latin America and the Lusophone world
4. Students evaluate the dynamics of power between dominant and subordinate groups in Brazil, especially through the lens of class, ethnicity, gender, race, and sexuality
5. Students gain a global perspective on civil society and social justice through Brazil and the Portuguese language

Psychology, BSLAS

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Psychology

department website: http://www.psychology.illinois.edu/
department faculty: Psychology Faculty (https://psychology.illinois.edu/directory/faculty/)
advising: Psychology advising (https://psychology.illinois.edu/academics/undergraduate-program/advising-services/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: psych-advising@illinois.edu

Students choose from the following concentrations:

- Behavioral Neuroscience (p. 361)
- Clinical/Community Psychology (p. 361)
- Cognitive Neuroscience (p. 362)
- Cognitive Psychology (p. 363)
- Developmental Psychology (p. 364)
- Diversity Science (p. 365)
- Intradisciplinary Psychology (p. 365)

- Organizational Psychology (p. 366)
- Personality Psychology (p. 367)
- Social Psychology (p. 367)

The Psychology major is a broad-based curriculum within a research-focused department. The program is designed both for students interested in a liberal arts education with psychology as a focal area and for students who plan to attend graduate or professional school either in psychology or in a different field such as medicine, law, social work, business administration, counseling, labor relations and many others.

The Psychology major provides both depth and breadth of knowledge in Psychology. The major consists of an introductory course, a statistics course, a breadth of knowledge or foundation in the different areas of psychology that comes from a set of core courses, a research methods course, and elective courses that give students a depth of knowledge. Each concentration, except for intradisciplinary psychology, has a core course specific to that area of psychology with a research methods course designed for that concentration. In formulating their Plan of Study, students can decide either to undertake a concentration in Intradisciplinary Psychology and select courses that focus on their own unique interests or to specialize in a particular area of Psychology by fulfilling the requirements for one of the other concentrations listed below. As undergraduate students fulfill the requirements, they also have the opportunity to participate in current research projects by working in labs. Students should contact our Undergraduate Advising Office for help in creating a plan of study and research that best meets their goals and interests.

The Department of Psychology also offers a BSLAS in Brain & Cognitive Science (p. 76).

Academic Advising

The Psychology Undergraduate Advising Office is open to help students choose patterns of courses relevant to their interests, as well as to help students explore graduate school, professional school, and career options. Advising is done by an award-winning staff of academic professionals along with mentoring by faculty for students with research interests. Peer registration assistants are also available to help with the registration process.

Areas of Interest

Psychology is the scientific investigation of human and animal behavior. Psychologists study behavior in systems ranging from single cells to the individual person, from small groups of people to communities. Psychologists strive to describe behavior and to understand its underlying biological and social mechanisms. This enterprise, designed to better understand the human condition, accumulates knowledge that can help solve problems faced by individuals and by communities. Students that graduate with a major in psychology acquire a wide range of knowledge and useful skills that allows them to find employment in many different areas.

Areas of interest in psychology, and many of these are reflected in the similarly-titled concentrations that are available within the major:

- Behavioral Neuroscience is the study of the biological mechanisms underlying behavior. Biological psychologists generally are interested in the brain and the nervous system, in the endocrine system, and in other organismic processes.
- Clinical psychology is the study of problems encountered by individuals, groups, and families — especially problems involving psychopathology. Clinical psychologists are interested in the application of psychological knowledge and techniques for the alleviation of these problems.
- Community psychology is the study of the social processes and problems of groups, organizations, and neighborhoods, and the development and evaluation of progress for social change and social policy based on psychological understanding.
- Cognitive neuroscience is concerned with understanding the neuroscientific bases of cognition. Various methods are employed to assess the roles of different brain systems in psychological functions such as memory, attention, language, executive control, decision making, response processing, and emotion.
- Cognitive psychology is the study of basic behavioral and cognitive processes, including learning, memory, problem-solving, motivation, and language.
- Developmental psychology is the study of intellectual development, emerging personality, and the acquisition of language, as well as psychophysiological and social development processes as individuals develop from birth through old age.
- Engineering psychology is the study of human behavior in the context of interactions between humans and machines.
- Organizational psychology is the application of techniques of assessment, prediction, and intervention to areas of human resources in organizations, including, but not limited to, standard personnel selection and training, attitude assessments and interventions, and program evaluations.
- Personality psychology focuses on individual behavior. It is the study of ways to understand and describe an individual's behavior and to predict an individual's future behavior.
- Quantitative psychology specialists develop mathematical models of psychological processes and devise methods for quantitative representation and analysis of data about behavior. These are used in the study of differences between individuals in ability, personality, preferences, and other psychological phenomena.
- Social psychology is the study of attitudes, social perception and cognition, interpersonal relations, interpersonal interactions, and social and cultural factors affecting human behavior.
- Visual cognition and human performance is the study of attention, visual perception, visual memory, and human performance. Visual cognition research uses tools drawn from cognitive psychology and cognitive neuroscience to better understand how visual information is perceived and remembered.

Prescribing Psychologists

The states of Illinois, New Mexico and Louisiana now allow appropriately qualified psychologists to write prescriptions for psychotropic medications, if they have the necessary training. There are many other states that currently have pending prescriptive authority legislative initiatives. One component of becoming a prescribing psychologist is completion of the following undergraduate courses:

• 2-semester course sequence in chemistry or biochemistry with lab

• 1 semester microbiology with lab

• 1 semester general biology for science majors

• 1 semester physiology

• 1 semester human anatomy

• 1 semester physiology and anatomy

• Medical terminology (class or proficiency)

For more information on becoming a prescribing psychologist and a detailed list of which courses meet these requirements, please consult with one of the academic advisors in psychology.

Psychology: Behavioral Neuroscience, BSLAS

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Psychology, Behavioral Neuroscience Concentration

department website: http://www.psychology.illinois.edu/undergrad/
department faculty: Psychology Faculty (https://psychology.illinois.edu/directory/faculty/)
advising: Psychology advising (https://psychology.illinois.edu/academics/undergraduate-program/advising-services/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: psych-advising@illinois.edu

Behavioral Neuroscience is the study of the biological mechanisms underlying behavior. Biological psychologists generally are interested in the brain and the nervous system, in the endocrine system, and in other organismic processes.

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Psychology, Behavioral Neuroscience Concentration

Please see your academic advisor. A Major Plan of Study Form must be completed and submitted to the LAS Student Academic Affairs Office before the end of the fifth semester (60-75 hours).

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 32-36 hours of Psychology courses.
Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Select one introductory course from the following:		**4**
PSYC 100	Intro Psych	
PSYC 103	Intro Experimental Psych	
Statistics:		**3-5**
PSYC 235	Intro to Statistics (or equivalent)	
Select one foundation course from the following:		**3**
PSYC 204	Intro to Brain and Cognition	
PSYC 220	Images of Mind	
PSYC 224	Cognitive Psych	
PSYC 230	Perception & Sensory Processes	
PSYC 248	Learning and Memory	
Select two foundation courses from the following:		**6**
PSYC 201	Intro to Social Psych	
PSYC 207	Psychology of Prejudice and Discrimination	
PSYC 216	Child Psych	
PSYC 238	Psychopathology and Problems in Living	
PSYC 239	Community Psych	
PSYC 245	Industrial Org Psych	
PSYC 250	Psych of Personality	
Concentration core course:		**3**
PSYC 210	Behavioral Neuroscience	
Concentration research methods course:		**4**
PSYC 311	Behavioral Neuroscience Lab	
Select four elective courses from the following:		**12**
IB 329	Animal Behavior (Same as PSYC 329)	
PSYC 365	Stress, Trauma and Resilience	
PSYC 396	Intermediate Current Topics in Psychology [1]	
PSYC 408	Human Behavior Genetics	
PSYC 413	Advanced Neuropsychopharmacology	
PSYC 414	Brain, Learning, and Memory	
PSYC 417	Neuroscience of Eating & Drinking	
PSYC 432	Genes and Behavior	
PSYC 433	Evolutionary Neuroscience	
PSYC 496	Adv Current Topics in Psych [1]	
Total Hours		35

[1] *PSYC 396 & 496 seminars taught by faculty members in the Behavioral Neuroscience program area.*

Psychology: Clinical/Community Psychology, BSLAS

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Psychology, Clinical/Community Psychology Concentration

department website: http://www.psychology.illinois.edu/undergrad/
department faculty: Psychology Faculty (https://psychology.illinois.edu/directory/faculty/)
advising: Psychology advising (https://psychology.illinois.edu/academics/undergraduate-program/advising-services/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: psych-advising@illinois.edu

Clinical psychology is the study of problems encountered by individuals, groups, and families — especially problems involving psychopathology. Clinical psychologists are interested in the application of psychological knowledge and techniques for the alleviation of these problems.

Community psychology is the study of the social processes and problems of groups, organizations, and neighborhoods, and the development and evaluation of progress for social change and social policy based on psychological understanding.

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Psychology, Clinical/Community Psychology Concentration

Please see your academic advisor. A Major Plan of Study Form must be completed and submitted to the LAS Student Academic Affairs Office before the end of the fifth semester (60-75 hours).

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 32-36 hours of Psychology courses.
Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Select one introductory course from the following:		**4**
PSYC 100	Intro Psych	
PSYC 103	Intro Experimental Psych	
Statistics course:		**3-5**
PSYC 235	Intro to Statistics (or equivalent)	
Select two foundation courses from the following:		**6**
PSYC 204	Intro to Brain and Cognition	
PSYC 210	Behavioral Neuroscience	
PSYC 220	Images of Mind	
PSYC 224	Cognitive Psych	
PSYC 230	Perception & Sensory Processes	
PSYC 248	Learning and Memory	
Select one foundation course from the following:		**3**
PSYC 201	Intro to Social Psych	
PSYC 207	Psychology of Prejudice and Discrimination	
PSYC 216	Child Psych	
PSYC 245	Industrial Org Psych	
PSYC 250	Psych of Personality	
Select one concentration core course:		**3**
PSYC 238	Psychopathology and Problems in Living	
PSYC 239	Community Psych	
Select one concentration research methods course from the following		**4**
PSYC 332	Social Psych Methods Lab	
PSYC 333	Social Psych in Society Lab	
PSYC 363	Developmental Child Psych Lab	
PSYC 379	Clinical/Abnormal Psych Lab	
Select one course on race/ethnicity:		**3**
PSYC 312	Psychology of Race & Ethnicity	
PSYC 416	African American Psychology	
Select three elective courses from the following:		**9**
PSYC 238 or PSYC 239 if not taken to satisfy core course requirement		
PSYC 312 or PSYC 416 if not taken to satisfy the race/ethnicity course requirement		
PSYC 308	Psychology of Religion and Spirituality	
PSYC 324	Developmental Psychopathology	
PSYC 336	Topics in Clin/Comm Psych	
PSYC 340	Community Projects	
PSYC 341	Advanced Community Projects	
PSYC 365	Stress, Trauma and Resilience	
PSYC 402	Intro Clin Neuropsych	
PSYC 410	Hate Crimes	
PSYC 420	Theories of Psychotherapy	
Any PSYC 396 or PSYC 496 seminar taught by faculty members in the Clinical/Community Psychology Program area		
Total Hours		35

Psychology: Cognitive Neuroscience, BSLAS

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Psychology, Cognitive Neuroscience Concentration

department website: http://www.psychology.illinois.edu/undergrad/
department faculty: Psychology Faculty (https://psychology.illinois.edu/directory/faculty/)
advising: Psychology advising (https://psychology.illinois.edu/academics/undergraduate-program/advising-services/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: psych-advising@illinois.edu

Cognitive neuroscience is concerned with understanding the neuroscientific bases of cognition. Various methods are employed to assess the roles of different brain systems in psychological functions such as memory, attention, language, executive control, decision making, response processing, and emotion.
for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Psychology, Cognitive Neuroscience Concentration

Please see your academic advisor. A Major Plan of Study Form must be completed and submitted to the LAS Student Academic Affairs Office before the end of the fifth semester (60-75 hours).

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 32-36 hours of Psychology courses.
Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Select one introductory course from the following:		**4**
PSYC 100	Intro Psych	
PSYC 103	Intro Experimental Psych	
Statistics course:		**3-5**
PSYC 235	Intro to Statistics	
Select one foundation course from the following:		**3**
PSYC 210	Behavioral Neuroscience	

PSYC 224	Cognitive Psych	
PSYC 230	Perception & Sensory Processes	
PSYC 248	Learning and Memory	
Select two foundation courses from the following:		**6**
PSYC 201	Intro to Social Psych	
PSYC 207	Psychology of Prejudice and Discrimination	
PSYC 216	Child Psych	
PSYC 238	Psychopathology and Problems in Living	
PSYC 239	Community Psych	
PSYC 245	Industrial Org Psych	
PSYC 250	Psych of Personality	
Select one concentration core course:		**3**
PSYC 204	Intro to Brain and Cognition	
PSYC 220	Images of Mind	
Concentration research methods course:		**4**
PSYC 445	Cognitive Neuroscience Lab	
Select four elective courses from any of the following:		**12**
BCOG 100	Introduction to the Brain and Cognitive Science	
BCOG 301	Intelligence and the Brain	
PSYC 204	Intro to Brain and Cognition (if not chosen as the core course)	
PSYC 220	Images of Mind (if not chosen as the core course)	
PSYC 302	Applied Neuroscience	
PSYC 361	The Psychology of Aging	
PSYC 402	Intro Clin Neuropsych	
PSYC 403	Memory and Amnesia	
PSYC 404	Cognitive Neuroscience	
PSYC 421	Principles of Psychophysiology	
PSYC 427	Language and the Brain	
PSYC 433	Evolutionary Neuroscience	
PSYC 450	Cognitive Psychophysiology	
PSYC 451	Neurobio of Aging	
PSYC 453	Cog Neuroscience of Vision	
PSYC 396	Intermediate Current Topics in Psychology (taught by faculty members in the Cognitive Neuroscience program area)	
PSYC 496	Adv Current Topics in Psych (taught by faculty members in the Cognitive Neuroscience program area)	
Total Hours		**35**

Psychology: Cognitive Psychology, BSLAS

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Psychology, Cognitive Psychology Concentration

department website: http://www.psychology.illinois.edu/undergrad/
department faculty: Psychology Faculty (https://psychology.illinois.edu/directory/faculty/)
advising: Psychology advising (https://psychology.illinois.edu/academics/undergraduate-program/advising-services/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: psych-advising@illinois.edu

Cognitive Psychology is the study of basic behavioral and cognitive processes, including learning, memory, problem-solving, motivation, and language.

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Psychology, Cognitive Psychology Concentration

Please see your academic advisor. A Major Plan of Study Form must be completed and submitted to the LAS Student Academic Affairs Office before the end of the fifth semester (60-75 hours).

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 32-36 hours of Psychology courses.
Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Select one introductory course from the following:		**4**
PSYC 100	Intro Psych	
PSYC 103	Intro Experimental Psych	
Statistics course:		**3**
PSYC 235	Intro to Statistics (or equivalent)	
Select one foundation course from the following:		**3**
PSYC 204	Intro to Brain and Cognition	
PSYC 210	Behavioral Neuroscience	
PSYC 220	Images of Mind	
PSYC 230	Perception & Sensory Processes	
Select two foundation courses from the following:		**6**
PSYC 201	Intro to Social Psych	
PSYC 207	Psychology of Prejudice and Discrimination	
PSYC 216	Child Psych	
PSYC 238	Psychopathology and Problems in Living	
PSYC 239	Community Psych	
PSYC 245	Industrial Org Psych	
PSYC 250	Psych of Personality	
Select one concentration core course:		**3**
PSYC 224	Cognitive Psych	
PSYC 248	Learning and Memory	
Concentration research methods course:		**4**
PSYC 331	Cognitive Psych Lab	
Select four elective courses from the following:		**12**

BCOG 100	Introduction to the Brain and Cognitive Science
BCOG 200	Introduction to Programming for the Brain and Cognitive Sciences
BCOG 301	Intelligence and the Brain
PSYC 224 or PSYC 248 (if not taken to satisfy core course requirement)	
PSYC 321	Human Memory
PSYC 351	Thinking and Reasoning
PSYC 396	Intermediate Current Topics in Psychology (taught by faculty members in the Cognitive Psychology program area)
PSYC 425	Psych of Language
PSYC 427	Language and the Brain
PSYC 450	Cognitive Psychophysiology
PSYC 468	Psych and Law
PSYC 489	Neural Network Modeling Lab
PSYC 496	Adv Current Topics in Psych (taught by faculty members in the Cognitive Psychology program area)
Total Hours	35

Psychology: Developmental Psychology, BSLAS

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Psychology, Developmental Psychology Concentration

department website: http://www.psychology.illinois.edu/undergrad/
department faculty: Psychology Faculty (https://psychology.illinois.edu/directory/faculty/)
advising: Psychology advising (https://psychology.illinois.edu/academics/undergraduate-program/advising-services/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: psych-advising@illinois.edu

Developmental psychology is the study of intellectual development, emerging personality, and the acquisition of language, as well as psychophysiological and social development processes as individuals develop from birth through old age.

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Psychology, Developmental Psychology Concentration

Please see your academic advisor. A Major Plan of Study Form must be completed and submitted to the LAS Student Academic Affairs Office before the end of the fifth semester (60-75 hours).

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 32-36 hours of Psychology courses.
Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Select one introductory course from the following:		**4**
PSYC 100	Intro Psych	
PSYC 103	Intro Experimental Psych	
Statistics course:		**3**
PSYC 235	Intro to Statistics (or equivalent)	
Select three foundation courses from the following two groups including at least one from each group:		**9**
Select one or two foundation courses from the following group:		
PSYC 204	Intro to Brain and Cognition	
PSYC 210	Behavioral Neuroscience	
PSYC 220	Images of Mind	
PSYC 224	Cognitive Psych	
PSYC 230	Perception & Sensory Processes	
PSYC 248	Learning and Memory	
Select one or two foundation courses from the following group:		
PSYC 201	Intro to Social Psych	
PSYC 207	Psychology of Prejudice and Discrimination	
PSYC 238	Psychopathology and Problems in Living	
PSYC 239	Community Psych	
PSYC 245	Industrial Org Psych	
PSYC 250	Psych of Personality	
Concentration core course:		**3**
PSYC 216	Child Psych	
Concentration research methods course:		**4**
PSYC 363	Developmental Child Psych Lab	
Select four elective courses from the following:		**12**
PSYC 318	Psych of the Infant	
PSYC 320	The Teenage Years	
PSYC 322	Introduction to Intellectual Disability	
PSYC 324	Developmental Psychopathology	
PSYC 326	Development and Relationships	
PSYC 328	Psychology of Gender	
PSYC 336	Topics in Clin/Comm Psych (Stress & Resiliency in Childhood)	
PSYC 361	The Psychology of Aging	
PSYC 396	Intermediate Current Topics in Psychology (taught by faculty members in the Developmental Psychology Program area)	
PSYC 423	Language Acquisition	
PSYC 462	How Children Think	
PSYC 465	Personality and Soc Dev	

PSYC 496	Adv Current Topics in Psych (taught by faculty members in the Developmental Psychology program area)	
Total Hours		35

Psychology: Diversity Science, BSLAS

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Psychology, Diversity Science Concentration

department website: http://www.psychology.illinois.edu/undergrad/
department faculty: Psychology Faculty (https://psychology.illinois.edu/directory/faculty/)
advising: Psychology advising (https://psychology.illinois.edu/academics/undergraduate-program/advising-services/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: psych-advising@illinois.edu

Diversity Science - Study of psychological research focusing on prejudice, discrimination, race, ethnicity, gender, and other areas.

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Psychology, Diversity Science Concentration

Please see your academic advisor. A Major Plan of Study Form must be completed and submitted to the LAS Student Academic Affairs Office before the end of the fifth semester (60-75 hours).

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 32-36 hours of Psychology courses.
Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Select one introductory course from the following:		**4**
PSYC 100	Intro Psych	
PSYC 103	Intro Experimental Psych	
Statistics course:		**3-5**
PSYC 235	Intro to Statistics	
Select two foundation courses from the following:		**6**
PSYC 204	Intro to Brain and Cognition	
PSYC 210	Behavioral Neuroscience	
PSYC 220	Images of Mind	
PSYC 224	Cognitive Psych	
PSYC 230	Perception & Sensory Processes	
PSYC 248	Learning and Memory	
Select one foundation course from the following:		**3**
PSYC 201	Intro to Social Psych	
PSYC 216	Child Psych	
PSYC 238	Psychopathology and Problems in Living	
PSYC 239	Community Psych	
PSYC 245	Industrial Org Psych	
PSYC 250	Psych of Personality	
Concentration core course:		**3**
PSYC 207	Psychology of Prejudice and Discrimination	
Select a concentration research methods course from the following:		**4**
PSYC 332	Social Psych Methods Lab	
PSYC 333	Social Psych in Society Lab	
PSYC 379	Clinical/Abnormal Psych Lab	
Select four elective courses from the following:		**12**
PSYC 239	Community Psych (if not taken as the foundation course)	
PSYC 265	Power, Status, and Influence	
PSYC 308	Psychology of Religion and Spirituality	
PSYC 312	Psychology of Race & Ethnicity	
PSYC 322	Introduction to Intellectual Disability	
PSYC 327	Psychology of Human Sexuality	
PSYC 328	Psychology of Gender	
PSYC 353	Social Cognition	
PSYC 373	Culture & Psychology	
PSYC 410	Hate Crimes	
PSYC 416	African American Psychology	
PSYC 468	Psych and Law	
PSYC 396	Intermediate Current Topics in Psychology (approved for the concentration by the Psychology Department Diversity committee)	
PSYC 496	Adv Current Topics in Psych (approved for the concentration by the Psychology Department Diversity committee)	
Total Hours		**35**

Psychology: Intradisciplinary Psychology, BSLAS

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Psychology, Intradisciplinary Psychology Concentration

department website: http://www.psychology.illinois.edu/undergrad/
department faculty: Psychology Faculty (https://psychology.illinois.edu/directory/faculty/)
advising: Psychology advising (https://psychology.illinois.edu/academics/undergraduate-program/advising-services/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: psych-advising@illinois.edu

Intradisciplinary Psychology - Provides students an opportunity to design a curriculum that meets academic and professional interests.

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Psychology, Intradisciplinary Psychology Concentration

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 32-36 hours of Psychology courses.
Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Select one introductory course from the following:		**4**
PSYC 100	Intro Psych	
PSYC 103	Intro Experimental Psych	
Statistics course:		3
PSYC 235	Intro to Statistics (or equivalent)	
Select two foundation courses from the following:		**6**
PSYC 204	Intro to Brain and Cognition	
PSYC 210	Behavioral Neuroscience	
PSYC 220	Images of Mind	
PSYC 224	Cognitive Psych	
PSYC 230	Perception & Sensory Processes	
PSYC 248	Learning and Memory	
Select two foundation courses from the following:		**6**
PSYC 201	Intro to Social Psych	
PSYC 207	Psychology of Prejudice and Discrimination	
PSYC 216	Child Psych	
PSYC 238	Psychopathology and Problems in Living	
PSYC 239	Community Psych	
PSYC 245	Industrial Org Psych	
PSYC 250	Psych of Personality	
Select one research methods courses from the following:		**3-4**
PSYC 311	Behavioral Neuroscience Lab	
PSYC 331	Cognitive Psych Lab	
PSYC 332	Social Psych Methods Lab	
PSYC 333	Social Psych in Society Lab	
PSYC 334	Perception Lab	
PSYC 350	Personality Lab	
PSYC 363	Developmental Child Psych Lab	
PSYC 379	Clinical/Abnormal Psych Lab	
PSYC 437	Advanced Psychology Lab	
PSYC 445	Cognitive Neuroscience Lab	
PSYC 489	Neural Network Modeling Lab	
PSYC 490	Measurement & Test Develop Lab	
Select any 300- or 400-level Psychology elective courses		**9-10**
Total Hours		32

Psychology: Organizational Psychology, BSLAS

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Psychology, Organizational Psychology Concentration

department website: http://www.psychology.illinois.edu/undergrad/
department faculty: Psychology Faculty (https://psychology.illinois.edu/directory/faculty/)
advising: Psychology advising (https://psychology.illinois.edu/academics/undergraduate-program/advising-services/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: psych-advising@illinois.edu

Organizational psychology is the application of techniques of assessment, prediction, and intervention to areas of human resources in organizations, including, but not limited to, standard personnel selection and training, attitude assessments and interventions, and program evaluations.

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Psychology, Organizational Psychology Concentration

Please see your academic advisor. A Major Plan of Study Form must be completed and submitted to the LAS Student Academic Affairs Office before the end of the fifth semester (60-75 hours).

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 32-36 hours of Psychology courses.
Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Select one introductory course from the following:		**4**
PSYC 100	Intro Psych	
PSYC 103	Intro Experimental Psych	
Statistics course:		**3-5**
PSYC 235	Intro to Statistics (or equivalent)	
Select two foundation courses from the following:		**6**
PSYC 204	Intro to Brain and Cognition	
PSYC 210	Behavioral Neuroscience	
PSYC 220	Images of Mind	
PSYC 224	Cognitive Psych	
PSYC 230	Perception & Sensory Processes	
PSYC 248	Learning and Memory	
Select two foundation courses from the following:		**6**
PSYC 201	Intro to Social Psych	
PSYC 207	Psychology of Prejudice and Discrimination	
PSYC 216	Child Psych	
PSYC 238	Psychopathology and Problems in Living	
PSYC 239	Community Psych	
PSYC 250	Psych of Personality	
Concentration core course:		**3**
PSYC 245	Industrial Org Psych	
Select two concentration research methods courses:		**8**
PSYC 332	Social Psych Methods Lab	

PSYC 333	Social Psych in Society Lab	
PSYC 350	Personality Lab	
PSYC 490	Measurement & Test Develop Lab	
Select two elective courses from any of the following:		**6**
PSYC 455	Organizational Psych	
PSYC 475	Personnel Psych	
PSYC 396	Intermediate Current Topics in Psychology (taught by faculty members in the Organizational Psychology program area)	
PSYC 496	Adv Current Topics in Psych (taught by faculty members in the Organizational Psychology program area)	
Total Hours		36

Psychology: Personality Psychology, BSLAS

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Psychology, Personality Psychology Concentration

department website: http://www.psychology.illinois.edu/undergrad/
department faculty: Psychology Faculty (https://psychology.illinois.edu/directory/faculty/)
advising: Psychology advising (https://psychology.illinois.edu/academics/undergraduate-program/advising-services/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: psych-advising@illinois.edu

Personality psychology focuses on individual behavior. It is the study of ways to understand and describe an individual's behavior and to predict an individual's future behavior.

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Psychology, Personality Psychology Concentration

Please see your academic advisor. A Major Plan of Study Form must be completed and submitted to the LAS Student Academic Affairs Office before the end of the fifth semester (60-75 hours).

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 32-36 hours of Psychology courses.
Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Select one foundation course from the following:		**4**
PSYC 100	Intro Psych	
PSYC 103	Intro Experimental Psych	
Statistics course:		**3**
PSYC 235	Intro to Statistics (or equivalent)	
Select two foundation courses from the following:		**6**
PSYC 204	Intro to Brain and Cognition	
PSYC 210	Behavioral Neuroscience	
PSYC 220	Images of Mind	
PSYC 224	Cognitive Psych	
PSYC 230	Perception & Sensory Processes	
PSYC 248	Learning and Memory	
Select one foundation course from the following:		**3**
PSYC 207	Psychology of Prejudice and Discrimination	
PSYC 216	Child Psych	
PSYC 238	Psychopathology and Problems in Living	
PSYC 239	Community Psych	
PSYC 245	Industrial Org Psych	
Concentration core course:		**3**
PSYC 250	Psych of Personality	
Concentration research methods course:		**4**
PSYC 350	Personality Lab	
Select four elective courses from the following:		**12**
PSYC 201	Intro to Social Psych	
PSYC 265	Power, Status, and Influence	
PSYC 306	Psychology of Morality	
PSYC 327	Psychology of Human Sexuality	
PSYC 328	Psychology of Gender	
PSYC 332	Social Psych Methods Lab	
PSYC 333	Social Psych in Society Lab	
PSYC 352	Attitude Theory and Change	
PSYC 353	Social Cognition	
PSYC 361	The Psychology of Aging	
PSYC 365	Stress, Trauma and Resilience	
PSYC 373	Culture & Psychology	
PSYC 396	Intermediate Current Topics in Psychology (if taught by faculty members in the Personality Psychology program area)	
PSYC 408	Human Behavior Genetics	
PSYC 465	Personality and Soc Dev	
PSYC 496	Adv Current Topics in Psych (if taught by faculty members in the Personality Psychology program area)	
Total Hours		35

Psychology: Social Psychology, BSLAS

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Psychology, Social Psychology Concentration

department website: http://www.psychology.illinois.edu/undergrad/
department faculty: Psychology Faculty (https://psychology.illinois.edu/directory/faculty/)
advising: Psychology advising (https://psychology.illinois.edu/academics/undergraduate-program/advising-services/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: psych-advising@illinois.edu

Social psychology is the study of attitudes, social perception and cognition, interpersonal relations, interpersonal interactions, and social and cultural factors affecting human behavior.

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Psychology, Social Psychology Concentration

Please see your academic advisor. A Major Plan of Study Form must be completed and submitted to the LAS Student Academic Affairs Office before the end of the fifth semester (60-75 hours).

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 32-36 hours of Psychology courses.
Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Select one introductory course from the following:		**4**
PSYC 100	Intro Psych	
PSYC 103	Intro Experimental Psych	
Statistics course:		**3**
PSYC 235	Intro to Statistics (or equivalent)	
Select two foundation courses from the following:		**6**
PSYC 204	Intro to Brain and Cognition	
PSYC 210	Behavioral Neuroscience	
PSYC 220	Images of Mind	
PSYC 224	Cognitive Psych	
PSYC 230	Perception & Sensory Processes	
PSYC 248	Learning and Memory	
Select one foundation course from the following:		**3**
PSYC 207	Psychology of Prejudice and Discrimination	
PSYC 216	Child Psych	
PSYC 238	Psychopathology and Problems in Living	
PSYC 239	Community Psych	
PSYC 245	Industrial Org Psych	
Concentration core course:		**3**
PSYC 201	Intro to Social Psych	
Select a concentration research methods course:		**4**
PSYC 332	Social Psych Methods Lab	
PSYC 333	Social Psych in Society Lab	
Select four elective courses from the following:		**12**
PSYC 250	Psych of Personality	
PSYC 265	Power, Status, and Influence	
PSYC 306	Psychology of Morality	
PSYC 327	Psychology of Human Sexuality	
PSYC 328	Psychology of Gender	
PSYC 332	Social Psych Methods Lab (if not chosen as the research methods course)	
PSYC 333	Social Psych in Society Lab (if not chosen as the research methods course)	
PSYC 352	Attitude Theory and Change	
PSYC 353	Social Cognition	
PSYC 361	The Psychology of Aging	
PSYC 365	Stress, Trauma and Resilience	
PSYC 373	Culture & Psychology	
PSYC 396	Intermediate Current Topics in Psychology (if taught by faculty members in the Social Psychology program area)	
PSYC 408	Human Behavior Genetics	
PSYC 465	Personality and Soc Dev	
PSYC 468	Psych and Law	
PSYC 496	Adv Current Topics in Psych (if taught by faculty members in the Social Psychology program area)	
Total Hours		35

Learning Outcomes: Psychology, BSLAS

Learning outcomes for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Psychology

The student learning outcomes are adapted from the American Psychological Association's (APA) "Guidelines for the Undergraduate Psychology Major" (2013). These guidelines consist of general learning outcomes along with specific indicators that can be assessed. Two sets of indicators are provided by the APA depending on whether a student has completed just the foundational courses (100# and 200# level classes) or is finishing the elective courses (300# and 400# level classes) necessary for each concentration within the Psychology major. The four learning outcomes that we will be evaluating are:

1. Students will demonstrate fundamental knowledge and comprehension of the major concepts, theoretical perspectives, historical trends, and empirical findings to discuss how psychological principles apply to behavioral phenomena. This includes 1.1) describing key concepts, principles and overarching themes, 1.2) developing a working knowledge of the different content or program areas in psychology, and 1.3) describing the application of psychology to everyday life.
2. Students will develop scientific reasoning and problem solving skills, including effective research methods. This includes 2.1) using scientific reasoning to interpret psychological phenomena; 2.2) demonstrating psychology information literacy; 2.3) engaging in innovative and integrative thinking and problem solving; 2.4) interpreting, designing, and conducting basic psychological research; and 2.5) incorporating sociocultural factors in scientific inquiry when appropriate.
3. Students will develop ethically and socially responsible behaviors for professional and personal settings in a landscape that involves increasing diversity. This goal encompasses 3.1) applying ethical standards to evaluate psychological science and practice; 3.2) building and enhancing interpersonal relationships; and 3.3) adopting values that build community at local, national, and global levels.
4. Students will be prepared to apply psychology#specific content and skills, effective self-reflection, project#management skills, teamwork skills, and career preparation to optimize their competitiveness for securing places in a graduate school, professional school, or in the workforce. For example, students should be able to 4.1) apply

psychological content and skills to career goals; 4.2) demonstrate project#management skills and teamwork capacity; and 4.3) develop meaningful professional direction for life after graduation.

Recreation, Sport & Tourism, BS

for the degree of Bachelor of Science Major in Recreation, Sport & Tourism

department website: http://rst.illinois.edu/
department faculty: Recreation, Sport, & Tourism Faculty (http://rst.illinois.edu/faculty/)
college catalog page: Applied Health Sciences (http://catalog.illinois.edu/schools/ahs/academic-units/)
college website: http://ahs.illinois.edu/

The Recreation, Sport & Tourism, BS degree program includes a set of three concentrations, of which a student must complete at least one:

Recreation Management Concentration (p. 369)

Sports Management Concentration (p. 370)

Tourism Management Concentration (p. 371)

The Department of Recreation, Sport and Tourism (RST) originated at the University of Illinois in 1940. Today, this program continues to rank nationally among the top three in the field, and takes pride in producing a large number of exceptional professionals in the field. The Department of Recreation, Sport and Tourism offers a bachelor of science degree with three areas of concentration: recreation management, sport management, and tourism management. The curriculum prepares students to design, manage, and deliver RST services to a variety of populations in diverse settings and provides a firm foundation from which students may pursue graduate studies. A broad general education is emphasized and complemented with a core of professional courses. Beyond a strong core integrating theory, management, and research, the program allows students to focus on a major market segment within the RST field by choosing an area of concentration. A total of 128 hours is needed for graduation. For further information, contact the Department of Recreation, Sport and Tourism, 219 Huff Hall, 1206 S. Fourth Street, Champaign, IL 61820, (217) 333-4410.

Internship Program

All students in the Department of Recreation, Sport and Tourism must satisfactorily complete the Internship Program prior to graduation. The program is designed to augment formal classroom instruction with active experiential learning under the guidance of a university and an agency-based supervisor.

The program consists of two courses (RST 480 and RST 485). Students register for RST 480 after completing a series of required RST courses. During this semester, students make final arrangements for completing RST 485 the following semester.

The RST 485 Internship is taken after the student satisfactorily completes all required RST course work, including RST 480. RST 485 is taken in agencies that are approved by the department and contracted for this program. Since a limited number of assignments are available in the campus area, most students look forward to the opportunity of an off-campus assignment. Students have been placed across the United States and even abroad.

Recreation, Sport & Tourism: Recreation Management, BS

for the degree of Bachelor of Science Major in Recreation, Sport & Tourism, Recreation Management Concentration

department website: http://rst.illinois.edu/
department faculty: Recreation, Sport, & Tourism Faculty (http://rst.illinois.edu/faculty/)
college catalog page: Applied Health Sciences (http://catalog.illinois.edu/schools/ahs/academic-units/)
college website: http://ahs.illinois.edu/

Summary of Degree Requirements

Code	Title	Hours
General Education		36-42
Recreation, Sport and Tourism Core Courses		39
Concentration Requirements		9
Electives (12 of which are restricted electives)		28-32
Experiential Education		13
Minimum Total Hours		**128**

for the degree of Bachelor of Science Major in Recreation, Sport & Tourism, Recreation Management Concentration

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**

Code	Title	Hours
General Education Requirements		**36-42**
Composition 1 (RHET 105) and Communication (CMN 101); or CMN 111 and CMN 112		6-7
Advanced Composition (RST 410 fulfills requirement)		3
Quantitative Reasoning I (from approved campus list)		3
Humanities and the Arts (from approved campus list)		6
Quantitative Reasoning II (RST 370 fulfills this requirement)		3
Social Science (RST 100 and RST 335 fulfill this requirement)		3
Social and Behavioral Science (RST 120 fulfills this requirement)		3
Natural Sciences and Technology (from approved campus list)		6
Foreign Language: Completion through the third level of the same language in high school or college		4
Cultural Studies		9
One course from Non-Western Cultures (from approved campus list)		
One course from U.S. Minority Cultures (RST 230 fulfills this requirement)		
One course from Western Cultures (RST 242 & RST 335 fulfill this requirement)		
Core Courses		**39**

RST 100	Recreation, Sport, and Tourism in Modern Society	3
RST 101	Orientation to Recreation, Sport and Tourism	1
RST 200	Leadership in Recreation, Sport and Tourism	2
RST 210	Management in Recreation, Sport and Tourism	3
RST 240	Financial Resource Management in Recreation, Sport and Tourism	3
RST 255	Ethical Issues in Recreation, Sport and Tourism	2
RST 325	Marketing in Recreation, Sport and Tourism	3
RST 340	Facility Management in Recreation, Sport and Tourism	3
RST 360	Communication in Recreation, Sport & Tourism	3
RST 370	Research Methods & Analysis	3
RST 410	Strategic Thinking in Recreation, Sport and Tourism	3
RST 429	Contemporary Issues in Recreation, Sport and Tourism	4
RST 460	Event Management in Recreation, Sport and Tourism	3
RST 465	Event Implementation and Evaluation in Recreation, Sport and Tourism	3
Electives		**28-32**
Restricted Electives (12 hours): Departmental courses not required in the core or counted toward concentration requirement.		
Free Electives (16-20 hours): Any courses not counted toward core requirements, concentration requirements, or restricted electives.		
Experiential Education		**13**
RST 480	Orientation to Internship (1 hour)	
RST 485	Internship (12 hours)	
Concentration required		**9**
Total Hours		**128**

Code	Title	Hours
Recreation Management Concentration		
RST 120	Parks, Recreation, and Environments	3
RST 317	Designing Parks and Recreation Experiences	3
RST 441	Community Planning and Engagement	3
Total Concentration Hours		**9**

Recreation, Sport & Tourism: Sport Management, BS

for the degree of Bachelor of Science Major in Recreation, Sport & Tourism, Sport Management Concentration

department website: http://rst.illinois.edu/
department faculty: Recreation, Sport, & Tourism Faculty (http://rst.illinois.edu/faculty/)
college catalog page: Applied Health Sciences (http://catalog.illinois.edu/schools/ahs/academic-units/)
college website: http://ahs.illinois.edu/

Summary of Degree Requirements

Code	Title	Hours
General Education		36-42
Recreation, Sport and Tourism Core Courses		39
Concentration Requirements		9
Electives (12 of which are restricted electives)		28-32
Experiential Education		13
Minimum Total Hours		**128**

for the degree of Bachelor of Science Major in Recreation, Sport & Tourism, Sport Management Concentration

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**

Code	Title	Hours
General Education Requirements		**36-42**
Composition 1 (RHET 105) and Communication (CMN 101); or CMN 111 and CMN 112		6-7
Advanced Composition (RST 410 fulfills requirement)		3
Quantitative Reasoning I (from approved campus list)		3
Humanities and the Arts (from approved campus list)		6
Quantitative Reasoning II (RST 370 fulfills this requirement)		3
Social Science (RST 100 and RST 335 fulfill this requirement)		3
Social and Behavioral Science (RST 120 fulfills this requirement)		3
Natural Sciences and Technology (from approved campus list)		6
Foreign Language: Completion through the third level of the same language in high school or college		4
Cultural Studies		9
One course from Non-Western Cultures (from approved campus list)		
One course from U.S. Minority Cultures (RST 230 fulfills this requirement)		
One course from Western Cultures (RST 242 & RST 335 fulfill this requirement)		
Core Courses		**39**
RST 100	Recreation, Sport, and Tourism in Modern Society	3
RST 101	Orientation to Recreation, Sport and Tourism	1
RST 200	Leadership in Recreation, Sport and Tourism	2
RST 210	Management in Recreation, Sport and Tourism	3
RST 240	Financial Resource Management in Recreation, Sport and Tourism	3

RST 255	Ethical Issues in Recreation, Sport and Tourism	2
RST 325	Marketing in Recreation, Sport and Tourism	3
RST 340	Facility Management in Recreation, Sport and Tourism	3
RST 360	Communication in Recreation, Sport & Tourism	3
RST 370	Research Methods & Analysis	3
RST 410	Strategic Thinking in Recreation, Sport and Tourism	3
RST 429	Contemporary Issues in Recreation, Sport and Tourism	4
RST 460	Event Management in Recreation, Sport and Tourism	3
RST 465	Event Implementation and Evaluation in Recreation, Sport and Tourism	3
Electives		**28-32**
Restricted Electives (12 hours): Departmental courses not required in the core or counted toward concentration requirement.		
Free Electives (16-20 hours): Any courses not counted toward core requirements, concentration requirements, or restricted electives.		
Experiential Education		**13**
RST 480	Orientation to Internship (1 hour)	
RST 485	Internship (12 hours)	
Concentration required		**9**
Total Hours		**128**

Sport Management Concentration Requirements

Code	Title	Hours
RST 130	Foundations of Sport Mgt	3
RST 354	Legal Aspects of Sport	3
RST 430	Sport & Development	3
Concentration Requirements		**9**

Recreation, Sport & Tourism: Tourism Management, BS

for the degree of Bachelor of Science Major in Recreation, Sport & Tourism, Tourism Concentration

department website: http://rst.illinois.edu/
department faculty: Recreation, Sport, & Tourism Faculty (http://rst.illinois.edu/faculty/)
college catalog page: Applied Health Sciences (http://catalog.illinois.edu/schools/ahs/academic-units/)
college website: http://ahs.illinois.edu/

Summary of Degree Requirements

Code	Title	Hours
General Education		36-42
Recreation, Sport and Tourism Core Courses		39
Concentration Requirements		9
Electives (12 of which are restricted electives)		28-32
Experiential Education		13
Minimum Total Hours		**128**

for the degree of Bachelor of Science Major in Recreation, Sport & Tourism, Tourism Management Concentration

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**

Code	Title	Hours
General Education Requirements		**36-42**
Composition 1 (RHET 105) and Communication (CMN 101); or CMN 111 and CMN 112		6-7
Advanced Composition (RST 410 fulfills requirement)		3
Quantitative Reasoning I (from approved campus list)		3
Humanities and the Arts (from approved campus list)		6
Quantitative Reasoning II (RST 370 fulfills this requirement)		3
Social Science (RST 100 and RST 335 fulfill this requirement)		3
Social and Behavioral Science (RST 120 fulfills this requirement)		3
Natural Sciences and Technology (from approved campus list)		6
Foreign Language: Completion through the third level of the same language in high school or college		4
Cultural Studies		9
One course from Non-Western Cultures (from approved campus list)		
One course from U.S. Minority Cultures (RST 230 fulfills this requirement)		
One course from Western Cultures (RST 242 & RST 335 fulfill this requirement)		
Core Courses		**39**
RST 100	Recreation, Sport, and Tourism in Modern Society	3
RST 101	Orientation to Recreation, Sport and Tourism	1
RST 200	Leadership in Recreation, Sport and Tourism	2
RST 210	Management in Recreation, Sport and Tourism	3
RST 240	Financial Resource Management in Recreation, Sport and Tourism	3
RST 255	Ethical Issues in Recreation, Sport and Tourism	2
RST 325	Marketing in Recreation, Sport and Tourism	3
RST 340	Facility Management in Recreation, Sport and Tourism	3
RST 360	Communication in Recreation, Sport & Tourism	3
RST 370	Research Methods & Analysis	3
RST 410	Strategic Thinking in Recreation, Sport and Tourism	3
RST 429	Contemporary Issues in Recreation, Sport and Tourism	4

RST 460	Event Management in Recreation, Sport and Tourism	3
RST 465	Event Implementation and Evaluation in Recreation, Sport and Tourism	3
Electives		**28-32**
Restricted Electives (12 hours): Departmental courses not required in the core or counted toward concentration requirement.		
Free Electives (16-20 hours): Any courses not counted toward core requirements, concentration requirements, or restricted electives.		
Experiential Education		**13**
RST 480	Orientation to Internship (1 hour)	
RST 485	Internship (12 hours)	
Concentration required		**9**
Total Hours		**128**

Tourism Management Concentration Requirements

Code	Title	Hours
RST 150	Foundations of Tourism	3
RST 350	Tourism and Culture	3
RST 450	Tourism Planning & Development	3
Total Concentration Hours		**9**

Learning Outcomes: Recreation, Sport & Tourism, BS

Learning outcomes for the degree of Bachelor of Science Major in Recreation, Sport & Tourism

Students graduating with the B.S. in Recreation, Sport & Tourism should be able to:

1. Communicate effectively in writing and in oral presentations about issues in recreation, sport and tourism.
2. Demonstrate a basic understanding of the history and theoretical underpinnings of recreation, sport and tourism in modern society.
3. Demonstrate basic knowledge about various dimensions of diversity, and the impact these dimensions have on service delivery recreation, sport and tourism organizations.
4. Demonstrate a basic understanding of the essential management functions necessary to deliver and manage services in recreation, sport and tourism organizations.
5. Demonstrate an ability to apply knowledge of basic management principles to professional practice.
6. Demonstrate the ability to design, implement, and evaluate services in recreation, sport and tourism venues.
7. Identify basic research methodologies at a level sufficient to collect, analyze, apply, and critique applied research data.

Religion, BALAS

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Religion

department website: https://www.religion.illinois.edu/
department faculty: Religion Faculty (https://www.religion.illinois.edu/directory/faculty/)
advising: Religion advising (https://las.illinois.edu/academics/advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: religion@illinois.edu

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Religion

Each student must complete two courses in any of the following: Hinduism, Buddhism, Chinese and Japanese Religions, or indigenous American religious practices, chosen from a list maintained in the departmental adviser's office. And each student must complete two courses in any of the following: Judaism, Christianity, Islam, or religious practices of the ancient Near East, chosen from a list maintained in the departmental adviser's office.

Additionally, each student will establish a primary and secondary field of study. For the primary area of study, a student must complete a minimum of three courses (nine credit hours), and for the secondary area two courses (six credit hours) are required. An individual course may not be counted twice toward fulfilling the requirements of the primary and secondary areas of interest. (Students are encouraged to complete more than the minimum of three courses in the primary area of study.)

The following are the areas of study: Buddhism, Christianity, Hinduism, Islam, Judaism, Philosophy of Religion, Religion in America, or individually designed area of study chosen with the approval of the departmental adviser.

Students considering graduate study in Religion are urged to consult with professors on the necessary preparation for graduate study in their area of interest.

Language Requirements

The major in Religion does not require any language study beyond meeting the University's general education language requirement. However, majors are strongly encouraged to learn the languages relevant to their primary field of study and to begin that course of study as soon as possible. Please consult with the Director of Undergraduate Studies in Religion or a professor in your area of interest about appropriate language study.

Capstone Experience

Research paper for one 400-level course in Religion (REL): Each major must make special arrangements with a professor teaching a 400-level REL course to conduct a significant research project that results in a research paper of 20 pages (minimum). The goal of this requirement is to ensure that each Religion major has conducted a significant research project. REL 493 can be used to satisfy this requirement.

Departmental distinction

To be considered for departmental distinction a student must have an overall GPA of at least 3.5. Distinction is granted on the basis of a senior thesis written in the context of REL 493. The level of distinction is based on evaluation of the thesis.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: A minimum of 30 hours of coursework is required for the major. This includes (a)REL 230 **or** REL 231**, and (b) completing a Capstone course. At least 15 of the 30 hours must be at the 300 or 400 level, and no more than 9 hours may be at the 100 level.**
Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Minimum of 30 hours of Religion courses including:		
PHIL/REL 230	Philosophy of Religion Intro	3
or REL 231	Religion and Philosophy	
Distribution Requirement: Courses taken must include:		12
(a) Two courses in the following: Judaism, Christianity, Islam, or religious practices of the ancient Near East, chosen from a list maintained in the departmental adviser's office and		
(b) Two courses in the following: Hinduism, Buddhism, Chinese and Japanese Religions, or indigenous American religious practices, chosen from a list maintained in the departmental adviser's office.		
Three courses in a primary area of study [1]		9
Two courses in a secondary area of study [1]		6
Capstone Experience: a 400-level REL course in which a research project is undertaken and a 20 page research paper is written. This course can be REL 493 and can also be used to fulfill part of the distribution or primary or secondary area of study requirement.		3

[1] *Areas of study include: Buddhism, Christianity, Hinduism, Islam, Judaism, Philosophy of Religion, Religion in America, or an individually designed area of study approved by the departmental advisor. Courses chosen to fulfill the primary area of study cannot also be used to fulfill the secondary area of study.*

Learning Outcomes: Religion, BALAS

Learning Outcomes for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Religion

1. Students will be able to understand and explain how global religious traditions reflect the social contexts in which they emerged, and in turn how the traditions have affected and continue to affect those societies;
2. Students will be able to analyze, and interpret (in both written and oral communication) the relationship between religious traditions and other forms of human cultural and social activity, including languages, literature, arts, political and social movements;
3. Students will be able to appreciate the diversity of global religious traditions and express that appreciation in activities and experiences meaningful to them.
4. Students will be able to develop sound and well-formed written arguments on matters of interest to them that respond insightfully to scholarship significant to their field of study.
5. Students will be able critically to assess and evaluate theories, arguments, and positions that have shaped the fields of the study of religion and individual global traditions.

Russian, East European, & Eurasian Studies, BALAS

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Russian, East European, & Eurasian Studies

department website: https://reeec.illinois.edu/
department faculty: Russian, East European, & Eurasian Studies (https://reeec.illinois.edu/people/groups/faculty/) Faculty (https://reeec.illinois.edu/people/groups/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: reec@illinois.edu

The Russian, East European, and Eurasian Center offers an interdisciplinary major and minor in Russian, East European, and Eurasian Studies (REEES). These programs involve students in the study of an important and complex world area in a manner that draws together the approaches of different disciplines, while at the same time building knowledge in a single discipline. A student will construct an individual program of study, depending on the student's interests and career goals, in consultation with the undergraduate advisor of the Center.

The major in Russian, East European, and Eurasian Studies consists of three components: 1) language study (Russian, Polish, Czech, Ukrainian, Bosnian-Croatian-Serbian, Turkish, and more); 2) a multidisciplinary area studies focus; and 3) concentration in a single discipline. Language study can be in Russian or in any of the other languages of the region offered at the University. Students also take courses in a variety of disciplines (history, sociology, political science) and develop a broad expertise in the history, politics, and culture of the region that includes Russia, but also many other countries, from the Czech Republic to Estonia to Uzbekistan. In addition, the concentration in a single discipline provides students with deep knowledge of a specific field that can qualify them for graduate or professional study. Many students also use this concentration to double major. With this program, the REEES major provides students with an interdisciplinary focus on issues critical to the region and foundational language training necessary for professional specialization in the area.

Students often go on to careers in government service (foreign service, FBI, CIA) or to work at NGOs (environment, human rights, and other international careers) in addition to publishing, editing, writing, translation, international business, law, teaching, and research.

REEES is one of two "Russian" majors (and minors) at the University of Illinois. What is the difference between them and which is the right one for you?

The REEES major has a current affairs focus and multidisciplinary area studies that develops students' skill sets in the humanities, social sciences, and other fields. The major in Slavic Studies emphasizes the study of language and literature, and students develop intensive cultural literacy and communication skills through humanities-oriented training. Many Slavic Studies majors go on to careers in writing and editing, media, or work with international cultural foundations and organizations. Both

majors are excellent preparation for law school or graduate school and careers in teaching or research.

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Russian, East European, & Eurasian Studies

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A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office before the end of the fifth semester (60-75 hours). Please see your advisor.

Departmental distinction: To qualify for departmental distinction, a student must have at least a 3.5 GPA in the courses taken for Component 2 (see below) and must complete a senior thesis in consultation with a faculty member affiliated with the center. Students who wish to qualify for distinction in this major should consult with the center director at the beginning of the junior year or earlier to prepare a suitable plan.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 48 hours. Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Component 1: Completion of three years of college-level study of Russian or another language of Eastern Europe or Eurasia, or equivalent proficiency. This stipulation may be partially satisfied through fulfillment of the LAS two-year language requirement if a regionally appropriate language is chosen for that purpose. A third year of study, however, is demanded beyond this. If a non-Russian, East European or Eurasian language is selected to meet the LAS requirement, then the three years of Russian, East European or Eurasian language study specified here must be taken in addition to those completed to satisfy the LAS requirement. Only the hours earned in the third, most advanced year of language study are calculated into the degree here, as these represent proficiency beyond that required by all LAS BA degree programs and as the first two years of language study are a prerequisite for the third.		6
Component 2: Russian and East European studies core courses, including:		24
REES 200	Intro to Russia and Eurasia	
REES 201	Introduction to Eastern Europe	
REES 495	Senior Seminar	
15 hours: Choose one course from each of three departments other than the department used for component 3 below. The courses comprising the remaining hours of component 2 may be from the same discipline as those under component 3; however, a course may be counted toward the total for only one component. Language courses that concentrate on the basic skills of speaking, listening, reading, and writing cannot be counted as part of this component.		
Component 3: Courses in a single discipline. Among those disciplines that are most commonly used with this specialization are anthropology, economics, geography, history, political science, Russian language and literature, and sociology. Among disciplines also used are business administration, comparative literature, education, English, fine arts, French, German, journalism, linguistics, mathematics, music, philosophy, psychology, and various natural sciences. Others are permitted. Consult your advisor. [2]		18

[1] *The Center maintains a list of applicable courses on its web site.*

[2] *If the study of a language is used for this component, 20 hours must be taken beyond the requirement of 6 additional hours outlined under component 1 above.*

Learning Outcomes: Russian, East European, & Eurasian Studies, BALAS

Learning Outcomes for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Russian, East European, & Eurasian Studies

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1. **Global Competence and Intercultural Skills**
   - Definition: REEES majors will engage and build productive relationships, founded in proficient language skills, with communities, organizations, and individuals across cultures, both at home and abroad.
2. **Interdisciplinary Perspective**
   - Definition: REEES majors will recognize and mobilize multiple types of data and forms of analysis, drawn from paradigms in the humanities and social sciences, to propose solutions to complex problems.
3. **Analytical Reasoning and Broad Knowledge Base**
   - Definition: REEES majors will critically analyze and evaluate interpretations of social, cultural, political, and economic phenomena, drawing on a broad knowledge base and research experience.

Slavic Studies, BALAS

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Slavic Studies

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department website: http://www.slavic.illinois.edu
department faculty: Slavic Faculty (http://www.slavic.illinois.edu/directory/faculty/)
overview of college admissions & requirements: LAS admissions information (https://www.las.illinois.edu/prospective/)
college website: https://las.illinois.edu/
email: slavic@illinois.edu

Students must select one concentration in consultation with an academic advisor. Students in all concentrations must complete a) 6 hours of language beyond the second year, and b) 24 hours of literature and culture courses.

- Major in Slavic Studies, Czech Studies concentration (p. 375)
- Major in Slavic Studies, Polish Studies Concentration (p. 375)
- Major in Slavic Studies, Russian Language, Literature, & Culture Concentration (p. 376)

- Major in Slavic Studies, South Slavic Studies Concentration (p. 377)
- Major in Slavic Studies, Ukrainian Studies Concentration (p. 378)

Unlike the major in Russian, East European, and Eurasian Studies, which has a multidisciplinary area studies and current affairs focus, the major in Slavic Studies emphasizes the study of language, literature, and culture in their historical context. Students develop intensive cultural literacy and communication skills through humanities-oriented training, and many go on to careers in writing and editing, media, or work with international cultural foundations and organizations. The major is an excellent preparation for law school, business school, or other graduate study, as well as careers in the N.G.O. world, teaching, or research.

5 Year BALAS/MA in Slavic Studies (Russian Language, Literature & Culture or Polish Studies concentrations) and European Union Studies

The Department of Slavic Languages & Literatures with the European Union Center offers a 5-year BALAS/MA degree program in Slavic Studies (Russian Language, Literature & Culture or Polish Studies concentrations) and the Master of Arts in European Union Studies (MAEUS). In order to be admitted to this degree program, students apply through a joint application process to their BALAS -granting program and the European Union Center during their third year of studies. Requirements for this degree program are identical to those for the stand-alone BALAS and for the stand-alone MAEUS. Students will receive both degrees when the requirements are met for the degrees; the BALAS and MA degrees will be conferred separately and independently. More detailed information may be obtained from department and EUC offices.

Slavic Studies: Czech Studies, BALAS

for the degree of Bachelor of Arts in Liberal Arts and Sciences Major in Slavic Studies, Czech Studies Concentration

department website: http://www.slavic.illinois.edu
department faculty: Slavic Faculty (http://www.slavic.illinois.edu/directory/faculty/)
overview of college admissions & requirements: LAS admissions information (https://www.las.illinois.edu/prospective/)
college website: https://las.illinois.edu/
email: slavic@illinois.edu

for the degree of Bachelor of Arts in Liberal Arts and Sciences Major in Slavic Studies, Czech Studies Concentration

A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office before the end of the fifth semester (60 - 75 hours). Study abroad courses may be substituted for major and minor requirements with approval of adviser.

Departmental distinction: Graduation with distinction may be earned by completion of one of the following two options:

- GPA in departmental courses of 3.75; or
- GPA in departmental courses of 3.50, plus successful completion of academic study trip to the region, documented by graded transcript. See a departmental adviser to work out details, preferably two semesters before graduation.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: equates to 30 hours including 6 hours in advanced language and 24 hours in literature and culture.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Language: A minimum of 6 hours beyond the second year of the Czech language: CZCH 484 Readings in Czech for 6 hours or equivalent; or Students may choose to complete the second year (200-level sequence) of a second Slavic language, including Russian, in addition to Czech		6
Literature and Culture: A minimum of 24 hours is required in the following areas:		24
6 hours of Introductory Culture courses:		
SLAV 120	Russian & E Euro Folktales (and)	
Choose one of the following:		
REES 201	Introduction to Eastern Europe	
RUSS 261	Intro Russian-Jewish Culture	
SLAV 117	Russ & E Euro Science Fiction	
6 hours of Literature Survey courses chosen in consultation with the Undergraduate Advisor from a list maintained in the Slavic Department. [1]		
12 hours of Upper-level (300- and 400-level) Literature and Culture courses chosen in consultation with the Undergraduate Advisor from a list maintained in the Slavic Department. [1]		
Capstone Experience: All majors are required to complete a capstone course, project, or experience chosen from among the following:		0-3
(1) RUSS 493 Honors Senior Thesis (2 hrs); or		
(2) a 300- or 400-level course in the Slavic Department in which a research project is undertaken; or		
(3) Study abroad in the region.		
Majors should consult with the Undergraduate Advisor to plan their capstone experience.		

[1] *Up to 9 hours of the literature requirement (but no more than 6 at the upper level) can be replaced by courses at the same level in other departments, chosen in consultation with and approved by the Undergraduate Advisor, that treat the history, culture, and society of the Czech region.*

Slavic Studies: Polish Studies, BALAS

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Slavic Studies, Polish Studies Concentration

department website: https://slavic.illinois.edu/
department faculty: Slavic Faculty (http://www.slavic.illinois.edu/directory/faculty/)
overview of college admissions & requirements: LAS admissions information (https://www.las.illinois.edu/prospective/)
college website: https://las.illinois.edu/
email: slavic@illinois.edu

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Slavic Studies, Polish Studies Concentration

A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office before the end of the fifth semester (60 - 75 hours). Study abroad courses may be substituted for major and minor requirements with approval of adviser.

Departmental distinction: Graduation with distinction may be earned by completion of one of the following two options:

- GPA in departmental courses of 3.75; or
- GPA in departmental courses of 3.50, plus successful completion of academic study trip to the region, documented by graded transcript. See a departmental adviser to work out details, preferably two semesters before graduation.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: equates to 30 hours including 6 hours in advanced language and 24 hours in literature and culture.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Language: A minimum of 6 hours beyond the second year of the Polish language: POL 301 and POL 302, or equivalent; or students may choose to complete the second year (200-level sequence) of a second Slavic language, including Russian, in addition to Polish.		6
Literature and Culture: A minimum of 24 hours is required in the following areas (POL 401 and POL 402 can count toward the requirements in any category):		24
6 hours of Introductory Culture courses:		
POL 115	Intro to Polish Culture (and)	
Choose one of the following:		
REES 200	Intro to Russia and Eurasia	
REES 201	Introduction to Eastern Europe	
RUSS 261	Intro Russian-Jewish Culture	
SLAV 117	Russ & E Euro Science Fiction	
SLAV 120	Russian & E Euro Folktales	
6 hours of Literature Survey courses chosen in consultation with the Undergraduate Advisor from a list maintained in the Slavic Department. [1]		
12 hours of Upper-level (300- and 400-level) Literature and Culture courses chosen in consultation with the Undergraduate Advisor from a list maintained in the Slavic Department. [1]		
Capstone Experience: All majors are required to complete a capstone course, project, or experience chosen from among the following:		0-3
(1) RUSS 493 Honors Senior Thesis (2 hrs); or		
(2) a 300- or 400-level course in the Slavic Department in which a research project is undertaken; or		
(3) Study abroad in the region.		
Majors should consult with the Undergraduate Advisor to plan their capstone experience.		

[1] *Up to 9 hours of the literature requirement (but no more than 6 at the upper level) can be replaced by courses at the same level in other departments, chosen in consultation with and approved by the Undergraduate Advisor, that treat the history, culture, and society of Poland or the region.*

Slavic Studies: Russian Language, Literature, and Culture, BALAS

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Slavic Studies, Russian Language, Literature, & Culture Concentration

department website: https://slavic.illinois.edu/
department faculty: Slavic Faculty (http://www.slavic.illinois.edu/directory/faculty/)
overview of college admissions & requirements: LAS admissions information (https://www.las.illinois.edu/prospective/)
college website: https://las.illinois.edu/
email: slavic@illinois.edu

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Slavic Studies, Russian Language, Literature, & Culture Concentration

A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office before the end of the fifth semester (60 - 75 hours). Study abroad courses may be substituted for major and minor requirements with approval of adviser.

Departmental distinction: Graduation with distinction may be earned by completion of one of the following two options:

- GPA in departmental courses of 3.75; or
- GPA in departmental courses of 3.50, plus successful completion of academic study trip to the region, documented by graded transcript. See a departmental adviser to work out details, preferably two semesters before graduation.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: equates to 30 hours including 6 hours in advanced language and 24 hours in literature and culture.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Language: A minimum of 6 hours beyond the second year of the Russian language: RUSS 301, 302 – Third-Year Russian I, II, or equivalent		6
Literature and Culture: A minimum of 24 hours is required in the following areas (RUSS 401 and 402- Fourth Year Russian I, II- can count toward the requirements of any category):		24
6 hours of Introductory Culture courses:		
RUSS 115	Intro to Russian Culture (and)	
Choose one of the following:		
REES 200	Intro to Russia and Eurasia	
RUSS 261	Intro Russian-Jewish Culture	
SLAV 117	Russ & E Euro Science Fiction	
SLAV 120	Russian & E Euro Folktales	
6 hours of Literature Survey courses: Two 200-level literature or cinema courses chosen in consultation with the Undergraduate Advisor from a list maintained in the Slavic Department.		
12 hours of Upper-level (300- and 400-level) Literature and Culture courses chosen from the following:		
Author Courses (6 hrs.):		
RUSS 320	Russian Writers	
RUSS 322	Dostoevsky	
RUSS 323	Tolstoy	
RUSS 325	Chekhov	
RUSS 335	Nabokov	
Literature and Culture Courses (6 hrs.):		
Two 400-level literature or culture courses chosen in consultation with the Undergraduate Advisor from a list maintained in the Slavic Department.		
Capstone Experience: All majors are required to complete a capstone course, project, or experience chosen from among the following:		0-3
(1) RUSS 493 Honors Senior Thesis (2 hrs); or		
(2) a 300- or 400-level course in the Slavic Department in which a research project is undertaken; or		
(3) Study abroad in the region.		
Majors should consult with the Undergraduate Advisor to plan their capstone experience.		

Slavic Studies: South Slavic Studies, BALAS

for the degree of Bachelor of Arts in Liberal Arts and Sciences Major in Slavic Studies, South Slavic Studies Concentration

department website: http://www.slavic.illinois.edu
department faculty: Slavic Faculty (http://www.slavic.illinois.edu/directory/faculty/)
overview of college admissions & requirements: LAS admissions information (https://www.las.illinois.edu/prospective/)
college website: https://las.illinois.edu/
email: slavic@illinois.edu

for the degree of Bachelor of Arts in Liberal Arts and Sciences Major in Slavic Studies, South Slavic Studies Concentration

A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office before the end of the fifth semester (60 - 75 hours). Study abroad courses may be substituted for major and minor requirements with approval of adviser.

Departmental distinction: Graduation with distinction may be earned by completion of one of the following two options:

- GPA in departmental courses of 3.75; or
- GPA in departmental courses of 3.50, plus successful completion of academic study trip to the region, documented by graded transcript. See a departmental adviser to work out details, preferably two semesters before graduation.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: equates to 30 hours including 6 hours in advanced language and 24 hours in literature and culture.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Language: A minimum of 6 hours beyond the second year of a South Slavic language: SCR 301, 302-Third-Year Serbian/Croatian I, II- or equivalent; or Students may choose to complete the second year (200-level sequence) of a second Slavic language, including Russian, in addition to SCR.		6
Literature and Culture: A minimum of 24 hours is required in the following areas:		24
6 hours of Introductory Culture courses:		
BCS 115	South Slavic Cultures (and)	
Choose one of the following:		
REES 201	Introduction to Eastern Europe	
SLAV 117	Russ & E Euro Science Fiction	
SLAV 120	Russian & E Euro Folktales	
6 hours of Literature and Culture courses chosen in consultation with the Undergraduate Advisor from a list maintained in the Slavic Department. [1]		
12 hours of Upper-level (300- and 400-level) Literature and Culture courses chosen in consultation with the Undergraduate Advisor from a list maintained in the Slavic Department. [1]		
Capstone Experience: All majors are required to complete a capstone course, project, or experience chosen from among the following:		0-3
(1) RUSS 493 Honors Senior Thesis (2 hrs); or		
(2) a 300- or 400-level course in the Slavic Department in which a research project is undertaken; or		
(3) Study abroad in the region.		
Majors should consult with the Undergraduate Advisor to plan their capstone experience.		

[1] *Up to 9 hours of the literature requirement (but no more than 6 at the upper level) can be replaced by courses at the same level in other departments, chosen in consultation with and approved by the Undergraduate Advisor, that treat the history, culture, and society of the South Slavic region.*

Slavic Studies: Ukrainian Studies, BALAS

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Slavic Studies, Ukrainian Studies Concentration

department website: https://slavic.illinois.edu/
department faculty: Slavic Faculty (http://www.slavic.illinois.edu/directory/faculty/)
overview of college admissions & requirements: LAS admissions information (https://www.las.illinois.edu/prospective/)
college website: https://las.illinois.edu/
email: slavic@illinois.edu

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Slavic Studies, Ukrainian Studies Concentration

A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office before the end of the fifth semester (60 - 75 hours). Study abroad courses may be substituted for major and minor requirements with approval of adviser.

Departmental distinction: Graduation with distinction may be earned by completion of one of the following two options:

- GPA in departmental courses of 3.75; or
- GPA in departmental courses of 3.50, plus successful completion of academic study trip to the region, documented by graded transcript. See a departmental adviser to work out details, preferably two semesters before graduation.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: equates to 30 hours including 6 hours in advanced language and 24 hours in literature and culture.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Language: A minimum of 6 hours beyond the second year of the Ukrainian language: UKR 301, 302- or equivalent; or Students may choose to complete the second year (200-level sequence) of a second Slavic language, including Russian, in addition to Ukrainian		6
Literature and Culture: A minimum of 24 hours is required in the following areas:		24
6 hours of Introductory Culture courses:		
UKR 113	Ukrainian Culture (and)	
Choose one of the following:		
REES 200	Intro to Russia and Eurasia	
REES 201	Introduction to Eastern Europe	
RUSS 261	Intro Russian-Jewish Culture	
SLAV 117	Russ & E Euro Science Fiction	
SLAV 120	Russian & E Euro Folktales	
6 hours of Literature Survey courses chosen in consultation with the Undergraduate Advisor from a list maintained in the Slavic Department. [1]		
12 hours of Upper-level (300- and 400-level) Literature and Culture courses chosen in consultation with the Undergraduate Advisor from a list maintained in the Slavic Department. [1]		
Capstone Experience: All majors are required to complete a capstone course, project, or experience chosen from among the following:		0-3
(1) RUSS 493 Honors Senior Thesis (2 hrs); or		
(2) a 300- or 400-level course in the Slavic Department in which a research project is undertaken; or		
(3) Study abroad in the region.		
Majors should consult with the Undergraduate Advisor to plan their capstone experience.		

[1] *Up to 9 hours of the literature requirement (but no more than 6 at the upper level) can be replaced by courses at the same level in other departments, chosen in consultation with and approved by the Undergraduate Advisor, that treat the history, culture, and society of the Ukrainian region.*

Learning Outcomes: Slavic Studies, BALAS

Learning Outcomes for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Slavic Studies

1. Proficiency in the target language associated with the major track of at least intermediate high level on the ACTFL scale, with some control of advanced low functions.
2. Improved and effective writing and communication skills in the English language.
3. Coherent knowledge and functional grasp of the culture(s) and history(ies) of the region or regions and peoples targeted by the major track.
4. Analytical and interpretive abilities making use of the critical tools and methodologies taught in our courses of literary and cultural study.

Social Work, BSW

for the degree of Bachelor of Social Work Major in Social Work

School of Social Work Office: 1010 W. Nevada St., Urbana, IL 61801
Director of BSW Program: Carol Wilson-Smith
email: undergradsocialwork@illinois.edu (undergradsocialwork@illinois.edu)
phone: (217) 244-5246
school website: https://socialwork.illinois.edu/
school faculty: School of Social Work Faculty (https://socialwork.illinois.edu/directory/)
overview of school admissions & requirements: School of Social Work (https://socialwork.illinois.edu/academics/undergraduate-programs/)

The Bachelor of Science in Social Work can be completed through our traditional program on the Urbana campus or through our upper level completer program in the Chicago area. The traditional program is open to freshmen, off-campus transfers and inter-campus transfers. Courses are taken on the Urbana campus. The completer program is open to upper division (junior/senior level) off-campus transfers and inter-campus transfers. Courses are a blend of online and in-person in the Chicago area.

The purpose of undergraduate social work education at the School of Social Work is to provide a comprehensive educational experience for students that is grounded in a liberal arts tradition and prepares graduates for excellence in the areas of social work practice, policy, social engagement and leadership.

Upon degree completion, graduates will be prepared for entry into generalist social work practice, advanced standing in graduate social work education, and a multitude of career opportunities. These can include careers in communications, corrections, education, government, healthcare, human resources, law, non-profit organizations, religious studies, and public service. Obtaining an undergraduate degree in Social Work gives students the opportunity to pursue a License of Social Work (LSW). A BSW degree also makes students eligible to pursue Advanced Standing status in many masters of Social Work (MSW) programs. The advanced standing status enables BSW graduates to receive an MSW in only one year.

The focus of undergraduate curriculum delivery is through a student-centered strengths-based educational model that fosters student understanding by providing a challenging, yet supportive environment of high expectations that encourage the development of well-informed and engaged citizens.

The social work major prepares practitioners for generalist social work practice with individuals, groups, families and communities. The curriculum requires a minimum of 120 hours for graduation.

for the degree of Bachelor of Social Work Major in Social Work (on campus & online)

Departmental Distinction: The top 10% of the BSW graduating class will graduate with distinction.

Minimum required major and supporting course work: A minimum of 53 course hours of social work coursework, which includes 15 credit hours of combined agency-based field practicum (internship) and field seminar.

Code	Title	Hours
Communication Skills and Composition		
CMN 101 & RHET 105	Public Speaking and Writing and Research	6-7
or CMN 111 & CMN 112	Oral & Written Comm I and Oral & Written Comm II	
Advanced Composition - SOCW 300 will meet the Advanced Composition Requirement		3-4
Language other than English		
Complete of the third level or equivalent is required for graduation. American Sign Language is also acceptable.		0-9
Humanities and the Arts		
Literature and the Arts		3
Historical and Philosophical Perspective		3
Social and Behavioral Science		
Any course that has been approved as a Social and Behavioral Science course from the General Education course list.		9
Cultural Studies		
U.S. Minority cultures		3
Western cultures		3
Non-Western cultures		3
Natural Sciences and Technology		
Life Science		3
Physical Science		3
Quantitative Reasoning		
SOCW 225	Social Work Statistics	
STAT 100	Statistics	
ECON 202	Economic Statistics I	
EPSY 280	Elements of Statistics	
SOC 280	Intro to Social Statistics	
PSYC 235	Intro to Statistics	
From the approved campus list		3

BSW Requirements

Code	Title	Hours
SOCW 200	Introduction to Social Work	3
SOCW 300	Diversity: Identities & Issues	3
SOCW 401	Practice I	4
SOCW 402	Practice II	3
SOCW 403	Practice III	3
SOCW 410	Social Welfare Pol and Svcs	3
SOCW 427	Social Work Research Methods	3
SOCW 451	HBSE I: Human Development	3
SOCW 461	Professional Practice Seminar I	4
SOCW 470	Field Practicum & Professional Seminar II	15
Social Work electives:		9
SOCW 310	UG Research Assistance	
SOCW 321	Social Entre & Social Change	
SOCW 325	International Development with Grassroots Organizations	
SOCW 330	International Perspectives	
SOCW 360	Social Work and the Military	

SOCW 370	Social Work and Disability Studies	
SOCW 380	Current Topics in Social Work (may be repeated)	
SOCW 404	Social Work Case Management Practice	
SOCW 412	Hispanics in the U.S.	
SOCW 416	Child Welfare Issues & Trends	
SOCW 417	Dementia Care for Older Adults	
SOCW 418	Independent Study	
SOCW 420	Subst Use in Social Context	
SOCW 436	Intl SW & Development	
SOCW 455	Social Work with Women	
SOCW 475	Undergraduate Research Abroad	
SOCW 480	UG Research Project	
Total SOCW hours		53
Minimum hours required for graduation		**120**

Learning Outcomes: Social Work, BSW

Learning outcomes for the degree of Bachelor of Social Work Major in Social Work

Students graduating with the Bachelor of Social Work should be able to:

1. Demonstrate ethical and professional behavior
2. Engage diversity and difference in practice
3. Advance human rights and social, economic, and environmental justice
4. Engage in practice-informed research and research-informed practice
5. Engage in Policy Practice
6. Engage with individuals, families, groups, organizations, and communities
7. Assess individuals, families, groups, organizations, and communities
8. Intervene with individuals, families, groups, organizations, and communities
9. Evaluate practice with individuals, families, groups, organizations, and communities

Sociology, BALAS

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Sociology

department website: https://sociology.illinois.edu/
department faculty: Sociology Faculty (https://sociology.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: soc@illinois.edu

Large-scale societal change begins with individuals like you -- hungry for knowledge and ready to make a real difference; in the Department of Sociology you will study the inner workings of society with a focus on either Inequalities or Global Sociology.

Sociologists explore human social life at every level, from personal relationships to global society. Major topics of study include inequality, social movements, criminology, race and class relations, gender, social institutions such as religion and education, and fundamental population processes like immigration and mortality. Sociologists use a range of methods and theories to develop and evaluate ideas about social life.

As a student of Sociology, you will train in research methods and become fluent in social statistics while understanding the complexity of societal diversity and social change. These skills are usable in a wide variety of work settings and are skills that employers value.

Recent graduates have pursued careers with the FBI, as Human Resource Specialists, with non-profit organizations, as policy officers, and have earned advanced degrees in Social Work, Sociology, Law, Medicine, and more. The career paths of Sociology alumni are as diverse as our student population -- who represent the best and the brightest from a variety of backgrounds.

In the Department of Sociology you can choose the major in Sociology, the minor in Sociology, or the minor in Criminology, Law and Society (CLS). Whereas the major and minor in Sociology provide an overview into the broader disciplines of Sociology, the minor in CLS is a more specialized approach for those students intersted in law and justice related careers and occupations.

Each student should see a Sociology departmental advisor at least once a year to choose sociology courses and to monitor their progress.

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Sociology

A Major Plan of Study Form must be completed and submitted to the LAS Student Academic Affairs Office before the end of the fifth semester (60-75 hours). Please see your adviser.

Departmental distinction: In order to achieve distinction, high distinction, or highest distinction, a sociology major must meet the following requirements:

- Have completed SOC 490 or SOC 495
- Attain a UIUC GPA of 3.25 or higher
- If both these requirements are met, then the MAJOR GPA distributes as follows:
  - 3.25 – Distinction
  - 3.50 – High Distinction
  - 3.75 – Highest Distinction

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 44 hours including 32 hours of Sociology courses. Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
SOC 100	Introduction to Sociology	4
SOC 200	Introduction to Sociological Theory	3

SOC 280	Intro to Social Statistics [1]	4
SOC 380	Social Research Methods	4
Select one of the following capstone experiences:		3
SOC 400	Internships	
SOC 450	Senior Capstone Seminar	
SOC 495	Senior Honors Seminar	
Students may select any sociology courses to fulfill the requirement of 32 hours in Sociology		14
Supporting course work taken outside the Department of Sociology [2]		12

1 *If a statistics course is taken outside the Department of Sociology to fulfill this requirement, that course does not count toward the 32 hours of Sociology courses.*

2 *Supporting course work is designed to expand the student's education, and should be taken outside of Sociology. A student may take supporting course work from one department, such as psychology, economics, history, or statistics, or from a cohesive selection of courses in various units. With an advisor's approval, departmental or interdisciplinary minors, or a double major, may be used to fulfill the requirements of supporting course work.*

Learning Outcomes: Sociology, BALAS

Learning Outcomes for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Sociology

1. Apply sociological theories to understand social phenomena.
2. Critically evaluate explanations of human behavior and social phenomenon.
3. Apply scientific principles to understand the social world.
4. Evaluate the quality of social scientific methods and data.
5. Rigorously analyze social scientific data.
6. Use sociological knowledge to inform policy debates and promote public understanding.

Spanish, BALAS

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Spanish

department website: https://spanport.illinois.edu/
department faculty: Spanish Faculty (https://spanport.illinois.edu/directory/faculty/)
advising: Spanish Advising (https://spanport.illinois.edu/academics/spanish-undergraduate/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: span-port@lists.illinois.edu

Undergraduate degree programs in Spanish & Portuguese
Spanish, BALAS (p. 381)

Teaching of Spanish, BA (p. 423)

Portuguese, BALAS (p. 359)

5 Year BALAS/MA in Spanish and European Union Studies - In addition to our 4 year BALAS programs, the Department of Spanish and Portuguese with the European Union Center offers a 5-year BALAS /MA degree program in Spanish and the Master of Arts in European Union Studies (MAEUS). In order to be admitted to this degree program, students apply through a joint application process to their BALAS-granting program and the European Union Center during their third year of studies. Requirements for this degree program are identical to those for the stand-alone BALAS and for the stand-alone MAEUS. Students will receive both degrees when the requirements are met for the degrees; the BALAS and MA degrees will be conferred separately and independently. More detailed information may be obtained from department and EUC offices.
for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Spanish

A Major Plan of Study Form must be completed and submitted to the Student Affairs Office before the end of the fourth semester (48-60 hours). Please see your adviser.

Departmental distinction: To be considered for departmental distinction, a student must maintain a 3.5 grade point average and fulfill special additional requirements. See the department's honors adviser.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: equates to 48 hours, including 33 hours in Spanish courses at the 200-level or higher.
Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
33 hours of SPAN courses [1]		33
SPAN 228	Spanish Composition	
4 to 6 200-level SPAN courses		
4 to 6 300- and/or 400-level SPAN courses		
Supporting course work, a minor, or a second major in an area of study chosen by the student and approved by the advisor. [2]		15-21
Total Hours		48-54

1 *With permission of the adviser, students will be able to take up to two SPAN courses that are taught in a language other than Spanish. Or up to two 200-level SPAN courses can be substituted with any of the following:* BASQ 401 *and* BASQ 402*,* CATL 401 *and* CATL 402*,* PORT 401 *and* PORT 402*, and* LAST 445*. These courses do not count for advanced hours and do not substitute for* SPAN 228*.*

2 *A minor generally consists of 16-21 hours.*

Learning Outcomes: Spanish, BALAS

Learning Outcomes for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Spanish

1. **Intellectual Reasoning and Knowledge**
   - Definition: Students of Spanish will acquire and apply broad and deep knowledge about the Spanish language and the cultures of the Spanish-speaking world.
2. **Translingual competence**
   - Definition: Students of Spanish will understand and analyze the nature of the Spanish language, "languages" in general, the social nature of languages and demonstrate intercultural communicative competence.
3. **Transcultural competence**
   - Definition: Through critical reflection, students of Spanish will understand and analyze the products, practices and perspectives of their own culture, cultures of the Spanish-speaking world and the nature of "culture" itself.
4. **Communicative Competence in Spanish**
   - Definition: In reading, writing, listening comprehension and speaking, students will acquire advanced proficiency in Spanish as described by the standards set by the American Council on the Teaching of Foreign Languages (ACTFL).

Special Education, BS

for the degree of Bachelor of Science: Major in Special Education

department: Special Education
interim head of department: Michaelene Ostrosky
department office: 288 Education Building
1310 South Sixth
Champaign, IL 61820
phone: (217) 333-0260
department website: https://education.illinois.edu/sped (https://education.illinois.edu/sped/)
department faculty: Special Education Faculty (https://education.illinois.edu/faculty-finder/sped/)
overview of college admissions & requirements: https://education.illinois.edu/programs/undergrad/programs-degrees/sped-lbs-ug (https://education.illinois.edu/programs/undergrad/programs-degrees/sped-lbs-ug/)
college website: https://education.illinois.edu/

Curriculum Preparatory for Learning and Behavior Specialist I in Special Education

This program is designed to prepare special education teachers for students ages 3-21. An applicant must have a cumulative grade point average of at least 2.5 (A = 4.0), a minimum of 50 hours of prior experience with individuals with disabilities[1], and sophomore or higher standing upon enrollment in the program. A minimum of 125[2] semester hours of credit is required for graduation. To proceed to the five semester professional education sequence, students must have completed all degree requirements outside of the professional education coursework.

Students pursuing teacher licensure programs in the College of Education (COE) must meet requirements in a series of sequential gateways. Included in the gateway requirements are successful completion of specified coursework, achievement of appropriate grade point averages, requirements for clinical experiences, and appropriate tests for the licensure area. Meeting all Gateway requirements leads to degree and licensure completion.

In order to be recommended for licensure, candidates are required to maintain University of Illinois at Urbana-Champaign, cumulative, content area, and professional education grade-point averages of 2.5 (A = 4.0). Candidates in teaching licensure programs must maintain a C or better in ALL content and professional education coursework. Candidates should consult their advisor or the Council on Teacher Education for the list of courses used to compute these grade-point averages. For teacher education licensure requirements applicable to all curricula, see the Council on Teacher Education. (http://www.cote.illinois.edu/)

Licensure requirements are subject to change without notice as a result of new mandates from the Illinois State Board of Education or the Illinois General Assembly.

for the degree of Bachelor of Science: Major in Special Education

Degree Requirements

Code	Title	Hours
Orientation Seminar		
EDUC 101	Education Orientation Seminar	1
Composition		
Composition I		4-6
Advanced composition. Students are encouraged to select a course that will also meet a requirement in another general education area. [3]		0-4
Language other than English		
Three years of one language other than English in high school or completion of the third semester of college-level language		0-12
Humanities/Arts		
SPED 117	The Culture of Disability	3
Humanities/Arts elective [3]		3
Cultural Studies [3]		**9**
One Western/Comparative Culture(s)		
One US Minority Culture(s)		
One Non-Western Culture(s)		
Natural Sciences and Technology [3]		
Life and/or Physical Sciences		6
Social/Behavioral Sciences		
Select one of the following:		4
PSYC 100	Intro Psych	
PSYC 103	Intro Experimental Psych	
KIN 262	Motor Develop, Growth & Form	3
Quantitative Reasoning [3]		
Quantitative Reasoning I (MATH 103 is recommended)		3-4
Quantitative Reasoning I or II [3]		3
Electives		
Elective courses (if needed to complete the 125 hour graduate requirement)		2-8
Professional Education Requirements		
EDUC 201 & EDUC 202	Identity and Difference in Education and Social Justice, School and Society (or program-approved equivalent courses)	6
Select one of the following:		3
PSYC 216	Child Psych	
EPSY 201	Educational Psychology	
HDFS 105	Intro to Human Development	
or other approved course		
SHS 320	Development of Spoken Language	3

EDPR 250	School & Community Experiences (LBS)	4
EDPR 420	Ed Prac Students with Sp Needs (LBE)	6
EDPR 420	Ed Prac Students with Sp Needs (LBS)	6
EDPR 420	Ed Prac Students with Sp Needs (LBT)	6
CI 431	Teaching Elementary Mathematics	4
CI 475	Teaching Elementary Reading and Language Arts I	4
Special Education Core Requirements		
SPED 317	Characteristics & Eligibility	3
SPED 424	Foundations of Assessment	3
SPED 426	Collaboration and Teaming	3
SPED 431	Assistive Technology and Physical Disabilities	2
SPED 438	Collaborating with Families	3
SPED 440	Instructional Strategies I	4
SPED 441	Instructional Strategies II	4
SPED 444	Career Development and Transition	3
SPED 446	Curriculum Development I	4
SPED 447	Curriculum Development II	4
SPED 448	Curriculum Development III	4
SPED 461	Alternative and Augmentative Communication and Literacy	3
SPED 470	Learning Environments I	3
SPED 471	Learning Environments II	3
Total Hours		125

TOTAL minimum hours include general education and professional education credits.[4]

[1] *Applicants may contact the Department of Special Education for further information on the prior experience requirement.*

[2] *Six hours of ROTC upper level courses (300 level or above) can count toward the degree as free electives.*

[3] *General Education Requirement: Courses must be selected from the Campus General Education Approved Course List.*

[4] *The total hours required for the degree may be higher for students who do not complete the language other than English requirement in high school.*

Learning Outcomes: Special Education, BS

Learning Outcomes for the degree of Bachelor of Science Major in Special Education

1. Students will develop a deep understanding of central concepts, tools of inquiry and structures of the discipline of special education and of the content they teach.
2. Students will apply multiple methods of assessment to generate data for use in monitoring learner progress and guiding teacher decision-making.
3. Students will demonstrate consistently in their practice a commitment to fairness, collaboration, professionalism, and the belief that all students can learn.

Speech & Hearing Science, BS

for the degree of Bachelor of Science Major in Speech & Hearing Science

department website: http://shs.illinois.edu/
department faculty: https://ahs.illinois.edu/shs-directory (https://ahs.illinois.edu/shs-directory/)
college catalog page: http://catalog.illinois.edu/schools/ahs/academic-units/
college website: http://www.ahs.illinois.edu/

Students pursuing this major must select one of these concentrations:

- Audiology (p. 383)
- Cultural-Linguistic Diversity (p. 385)
- Neuroscience of Communication (p. 387)
- Speech-Language Pathology (p. 388)

Summary of Degree Requirements

Code	Title	Hours
General Education		40-54
Speech and Hearing Science Core		28
Area of Concentration (and Correlate, if required by concentration)		**19**
Electives		27-41
Total Hours		128

Speech & Hearing Science: Audiology, BS

for the degree of Bachelor of Science Major in Speech & Hearing Science, Audiology Concentration

department website: http://shs.illinois.edu/
department faculty: https://ahs.illinois.edu/shs-directory (https://ahs.illinois.edu/shs-directory/)
college catalog page: http://catalog.illinois.edu/schools/ahs/academic-units/
college website: http://www.ahs.illinois.edu/

The **Audiology** concentration provides explicit background in the theoretical and clinical areas necessary for graduate study. Students will learn foundational knowledge for understanding human speech, language, swallowing, hearing, and balance processes, with a particular eye toward the implications of differences and disruptions in the communication systems associated with disorders. Although students across any of the concentrations can pursue the graduate study and pre-certification requirements associated with becoming an audiologist or speech-language pathologist, the audiology concentration is the most directly connected to clinical practice in audiology.

More information about the fields of speech-language pathology and audiology may be found on the American Speech-Language Hearing Association's web site: http://www.asha.org.

for the degree of Bachelor of Science Major in Speech & Hearing Science, Audiology Concentration

General Education: Students are advised to select their General Education course requirements from the University's approved list of courses (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **and to work in close consultation with their academic advisor to ensure graduation requirements are addressed.**

Code	Title	Hours
Communication Skills		
Composition I		
RHET 105	Writing and Research	4-6
or CMN 111 & CMN 112	Oral & Written Comm I and Oral & Written Comm II	
Advanced Composition		3
One course in Advanced Writing/Composition II from university approved Gen Ed list.		
Quantitative Reasoning I		**3**
Choose one of the following:		
STAT 100	Statistics	
STAT 107	Data Science Discovery	
STAT 200	Statistical Analysis	
STAT 212	Biostatistics	
Quantitative Reasoning II		**3**
One course from the university approved Gen Ed list.		
Humanities and the Arts		**6**
Minimum of two courses from university approved Gen Ed list.		
Social and Behavioral Sciences		**6**
Minimum of two courses from university approved Gen Ed list.		
Natural Sciences and Technology		**6**
Choose one from the following and one from the university approved Gen Ed list.		
CHEM 101	Introductory Chemistry	
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	
CHEM 104 & CHEM 105	General Chemistry II and General Chemistry Lab II	
CHEM 108	Chemistry, Everyday Phenomena	
CHEM 202 & CHEM 203	Accelerated Chemistry I and Accelerated Chemistry Lab I	
CHEM 204 & CHEM 205	Accelerated Chemistry II and Accelerated Chemistry Lab II	
PHYS 101	College Physics: Mech & Heat	
PHYS 102	College Physics: E&M & Modern	
PHYS 123	Physics Made Easy	
PHYS 140	How Things Work	
PHYS 150	Physics of Societal Issues	
PHYS 211	University Physics: Mechanics	
PHYS 212	University Physics: Elec & Mag	
PHYS 213	Univ Physics: Thermal Physics	
PHYS 214	Univ Physics: Quantum Physics	
Cultural Studies		**9**
One course from Western Cultures university approved Gen Ed list.		
One course from Non-Western Cultures university approved Gen Ed list.		
One course from U.S. Minority Cultures university approved Gen Ed list.		
Foreign Language		**0-12**
May be satisfied if had three years of one non-English language in high school or completed the equivalent of three semesters of college level foreign language (through the intermediate level).		
Total Hours		40-54

Speech and Hearing Science Professional Core Requirements

All students must complete a series of SHS core classes regardless of their area of concentration. Students are advised to work with the undergraduate academic advisor to ensure courses are taken in proper sequential order. One area of concentration (Speech-Language Pathology, Audiology, Neuroscience of Communication, or Cultural-Linguistic Diversity) must be declared prior to the senior year.

Code	Title	Hours
SHS 170	Intro Hum Comm Sys & Disorders	3
SHS 191	Freshmen Seminar	1
SHS 200	General Phonetics	3
SHS 240	Intro Sound & Hearing Science	3
SHS 300	Anat & Physiol Spch Mechanism	4
or LING 300	Anat & Physiol Spch Mechanism	
SHS 301	General Speech Science	4
or LING 303	General Speech Science	
SHS 320	Development of Spoken Language	3
SHS 385	Evidence-Based Practice in Communication Sciences and Disorders	3
SHS 450	Intro Audiol & Hear Disorders	4
General Education Hours		40-54
Professional Core Hours		28
Concentration Hours		19
Electives		27-41
Total Hours		128

Electives

All students are encouraged to take electives in and outside the department that will count towards the 128 required hours for graduation (the total number of electives students may take may vary with each individual). Students are encouraged to select electives that will complement their areas of interest and future goals. Areas listed below are only a sampling of possibilities; they are not to be considered as requirements and students are not limited to these choices. All students are responsible for addressing course pre-requisites and course availability may vary.

Anthropology (ANTH), Communications (CMN), Kinesiology and Community Health (KIN, CHLH), Educational Organization and Leadership (EOL), Curriculum & Instruction (CI), Educational Policy Studies (EPS), Educational Psychology (EPSY), English (ENGL), English as a Second Language (ESL), Gender and Women's Studies (GWS), Human Development and Family Studies (HDFS), Library and Information Science

(LIS), Linguistics (LING), Psychology (PSYC), Recreation, Sport, & Tourism (RST), Rehabilitation Counseling (REHB), Special Education (SPED), Sociology (SOC), Social Work (SOCW). Additional areas to explore may include: courses in a foreign language beyond the completion of the University's requirement, as well as additional courses in science, such as Biology (IB, MCB), Physics (PHYS), microcomputer applications (e.g. ACE), and courses in cultural studies.

Audiology Concentration

Code	Title	Hours
SHS 271	Communication and Aging	3
SHS 280	Communication Neuroscience	3
SHS 352	Hearing Health and Society	3
SHS 451	Aural Rehab Children to Adults (requires senior standing and completion of core classes)	3
SHS 475	Prepracticum in SHS (requires senior standing and completion of core classes)	1
Students must also take 6 hours from the following specified electives:		6
SHS 222	Language & Culture of Deaf Communities	
SHS 270	Comm Disability in the Media	
SHS 291	Research Lab Experience in SHS (Approved for S/U grading only. Must be arranged with individual faculty member.) [1]	
SHS 333	Children with Neurodevelopmental Disorders Across Communication Contexts	
SHS 375	Comm Partners & Health	
SHS 390	Individual Study [1]	
SHS 395	Honors Individual Study [1]	
SHS 473	Augmentative & Alt Comm (Requires senior standing and completion of core classes)	
NOTE: For those planning on pursuing graduate studies in Speech-Language Pathology or Audiology, many graduate programs require 25 clinical observation hours. These should be completed and recorded prior to graduation (some may be completed prior to serving as a clinical participant in the required SHS 475 **pre-practicum).**		
Total Hours		19

[1] *No more than 3 credits from SHS 291, SHS 390 and SHS 395 may be counted toward the 6 credits of specified electives.*

Speech & Hearing Science: Cultural-Linguistic Diversity, BS

for the degree of Bachelor of Science Major in Speech & Hearing Science, Cultural-Linguistic Diversity Concentration

department website: http://shs.illinois.edu/
department faculty: https://ahs.illinois.edu/shs-directory (https://ahs.illinois.edu/shs-directory/)
college catalog page: http://catalog.illinois.edu/schools/ahs/academic-units/
college website: http://www.ahs.illinois.edu/

The **Cultural-Linguistic Diversity** concentration is designed to examine ways that individual communication differences, including disorders, interface with sociocultural systems, institutions, and practices. Students will take courses in theory and research methods to explore ways in which sociolinguistic differences shape child development, socialization, and identity. This concentration is intended to help provide students with knowledge related to cultural-linguistic differences (race, ethnicity, socio-economic status, neurodiversity) that is needed to serve an increasingly global society concerned with human rights and responsibilities. Such expertise is expected to enhance multiple career paths in education, law, business, and health-related fields. In addition, undergraduates interested in pursuing careers as an audiologist or speech-language pathologist can combine this concentration with pre-certification requirements.

More information about the fields of speech-language pathology and audiology may be found on the American Speech-Language Hearing Association's web site: http://www.asha.org.

for the degree of Bachelor of Science Major in Speech & Hearing Science, Cultural-Linguistic Diversity Concentration

General Education: Students are advised to select their General Education course requirements from the University's approved list of courses (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **and to work in close consultation with their academic advisor to ensure graduation requirements are addressed.**

Code	Title	Hours
Communication Skills		
Composition I		
RHET 105	Writing and Research	4-6
or CMN 111 & CMN 112	Oral & Written Comm I and Oral & Written Comm II	
Advanced Composition		3
One course in Advanced Writing/Composition II from university approved Gen Ed list.		
Quantitative Reasoning I		**3**
Choose one of the following:		
STAT 100	Statistics	
STAT 107	Data Science Discovery	
STAT 200	Statistical Analysis	
STAT 212	Biostatistics	
Quantitative Reasoning II		**3**
One course from the university approved Gen Ed list.		
Humanities and the Arts		**6**
Minimum of two courses from university approved Gen Ed list.		
Social and Behavioral Sciences		**6**
Minimum of two courses from university approved Gen Ed list.		
Natural Sciences and Technology		**6**
Choose one from the following and one from the university approved Gen Ed list.		
CHEM 101	Introductory Chemistry	
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	
CHEM 104 & CHEM 105	General Chemistry II and General Chemistry Lab II	

CHEM 108	Chemistry, Everyday Phenomena	
CHEM 202 & CHEM 203	Accelerated Chemistry I and Accelerated Chemistry Lab I	
CHEM 204 & CHEM 205	Accelerated Chemistry II and Accelerated Chemistry Lab II	
PHYS 101	College Physics: Mech & Heat	
PHYS 102	College Physics: E&M & Modern	
PHYS 123	Physics Made Easy	
PHYS 140	How Things Work	
PHYS 150	Physics of Societal Issues	
PHYS 211	University Physics: Mechanics	
PHYS 212	University Physics: Elec & Mag	
PHYS 213	Univ Physics: Thermal Physics	
PHYS 214	Univ Physics: Quantum Physics	
Cultural Studies		**9**
One course from Western Cultures university approved Gen Ed list.		
One course from Non-Western Cultures university approved Gen Ed list.		
One course from U.S. Minority Cultures university approved Gen Ed list.		
Foreign Language		**0-12**
May be satisfied if had three years of one non-English language in high school or completed the equivalent of three semesters of college level foreign language (through the intermediate level).		
Total Hours		40-54

Speech and Hearing Science Professional Core Requirements

All students must complete a series of SHS core classes regardless of their area of concentration. Students are advised to work with the undergraduate academic advisor to ensure courses are taken in proper sequential order. One area of concentration (Speech-Language Pathology, Audiology, Neuroscience of Communication, or Cultural-Linguistic Diversity) must be declared prior to the senior year.

Code	Title	Hours
SHS 170	Intro Hum Comm Sys & Disorders	3
SHS 191	Freshmen Seminar	1
SHS 200	General Phonetics	3
SHS 240	Intro Sound & Hearing Science	3
SHS 300	Anat & Physiol Spch Mechanism	4
or LING 300	Anat & Physiol Spch Mechanism	
SHS 301	General Speech Science	4
or LING 303	General Speech Science	
SHS 320	Development of Spoken Language	3
SHS 385	Evidence-Based Practice in Communication Sciences and Disorders	3
SHS 450	Intro Audiol & Hear Disorders	4
General Education Hours		40-54
Professional Core Hours		28
Concentration Hours		19
Electives		27-41
Total Hours		128

Electives

All students are encouraged to take electives in and outside the department that will count towards the 128 required hours for graduation (the total number of electives students may take may vary with each individual). Students are encouraged to select electives that will complement their areas of interest and future goals. Areas listed below are only a sampling of possibilities; they are not to be considered as requirements and students are not limited to these choices. All students are responsible for addressing course pre-requisites and course availability may vary.

Anthropology (ANTH), Communications (CMN), Kinesiology and Community Health (KIN, CHLH), Educational Organization and Leadership (EOL), Curriculum & Instruction (CI), Educational Policy Studies (EPS), Educational Psychology (EPSY), English (ENGL), English as a Second Language (ESL), Gender and Women's Studies (GWS), Human Development and Family Studies (HDFS), Library and Information Science (LIS), Linguistics (LING), Psychology (PSYC), Recreation, Sport, & Tourism (RST), Rehabilitation Counseling (REHB), Special Education (SPED), Sociology (SOC), Social Work (SOCW). Additional areas to explore may include: courses in a foreign language beyond the completion of the University's requirement, as well as additional courses in science, such as Biology (IB, MCB), Physics (PHYS), microcomputer applications (e.g. ACE), and courses in cultural studies.

Cultural-Linguistic Diversity Concentration

Code	Title	Hours
SHS 222	Language & Culture of Deaf Communities	3
SHS 271	Communication and Aging	3
SHS 352	Hearing Health and Society	3
SHS 380	Comm Competence and Disorders	3
Seven hours from the following:		7
Up to 6 hours of a language other than English (only courses taken above and beyond those used to satisfy the University's langauage requirement or taken in a different area for elective credit)		
CMN 232	Intro to Intercultural Comm	
CHLH 330	Disability in American Society	
CHLH 407	Disability, Culture & Society	
EPS 310	Race and Cultural Diversity	
EPSY 202	Exploring Cultural Diversity	
LING 111		
LING 210	Language History	
LING 450	Sociolinguistics I	
SPED 117	The Culture of Disability	
SOC 225	Race and Ethnicity	
SHS 291	Research Lab Experience in SHS [1]	
SHS 333	Children with Neurodevelopmental Disorders Across Communication Contexts	
SHS 390	Individual Study [1]	
SHS 395	Honors Individual Study [1]	
SHS 475	Prepracticum in SHS	
Total Hours		19

[1] *No more than 3 credits from SHS 291, SHS 390 and SHS 395 may be counted toward the 7 credits of specified electives.*

Speech & Hearing Science: Neuroscience of Communication, BS

for the degree of Bachelor of Science Major in Speech & Hearing Science, Neuroscience of Communication Concentration

department website: http://shs.illinois.edu/
department faculty: https://ahs.illinois.edu/shs-directory (https://ahs.illinois.edu/shs-directory/)
college catalog page: http://catalog.illinois.edu/schools/ahs/academic-units/
college website: http://www.ahs.illinois.edu/

The **Neuroscience of Communication** concentration provides an interdisciplinary understanding of the neurological systems that underlie human communication. Students will study the biological basis of communication in order to understand brain-behavior correlates of typical and disordered speech, language, and hearing function. In addition, students will benefit from faculty research that utilizes innovative technologies to study the structure and function of the sensory-motor systems that underlie human communication abilities. This concentration is intended to help prepare students for health and science-related careers, including medicine and neuroscience. In addition, undergraduates interested in pursuing careers as an audiologist or speech-language pathologist can combine this concentration with pre-certification requirements.

More information about the fields of speech-language pathology and audiology may be found on the American Speech-Language Hearing Association's web site: http://www.asha.org.

for the degree of Bachelor of Science Major in Speech & Hearing Science, Neuroscience of Communication Concentration

General Education: Students are advised to select their General Education course requirements from the University's approved list of courses (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **and to work in close consultation with their academic advisor to ensure graduation requirements are addressed.**

Code	Title	Hours
Communication Skills		
Composition I		
RHET 105	Writing and Research	4-6
or CMN 111 & CMN 112	Oral & Written Comm I and Oral & Written Comm II	
Advanced Composition		3
One course in Advanced Writing/Composition II from university approved Gen Ed list.		
Quantitative Reasoning I		**3**
Choose one of the following:		
STAT 100	Statistics	
STAT 107	Data Science Discovery	
STAT 200	Statistical Analysis	
STAT 212	Biostatistics	
Quantitative Reasoning II		**3**
One course from the university approved Gen Ed list.		
Humanities and the Arts		**6**
Minimum of two courses from university approved Gen Ed list.		
Social and Behavioral Sciences		**6**
Minimum of two courses from university approved Gen Ed list.		
Natural Sciences and Technology		**6**
Choose one from the following and one from the university approved Gen Ed list.		
CHEM 101	Introductory Chemistry	
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	
CHEM 104 & CHEM 105	General Chemistry II and General Chemistry Lab II	
CHEM 108	Chemistry, Everyday Phenomena	
CHEM 202 & CHEM 203	Accelerated Chemistry I and Accelerated Chemistry Lab I	
CHEM 204 & CHEM 205	Accelerated Chemistry II and Accelerated Chemistry Lab II	
PHYS 101	College Physics: Mech & Heat	
PHYS 102	College Physics: E&M & Modern	
PHYS 123	Physics Made Easy	
PHYS 140	How Things Work	
PHYS 150	Physics of Societal Issues	
PHYS 211	University Physics: Mechanics	
PHYS 212	University Physics: Elec & Mag	
PHYS 213	Univ Physics: Thermal Physics	
PHYS 214	Univ Physics: Quantum Physics	
Cultural Studies		**9**
One course from Western Cultures university approved Gen Ed list.		
One course from Non-Western Cultures university approved Gen Ed list.		
One course from U.S. Minority Cultures university approved Gen Ed list.		
Foreign Language		**0-12**
May be satisfied if had three years of one non-English language in high school or completed the equivalent of three semesters of college level foreign language (through the intermediate level).		
Total Hours		40-54

Speech and Hearing Science Professional Core Requirements

All students must complete a series of SHS core classes regardless of their area of concentration. Students are advised to work with the undergraduate academic advisor to ensure courses are taken in proper sequential order. One area of concentration (Speech-Language Pathology, Audiology, Neuroscience of Communication, or Cultural-Linguistic Diversity) must be declared prior to the senior year.

Code	Title	Hours
SHS 170	Intro Hum Comm Sys & Disorders	3
SHS 191	Freshmen Seminar	1

SHS 200	General Phonetics	3
SHS 240	Intro Sound & Hearing Science	3
SHS 300	Anat & Physiol Spch Mechanism	4
or LING 300	Anat & Physiol Spch Mechanism	
SHS 301	General Speech Science	4
or LING 303	General Speech Science	
SHS 320	Development of Spoken Language	3
SHS 385	Evidence-Based Practice in Communication Sciences and Disorders	3
SHS 450	Intro Audiol & Hear Disorders	4
General Education Hours		40-54
Professional Core Hours		28
Concentration Hours		19
Electives		27-41
Total Hours		128

Electives

All students are encouraged to take electives in and outside the department that will count towards the 128 required hours for graduation (the total number of electives students may take may vary with each individual). Students are encouraged to select electives that will complement their areas of interest and future goals. Areas listed below are only a sampling of possibilities; they are not to be considered as requirements and students are not limited to these choices. All students are responsible for addressing course pre-requisites and course availability may vary.

Anthropology (ANTH), Communications (CMN), Kinesiology and Community Health (KIN, CHLH), Educational Organization and Leadership (EOL), Curriculum & Instruction (CI), Educational Policy Studies (EPS), Educational Psychology (EPSY), English (ENGL), English as a Second Language (ESL), Gender and Women's Studies (GWS), Human Development and Family Studies (HDFS), Library and Information Science (LIS), Linguistics (LING), Psychology (PSYC), Recreation, Sport, & Tourism (RST), Rehabilitation Counseling (REHB), Special Education (SPED), Sociology (SOC), Social Work (SOCW). Additional areas to explore may include: courses in a foreign language beyond the completion of the University's requirement, as well as additional courses in science, such as Biology (IB, MCB), Physics (PHYS), microcomputer applications (e.g. ACE), and courses in cultural studies.

Neuroscience of Communication Concentration

Code	Title	Hours
SHS 280	Communication Neuroscience	3
SHS 389	Neuroplasticity and Communication	3
SHS 427	Language and the Brain	3
SHS 470	Neural Bases Spch Lang	4
Students must also take 6 hours from the following specified electives:		**6**
Any Chemistry or Physics 100-level class		
IB 100	Biology in Today's World	
PSYC 204	Intro to Brain and Cognition	
PSYC 216	Child Psych	
or EPSY 236	Child Development in Education	
PSYC 230	Perception & Sensory Processes	
PSYC 224	Cognitive Psych	
PSYC 248	Learning and Memory	
SHS 271	Communication and Aging	
SHS 291	Research Lab Experience in SHS [1]	
SHS 333	Children with Neurodevelopmental Disorders Across Communication Contexts	
SHS 375	Comm Partners & Health	
SHS 390	Individual Study [1]	
SHS 395	Honors Individual Study [1]	
SHS 473	Augmentative & Alt Comm	
SHS 475	Prepracticum in SHS	
Total Hours		19

[1] *No more than 3 credits from SHS 291, SHS 390 and SHS 395 may be counted toward the 6 credits of specified electives.*

Speech & Hearing Science: Speech-Language Pathology, BS

for the degree of Bachelor of Science Major in Speech & Hearing Science, Speech-Language Pathology Concentration

department website: http://shs.illinois.edu/
department faculty: https://ahs.illinois.edu/shs-directory (https://ahs.illinois.edu/shs-directory/)
college catalog page: http://catalog.illinois.edu/schools/ahs/academic-units/
college website: http://www.ahs.illinois.edu/

The **Speech-Language Pathology** concentration provides explicit background in the theoretical and clinical areas necessary for graduate study. Students will learn foundational knowledge for understanding human speech, language, swallowing, hearing, and balance processes, with a particular eye toward the implications of differences and disruptions in the communication systems associated with disorders. Although students across any of the concentrations can pursue the graduate study and pre-certification requirements associated with becoming an audiologist or speech-language pathologist, the Speech-Language Pathology concentration is the most directly associated with opportunities for clinical practice in speech-language pathology.

More information about the fields of speech-language pathology and audiology may be found on the American Speech-Language Hearing Association's web site: http://www.asha.org.

for the degree of Bachelor of Science Major in Speech & Hearing Science, Speech-Language Pathology Concentration

General Education: Students are advised to select their General Education course requirements from the University's approved list of courses (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **and to work in close consultation with their academic advisor to ensure graduation requirements are addressed.**

Code	Title	Hours
Communication Skills		
Composition I		
RHET 105	Writing and Research	4-6
or CMN 111	Oral & Written Comm I	
& CMN 112	and Oral & Written Comm II	

Advanced Composition		3
One course in Advanced Writing/Composition II from university approved Gen Ed list.		
Quantitative Reasoning I		**3**
Choose one of the following:		
STAT 100	Statistics	
STAT 107	Data Science Discovery	
STAT 200	Statistical Analysis	
STAT 212	Biostatistics	
Quantitative Reasoning II		**3**
One course from the university approved Gen Ed list.		
Humanities and the Arts		**6**
Minimum of two courses from university approved Gen Ed list.		
Social and Behavioral Sciences		**6**
Minimum of two courses from university approved Gen Ed list.		
Natural Sciences and Technology		**6**
Choose one from the following and one from the university approved Gen Ed list.		
CHEM 101	Introductory Chemistry	
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	
CHEM 104 & CHEM 105	General Chemistry II and General Chemistry Lab II	
CHEM 108	Chemistry, Everyday Phenomena	
CHEM 202 & CHEM 203	Accelerated Chemistry I and Accelerated Chemistry Lab I	
CHEM 204 & CHEM 205	Accelerated Chemistry II and Accelerated Chemistry Lab II	
PHYS 101	College Physics: Mech & Heat	
PHYS 102	College Physics: E&M & Modern	
PHYS 123	Physics Made Easy	
PHYS 140	How Things Work	
PHYS 150	Physics of Societal Issues	
PHYS 211	University Physics: Mechanics	
PHYS 212	University Physics: Elec & Mag	
PHYS 213	Univ Physics: Thermal Physics	
PHYS 214	Univ Physics: Quantum Physics	
Cultural Studies		**9**
One course from Western Cultures university approved Gen Ed list.		
One course from Non-Western Cultures university approved Gen Ed list.		
One course from U.S. Minority Cultures university approved Gen Ed list.		
Foreign Language		**0-12**
May be satisfied if had three years of one non-English language in high school or completed the equivalent of three semesters of college level foreign language (through the intermediate level).		
Total Hours		40-54

Speech and Hearing Science Professional Core Requirements

All students must complete a series of SHS core classes regardless of their area of concentration. Students are advised to work with the undergraduate academic advisor to ensure courses are taken in proper sequential order. One area of concentration (Speech-Language Pathology, Audiology, Neuroscience of Communication, or Cultural-Linguistic Diversity) must be declared prior to the senior year.

Code	Title	Hours
SHS 170	Intro Hum Comm Sys & Disorders	3
SHS 191	Freshmen Seminar	1
SHS 200	General Phonetics	3
SHS 240	Intro Sound & Hearing Science	3
SHS 300	Anat & Physiol Spch Mechanism	4
or LING 300	Anat & Physiol Spch Mechanism	
SHS 301	General Speech Science	4
or LING 303	General Speech Science	
SHS 320	Development of Spoken Language	3
SHS 385	Evidence-Based Practice in Communication Sciences and Disorders	3
SHS 450	Intro Audiol & Hear Disorders	4
General Education Hours		40-54
Professional Core Hours		28
Concentration Hours		19
Electives		27-41
Total Hours		128

Electives

All students are encouraged to take electives in and outside the department that will count towards the 128 required hours for graduation (the total number of electives students may take may vary with each individual). Students are encouraged to select electives that will complement their areas of interest and future goals. Areas listed below are only a sampling of possibilities; they are not to be considered as requirements and students are not limited to these choices. All students are responsible for addressing course pre-requisites and course availability may vary.

Anthropology (ANTH), Communications (CMN), Kinesiology and Community Health (KIN, CHLH), Educational Organization and Leadership (EOL), Curriculum & Instruction (CI), Educational Policy Studies (EPS), Educational Psychology (EPSY), English (ENGL), English as a Second Language (ESL), Gender and Women's Studies (GWS), Human Development and Family Studies (HDFS), Library and Information Science (LIS), Linguistics (LING), Psychology (PSYC), Recreation, Sport, & Tourism (RST), Rehabilitation Counseling (REHB), Special Education (SPED), Sociology (SOC), Social Work (SOCW). Additional areas to explore may include: courses in a foreign language beyond the completion of the University's requirement, as well as additional courses in science, such as Biology (IB, MCB), Physics (PHYS), microcomputer applications (e.g. ACE), and courses in cultural studies.

Speech-Language Pathology Concentration

Code	Title	Hours
SHS 280	Communication Neuroscience	3
SHS 380	Comm Competence and Disorders	3
SHS 451	Aural Rehab Children to Adults	3

SHS 473	Augmentative & Alt Comm	3
SHS 475	Prepracticum in SHS (Requires senior standing and completion of core classes. Offered Fall and Spring.)	1
Students must also take 6 hours from the following specific electives:		6
SHS 271	Communication and Aging	
SHS 291	Research Lab Experience in SHS (Approved for S/U grading only. Must be arranged with individual faculty member.) [1]	
SHS 333	Children with Neurodevelopmental Disorders Across Communication Contexts	
SHS 375	Comm Partners & Health	
SHS 390	Individual Study [1]	
SHS 395	Honors Individual Study [1]	
SHS 410	Stuttering: Theory & Practice (Requires senior standing in the SHS program or instructor consent)	
SHS 430	Devel & Disorders Phonol Artic	
SHS 431	Lang Disorders Preschool Child (requires senior standing in the SHS program or instructor consent)	
Total Hours		19

[1] *No more than 3 credits from SHS 291, SHS 390 and SHS 395 may be counted toward the 6 credits of specified electives.*

Learning Outcomes: Speech & Hearing Science, BS

Learning outcomes for the degree of Bachelor of Science Major in Speech & Hearing Science

1. Students will describe basic speech, language, and hearing processes across the lifespan from the biological, behavioral, and social science perspectives.
2. Students will apply knowledge of how disruptions in speech, language, and hearing processes relate to human communication functioning and disability.
3. Students will demonstrate the ability to read and evaluate literature related to human communication processes across academic disciplines.
4. Students will apply knowledge of cultural-linguistic diversity to inform discussions about human communication functioning and disability.

Statistics & Computer Science, BSLAS

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Statistics & Computer Science

statistics website: Statistics & Computer Science (https://stat.illinois.edu/academics/undergraduate-program/degree-programs/statistics-computer-science-major/)
computer science degree information: Statistics & Computer Science (https://cs.illinois.edu/academics/undergraduate/degree-program-options/bs-statistics-computer-science/)
statistics advising: department advising information (https://stat.illinois.edu/academics/advising/)
computer science advising: department advising information (https://cs.illinois.edu/academics/undergraduate/undergraduate-advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college websites: https://las.illinois.edu/ **and** https://engineering.illinois.edu
statistics email: stat-advising@illinois.edu
computer science email: undergrad@cs.illinois.edu

This major is sponsored jointly by the Departments of Statistics and Computer Science. The Statistics and Computer Science major is designed for students who would like a strong foundation in computer science, coupled with significant advanced coursework in statistics. The major prepares students for professional or graduate work in statistics and computer science, and for applications of computing in which knowledge of statistics is particularly important, such as data mining and machine learning.

Undergraduate degree programs in Statistics

Statistics, BSLAS (p. 391)

Statistics & Computer Sciences, BSLAS (p. 390)

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Statistics & Computer Science

Departmental distinction: To graduate with distinction requires a specified minimum grade point average in all Computer Science, Statistics, and Mathematics courses listed below. A GPA of 3.25 is required for Distinction, 3.5 for High Distinction, and 3.75 for Highest Distinction.

Departmental distinction: To graduate with distinction requires a specified minimum grade point average in all Computer Science, Statistics, and Mathematics courses listed below. A GPA of 3.25 is required for Distinction, 3.5 for High Distinction, and 3.75 for Highest Distinction.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Normally equates to 68-72 hours. At least 12 hours of 300- and 400-level courses must be taken on this campus.
Minimum hours required for graduation: 120 hours

Code	Title	Hours
CS 100	Freshman Orientation (recommended)	1
Mathematical Foundation		
Calculus through MATH 241: Calculus III		11-12

MATH 257	Linear Algebra with Computational Applications	3
or MATH 415	Applied Linear Algebra	
Computer Science Foundation		
CS 124	Introduction to Computer Science I	3
CS 128	Introduction to Computer Science II	3
CS 173	Discrete Structures	3
CS 222	Software Design Lab	1
CS 225	Data Structures	4
Choose one of the following combinations:		8-11
CS 233 & CS 241	Computer Architecture and System Programming	
OR		
CS 240	Introduction to Computer Systems	
& two CS courses at the 400 level above CS 403, excluding CS 421 and CS 491. These two courses must be distinct from all other courses used to fulfill program requirements or options.		
CS 357	Numerical Methods I	3
CS 374	Introduction to Algorithms & Models of Computation	4
CS 421	Programming Languages & Compilers	3
Probability and Statistics Foundation		
Choose one of the following:		3-4
STAT 107	Data Science Discovery	
STAT 200	Statistical Analysis	
STAT 212	Biostatistics	
STAT 400	Statistics and Probability I	4
STAT 410	Statistics and Probability II	3 or 4
STAT 425	Statistical Modeling I	3 or 4
STAT 426	Statistical Modeling II	3 or 4
Statistical Application Electives -Choose one of the following:		**3**
STAT 428	Statistical Computing	
STAT 431	Applied Bayesian Analysis	
STAT 432	Basics of Statistical Learning	
STAT 434	Survival Analysis	
STAT 448	Advanced Data Analysis	
Computational Application Elective - Choose one of the following:		**3**
CS 410	Text Information Systems	
CS 411	Database Systems	
CS 412	Introduction to Data Mining	
CS 446	Machine Learning	
CS 481	Advanced Topics in Stochastic Processes & Applications	
CS 482	Simulation	
Total Hours		**68-72**

Statistics, BSLAS

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Statistics

department website: https://stat.illinois.edu/
department faculty: Statistics Faculty (https://stat.illinois.edu/directory/faculty/)
advising: Statistics advising (https://stat.illinois.edu/academics/advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: stat-office@illinois.edu

Statistics is the science of modeling, summarizing, and analyzing data, and of using mathematics and computing tools to make predictions and decisions in the face of uncertainty. Statistical ideas are applicable in any area involving quantitative measurement and in almost every area of scholarly pursuit. The major, administered by the Department of Statistics, is designed to provide students with an understanding of the concepts of statistical inference and a familiarity with the methods of applied statistical analysis. A major in statistics will prepare students for a career in business, industry, or government, and for further graduate study in statistics or in a related area.

Undergraduate degree programs in Statistics

Statistics, BSLAS (p. 391)

Statistics & Computer Sciences, BSLAS (p. 390)

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Statistics

Departmental distinction: To graduate with distinction requires a specified minimum grade point average in all Computer Science, Statistics, and Mathematics courses listed below. A GPA of 3.25 is required for Distinction, 3.5 for High Distinction, and 3.75 for Highest Distinction.
General education: Students must complete the Campus General Education requirements including the campus general education language requirement.
Minimum required major and supporting course work: Normally equates to 70-72 hours.
Twelve hours of 300- and 400-level in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Introductory and Preparatory Coursework (17-19 hours)		
Calculus through MATH 241 - Calculus III		11-12
Select one from the following:		3-4
STAT 107	Data Science Discovery	
STAT 200	Statistical Analysis	
STAT 212	Biostatistics	
Select one from the following:		3
MATH 257	Linear Algebra with Computational Applications	
MATH 415	Applied Linear Algebra	
MATH 416	Abstract Linear Algebra	
Statistical Core Coursework (13 hours)		
STAT 400	Statistics and Probability I	4
STAT 410	Statistics and Probability II	3

STAT 425	Statistical Modeling I	3
STAT 426	Statistical Modeling II	3
Advanced Statistics Electives (12 hours)		
Select four of the following:		12
STAT 385	Statistics Programming Methods	
STAT 424	Analysis of Variance	
STAT 427	Statistical Consulting	
STAT 428	Statistical Computing	
STAT 429	Time Series Analysis	
STAT 430	Topics in Applied Statistics	
STAT 431	Applied Bayesian Analysis	
STAT 432	Basics of Statistical Learning	
STAT 433	Stochastic Processes	
STAT 434	Survival Analysis	
STAT 440	Statistical Data Management	
STAT 443	Professional Statistics	
STAT 447	Data Science Programming Methods	
STAT 448	Advanced Data Analysis	
STAT 480	Data Science Foundations	
MATH 444	Elementary Real Analysis	
or MATH 447	Real Variables	
Total Hours		42-44

Learning Outcomes: Statistics, BSLAS

Learning Outcomes for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Statistics

Statistics students will:

1. Be able to apply mathematical and statistical reasoning to draw valid conclusions from data;
2. Communicate the results of a statistical analysis effectively in writing, through visualizations, and orally;
3. Be competent in the use of statistical software, in data management, and in writing statistical code;
4. Be adept in the use of modern methods of statistical computing, statistical learning, and data science;
5. Work effectively as part of a team.

Strategic Business Development & Entrepreneurship, BS

for the degree of Bachelor of Science Major in Strategic Business Development and Entrepreneurship

overview of college admissions & requirements: Gies Catalog (http://catalog.illinois.edu/schools/gies-business/academic-units/) **college website:** https://giesbusiness.illinois.edu/ (https://business.illinois.edu/)

The Strategic Business Development and Entrepreneurship major examines how business opportunities are identified and exploited for society through existing and new organizations. Students will learn to generate and evaluate ideas, develop those ideas into products and services, assemble resources, mitigate risks, and lead organizations that meet human needs. The degree prepares students to work within existing organizations as well as to create new organizations, both for-profit and not-for-profit.

In addition to the SBDE Major requirements, students must also fulfill the University's General Education requirements and the Gies College of Business Core Courses requirements (for more detail, refer to the Gies College of Business Undergraduate Section).

for the degree of Bachelor of Science Major in Strategic Business Development and Entrepreneurship

Minimum hours required for graduation: 124 hours.

University Composition Requirements

Code	Title	Hours
Composition I: Principles of Composition [1]		4-7
Advanced Composition		3

General Education Requirements

Code	Title	Hours
A minimum of six courses is required, as follows:		18
Humanities & the Arts: Literature & the Arts (1-2 courses) [4]		
Humanities & the Arts: Historical & Philosophical Perspectives (1-2 courses) [4]		
Natural Sciences & Technology: Physical Sciences (0-2 courses) [5]		
Natural Sciences & Technology: Life Sciences (0-2 courses) [5]		
Behavioral Sciences (1 course)		
Cultural Studies: Non-Western Cultures (1 course)		
Cultural Studies: U.S. Minorities Cultures (1 course)		
Cultural Studies: Western/Comparative Cultures (1 course)		
Quantitative Reasoning (2 courses) [7]		

Language Other Than English

Code	Title	Hours
Completion of the third semester or equivalent of a language other than English is required. Completion of three years of a single language in high school satisfies this requirement.		0-15

Business Core Requirements

Code	Title	Hours
ACCY 201 & ACCY 202	Accounting and Accountancy I and Accounting and Accountancy II	6
BUS 101	Professional Responsibility and Business [2]	3
BUS 201	Business Dynamics	3
BUS 301	Business in Action	3
BUS 401	Global Business Perspectives	3
BADM 210 & BADM 211	Business Analytics I and Business Analytics II	6
BADM 275	Fundamentals of Operations Management	3
BADM 300	The Legal Environment of Bus	3
BADM 310	Mgmt and Organizational Beh [6]	3

BADM 320	Principles of Marketing	3
BADM 449	Business Policy and Strategy	3
CMN 101	Public Speaking	3
CS 105	Intro Computing: Non-Tech	3
ECON 102 & ECON 103	Microeconomic Principles and Macroeconomic Principles	6
FIN 221	Corporate Finance	3
Total Hours		54

[1] *For a list of the specific courses that meet this requirement, see the college Office of Undergraduate Affairs in 1055 Business Instructional Facility or see the Course Explorer for a list of approved general education courses.*

[2] BUS 101, BUS 201, BUS 301 *and* BUS 401 *are required for all Gies College of Business students. Students who enter the College their first year take each sequential course every fall.*
Inter-College transfer students take BUS 301 *and* BUS 401 *in their sophomore year. Off-campus transfer students take* BUS 101 *and* BUS 201 *in their junior year.*

[4] *Three courses in the Humanities & the Arts area are required and students must complete at least one course in the Literature & the Arts and Historical & Perspectives subcategories. At least one of the courses must be a 200 or higher level course.*

[5] *Two courses in the Natural Sciences & Technology area are required. It is strongly recommended that students complete one course in the Physical Sciences and Life Sciences subcategories.*

[6] *This course includes limited voluntary participation as a subject in experiments.*

[7] CS 105 *fulfills a Quantitative Reasoning I requirement.*

Code	Title	Hours
BADM 367	Mgmt of Innov and Technology	3
BADM 446	Entrepreneurship: New Venture Creation	4
FIN 423	Financing Emerging Businesses	3
Total Core Required Hours		**10**
Skill-Building Elective Choices:		**17-19**
BADM 311	Leading Individuals and Teams	
BADM 312	Designing and Managing Orgs (Renamed Designing & Leading Organizations)	
BADM 314	Leading Negotiations	
BADM 322	Marketing Research	
BADM 323	Marketing Communications	
BADM 327	Marketing to Business and Govt	
BADM 329	New Product Development	
BADM 350	IT for Networked Organizations	
BADM 351	E-Business Management	
BADM 359	Business Problem Formulation and Solution	
BADM 375	Operations Strategy	
BADM 377	Project Management	
BADM 447	Legal Issues in Entrepreneurship	
Experiential Elective Choices [1]		
BADM 331	Making Things	
BADM 332	Sustainable Product Design & Marketing Plans I: Bottom-Up Immersion in Subsistence Marketplaces	
BADM 333	Sustainable Product Design & Marketing Plans II: Bottom-Up Enterprise & Marketing Innovation	
BADM 357	Digital Making Seminar	
BADM 420	Advanced Marketing Management	
BADM 445	Small Business Consulting	
Other experiential entrep. or business/product dev. course with departmental approval		
Total Hours		**27-29**

[1] *7 hours maximum Experiential Elective hours (included in total elective hours)*

Studio Art, BASA

for the degree of Bachelor of Arts in Studio Art Major in Studio Art

school office: 143 Art and Design Building, Champaign, IL 61820
contact: Mark Avery, Coordinator of Undergraduate Academic Affairs
email: mavery@illinois.edu
phone: (217) 333-6632
department website: S (https://art.illinois.edu)chool of Art & Design (https://art.illinois.edu/)
department faculty: Art & Design Faculty (https://art.illinois.edu/index.php/people/faculty-staff/)
overview of college admissions & requirements: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/

Students pursuing this major select one of seven concentrations:

- General Studio Art Concentration (p. 395)
- Fashion Concentration (p. 394)
- New Media Concentration (p. 396)
- Painting Concentration (p. 397)
- Photography Concentration (p. 397)
- Printmaking Concentration (http://catalog.illinois.edu/undergraduate/faa/academic-units/school-art-design/studioart/ba/printmakingconcentration/)
- Sculpture Concentration (p. 399)

The Bachelor of Arts in Studio Art (with concentrations) focuses on the study of art, design, and art history in the context of a broader program of general study offered by the diverse research and teaching activities across the University of Illinois, Urbana/Champaign campus. It differs from the Bachelor of Fine Arts in that it offers students rigorous education in studio art while permitting them time to pursue studies in other areas, with a significant part of the educational experience occurring in areas outside the studio. Students choose from courses that will lead to concentrations in Fashion, Painting, Photography, Sculpture, Printmaking, New Media, or (general) Studio Art. These options permit students to experience a broad range of media practices or to focus on media-specific credits. Concentrations will be noted on the student's degree, indicating a level of expertise in a particular sub-discipline that will be useful in the pursuit of advanced study or in employment opportunities where particular material skills are needed.

Foundation courses for the BA in Studio Art introduce basic materials and conceptual approaches to making art, using traditional media including drawing and painting, printmaking, clay, plaster, wood and metal, to code, digital imaging, interactive media, and time-based applications. By incorporating new and traditional strategies and technologies students will understand visual organization and communication in 2D (artworks in two dimensions, such as drawing, painting or printmaking), 3D (artworks in three dimensions, such as sculpture and installation), and 4D (artworks of a time-based nature, such as coding, video, sound and performance).

The advanced BA Studio Art student can look forward to a changing menu of courses on a variety of topics, taught by a diverse faculty with expertise in a wide variety of conceptual, material and technical strategies for making art. The BA Studio Art's curriculum offerings are designed to reflect an increasingly dynamic culture and provide students with experiences and skills that promote adaptability after graduation.

BA Studio Art students are provided with individual studio spaces housed in a communal studio building, where they pursue a self-selected studio practice. The communal studio configuration provides the geography for a strong, vibrant community of student-artists working together as they establish their focus and participate in exhibitions, performances, and critiques.

Students in the School of Art and Design must complete the Campus General Education requirements (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/). Some Art and Design courses will also apply toward the General Education requirements (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/).

A portfolio review is required for admission to the School of Art and Design.

Studio Art: Fashion, BASA

for the degree of Bachelor of Arts in Studio Art Major in Studio Art, Fashion Concentration

contact: Mark Avery
office: 140 Art and Design Building, Champaign, IL 61820
email: mavery@illinois.edu
phone: (217) 333-6632

school catalog page: Art & Design (http://catalog.illinois.edu/faa/)
school website: School of Art & Design (https://art.illinois.edu/)
school faculty: Art & Design Faculty (https://art.illinois.edu/index.php/people/faculty-staff/)
overview of college admissions & requirements: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: Fine & Applied Arts (https://faa.illinois.edu/)

Students in the BASA and BFASA who choose a concentration in Fashion will focus on developing their own unique apparel design process with an emphasis on sustainable practices while becoming familiar with the various aspects of the fashion industry from concept to consumer. Students will be introduced to various modes of research and ideation, gaining the tools to be able to effectively communicate and produce their two- and three-dimensional designs within the context of the history of fashion and the theoretical underpinnings that drive fashion and contemporary culture.

Introductory courses in Fashion give students an overview of the industry from customer development, design and production through manufacturing, promotion and sales. Students are introduced to the fundamentals of textiles and clothing design, and the basics of creating a fashion collection through the use of hand and digital illustration techniques. Further courses focus on the exploration of experimental design, patternmaking, and sewing skills while encouraging the development of the designer's personal creative vision within the context of fashion history and the consumer market. Additional courses bring a greater understanding of how to enact knowledge gained in an educational setting within the fashion industry, through sustainable fashion collection development and branding. Students are given the unique opportunity to showcase their constructed ensembles and mini-collections on the runway in the Re-Fashioned fashion show presented each spring. We offer experiences in a variety of classrooms designed to support explorations in bringing two-dimensional materials to three-dimensional forms, access to computer labs, digital output technologies including 3D printers, sewing and embroidery machines, and dress forms.

for the degree of Bachelor of Arts in Studio Art Major in Studio Art, Fashion Concentration

Students in the School of Art and Design must complete the Campus General Education requirements. Some Art and Design courses will also apply toward the General Education requirements.

A portfolio review is required for admission to the School of Art and Design.

First Year Curriculum

Code	Title	Hours
FAA 101	Arts at Illinois	1
ARTF 101	Contemporary Issues in Art	2
ARTE 101	Art, Design, and Society	2
ARTH 110	Introduction to the History of Art and Visual Culture	3
Select one Drawing course:		3
ARTF 102	Observational Drawing	
ARTF 104	Expressive Drawing	
ARTF 106	Visualization Drawing	
Select one course in 2D Category:		3
ARTD 151	Introduction to Graphic Design	
ARTS 205	Introduction to Printmaking (required for Studio Art: Printmaking)	
ARTS 221	Fashion Illustration (required for Studio Art: Fashion)	
ARTS 251	Beginning Painting (required for Studio Art: Painting)	
ARTS 264	Basic Photography (required for Studio Art: Photography)	
Select one course in 3D Category:		3
ARTD 101	Introduction to Industrial Design	
ARTS 210	Ceramics Sculpture I	
ARTS 230	Jewelry/Metals I	
ARTS 280	Beginning Sculpture (required for Studio Art: Sculpture)	
Select one course in 4D Category:		3

ARTS 241	Image Practice	
ARTS 243	Time Arts I	
ARTS 244	Interaction I	
Total Hours		**20**

Code	Title	Hours
Art History Requirements		**9**
200 level and above ARTH courses		

Code	Title	Hours
Total Credits for BA Studio Arts		
First-Year Curriculum Requirements		20
Art History Requirements		9
Concentration Requirements [1]		16
General Education Requirements		40
Electives to bring the total hours earned to 122, including a minimum of 40 credits at the 300- or 400-level.		37
Total Hours		122

[1] See Concentrations for requirements for individual concentrations.

Fashion Concentration

Code	Title	Hours
ARTS 221	Fashion Illustration (exclude if taken in first year curriculum)	(3)
ARTS 223	Experimental Fashion	3
ARTS 321	Sustainable Fashion Development and Branding	3
or ARTS 420	Making Fashion: Apparel Design in Context	
ARTS 392	Current Art Issues Seminar	3
ARTS 448	BASA Capstone Project	4
Choose one of the following:		3
ARTS 220	Introduction to Fashion	
ARTS 299	Special Topics in Studio Art	
ARTS 499	Special Topics in Studio Art	
ARTS 320	Fashion and Textiles Design	
ARTS 381	Intermediate Sculpture	
ARTS 457	Art in Context	
Total Hours		**16**

Studio Art: General Studio Art, BASA

for the degree of Bachelor of Arts Major in Studio Art, General Studio Art Concentration

contact: Mark Avery
office: 140 Art and Design Building, Champaign, IL 61820
email: mavery@illinois.edu
phone: (217) 333-6632

school catalog page: Art & Design (http://catalog.illinois.edu/faa/)
school website: School of Art & Design (https://art.illinois.edu/)
school faculty: Art & Design Faculty (https://art.illinois.edu/index.php/people/faculty-staff/)
overview of college admissions & requirements: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: Fine & Applied Arts (https://faa.illinois.edu/)

for the degree of Bachelor of Arts Major in Studio Art, General Studio Art Concentration

Students in the School of Art and Design must complete the Campus General Education requirements. Some Art and Design courses will also apply toward the General Education requirements.

A portfolio review is required for admission to the School of Art and Design.

First Year Curriculum

Code	Title	Hours
FAA 101	Arts at Illinois	1
ARTF 101	Contemporary Issues in Art	2
ARTE 101	Art, Design, and Society	2
ARTH 110	Introduction to the History of Art and Visual Culture	3
Select one Drawing course:		3
ARTF 102	Observational Drawing	
ARTF 104	Expressive Drawing	
ARTF 106	Visualization Drawing	
Select one course in 2D Category:		3
ARTD 151	Introduction to Graphic Design	
ARTS 205	Introduction to Printmaking (required for Studio Art: Printmaking)	
ARTS 221	Fashion Illustration (required for Studio Art: Fashion)	
ARTS 251	Beginning Painting (required for Studio Art: Painting)	
ARTS 264	Basic Photography (required for Studio Art: Photography)	
Select one course in 3D Category:		3
ARTD 101	Introduction to Industrial Design	
ARTS 210	Ceramics Sculpture I	
ARTS 230	Jewelry/Metals I	
ARTS 280	Beginning Sculpture (required for Studio Art: Sculpture)	
Select one course in 4D Category:		3
ARTS 241	Image Practice	
ARTS 243	Time Arts I	
ARTS 244	Interaction I	
Total Hours		**20**

Code	Title	Hours
Art History Requirements		**9**
200 level and above ARTH courses		

Code	Title	Hours
Total Credits for BA Studio Arts		
First-Year Curriculum Requirements		20
Art History Requirements		9
Concentration Requirements [1]		16
General Education Requirements		40
Electives to bring the total hours earned to 122, including a minimum of 40 credits at the 300- or 400-level.		37
Total Hours		122

[1] See Concentrations for requirements for individual concentrations.

Code	Title	Hours
Select one 200-level ARTS course from foundations 2D, 3D, 4D studio courses menu		3
200-level ARTS course		3
300-level ARTS course		3
ARTS 392	Current Art Issues Seminar	3
400-level ARTS course		3
ARTS 448	BASA Capstone Project	4
Total Hours		**16**

Studio Art: New Media, BASA

for the degree of Bachelor of Arts in Studio Art Major in Studio Art, New Media Concentration

contact: Mark Avery
office: 140 Art and Design Building, Champaign, IL 61820
email: mavery@illinois.edu
phone: (217) 333-6632

school catalog page: Art & Design (http://catalog.illinois.edu/faa/)
school website: School of Art & Design (https://art.illinois.edu/)
school faculty: Art & Design Faculty (https://art.illinois.edu/index.php/people/faculty-staff/)
overview of college admissions & requirements: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: Fine & Applied Arts (https://faa.illinois.edu/)

for the degree of Bachelor of Arts in Studio Art Major in Studio Art, New Media Concentration

Students in the School of Art and Design must complete the Campus General Education requirements. Some Art and Design courses will also apply toward the General Education requirements.

A portfolio review is required for admission to the School of Art and Design.

First Year Curriculum

Code	Title	Hours
FAA 101	Arts at Illinois	1
ARTF 101	Contemporary Issues in Art	2
ARTE 101	Art, Design, and Society	2
ARTH 110	Introduction to the History of Art and Visual Culture	3
Select one Drawing course:		3
ARTF 102	Observational Drawing	
ARTF 104	Expressive Drawing	
ARTF 106	Visualization Drawing	
Select one course in 2D Category:		3
ARTD 151	Introduction to Graphic Design	
ARTS 205	Introduction to Printmaking (required for Studio Art: Printmaking)	
ARTS 221	Fashion Illustration (required for Studio Art: Fashion)	
ARTS 251	Beginning Painting (required for Studio Art: Painting)	
ARTS 264	Basic Photography (required for Studio Art: Photography)	
Select one course in 3D Category:		3
ARTD 101	Introduction to Industrial Design	
ARTS 210	Ceramics Sculpture I	
ARTS 230	Jewelry/Metals I	
ARTS 280	Beginning Sculpture (required for Studio Art: Sculpture)	
Select one course in 4D Category:		3
ARTS 241	Image Practice	
ARTS 243	Time Arts I	
ARTS 244	Interaction I	
Total Hours		**20**

Code	Title	Hours
Art History Requirements		**9**
200 level and above ARTH courses		

Code	Title	Hours
Total Credits for BA Studio Arts		
First-Year Curriculum Requirements		20
Art History Requirements		9
Concentration Requirements [1]		16
General Education Requirements		40
Electives to bring the total hours earned to 122, including a minimum of 40 credits at the 300- or 400-level.		37
Total Hours		122

[1] See Concentrations for requirements for individual concentrations.

New Media Concentration

Code	Title	Hours
ARTS 241	Image Practice [1]	3
ARTS 243	Time Arts I [1]	3
ARTS 244	Interaction I [1]	3
ARTS 392	Current Art Issues Seminar	3
ARTS 448	BASA Capstone Project	4
Choose one of the following:		3
ARTS 299	Special Topics in Studio Art	
ARTS 399	Internship in Studio Arts [2]	
ARTS 499	Special Topics in Studio Art [2]	
ARTS 443	Time Arts II	
ARTS 444	Interaction II	

ARTS 445	Special Topics in New Media	
Total Hours		**16**

[1] *Exclude if taken as part of the Foundation Requirements.*

[2] *Advisor consent required.*

Studio Art: Painting, BASA

for the degree of Bachelor of Arts in Studio Art Major in Studio Art, Painting Concentration

contact: Mark Avery
office: 140 Art and Design Building, Champaign, IL 61820
email: mavery@illinois.edu
phone: (217) 333-6632

school catalog page: Art & Design (http://catalog.illinois.edu/faa/)
school website: School of Art & Design (https://art.illinois.edu/)
school faculty: Art & Design Faculty (https://art.illinois.edu/index.php/people/faculty-staff/)
overview of college admissions & requirements: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: Fine & Applied Arts (https://faa.illinois.edu/)

for the degree of Bachelor of Arts in Studio Art Major in Studio Art, Painting Concentration

Students in the School of Art and Design must complete the Campus General Education requirements. Some Art and Design courses will also apply toward the General Education requirements.

A portfolio review is required for admission to the School of Art and Design.

First Year Curriculum

Code	Title	Hours
FAA 101	Arts at Illinois	1
ARTF 101	Contemporary Issues in Art	2
ARTE 101	Art, Design, and Society	2
ARTH 110	Introduction to the History of Art and Visual Culture	3
Select one Drawing course:		3
ARTF 102	Observational Drawing	
ARTF 104	Expressive Drawing	
ARTF 106	Visualization Drawing	
Select one course in 2D Category:		3
ARTD 151	Introduction to Graphic Design	
ARTS 205	Introduction to Printmaking (required for Studio Art: Printmaking)	
ARTS 221	Fashion Illustration (required for Studio Art: Fashion)	
ARTS 251	Beginning Painting (required for Studio Art: Painting)	
ARTS 264	Basic Photography (required for Studio Art: Photography)	
Select one course in 3D Category:		3
ARTD 101	Introduction to Industrial Design	
ARTS 210	Ceramics Sculpture I	
ARTS 230	Jewelry/Metals I	
ARTS 280	Beginning Sculpture (required for Studio Art: Sculpture)	
Select one course in 4D Category:		3
ARTS 241	Image Practice	
ARTS 243	Time Arts I	
ARTS 244	Interaction I	
Total Hours		**20**

Code	Title	Hours
Art History Requirements		**9**
200 level and above ARTH courses		

Code	Title	Hours
Total Credits for BA Studio Arts		
First-Year Curriculum Requirements		20
Art History Requirements		9
Concentration Requirements [1]		16
General Education Requirements		40
Electives to bring the total hours earned to 122, including a minimum of 40 credits at the 300- or 400-level.		37
Total Hours		122

[1] See Concentrations for requirements for individual concentrations.

Code	Title	Hours
ARTS 250	Life Drawing	3
ARTS 251	Beginning Painting [1]	3
ARTS 354	Intermediate Painting	3
ARTS 392	Current Art Issues Seminar	3
ARTS 448	BASA Capstone Project	4
Choose one of the following:		3
ARTS 399	Internship in Studio Arts (with advisor consent)	
ARTS 499	Special Topics in Studio Art (with advisor consent)	
ARTS 454	Advanced Drawing	
ARTS 455	Advanced Painting	
Total Hours		**16**

[1] *ARTS 251 is required for the concentration if not already taken to fulfill the 2D Category Foundation Requirement.*

Studio Art: Photography, BASA

for the degree of Bachelor of Arts in Studio Art Major in Studio Art, Photography Concentration

contact: Mark Avery
office: 140 Art and Design Building, Champaign, IL 61820
email: mavery@illinois.edu
phone: (217) 333-6632

school catalog page: Art & Design (http://catalog.illinois.edu/faa/)
school website: School of Art & Design (https://art.illinois.edu/)
school faculty: Art & Design Faculty (https://art.illinois.edu/index.php/people/faculty-staff/)
overview of college admissions & requirements: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: Fine & Applied Arts (https://faa.illinois.edu/)

Students in the BASA and BFASA who choose a Photography concentration will focus on creating works of art that use photographic imagery. Faculty in the Photography program are committed to continually redefining fine art photography in an expansive and openly creative way. The ability to understand and employ photography's unique narrative potential is emphasized alongside technical considerations. Our classes provide a balance of practice and theory, which assures the understanding and appreciation of both the interdependence and integration of creativity, production, and research.

Our photography faculty has international exhibition records and work in numerous museum and private collections. Their photographs, installations, books, films, and videos have won critical acclaim in the form of national reviews and grants ranging from the National Endowment for the Arts to the Illinois Arts Council. Faculty members have lectured on their work throughout the United States and abroad.

Collectively the faculty has a wide range of skills, and they use them to teach fine black and white printing, studio lighting, color photography, digital photography, video, installation art, the history of photography, and critical theory. Graduates of our program apply their knowledge in a variety of ways, as fine artists, commercial photographers, designers, gallery and museum professionals, or any field that requires visual literacy and creative thinking.

for the degree of Bachelor of Arts in Studio Art Major in Studio Art, Photography Concentration

Students in the School of Art and Design must complete the Campus General Education requirements. Some Art and Design courses will also apply toward the General Education requirements.

A portfolio review is required for admission to the School of Art and Design.

First Year Curriculum

Code	Title	Hours
FAA 101	Arts at Illinois	1
ARTF 101	Contemporary Issues in Art	2
ARTE 101	Art, Design, and Society	2
ARTH 110	Introduction to the History of Art and Visual Culture	3
Select one Drawing course:		3
ARTF 102	Observational Drawing	
ARTF 104	Expressive Drawing	
ARTF 106	Visualization Drawing	
Select one course in 2D Category:		3
ARTD 151	Introduction to Graphic Design	
ARTS 205	Introduction to Printmaking (required for Studio Art: Printmaking)	
ARTS 221	Fashion Illustration (required for Studio Art: Fashion)	
ARTS 251	Beginning Painting (required for Studio Art: Painting)	
ARTS 264	Basic Photography (required for Studio Art: Photography)	
Select one course in 3D Category:		3
ARTD 101	Introduction to Industrial Design	
ARTS 210	Ceramics Sculpture I	
ARTS 230	Jewelry/Metals I	
ARTS 280	Beginning Sculpture (required for Studio Art: Sculpture)	
Select one course in 4D Category:		3
ARTS 241	Image Practice	
ARTS 243	Time Arts I	
ARTS 244	Interaction I	
Total Hours		**20**

Code	Title	Hours
Art History Requirements		**9**
200 level and above ARTH courses		

Code	Title	Hours
Total Credits for BA Studio Arts		
First-Year Curriculum Requirements		20
Art History Requirements		9
Concentration Requirements [1]		16
General Education Requirements		40
Electives to bring the total hours earned to 122, including a minimum of 40 credits at the 300- or 400-level.		37
Total Hours		122

[1] See Concentrations for requirements for individual concentrations.

Students in the photography concentration should elect ARTH 257 as part of the 9 additional hours of Art History, listed above.

Photography Concentration

Code	Title	Hours
ARTH 257	History of Photography (exclude if taken as part of Art History requirements)	(3)
ARTS 264	Basic Photography (exclude if taken as part of first year curriculum)	(3)
ARTS 266	View Camera	3
or ARTS 267	Digital Photographic Output	
ARTS 365	Photography Workshop	3
or ARTS 367	RAW Photography	
ARTS 392	Current Art Issues Seminar	3
ARTS 448	BASA Capstone Project	4
ARTS 461	Advanced Photography	3
Total Hours		**16**

Studio Art: Printmaking, BASA

for the degree of Bachelor of Arts in Studio Art Major in Studio Art, Printmaking Concentration

contact: Mark Avery
office: 140 Art and Design Building, Champaign, IL 61820
email: mavery@illinois.edu
phone: (217) 333-6632

school catalog page: Art & Design (http://catalog.illinois.edu/faa/)
school website: School of Art & Design (https://art.illinois.edu/)
school faculty: Art & Design Faculty (https://art.illinois.edu/index.php/people/faculty-staff/)
overview of college admissions & requirements: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: Fine & Applied Arts (https://faa.illinois.edu/)

for the degree of Bachelor of Arts in Studio Art Major in Studio Art, Printmaking Concentration

Students in the School of Art and Design must complete the Campus General Education requirements. Some Art and Design courses will also apply toward the General Education requirements.

A portfolio review is required for admission to the School of Art and Design.

First Year Curriculum

Code	Title	Hours
FAA 101	Arts at Illinois	1
ARTF 101	Contemporary Issues in Art	2
ARTE 101	Art, Design, and Society	2
ARTH 110	Introduction to the History of Art and Visual Culture	3
Select one Drawing course:		3
ARTF 102	Observational Drawing	
ARTF 104	Expressive Drawing	
ARTF 106	Visualization Drawing	
Select one course in 2D Category:		3
ARTD 151	Introduction to Graphic Design	
ARTS 205	Introduction to Printmaking (required for Studio Art: Printmaking)	
ARTS 221	Fashion Illustration (required for Studio Art: Fashion)	
ARTS 251	Beginning Painting (required for Studio Art: Painting)	
ARTS 264	Basic Photography (required for Studio Art: Photography)	
Select one course in 3D Category:		3
ARTD 101	Introduction to Industrial Design	
ARTS 210	Ceramics Sculpture I	
ARTS 230	Jewelry/Metals I	
ARTS 280	Beginning Sculpture (required for Studio Art: Sculpture)	
Select one course in 4D Category:		3
ARTS 241	Image Practice	
ARTS 243	Time Arts I	
ARTS 244	Interaction I	
Total Hours		**20**

Code	Title	Hours
Art History Requirements		**9**
200 level and above ARTH courses		

Code	Title	Hours
Total Credits for BA Studio Arts		
First-Year Curriculum Requirements		20
Art History Requirements		9
Concentration Requirements [1]		16
General Education Requirements		40
Electives to bring the total hours earned to 122, including a minimum of 40 credits at the 300- or 400-level.		37
Total Hours		122

[1] See Concentrations for requirements for individual concentrations.

Code	Title	Hours
ARTS 205	Introduction to Printmaking (required for the Printmaking concentration, exclude if taken in first year curriculum)	3
ARTS 250	Life Drawing	3
ARTS 392	Current Art Issues Seminar	3
ARTS 405	Special Topics in Printmaking (may be repeated to a maximum of 12 hours)	3
ARTS 448	BASA Capstone Project	4
Choose one of the following: (ARTS 405 can be repeated for this requirement)		
ARTS 399	Internship in Studio Arts (with advisor consent)	1 to 4
ARTS 454	Advanced Drawing	3
ARTS 455	Advanced Painting	3
ARTS 499	Special Topics in Studio Art	1 to 4
Total Hours		**16**

Studio Art: Sculpture, BASA

for the degree of Bachelor of Arts in Studio Art Major in Studio Art, Sculpture Concentration

contact: Mark Avery
office: 140 Art and Design Building, Champaign, IL 61820
email: mavery@illinois.edu
phone: (217) 333-6632

school catalog page: Art & Design (http://catalog.illinois.edu/faa/)
school website: School of Art & Design (https://art.illinois.edu/)
school faculty: Art & Design Faculty (https://art.illinois.edu/index.php/people/faculty-staff/)
overview of college admissions & requirements: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: Fine & Applied Arts (https://faa.illinois.edu/)

for the degree of Bachelor of Arts in Studio Art Major in Studio Art, Sculpture Concentration

Students in the School of Art and Design must complete the Campus General Education requirements. Some Art and Design courses will also apply toward the General Education requirements.

A portfolio review is required for admission to the School of Art and Design.

First Year Curriculum

Code	Title	Hours
FAA 101	Arts at Illinois	1
ARTF 101	Contemporary Issues in Art	2
ARTE 101	Art, Design, and Society	2
ARTH 110	Introduction to the History of Art and Visual Culture	3
Select one Drawing course:		3
ARTF 102	Observational Drawing	
ARTF 104	Expressive Drawing	
ARTF 106	Visualization Drawing	
Select one course in 2D Category:		3
ARTD 151	Introduction to Graphic Design	
ARTS 205	Introduction to Printmaking (required for Studio Art: Printmaking)	
ARTS 221	Fashion Illustration (required for Studio Art: Fashion)	
ARTS 251	Beginning Painting (required for Studio Art: Painting)	
ARTS 264	Basic Photography (required for Studio Art: Photography)	
Select one course in 3D Category:		3
ARTD 101	Introduction to Industrial Design	
ARTS 210	Ceramics Sculpture I	
ARTS 230	Jewelry/Metals I	
ARTS 280	Beginning Sculpture (required for Studio Art: Sculpture)	
Select one course in 4D Category:		3
ARTS 241	Image Practice	
ARTS 243	Time Arts I	
ARTS 244	Interaction I	
Total Hours		**20**

Code	Title	Hours
Art History Requirements		**9**
200 level and above ARTH courses		

Code	Title	Hours
Total Credits for BA Studio Arts		
First-Year Curriculum Requirements		20
Art History Requirements		9
Concentration Requirements [1]		16
General Education Requirements		40
Electives to bring the total hours earned to 122, including a minimum of 40 credits at the 300- or 400-level.		37
Total Hours		122

[1] See Concentrations for requirements for individual concentrations.

Code	Title	Hours
ARTS 280	Beginning Sculpture [1]	3
ARTS 381	Intermediate Sculpture	3
ARTS 252	Making and Meaning	3
or ARTS 210	Ceramics Sculpture I	
ARTS 392	Current Art Issues Seminar	3
ARTS 448	BASA Capstone Project	4
Choose one of the following:		3
ARTS 399	Internship in Studio Arts [2]	1 to 4
ARTS 499	Special Topics in Studio Art	1 to 4
ARTS 310	Ceramics Sculpture II	3
ARTS 456	Advanced Sculpture	3
ARTS 457	Art in Context	3
Total Hours		**16**

[1] *ARTS 280 is required for the concentration if not already taken to fulfill the 3D Category Foundation Requirement.*

[2] *Advisor consent required.*

Learning Outcomes: Studio Art, BASA

Learning outcomes for the Bachelor of Arts Major in Studio Art

1. Students will understand and be able to apply basic principles of visual and material communication, including two-dimensional pictorial concepts, three-dimensional formal and spatial concepts, and a wide variety of media and formats for artistic production, and possess the ability to apply them to a specific aesthetic intent.
2. Students will demonstrate an ability and willingness to experiment and explore the expressive possibilities of various media, and artistic and creative strategies for self-directed art-making, and investigate the diverse activities and conceptual modes available to the contemporary artist, including work that directly addresses or engages with recent developments in the field of fine art as well as broader social questions and challenges. Students are trained in the production and critique of artworks that explore forms and technologies identified as new or emerging.
3. Students will gain knowledge of, understand, and be able to apply concepts of visual rhetoric in the development of content, and be able to recognize and critically analyze an evolving variety of communicative practices in art and visual culture, including those that that represent diverse cultures and sociopolitical positions, and to demonstrate openness to new social possibilities and a critical empathy towards both audiences and culture producers of differing histories, origins and identities.
4. Students will be willing and able to investigate and accommodate broad-ranging types of knowledge and artistic strategies for the purpose of synthesizing diverse and even disparate ideas in order to create sophisticated, unique works of art, participate in new types of collaboration, and to make innovative statements and hypotheses, or propose creative solutions to social, organizational and societal problems using aesthetic strategies.
5. Students concentrating in New Media create work for the new disciplinary mechanisms that have arisen to evaluate and promote artwork in digital media, but also for traditional institutional mechanisms of art distribution and art critique. As in Contemporary Art, work in New Media may take the form of performance, sound and

radio broadcast, gallery exhibition, curation, public art, cinema and video, a networked event, publication, or even scientific research.

6. Students will develop an innovative, imaginative, and entrepreneurial self-directed studio practice, will gain a deep understanding of their own creativity, be able to apply it in any context, and will learn to independently generate thematic investigation and implementation of research in a broad variety of social locations, including art and educational institutions, activist forums, and cyberspace. Students in the BASA will produce web and print based documents that serve to market and promote their practice as independent makers.

Studio Art, BFASA

for the degree of Bachelor of Fine Arts in Studio Art Major in Studio Art

school office: 143 Art and Design Building, Champaign, IL 61820
contact: Mark Avery, Coordinator of Undergraduate Academic Affairs
email: mavery@illinois.edu
phone: (217) 333-6632
department website: S (https://art.illinois.edu)chool of Art & Design (https://art.illinois.edu/)
department faculty: Art & Design Faculty (https://art.illinois.edu/index.php/people/faculty-staff/)
overview of college admissions & requirements: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/

Students pursuing this major select one of seven concentrations:

- General Studio Art Concentration (p. 403)
- Fashion Concentration (p. 401)
- New Media Concentration (p. 404)
- Painting Concentration (p. 405)
- Photography Concentration (p. 407)
- Printmaking Concentration (p. 408)
- Sculpture Concentration (p. 410)

The Bachelor of Fine Arts in Studio Art (BFASA) at the University of Illinois offers students unprecedented flexibility in determining their own courses and topics of study, engaging in a diverse, innovative curriculum. In response to a rapidly changing world in which artists and designers are constantly presented with new tools, platforms, topics, strategies and venues for exhibition, publication, performance and other types of cultural work, the BFASA prepares students for the workplaces of the future. The BFASA is designed to equip graduates with the skills necessary to not only create artwork, but to communicate, think critically and creatively, and gain experience in a broad range of topics that will prepare them as innovative artists and as global citizens. Students will navigate a dynamic curriculum that is responsive to current trends in art, culture and creativity. It encourages new, interdisciplinary initiatives and fosters collaboration and research at the undergraduate level within the context of a premier research university.

The BFASA at Illinois begins with basic material and technological tools and concepts in a variety of studio courses. Students are guided in the understanding of visual organization and communication in two, three, and four dimensions by utilizing both new and traditional technologies and strategies. Foundation courses introduce basic material and conceptual approaches to making art, using media from traditional disciplines including drawing and painting, printmaking, clay, plaster, wood and metal, to code, digital imaging, interactive media, and time-based applications.

At the intermediate and advanced levels, curriculum offerings are designed to reflect an increasingly dynamic culture, and to provide students with experiences and skills that will enhance their adaptability. A changing menu of courses on a variety of topics is taught by a faculty with expertise in a wide variety of conceptual, material and technical strategies for making art.

BFASA students are provided individual studio spaces, where they develop a self-directed practice, housed in a communal studio building. The studio configuration provides the stage for a strong, vibrant community of student-artists working together as they establish their interests and participate in exhibitions, performances, and critiques. The capstone experience is the BFASA Thesis course, in which students develop an individually determined body of work based on their entire educational experience. A portfolio and written thesis paper will demonstrate their conceptual, technical and expressive abilities.

Our graduates will enter professional lives as artists at a time when the boundaries between art and other fields are vanishing. Creative individuals with broad and versatile material, technical and intellectual skills will be in demand within expanding diverse practices that comprise contemporary art and society.

Students in the School of Art and Design must complete the Campus General Education requirements (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/). Some Art and Design courses will also apply toward the General Education requirements (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/).

A portfolio review is required for admission to the School of Art and Design.

Studio Art: Fashion, BFASA

for the degree of Bachelor of Fine Arts in Studio Art Major in Studio Art, Fashion Concentration

contact: Mark Avery
office: 140 Art and Design Building, Champaign, IL 61820
email: mavery@illinois.edu
phone: (217) 333-6632

school website: School of Art & Design (https://art.illinois.edu/)
school faculty: Art & Design Faculty (https://art.illinois.edu/about/faculty-directory/)
overview of college admissions & requirements: Fine & Applied Arts (https://faa.illinois.edu/)
college website: Fine & Applied Arts (https://faa.illinois.edu/applying-faa/)

Students in the BASA and BFASA who choose a concentration in Fashion will focus on developing their own unique apparel design process with an emphasis on sustainable practices while becoming familiar with the various aspects of the fashion industry from concept to consumer. Students will be introduced to various modes of research and ideation, gaining the tools to be able to effectively communicate and produce their two- and three-dimensional designs within the context of the history

of fashion and the theoretical underpinnings that drive fashion and contemporary culture.

Introductory courses in Fashion give students an overview of the industry from customer development, design and production through manufacturing, promotion and sales. Students are introduced to the fundamentals of textiles and clothing design, and the basics of creating a fashion collection through the use of hand and digital illustration techniques. Further courses focus on the exploration of experimental design, patternmaking, and sewing skills while encouraging the development of the designer's personal creative vision within the context of fashion history and the consumer market. Additional courses bring a greater understanding of how to enact knowledge gained in an educational setting within the fashion industry, through sustainable fashion collection development and branding. Students are given the unique opportunity to showcase their constructed ensembles and mini-collections on the runway in the Re-Fashioned fashion show presented each spring. We offer experiences in a variety of classrooms designed to support explorations in bringing two-dimensional materials to three-dimensional forms, access to computer labs, digital output technologies including 3D printers, sewing and embroidery machines, and dress forms.

for the degree of Bachelor of Fine Arts in Studio Art Major in Studio Art, Fashion Concentration

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Students in the School of Art and Design must complete the Campus General Education requirements. Some Art and Design courses will also apply toward the General Education requirements.

A portfolio review is required for admission to the School of Art and Design.

First Year Curriculum

Code	Title	Hours
FAA 101	Arts at Illinois	1
ARTF 101	Contemporary Issues in Art	2
ARTE 101	Art, Design, and Society	2
ARTH 110	Introduction to the History of Art and Visual Culture	3
Select one Drawing course:		3
ARTF 102	Observational Drawing	
ARTF 104	Expressive Drawing	
ARTF 106	Visualization Drawing	
Select one course in 2D Category:		3
ARTD 151	Introduction to Graphic Design	
ARTS 205	Introduction to Printmaking (required for Studio Art: Printmaking)	
ARTS 221	Fashion Illustration (required for Studio Art: Fashion)	
ARTS 251	Beginning Painting (required for Studio Art: Painting)	
ARTS 264	Basic Photography (required for Studio Art: Photography)	
Select one course in 3D Category:		3
ARTD 101	Introduction to Industrial Design	
ARTS 210	Ceramics Sculpture I	
ARTS 230	Jewelry/Metals I	
ARTS 280	Beginning Sculpture (required for Studio Art: Sculpture)	
Select one course in 4D Category:		3
ARTS 241	Image Practice	
ARTS 243	Time Arts I	
ARTS 244	Interaction I	
Total Hours		**20**

Code	Title	Hours
Art History Requirements		**9**
200 level and above ARTH courses		

Code	Title	Hours
Capstone Requirements		
ARTS 392	Current Art Issues Seminar	3
ARTS 451	Advanced Studio II	4

Code	Title	Hours
Total Credits for BFA Studio Arts		
First-Year Curriculum Requirements		20
Art History Requirements		9
BFA Capstone requirements		7
Concentration Requirements [1]		43-46
General Education Requirements, three hours of art history also count as gen ed credit		40
Electives to bring the total hours earned to 122, including a minimum of 40 credits at the 300- or 400-level.		0-3
Total Hours		**122**

[1] See Concentrations tab for requirements for individual concentrations.

Fashion Concentration

Code	Title	Hours
Select four courses from the following list:		**12**
Some courses are required for the Fashion concentration, noted below. If any required course was selected in the First Year curriculum, pick from remaining offerings in this section.		
ARTS 205	Introduction to Printmaking (exclude if taken in first year curriculum)	
ARTS 220	Introduction to Fashion (required for the Fashion concentration)	
ARTS 221	Fashion Illustration (required for the Fashion concentration; exclude if taken in first year curriculum)	
ARTS 223	Experimental Fashion (required for the Fashion concentration)	
ARTS 230	Jewelry/Metals I (exclude if taken in first year curriculum)	
ARTS 231	Jewelry/Metals II	
ARTS 250	Life Drawing	
ARTS 252	Making and Meaning	
ARTS 264	Basic Photography (exclude if taken in first year curriculum)	
ARTS 280	Beginning Sculpture (exclude if taken in first year curriculum)	

ARTS 299	Special Topics in Studio Art (may be repeated to a maximum of 12 hours total if topics vary)	
GWS 275	The Politics of Fashion	
THEA 242	Introduction to Costume Production	
Select up to eleven 300 or 400-level courses from the following list:		**31-34**
Some courses are required for the Fashion concentration, noted below.		
ARTS 320	Fashion and Textiles Design (required for the Fashion concentration)	
ARTS 321	Sustainable Fashion Development and Branding (required for the Fashion concentration)	
ARTS 340	The Art of 3D Imaging	
ARTS 381	Intermediate Sculpture	
ARTS 399	Internship in Studio Arts (may be completed twice to a maximum of 4 hours total, with advisor consent)	
ARTS 420	Making Fashion: Apparel Design in Context (required for the Fashion concentration)	
ARTS 456	Advanced Sculpture (may be repeated to a maximum of 6 hours)	
ARTS 499	Special Topics in Studio Art (may be repeated to a maximum of 9 hours, if topics vary)	
THEA 442	Introduction to Costume Patterning and Draping	
THEA 443	Flat Pattern Drafting	
THEA 444	Costume Draping	
THEA 445	Costume History I	
THEA 446	Costume History II	
THEA 448	Costume Crafts	
THEA 449	Technology and Costume Crafts	
Total Hours		43-46

Studio Art: General Studio Art, BFASA

for the degree of Bachelor of Fine Arts in Studio Art Major in Studio Art, General Studio Art Concentration

contact: Mark Avery
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email: mavery@illinois.edu
phone: (217) 333-6632

school catalog page: Art & Design (http://catalog.illinois.edu/faa/)
school website: School of Art & Design (https://art.illinois.edu/)
school faculty: Art & Design Faculty (https://art.illinois.edu/index.php/people/faculty-staff/)
overview of college admissions & requirements: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: Fine & Applied Arts (https://faa.illinois.edu/)
for the degree of Bachelor of Fine Arts in Studio Art Major in Studio Art, General Studio Art Concentration

Students in the School of Art and Design must complete the Campus General Education requirements. Some Art and Design courses will also apply toward the General Education requirements.

A portfolio review is required for admission to the School of Art and Design.

First Year Curriculum

Code	Title	Hours
FAA 101	Arts at Illinois	1
ARTF 101	Contemporary Issues in Art	2
ARTE 101	Art, Design, and Society	2
ARTH 110	Introduction to the History of Art and Visual Culture	3
Select one Drawing course:		3
ARTF 102	Observational Drawing	
ARTF 104	Expressive Drawing	
ARTF 106	Visualization Drawing	
Select one course in 2D Category:		3
ARTD 151	Introduction to Graphic Design	
ARTS 205	Introduction to Printmaking (required for Studio Art: Printmaking)	
ARTS 221	Fashion Illustration (required for Studio Art: Fashion)	
ARTS 251	Beginning Painting (required for Studio Art: Painting)	
ARTS 264	Basic Photography (required for Studio Art: Photography)	
Select one course in 3D Category:		3
ARTD 101	Introduction to Industrial Design	
ARTS 210	Ceramics Sculpture I	
ARTS 230	Jewelry/Metals I	
ARTS 280	Beginning Sculpture (required for Studio Art: Sculpture)	
Select one course in 4D Category:		3
ARTS 241	Image Practice	
ARTS 243	Time Arts I	
ARTS 244	Interaction I	
Total Hours		**20**

Code	Title	Hours
Art History Requirements		**9**
200 level and above ARTH courses		

Code	Title	Hours
Capstone Requirements		
ARTS 392	Current Art Issues Seminar	3
ARTS 451	Advanced Studio II	4

Code	Title	Hours
Total Credits for BFA Studio Arts		
First-Year Curriculum Requirements		20
Art History Requirements		9
BFA Capstone requirements		7
Concentration Requirements [1]		43-46

General Education Requirements, three hours of art history also count as gen ed credit	40
Electives to bring the total hours earned to 122, including a minimum of 40 credits at the 300- or 400-level.	0-3
Total Hours	**122**

[1] See Concentrations tab for requirements for individual concentrations.

Code	Title	Hours
Select four courses from the following list:		**12**
Some courses are required for the General Studio Art concentration, noted below. If any required course was selected in the first year curriculum, pick from remaining offerings in this section.		
ARTS 205	Introduction to Printmaking (exclude if taken in first year curriculum)	
ARTS 210	Ceramics Sculpture I (exclude if taken in first year curriculum)	
ARTS 241	Image Practice (exclude if taken in first year curriculum)	
ARTS 243	Time Arts I (exclude if taken in first year curriculum)	
ARTS 250	Life Drawing	
ARTS 251	Beginning Painting (exclude if taken in first year curriculum)	
ARTS 252	Making and Meaning	
ARTS 354	Intermediate Painting	
ARTS 280	Beginning Sculpture (exclude if taken in first year curriculum)	
ARTS 381	Intermediate Sculpture	
ARTS 299	Special Topics in Studio Art (may be repeated to a maximum of 12 hours total if topics vary)	
Select up to eleven 300- or 400-level courses from the following list:		31-34
Some courses are required for the General Studio Art concentration, noted below.		
ARTS 310	Ceramics Sculpture II	
ARTS 350	Intermediate Studio I	
ARTS 351	Intermediate Studio II	
ARTS 399	Internship in Studio Arts (may be completed twice to a maximum of 4 hours total, with advisor consent)	
ARTS 405	Special Topics in Printmaking [1]	
ARTS 443	Time Arts II [1]	
ARTS 444	Interaction II [1]	
ARTS 445	Special Topics in New Media	
ARTS 450	Advanced Studio I	
ARTS 454	Advanced Drawing [1]	
ARTS 455	Advanced Painting [1]	
ARTS 456	Advanced Sculpture [1]	
ARTS 457	Art in Context [1]	
ARTS 499	Special Topics in Studio Art (may be repeated to a maximum of 9 hours, if topics vary)	
Total Hours		**43-46**

[1] May be repeated to a maximum of 6 hours.

Studio Art: New Media, BFASA

for the degree of Bachelor of Fine Arts in Studio Art Major in Studio Art, New Media Concentration

contact: Mark Avery
office: 140 Art and Design Building, Champaign, IL 61820
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phone: (217) 333-6632

school catalog page: Art & Design (http://catalog.illinois.edu/faa/)
school website: School of Art & Design (https://art.illinois.edu/)
school faculty: Art & Design Faculty (https://art.illinois.edu/index.php/people/faculty-staff/)
overview of college admissions & requirements: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: Fine & Applied Arts (https://faa.illinois.edu/)

for the degree of Bachelor of Fine Arts in Studio Art Major in Studio Art, New Media Concentration

Students in the School of Art and Design must complete the Campus General Education requirements. Some Art and Design courses will also apply toward the General Education requirements.

A portfolio review is required for admission to the School of Art and Design.

First Year Curriculum

Code	Title	Hours
FAA 101	Arts at Illinois	1
ARTF 101	Contemporary Issues in Art	2
ARTE 101	Art, Design, and Society	2
ARTH 110	Introduction to the History of Art and Visual Culture	3
Select one Drawing course:		3
ARTF 102	Observational Drawing	
ARTF 104	Expressive Drawing	
ARTF 106	Visualization Drawing	
Select one course in 2D Category:		3
ARTD 151	Introduction to Graphic Design	
ARTS 205	Introduction to Printmaking (required for Studio Art: Printmaking)	
ARTS 221	Fashion Illustration (required for Studio Art: Fashion)	
ARTS 251	Beginning Painting (required for Studio Art: Painting)	
ARTS 264	Basic Photography (required for Studio Art: Photography)	
Select one course in 3D Category:		3

ARTD 101	Introduction to Industrial Design	
ARTS 210	Ceramics Sculpture I	
ARTS 230	Jewelry/Metals I	
ARTS 280	Beginning Sculpture (required for Studio Art: Sculpture)	
Select one course in 4D Category:		3
ARTS 241	Image Practice	
ARTS 243	Time Arts I	
ARTS 244	Interaction I	
Total Hours		**20**

Code	Title	Hours
Art History Requirements		**9**
200 level and above ARTH courses		

Code	Title	Hours
Capstone Requirements		
ARTS 392	Current Art Issues Seminar	3
ARTS 451	Advanced Studio II	4

Code	Title	Hours
Total Credits for BFA Studio Arts		
First-Year Curriculum Requirements		20
Art History Requirements		9
BFA Capstone requirements		7
Concentration Requirements [1]		43-46
General Education Requirements, three hours of art history also count as gen ed credit		40
Electives to bring the total hours earned to 122, including a minimum of 40 credits at the 300- or 400-level.		0-3
Total Hours		**122**

[1] See Concentrations tab for requirements for individual concentrations.

Code	Title	Hours
Select four courses from the following list:		**12**
Some courses are required for the New Media concentration, noted below. If any required course was selected in the first year curriculum, pick from remaining offerings in this section.		
ARTS 205	Introduction to Printmaking (exclude if taken in first year curriculum)	
ARTS 210	Ceramics Sculpture I (exclude if taken in first year curriculum)	
ARTS 241	Image Practice (required for New Media Concentration; exclude if taken in first year curriculum)	
ARTS 243	Time Arts I (required for New Media Concentration; exclude if taken in first year curriculum)	
ARTS 244	Interaction I (required for New Media Concentration; exclude if taken in first year curriculum)	
ARTS 250	Life Drawing	
ARTS 251	Beginning Painting (exclude if taken in first year curriculum)	
ARTS 252	Making and Meaning	
ARTS 354	Intermediate Painting	
ARTS 280	Beginning Sculpture (exclude if taken in first year curriculum)	
ARTS 381	Intermediate Sculpture	
ARTS 299	Special Topics in Studio Art (may be repeated up to 12 hours total if topics vary)	
Select up to eleven 300- or 400-level courses from the following list:		**31-34**
Some courses are required for the New Media concentration, noted below.		
ARTS 310	Ceramics Sculpture II	
ARTS 350	Intermediate Studio I	
ARTS 351	Intermediate Studio II	
ARTS 399	Internship in Studio Arts (may be completed twice to a maximum of 4 hours total, with advisor consent)	
ARTS 405	Special Topics in Printmaking [1]	
ARTS 443	Time Arts II (required for New Media Concentration) [1]	
ARTS 444	Interaction II [1]	
ARTS 445	Special Topics in New Media (required for New Media Concentration) [1]	
ARTS 450	Advanced Studio I	
ARTS 454	Advanced Drawing [1]	
ARTS 455	Advanced Painting [1]	
ARTS 456	Advanced Sculpture [1]	
ARTS 457	Art in Context [1]	
ARTS 499	Special Topics in Studio Art (may be repeated to a maximum of 9 hours, if topics vary)	
Total Hours		**43-46**

[1] May be repeated to a maximum of 6 hours.

Studio Art: Painting, BFASA

for the degree of Bachelor of Fine Arts in Studio Art Major in Studio Art, Painting Concentration

contact: Mark Avery
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phone: (217) 333-6632

school catalog page: Art & Design (http://catalog.illinois.edu/faa/)
school website: School of Art & Design (https://art.illinois.edu/)
school faculty: Art & Design Faculty (https://art.illinois.edu/index.php/people/faculty-staff/)
overview of college admissions & requirements: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: Fine & Applied Arts (https://faa.illinois.edu/)

for the degree of Bachelor of Fine Arts in Studio Art Major in Studio Art, Painting Concentration

Students in the School of Art and Design must complete the Campus General Education requirements. Some Art and Design courses will also apply toward the General Education requirements.

A portfolio review is required for admission to the School of Art and Design.

First Year Curriculum

Code	Title	Hours
FAA 101	Arts at Illinois	1
ARTF 101	Contemporary Issues in Art	2
ARTE 101	Art, Design, and Society	2
ARTH 110	Introduction to the History of Art and Visual Culture	3
Select one Drawing course:		3
ARTF 102	Observational Drawing	
ARTF 104	Expressive Drawing	
ARTF 106	Visualization Drawing	
Select one course in 2D Category:		3
ARTD 151	Introduction to Graphic Design	
ARTS 205	Introduction to Printmaking (required for Studio Art: Printmaking)	
ARTS 221	Fashion Illustration (required for Studio Art: Fashion)	
ARTS 251	Beginning Painting (required for Studio Art: Painting)	
ARTS 264	Basic Photography (required for Studio Art: Photography)	
Select one course in 3D Category:		3
ARTD 101	Introduction to Industrial Design	
ARTS 210	Ceramics Sculpture I	
ARTS 230	Jewelry/Metals I	
ARTS 280	Beginning Sculpture (required for Studio Art: Sculpture)	
Select one course in 4D Category:		3
ARTS 241	Image Practice	
ARTS 243	Time Arts I	
ARTS 244	Interaction I	
Total Hours		**20**

Code	Title	Hours
Art History Requirements		**9**
200 level and above ARTH courses		

Code	Title	Hours
Capstone Requirements		
ARTS 392	Current Art Issues Seminar	3
ARTS 451	Advanced Studio II	4

Code	Title	Hours
Total Credits for BFA Studio Arts		
First-Year Curriculum Requirements		20
Art History Requirements		9
BFA Capstone requirements		7
Concentration Requirements [1]		43-46
General Education Requirements, three hours of art history also count as gen ed credit		40
Electives to bring the total hours earned to 122, including a minimum of 40 credits at the 300- or 400-level.		0-3
Total Hours		**122**

[1] See Concentrations tab for requirements for individual concentrations.

Code	Title	Hours
Select four courses from the following list:		**12**
Some courses are required for the Painting concentration, noted below. If any required course was selected in the first year curriculum, pick from remaining offerings in this section.		
ARTS 205	Introduction to Printmaking (exclude if taken in first year curriculum)	
ARTS 210	Ceramics Sculpture I (exclude if taken in first year curriculum)	
ARTS 241	Image Practice (exclude if taken in first year curriculum)	
ARTS 243	Time Arts I (exclude if taken in first year curriculum)	
ARTS 250	Life Drawing (required for the Painting concentration)	
ARTS 251	Beginning Painting (required for the Painting concentration; exclude if taken in first year curriculum)	
ARTS 252	Making and Meaning	
ARTS 354	Intermediate Painting (required for the Painting concentration)	
ARTS 280	Beginning Sculpture (exclude if taken in first year curriculum)	
ARTS 381	Intermediate Sculpture	
ARTS 299	Special Topics in Studio Art (may be repeated to a maximum of 12 hours total if topics vary)	
Select up to eleven 300- or 400-level courses from the following list:		**31-33**
Some courses are required for the Painting concentration, noted below.		
ARTS 310	Ceramics Sculpture II	
ARTS 350	Intermediate Studio I	
ARTS 351	Intermediate Studio II	
ARTS 399	Internship in Studio Arts (may be completed twice to a maximum of 4 hours total, with advisor consent)	
ARTS 405	Special Topics in Printmaking [1]	
ARTS 443	Time Arts II [1]	
ARTS 444	Interaction II [1]	
ARTS 445	Special Topics in New Media	
ARTS 450	Advanced Studio I	
ARTS 454	Advanced Drawing [1]	
ARTS 455	Advanced Painting [1]	
ARTS 456	Advanced Sculpture [1]	
ARTS 457	Art in Context [1]	

ARTS 499	Special Topics in Studio Art (may be repeated to a maximum of 9 hours, if topics vary)	
Total Hours		**43-46**

[1] May be repeated to a maximum of 6 hours.

Studio Art: Photography, BFASA

for the degree of Bachelor of Fine Arts in Studio Art Major in Studio Art, Photography Concentration

contact: Mark Avery
office: 140 Art and Design Building, Champaign, IL 61820
email: mavery@illinois.edu
phone: (217) 333-6632

school catalog page: Art & Design (http://catalog.illinois.edu/faa/)
school website: School of Art & Design (https://art.illinois.edu/)
school faculty: Art & Design Faculty (https://art.illinois.edu/index.php/people/faculty-staff/)
overview of college admissions & requirements: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: Fine & Applied Arts (https://faa.illinois.edu/)

Students in the BASA and BFASA who choose a Photography concentration will focus on creating works of art that use photographic imagery. Faculty in the Photography program are committed to continually redefining fine art photography in an expansive and openly creative way. The ability to understand and employ photography's unique narrative potential is emphasized alongside technical considerations. Our classes provide a balance of practice and theory, which assures the understanding and appreciation of both the interdependence and integration of creativity, production, and research.

Our photography faculty has international exhibition records and work in numerous museum and private collections. Their photographs, installations, books, films, and videos have won critical acclaim in the form of national reviews and grants ranging from the National Endowment for the Arts to the Illinois Arts Council. Faculty members have lectured on their work throughout the United States and abroad.

Collectively the faculty has a wide range of skills, and they use them to teach fine black and white printing, studio lighting, color photography, digital photography, video, installation art, the history of photography, and critical theory. Graduates of our program apply their knowledge in a variety of ways, as fine artists, commercial photographers, designers, gallery and museum professionals, or any field that requires visual literacy and creative thinking.

for the degree of Bachelor of Fine Arts in Studio Art Major in Studio Art, Photography Concentration

Students in the School of Art and Design must complete the Campus General Education requirements. Some Art and Design courses will also apply toward the General Education requirements.

A portfolio review is required for admission to the School of Art and Design.

First Year Curriculum

Code	Title	Hours
FAA 101	Arts at Illinois	1
ARTF 101	Contemporary Issues in Art	2
ARTE 101	Art, Design, and Society	2
ARTH 110	Introduction to the History of Art and Visual Culture	3
Select one Drawing course:		3
ARTF 102	Observational Drawing	
ARTF 104	Expressive Drawing	
ARTF 106	Visualization Drawing	
Select one course in 2D Category:		3
ARTD 151	Introduction to Graphic Design	
ARTS 205	Introduction to Printmaking (required for Studio Art: Printmaking)	
ARTS 221	Fashion Illustration (required for Studio Art: Fashion)	
ARTS 251	Beginning Painting (required for Studio Art: Painting)	
ARTS 264	Basic Photography (required for Studio Art: Photography)	
Select one course in 3D Category:		3
ARTD 101	Introduction to Industrial Design	
ARTS 210	Ceramics Sculpture I	
ARTS 230	Jewelry/Metals I	
ARTS 280	Beginning Sculpture (required for Studio Art: Sculpture)	
Select one course in 4D Category:		3
ARTS 241	Image Practice	
ARTS 243	Time Arts I	
ARTS 244	Interaction I	
Total Hours		**20**

Code	Title	Hours
Art History Requirements		**9**
200 level and above ARTH courses		

Code	Title	Hours
Capstone Requirements		
ARTS 392	Current Art Issues Seminar	3
ARTS 451	Advanced Studio II	4

Code	Title	Hours
Total Credits for BFA Studio Arts		
First-Year Curriculum Requirements		20
Art History Requirements		9
BFA Capstone requirements		7
Concentration Requirements [1]		43-46
General Education Requirements, three hours of art history also count as gen ed credit		40
Electives to bring the total hours earned to 122, including a minimum of 40 credits at the 300- or 400-level.		0-3
Total Hours		**122**

[1] See Concentrations tab for requirements for individual concentrations.

Students in the photography concentration must elect ARTH 257 as part of the 9 additional hours of Art History, listed above.

Photography Concentration

Code	Title	Hours
Select four courses from the following list:		**12**
Some courses are required for the Photography concentration, noted below. If any required course was selected in the First Year curriculum, pick from remaining offerings in this section.		
ARTS 205	Introduction to Printmaking (exclude if taken in first year curriculum)	3
ARTS 221	Fashion Illustration (exclude if taken in first year curriculum)	3
ARTS 223	Experimental Fashion	3
ARTS 241	Image Practice (exclude if taken in first year curriculum)	3
ARTS 243	Time Arts I (exclude if taken in first year curriculum)	3
ARTS 251	Beginning Painting (exclude if taken in first year curriculum)	3
ARTS 252	Making and Meaning	3
ARTS 264	Basic Photography (exclude if taken in first year curriculum; required for the photography concentration)	3
ARTS 265	Photography II (required for the photography concentration)	3
ARTS 266	View Camera (required for the photography concentration)	3
ARTS 267	Digital Photographic Output	3
ARTS 280	Beginning Sculpture (exclude if taken in first year curriculum)	3
ARTS 299	Special Topics in Studio Art (may be repeated to a maximum of 12 hours total if topics vary)	3
Select up to eleven 300 or 400-level courses from the following list:		**31-34**
Some courses are required for the Photography concentration, noted below.		
ARTS 320	Fashion and Textiles Design	3
ARTS 321	Sustainable Fashion Development and Branding	3
ARTS 354	Intermediate Painting	3
ARTS 364	Photography III (required for the photography concentration)	3
ARTS 365	Photography Workshop (may be repeated to a maximum of 6 hours)	3
ARTS 367	RAW Photography	3
ARTS 381	Intermediate Sculpture	3
ARTS 394	Special Topics in Photography (required for the photography concentration)	3
ARTS 399	Internship in Studio Arts (may be completed twice to a maximum of 4 hours total, with advisor consent)	1 to 4
ARTS 405	Special Topics in Printmaking (may be repeated to a maximum of 6 hours)	3
ARTS 420	Making Fashion: Apparel Design in Context	3
ARTS 443	Time Arts II (may be repeated to a maximum of 6 hours)	3
ARTS 444	Interaction II (may be repeated to a maximum of 6 hours)	3
ARTS 445	Special Topics in New Media	3
ARTS 454	Advanced Drawing (may be repeated to a maximum of 6 hours)	3
ARTS 455	Advanced Painting (may be repeated to a maximum of 6 hours)	3
ARTS 456	Advanced Sculpture (may be repeated to a maximum of 6 hours)	3
ARTS 457	Art in Context (may be repeated to a maximum of 6 hours)	3
ARTS 461	Advanced Photography (taken twice senior year, for 6 credits total; required for the photography concentration)	6
ARTS 499	Special Topics in Studio Art (may be repeated to a maximum of 9 hours total, if topics vary)	0 to 3
Total Hours		**43-46**

Studio Art: Printmaking, BFASA

for the degree of Bachelor of Fine Arts in Studio Art Major in Studio Art, Printmaking Concentration

contact: Mark Avery
office: 140 Art and Design Building, Champaign, IL 61820
email: mavery@illinois.edu
phone: (217) 333-6632

school catalog page: Art & Design (http://catalog.illinois.edu/faa/)
school website: School of Art & Design (https://art.illinois.edu/)
school faculty: Art & Design Faculty (https://art.illinois.edu/index.php/people/faculty-staff/)
overview of college admissions & requirements: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: Fine & Applied Arts (https://faa.illinois.edu/)

for the degree of Bachelor of Fine Arts in Studio Art Major in Studio Art, Printmaking Concentration

Students in the School of Art and Design must complete the Campus General Education requirements. Some Art and Design courses will also apply toward the General Education requirements.

A portfolio review is required for admission to the School of Art and Design.

First Year Curriculum

Code	Title	Hours
FAA 101	Arts at Illinois	1
ARTF 101	Contemporary Issues in Art	2
ARTE 101	Art, Design, and Society	2

ARTH 110	Introduction to the History of Art and Visual Culture	3
Select one Drawing course:		3
ARTF 102	Observational Drawing	
ARTF 104	Expressive Drawing	
ARTF 106	Visualization Drawing	
Select one course in 2D Category:		3
ARTD 151	Introduction to Graphic Design	
ARTS 205	Introduction to Printmaking (required for Studio Art: Printmaking)	
ARTS 221	Fashion Illustration (required for Studio Art: Fashion)	
ARTS 251	Beginning Painting (required for Studio Art: Painting)	
ARTS 264	Basic Photography (required for Studio Art: Photography)	
Select one course in 3D Category:		3
ARTD 101	Introduction to Industrial Design	
ARTS 210	Ceramics Sculpture I	
ARTS 230	Jewelry/Metals I	
ARTS 280	Beginning Sculpture (required for Studio Art: Sculpture)	
Select one course in 4D Category:		3
ARTS 241	Image Practice	
ARTS 243	Time Arts I	
ARTS 244	Interaction I	
Total Hours		**20**

Code	Title	Hours
Art History Requirements		**9**
200 level and above ARTH courses		

Code	Title	Hours
Capstone Requirements		
ARTS 392	Current Art Issues Seminar	3
ARTS 451	Advanced Studio II	4

Code	Title	Hours
Total Credits for BFA Studio Arts		
First-Year Curriculum Requirements		20
Art History Requirements		9
BFA Capstone requirements		7
Concentration Requirements [1]		43-46
General Education Requirements, three hours of art history also count as gen ed credit		40
Electives to bring the total hours earned to 122, including a minimum of 40 credits at the 300- or 400-level.		0-3
Total Hours		**122**

[1] See Concentrations tab for requirements for individual concentrations.

Code	Title	Hours
Select four courses from the following list:		**12**
Some courses are required for the Printmaking concentration, noted below. If any required course was selected in the first year curriculum, pick from remaining offerings in this section.		
ARTS 205	Introduction to Printmaking (required for the Printmaking concentration, exclude if taken in first year curriculum)	
ARTS 210	Ceramics Sculpture I (exclude if taken in first year curriculum)	
ARTS 241	Image Practice (exclude if taken in first year curriculum)	
ARTS 243	Time Arts I (exclude if taken in first year curriculum)	
ARTS 244	Interaction I (exclude if taken in first year curriculum)	
ARTS 250	Life Drawing (required for the Printmaking concentration)	
ARTS 251	Beginning Painting (exclude if taken in first year curriculum)	
ARTS 252	Making and Meaning	
ARTS 354	Intermediate Painting	
ARTS 280	Beginning Sculpture (exclude if taken in first year curriculum)	
ARTS 381	Intermediate Sculpture	
ARTS 299	Special Topics in Studio Art (may be repeated to a maximum of 12 hours total if topics vary)	
Select up to eleven 300- or 400-level courses from the following list:		**31-34**
Some courses are required for the Printmaking concentration, noted below.		
ARTS 310	Ceramics Sculpture II	
ARTS 350	Intermediate Studio I	
ARTS 351	Intermediate Studio II	
ARTS 399	Internship in Studio Arts (may be completed twice to a maximum of 4 hours total, with advisor consent)	
ARTS 405	Special Topics in Printmaking (6 hours required for the Printmaking concentration)	
ARTS 443	Time Arts II [1]	
ARTS 444	Interaction II [1]	
ARTS 445	Special Topics in New Media	
ARTS 450	Advanced Studio I	
ARTS 454	Advanced Drawing (ARTS 454 or ARTS 455 required) [1]	
ARTS 455	Advanced Painting (ARTS 454 or ARTS 455 required) [1]	
ARTS 456	Advanced Sculpture [1]	
ARTS 457	Art in Context [1]	
ARTS 499	Special Topics in Studio Art (may be repeated to a maximum of 9 hours, if topics vary)	
Total Hours		**43-46**

[1] May be repeated to a maximum of 6 hours.

Studio Art: Sculpture, BFASA

for the degree of Bachelor of Fine Arts in Studio Art Major in Studio Art, Sculpture Concentration

contact: Mark Avery
office: 140 Art and Design Building, Champaign, IL 61820
email: mavery@illinois.edu
phone: (217) 333-6632

school catalog page: Art & Design (http://catalog.illinois.edu/faa/)
school website: School of Art & Design (https://art.illinois.edu/)
school faculty: Art & Design Faculty (https://art.illinois.edu/index.php/people/faculty-staff/)
overview of college admissions & requirements: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: Fine & Applied Arts (https://faa.illinois.edu/)

for the degree of Bachelor of Fine Arts in Studio Art Major in Studio Art, Sculpture Concentration

Students in the School of Art and Design must complete the Campus General Education requirements. Some Art and Design courses will also apply toward the General Education requirements.

A portfolio review is required for admission to the School of Art and Design.

First Year Curriculum

Code	Title	Hours
FAA 101	Arts at Illinois	1
ARTF 101	Contemporary Issues in Art	2
ARTE 101	Art, Design, and Society	2
ARTH 110	Introduction to the History of Art and Visual Culture	3
Select one Drawing course:		3
ARTF 102	Observational Drawing	
ARTF 104	Expressive Drawing	
ARTF 106	Visualization Drawing	
Select one course in 2D Category:		3
ARTD 151	Introduction to Graphic Design	
ARTS 205	Introduction to Printmaking (required for Studio Art: Printmaking)	
ARTS 221	Fashion Illustration (required for Studio Art: Fashion)	
ARTS 251	Beginning Painting (required for Studio Art: Painting)	
ARTS 264	Basic Photography (required for Studio Art: Photography)	
Select one course in 3D Category:		3
ARTD 101	Introduction to Industrial Design	
ARTS 210	Ceramics Sculpture I	
ARTS 230	Jewelry/Metals I	
ARTS 280	Beginning Sculpture (required for Studio Art: Sculpture)	
Select one course in 4D Category:		3
ARTS 241	Image Practice	
ARTS 243	Time Arts I	
ARTS 244	Interaction I	
Total Hours		**20**

Code	Title	Hours
Art History Requirements		**9**
200 level and above ARTH courses		

Code	Title	Hours
Capstone Requirements		
ARTS 392	Current Art Issues Seminar	3
ARTS 451	Advanced Studio II	4

Code	Title	Hours
Total Credits for BFA Studio Arts		
First-Year Curriculum Requirements		20
Art History Requirements		9
BFA Capstone requirements		7
Concentration Requirements [1]		43-46
General Education Requirements, three hours of art history also count as gen ed credit		40
Electives to bring the total hours earned to 122, including a minimum of 40 credits at the 300- or 400-level.		0-3
Total Hours		**122**

[1] See Concentrations tab for requirements for individual concentrations.

Code	Title	Hours
Select four courses from the following list:		**12**
Some courses are required for the Sculpture concentration, noted below. If any required course was selected in the first year curriculum, pick from remaining offerings in this section.		
ARTS 205	Introduction to Printmaking (exclude if taken in first year curriculum)	
ARTS 210	Ceramics Sculpture I (required for Sculpture concentration; exclude if taken in first year curriculum)	
or ARTS 252	Making and Meaning	
ARTS 241	Image Practice (exclude if taken in first year curriculum)	
ARTS 243	Time Arts I (exclude if taken in first year curriculum)	
ARTS 250	Life Drawing	
ARTS 251	Beginning Painting (exclude if taken in first year curriculum)	
ARTS 354	Intermediate Painting	
ARTS 280	Beginning Sculpture (required for Sculpture concentration; exclude if taken in first year curriculum)	
ARTS 381	Intermediate Sculpture (required for Sculpture concentration)	
ARTS 299	Special Topics in Studio Art (may be repeated up to 12 hours total if topics vary)	

Select up to eleven 300- or 400-level courses from the following list:		**31-34**
Some courses are required for the Sculpture concentration, noted below.		
ARTS 310	Ceramics Sculpture II (required for Sculpture concentration)	
or ARTS 457	Art in Context	
ARTS 350	Intermediate Studio I	
ARTS 351	Intermediate Studio II	
ARTS 399	Internship in Studio Arts (may be completed twice to a maximum of 4 hours total, with advisor consent)	
ARTS 405	Special Topics in Printmaking [1]	
ARTS 443	Time Arts II [1]	
ARTS 444	Interaction II [1]	
ARTS 445	Special Topics in New Media	
ARTS 450	Advanced Studio I	
ARTS 454	Advanced Drawing [1]	
ARTS 455	Advanced Painting [1]	
ARTS 456	Advanced Sculpture (required for Sculpture concentration) [1]	
ARTS 457	Art in Context [1]	
or ARTS 310	Ceramics Sculpture II	
ARTS 499	Special Topics in Studio Art (may be repeated to a maximum of 9 hours, if topics vary)	
Total Hours		**43-46**

[1] May be repeated to a maximum of 6 hours.

Learning Outcomes: Studio Art, BFASA

Learning outcomes for the Bachelor of Fine Arts Major in Studio Art

1. Students will understand and be able to apply basic principles of visual and material communication, including two-dimensional pictorial concepts, three-dimensional formal and spatial concepts, and a wide variety of media and formats for artistic production, and possess the ability to apply them to a specific aesthetic intent.
2. Students will demonstrate an ability and willingness to experiment and explore the expressive possibilities of various media, and artistic and creative strategies for self-directed art-making, and investigate the diverse activities and conceptual modes available to the contemporary artist, including work that directly addresses or engages with recent developments in the field of fine art as well as broader social questions and challenges. Students are trained in the production and critique of artworks that explore forms and technologies identified as new or emerging.
3. Students will gain knowledge of, understand, and be able to apply concepts of visual rhetoric in the development of content, and be able to recognize and critically analyze an evolving variety of communicative practices in art and visual culture, including those that represent diverse cultures and sociopolitical positions, and to demonstrate openness to new social possibilities and a critical empathy towards both audiences and culture producers of differing histories, origins and identities.
4. Students will develop an innovative, imaginative, and entrepreneurial self-directed studio practice, will gain a deep understanding of their own creativity, be able to apply it in any context, and will learn to independently generate thematic investigation and implementation of research in a broad variety of social locations, including art and educational institutions, activist forums, and cyberspace.
5. Students will be willing and able to investigate and accommodate broad-ranging types of knowledge and artistic strategies for the purpose of synthesizing diverse and even disparate ideas in order to create sophisticated, unique works of art, participate in new types of collaboration, and to make innovative statements and hypotheses, or propose creative solutions to social, organizational and societal problems using aesthetic strategies.
6. Students concentrating in New Media create work for the new disciplinary mechanisms that have arisen to evaluate and promote artwork in digital media, but also for traditional institutional mechanisms of art distribution and art critique. As in Contemporary Art, work in New Media may take the form of performance, sound and radio broadcast, gallery exhibition, curation, public art, cinema and video, a networked event, publication, or even scientific research.
7. Junior and Senior years see students working with critics/professors across the School to develop a portfolio of works in time-based, interactive, physical, networked or performative media. In the process of generating a body of work around a subject and form of their choice, students receive instruction in technical execution, formal composition, and theoretical framing.
8. While pursuing a BFASA, students prepare for work as artists at a time when artists are employed in a variety of spheres – artistic direction, project management, education, research, fine art, curation, performance, non-profit work, activism, advertising, and many others. As digital medias evolve, our graduates will be flexible, able to understand the best use of emerging technologies while crafting new economic and social connections.
9. Students will produce an integrated, cohesive, critically informed body of work for a thesis exhibition, supported by a written thesis document that serves to position their artistic practice within the broader sphere of contemporary art practices, exhibition strategies, audiences, and economies.

Supply Chain Management, BS

for the degree of Bachelor of Science Major in Supply Chain Management

overview of college admissions & requirements: Gies Catalog (p. 1202)
college website: Gies College of Business (https://giesbusiness.illinois.edu/)

The Supply Chain Management student studies the flow of finances, information and materials starting from supply chain planning to the sourcing of raw material, parts and components through the manufacturing or processing sector to the marketing and delivery of end products for industrial customers or individual consumers. The Supply Chain Management Major is available only to qualified students based upon application and personal interviews. For more information, contact the Director of the Supply Chain Management Program.

for the degree of Bachelor of Science Major in Supply Chain Management

Core Curriculum

Normally, students must register for no fewer than 12 hours or more than 18 hours in each semester. Students should take mathematics, economics, and accountancy courses in the semesters indicated in the sample schedule of courses. The computer science course must be taken during the first year. The computer science requirement no longer allows ACE 161 as an equivalent course.

Up to 4 hours of Kinesiology activity courses, numbered 100-110 may be counted toward the 124 hours for the degree. The same section of a course may not be repeated for credit. Credit is limited to a maximum of 12 credit hours for 199 courses. Students may receive foreign language credit for courses only 2 levels below highest level taken in high school. For example: 4 years of high school French-no credit below FR 102.

Credit toward the 124 degree hours is not given for MATH 101. Once the math requirement is completed, lower level math courses cannot be taken for credit.

Any course used to fill a specific degree requirement may not be taken on the credit-no credit grade option. Only free electives may be taken on the credit-no credit option. All finance and accountancy courses must be taken for a grade. It is recommended that all courses taken in the business administration area be taken for a grade.

Minimum hours required for graduation: 124 hours.

University Composition Requirements

Code	Title	Hours
Composition I: Principles of Composition [1]		4-7
Advanced Composition		3

General Education Requirements

Code	Title	Hours
A minimum of six courses is required, as follows:		18
Humanities & the Arts: Literature & the Arts (1-2 courses) [4]		
Humanities & the Arts: Historical & Philosophical Perspectives (1-2 courses) [4]		
Natural Sciences & Technology: Physical Sciences (0-2 courses) [5]		
Natural Sciences & Technology: Life Sciences (0-2 courses) [5]		
Behavioral Sciences (1 course)		
Cultural Studies: Non-Western Cultures (1 course)		
Cultural Studies: U.S. Minorities Cultures (1 course)		
Cultural Studies: Western/Comparative Cultures (1 course)		
Quantitative Reasoning (2 courses) [7]		

Language Other Than English

Code	Title	Hours
Completion of the third semester or equivalent of a language other than English is required. Completion of three years of a single language in high school satisfies this requirement.		0-15

Business Core Requirements

Code	Title	Hours
ACCY 201 & ACCY 202	Accounting and Accountancy I and Accounting and Accountancy II	6
BUS 101	Professional Responsibility and Business [2]	3
BUS 201	Business Dynamics	3
BUS 301	Business in Action	3
BUS 401	Global Business Perspectives	3
BADM 210 & BADM 211	Business Analytics I and Business Analytics II	6
BADM 275	Fundamentals of Operations Management	3
BADM 300	The Legal Environment of Bus	3
BADM 310	Mgmt and Organizational Beh [6]	3
BADM 320	Principles of Marketing	3
BADM 449	Business Policy and Strategy	3
CMN 101	Public Speaking	3
CS 105	Intro Computing: Non-Tech	3
ECON 102 & ECON 103	Microeconomic Principles and Macroeconomic Principles	6
FIN 221	Corporate Finance	3
Total Hours		54

1 *For a list of the specific courses that meet this requirement, see the college Office of Undergraduate Affairs in 1055 Business Instructional Facility or see the Course Explorer for a list of approved general education courses.*

2 BUS 101, BUS 201, BUS 301 *and* BUS 401 *are required for all Gies College of Business students. Students who enter the College their first year take each sequential course every fall.*
Inter-College transfer students take BUS 301 *and* BUS 401 *in their sophomore year. Off-campus transfer students take* BUS 101 *and* BUS 201 *in their junior year.*

4 *Three courses in the Humanities & the Arts area are required and students must complete at least one course in the Literature & the Arts and Historical & Perspectives subcategories. At least one of the courses must be a 200 or higher level course.*

5 *Two courses in the Natural Sciences & Technology area are required. It is strongly recommended that students complete one course in the Physical Sciences and Life Sciences subcategories.*

6 *This course includes limited voluntary participation as a subject in experiments.*

7 CS 105 *fulfills a Quantitative Reasoning I requirement.*

Specific Major Requirements: Students are required to complete an approved internship to earn the Bachelor of Science in Supply Chain Management degree.

Code	Title	Hours
BADM 324	Purchasing and Supply Mgmnt (Prerequisite: Credit or current enrollment in BADM 320)	3
BADM 335	Supply Chain Management Basics	3
BADM 336	Modeling the Supply Chain (Prerequisite: BADM 335) [1]	3
BADM 337	Practicum in Supply Chain Mgt	3
BADM 338	Global Supply Chain Management	3

BADM 350	IT for Networked Organizations	3
BADM 375	Operations Strategy	3
BADM 378	Logistics Management	3
Select one of the following:		3
BADM 322	Marketing Research (Prerequisite: BADM 320)	
BADM 327	Marketing to Business and Govt	
BADM 328	Advanced Sales Strategies	
BADM 352	Database Design and Management	
BADM 374	Management Decision Models (Prerequisite: BADM 210)	
BADM 377	Project Management	
BADM 379	Business Process Improvement	
Total Hours		27

[1] The approved internship must be completed prior to enrollment in BADM 336 and a report on the internship must be submitted.

Learning Outcomes: Supply Chain Management, BS

Learning Outcomes for the degree of Bachelor of Science Major in Supply Chain Management

1. Disciplinary Competence: Gain an understanding of the structure of supply chains, the fundamental principles of managing them, and their interactions with other business functions.
2. Disciplinary Competence and Critical Thinking: Demonstrate the ability to analyze, model and evaluate different parts of a supply chain through appropriate quantitative and qualitative methods.
3. Critical Thinking: Develop an ability to critically evaluate real-world supply-chain problems and apply theory and models to create practically implementable solutions.
4. Group Work: Demonstrate the ability to collaborate as an effective team member in varying roles in diverse groups/environments.
5. Communication: Develop the ability to effectively and professionally tell a persuasive story through oral and written presentations.

Sustainable Design, BS

for the Bachelor of Science in Sustainable Design

Bachelor of Science in Sustainable Design
College of Fine and Applied Arts Office of Undergraduate Affairs
110 Architecture Building
608 East Lorado Taft Drive

Faculty Program Administrator: Dr. Daniel Schneider (ddws@illinois.edu)
Program Administrator: Dr. Nicole Turner (nicturn@illinois.edu)
Program Website: https://faa.illinois.edu/bachelor-science-sustainable-design (https://faa.illinois.edu/bachelor-science-sustainable-design/)
Program Email: sustaindesign@illinois.edu (sustaindesign@illinois.edu)
College Website: https://faa.illinois.edu/

The major in Sustainable Design offers an innovative, interdisciplinary course of study in design, with a focus on building sustainable communities through the intentional design of environmentally sensitive products, buildings, neighborhoods, landscapes and cities.

The program grounds concrete skills development with opportunities to move between disciplinary barriers, allowing students to prepare for the future in a sustainable world where ideas from many disciplines will be necessary to solve the complex problems of pollution reduction, energy conservation, and biodiversity protection in equitable, healthy, and thriving places.

Required introductory coursework provide a solid grounding in design thinking and skills, coupled with a broad understanding of the role of design in achieving sustainable results across scales. Students will apply their skills and knowledge in a required senior capstone project.

With expertise across disciplines, students in this program will be prepared to work in the public and private sector, or continue preparation in a variety of professional graduate programs such as Architecture, Industrial Design, Landscape Architecture, Urban Design and Urban Planning.

for the Bachelor of Science in Sustainable Design

Code	Title	Hours
General Education Requirements		
Composition I		4
Advanced Composition		3
Humanities & the Arts [1]		6
Cultural Studies: Western/Comparative Culture(s)		3
Cultural Studies: Non-Western Culture(s)		3
Cultural Studies: US Minority Culture(s)		3
Natural Sciences and Technology		6
Social and Behavioral Sciences [1]		6
Quantitative Reasoning I and II		6
Language Other than English [2]		0-12
Total Hours (with Language requirement fulfilled)		**34**

Code	Title	Hours
Major Requirements		
FAA 101	Arts at Illinois	1
LA 101	Introduction to Landscape Arch	2
UP 136	Urban Sustainability (Gen Ed: Social & Behav Sci)	3
ARCH 171	Concepts and Theories of Architectural Design	3
ARTH 211	Design History Survey (Gen Ed: Humanities & the Arts)	3
ARTD 225	Design Drawing	3
FAA 230	Sustainable Design of the Built Environment	3
ARCH 231	Anatomy of Buildings	4
ARTD 326	Sustainability & Manufacturing	3
ARTD 451	Ethics of a Designer in a Global Economy	4
FAA 330	Making Sustainable Design	5
ARCH 273	Strategies of Architectural Design	3
FAA 430	Capstone Seminar	3

FAA 431	Capstone Studio	5
Total Hours		45

Code	Title	Hours
Major Electives		
Select 16 credit hours, with at least 10 hours at the 300 or 400-level, and with approval of advisor.		
ARTD 230	Design Thinking/Need-Finding	3
ARTD 270	Design Methods	2
ART 205	Experience & Meaning in Design (Gen Ed: Social & Beh Sci - Beh Sci + Cultural Studies: Western)	3
ART 208	Digital Art and Sustainability (Gen Ed: Humanities & the Arts- LA)	3
ART 310	Design Thinking (Gen Ed: Humanities & the Arts- LA)	3
ARTD 426	Product Innovation	3
ARTS 321	Sustainable Fashion Development and Branding	3
UP 203	Cities: Planning & Urban Life	3
UP 204	Chicago: Planning & Urban Life	3
UP 205	Ecology & Environmental Sustainability (Gen Ed: Natural Sci & Tech)	3
UP 246	International Environmental Planning and Governance	3
UP 340	Planning for Healthy Cities	3
UP 405	Watershed Ecology and Planning	4
UP 406	Urban Ecology	4
UP 418	GIS for Planners	4
UP 420	Plng for Historic Preservation	4
UP 430	Urban Transportation Planning	4
UP 434	Pedestrian and Bicycle Planning	3
UP 456	Sustainable Planning Workshop	4
UP 479	Community Engagement in Planning	3
UP 486	Planning with Climate Change	4
UP 494	Special Topics in Planning (section LB Public Transportation Planning, or section SK Food Systems Planning)	4
ARCH 210	Introduction to the History of World Architecture	3
ARCH 321	Environment, Architecture, and Global Health	3
ARCH 416	The Architecture of the United States, c.1650 to Present	3
ARCH 417	Modern and Contemporary Global Architecture	3
LA 212	Water and Society (Gen Ed: Humanities & the Arts -HP + Cultural Studies- West)	3
LA 222	Islamic Gardens & Architecture (Gen Ed: Humanities & the Arts -HP + Cultural Studies- Non-West)	3
LA 314	History of World Landscapes (Gen Ed: Advanced Composition + Humanities & the Arts-HP + Cultural Studies- West)	4
LA 370	Environmental Sustainability	3
LA 446	Sustainable Planning Seminar	4
LA 466	Energy & the Built Environment	4
LA 480	Sustainable Design Principles	2
Total Hours (minimum)		**16**

Code	Title	Hours
College or University Electives		
Select approximately 25 credit hours with approval of advisor to complete degree requirements.		

Code	Title	Hours
Summary of Credits for Bachelor of Science in Sustainable Design		
General Education requirements [1]		34
Language Requirements [2]		0 - 12
Major Requirements		45
Major Electives		16
College or University Electives		25
Total Hours for Bachelor of Science in Sustainable Design [3]		**120**

[1] **Completion of ARTH 211 and UP 136** (major requirements) meets 6 hours of the general education requirement for Humanities and the Arts (3 hours) and Social and Behavioral Science (3 hours).

[2] **Language Requirements**

This requirement may be satisfied by:

• Successfully completing a third-semester college-level course in a language other than English;

• Successful completion, in high school, of the third year of a language other than English; or

• Demonstrating proficiency at the third semester level in a language proficiency examination approved by the College of Liberal Arts and Sciences and the appropriate department

• Current list of courses approved to satisfy the language requirement. If you enter UIUC without three years of language other than English in high school, you must take a language placement test to determine the courses in which you should enroll

[3] **Advanced Hours Requirement:** A minimum of 40 credits at the 300 or 400 course level are required.

Systems Engineering & Design, BS

for the degree of Bachelor of Science in Systems Engineering and Design (formerly General Engineering)

department website: https://ise.illinois.edu/
department faculty: Industrial & Enterprise Systems Faculty (https://ise.illinois.edu/directory/faculty.html)
overview of college admissions & requirements: The Grainger College of Engineering (https://grainger.illinois.edu/admissions/)
college website: https://grainger.illinois.edu/

Systems Engineering and Design (SED) is a comprehensive, interdisciplinary program emphasizing interactions between parts of a whole. It brings together basic sciences, engineering analysis, and

engineering design. The curriculum offers flexibility through a Secondary Field Option, while providing a broad background in engineering as a whole and decision-making that supports overall design. Systems Engineers understand how to coordinate interacting parts of a whole and to evaluate engineering within economic and physical constraints.

Through the Secondary Field Option electives, students can tailor their studies to one's interests and career goals in both technical and nontechnical areas. Secondary field options are of two types: pre-approved and customized. Pre-approved secondary fields have designated titles and a specified list of courses, from which several may be selected. Approval for the substitution of a course for one on the specified list may be requested via a petition form submitted to the department. Customized secondary fields may be created to achieve goals in areas not provided by pre-approved fields. To do this, a suitable title and all the courses must be petitioned for acceptance by the department. Petition approval is based on the merit of the secondary field and the coherence of the courses within it relative to the student's goals.

Pursuit of campus minors, dual degrees, and James Scholar contracts may be integrated with customized secondary field options. Courses taken may be applied to minors, dual degrees, or contracts as well as secondary field options.

Pre-approved Secondary Fields

- Automotive Engineering
- Bioengineering
- Business Systems Integration and Consulting
- Civil Engineering Structures
- Communications and Computer Systems
- Computer Science
- Construction
- Control Systems
- Digital Prototyping
- Engineering Administration
- Engineering Marketing
- Environmental Quality
- Internet of Things (IOT)
- Manufacturing Engineering
- Nondestructive Testing and Evaluation
- Operations Research
- Quality Control
- Rehabilitation Engineering
- Robotics
- Theoretical and Applied Mechanics

Customized Secondary Fields

Customized secondary fields differ from pre-approved ones in that no sets of specified courses to choose from have been predefined. For all customized secondary field options, a course list must be constructed and submitted for approval by the department.

The following list contains examples of over fifty titles of customized secondary field options which have been approved. The complete list may be found at the department's secondary field website (http://ise.illinois.edu/undergraduate-programs/general-engineering-degree/secondary-field-option/). Additional titles beyond those listed may be proposed.

- A foreign language (several)
- An engineering discipline (several)
- Audio Engineering
- Economics
- Entrepreneurship
- Finance
- Fluid Dynamics
- International Business
- Mathematics
- Pre-Law
- Pre-Med
- Renewable Energy

Design experience and project management are emphasized and integrated across the core with a focus on establishing critical problem-solving skills applied across disciplines, strong communication skills, and the ability to work effectively and get results in a team environment.

The capstone experience for Systems Engineering and Design undergraduates is the Senior Project Course. Students work collaboratively with industry and a team of faculty members on a real-world problem during their final semester. The results are documented in a final written report and a formal presentation at the end of the semester to the company so that the student recommendations may be implemented.

for the degree of Bachelor of Science in Systems Engineering and Design (formerly General Engineering)

Graduation Requirements

Minimum Technical GPA (https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-TechnicalGPARequirement)**: 2.0**

TGPA is required for Engineering and Technical Elective courses and MATH 415. See Technical GPA (https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-TechnicalGPARequirement) to clarify requirements.

Minimum Overall GPA: 2.0
Minimum hours required for graduation: 128 hours
General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement. One of the SBS courses must be an introductory economics course (ECON 102 or ECON 103). Specific Advanced Composition courses required for this degree are listed below.**

Orientation and Professional Development

Code	Title	Hours
ENG 100	Engineering Orientation [1]	0
SE 100	Introduction to ISE	1
SE 290	ISE Undergraduate Seminar	0
Total Hours		1

Foundational Mathematics and Science

Code	Title	Hours
CHEM 102	General Chemistry I	3
CHEM 103	General Chemistry Lab I	1
MATH 221	Calculus I [2]	4
MATH 231	Calculus II	3
MATH 241	Calculus III	4
MATH 285	Intro Differential Equations	3
MATH 415	Applied Linear Algebra	3
PHYS 211	University Physics: Mechanics	4
PHYS 212	University Physics: Elec & Mag	4
PHYS 213	Univ Physics: Thermal Physics	2
Total Hours		31

Systems Engineering and Design Technical Core

Code	Title	Hours
CS 101	Intro Computing: Engrg & Sci	3
ECE 110	Introduction to Electronics	3
ECE 211	Analog Circuits & Systems	2
IE 300	Analysis of Data	3
IE 310	Deterministic Models in Optimization	3
SE 101	Engineering Graphics & Design	3
SE 261	Business Side of Engineering	1
SE 310	Design of Structures and Mechanisms	3
SE 311	Engineering Design Analysis	3
SE 312	Instrumentation and Test Lab	1
SE 320	Control Systems	4
SE 424	State Space Design for Control	3
SE 494	Senior Engineering Project I [3]	3
SE 495	Senior Engineering Project II [3]	2
TAM 211	Statics	3
TAM 212	Introductory Dynamics	3
TAM 251	Introductory Solid Mechanics	3
TAM 335	Introductory Fluid Mechanics	4
Total Hours		50

Secondary Field Option Electives

Code	Title	Hours
Secondary field option electives selected from departmentally approved list below or by petition to the department. [4]		**12**
Automotive Engineering		
CS 440	Artificial Intelligence	3 or 4
CS 446	Machine Learning	3 or 4
ECE 431	Electric Machinery	4
ECE 464	Power Electronics	3
ECE 470/AE 482/ ME 445	Introduction to Robotics	4
ECE 486	Control Systems	4
ME 320	Heat Transfer	4
ME 360	Signal Processing	3.5
ME 400	Energy Conversion Systems	3 or 4
ME 403	Internal Combustion Engines	3 or 4
ME 460	Industrial Control Systems	4
ME 461	Computer Cntrl of Mech Systems	3 or 4
SE 400	Engineering Law	3 or 4
SE 497	Independent Study (May be taken for up to 3 credit hours, based on automotive Engineering project approved by SFO faculty mentor)	0 to 4
TAM 412	Intermediate Dynamics	4
TAM 416	Introduction to Nonlinear Dynamics and Vibrations	4
In addtion to completing 12 credit hours from the list of approved courses above, students must complete:		
Dynamics/Controls (select at least one course):		
ECE 470/AE 482/ ME 445	Introduction to Robotics	4
ECE 486	Control Systems	4
ME 460	Industrial Control Systems	4
TAM 412	Intermediate Dynamics	4
TAM 416	Introduction to Nonlinear Dynamics and Vibrations	4
Automotive Power Systems (select at least one course):		
ME 400	Energy Conversion Systems	3 or 4
ME 403	Internal Combustion Engines	3 or 4
ECE 431	Electric Machinery	4
ECE 464	Power Electronics	3
Autonomous Systems and Robotics		
CS 225	Data Structures	4
CS 440	Artificial Intelligence	3 or 4
CS 446	Machine Learning	3 or 4
ECE 470	Introduction to Robotics	4
ECE 486	Control Systems	4
ECE 490	Introduction to Optimization	3 or 4
ME 351		
ME 461	Computer Cntrl of Mech Systems	3 or 4
SE 400	Engineering Law	3 or 4
SE 411	Reliability Engineering	3 or 4
SE 423	Mechatronics	3
Bioengineering		
BIOE 120	Introduction to Bioengineering	1
BIOE 414	Biomedical Instrumentation	3
or ECE 414	Biomedical Instrumentation	
BIOE 415	Biomedical Instrumentation Lab	2
or ECE 415	Biomedical Instrumentation Lab	
BIOE 498	Special Topics	3
BIOP 401	Introduction to Biophysics	3
CHEM 232	Elementary Organic Chemistry I	3 or 4
CHEM 233	Elementary Organic Chem Lab I	2
IE 340/PSYC 358	Human Factors	4
KIN 355	Biomechanics of Human Movement	3
MCB 150	Molec & Cellular Basis of Life (recommended only if a prerequisite to another listed course)	4
MCB 250	Molecular Genetics (recommended only if a prerequisite to another listed course)	3

MCB 251	Exp Techniqs in Molecular Biol (recommended only if a prerequisite to another listed course)	2
MCB 401	Cellular Physiology	3
MCB 402	Sys & Integrative Physiology	3
MCB 403	Cell & Membrane Physiology Lab	1 or 2
MCB 404	Sys & Integrative Physiol Lab	1 to 2
MCB 450	Introductory Biochemistry	3
SE 400	Engineering Law	3 or 4
Business Systems Integration & Consulting		
Core Requirement:		
SE 400	Engineering Law	3 or 4
Group I (At least one course):		
ACCY 200	Fundamentals of Accounting (A basic accounting course is highly recommended)	3
ACCY 201	Accounting and Accountancy I (A basic accounting course is highly recommended)	3
ACCY 202	Accounting and Accountancy II (A basic accounting course is highly recommended)	3
ADV 150	Introduction to Advertising	3
BADM 310	Mgmt and Organizational Beh	3
BADM 311	Leading Individuals and Teams	3
BADM 312	Designing and Managing Orgs	3
BADM 320	Principles of Marketing	3
BADM 445	Small Business Consulting	4
BADM 446	Entrepreneurship: New Venture Creation	4
BTW 250	Principles Bus Comm	3
BTW 261	Principles Tech Comm	3
FIN 221	Corporate Finance	3
FIN 300	Financial Markets	3
IE 420	Financial Engineering	3 or 4
Group II (At least one course)		
BADM 352	Database Design and Management	3
BADM 353	Info Sys Analysis and Design	3
CS 225	Data Structures	4
All other 200-, 300-, 400-level CS courses		
Civil Engineering Structures		
CEE 380	Geotechnical Engineering	3
CEE 460	Steel Structures I	3
CEE 461	Reinforced Concrete I	3
CEE 462	Steel Structures II	3 or 4
CEE 463	Reinforced Concrete II	3 or 4
CEE 465	Design of Structural Systems	3
SE 400	Engineering Law	3 or 4
Computer Science		
CS 173	Discrete Structures	3
CS 225	Data Structures	4
CS 410	Text Information Systems	3 or 4
CS 411	Database Systems	3 or 4
CS 425	Distributed Systems	3 or 4
CS 438	Communication Networks	3 or 4
All other 200-,300-,400-level CS courses		
SE 400	Engineering Law	3 or 4
Construction		
CEE 300	Behavior of Materials (Credit will not be given for CEE 300, ME 330 and MSE 280 (only one course may be taken out of these three))	4
CEE 310	Transportation Engineering	3
CEE 320	Construction Engineering	3
CEE 380	Geotechnical Engineering	3
CEE 420	Construction Productivity	3 or 4
CEE 421	Construction Planning	3 or 4
CEE 422	Construction Cost Analysis	3 or 4
CEE 460	Steel Structures I	3
CEE 461	Reinforced Concrete I	3
CEE 465	Design of Structural Systems	3
ME 330	Engineering Materials (Credit will not be given for CEE 300, ME 330 and MSE 280 (only one course may be taken out of these three))	4
SE 400	Engineering Law	3 or 4
Control Systems		
CS 225	Data Structures	4
ECE 470/AE 482/ ME 445	Introduction to Robotics	4
ECE 486	Control Systems	4
ECE 490	Introduction to Optimization	3 or 4
IE 410	Advanced Topics in Stochastic Processes & Applications	3 or 4
MATH 444	Elementary Real Analysis	3 or 4
MATH 461	Probability Theory	3 or 4
MATH 464	Statistics and Probability II	3 or 4
ME 360	Signal Processing	3.5
ME 460	Industrial Control Systems	4
ME 461	Computer Cntrl of Mech Systems	3 or 4
SE 400	Engineering Law	3 or 4
SE 420	Digital Control Systems	4
SE 422	Robot Dynamics and Control	4
SE 423	Mechatronics	3
Digital Prototyping		
ME 270	Design for Manufacturability	3
ME 451	Computer-Aided Mfg Systems	3 or 4
ME 452	Num Control of Mfg Processes	3 or 4
ME 471/AE 420/ CSE 451	Finite Element Analysis	3 or 4
SE 400	Engineering Law	3 or 4
SE 402	Comp-Aided Product Realization	3 or 4
SE 410	Component Design (SE Design Electives - one course must be taken to fulfill the design elective requirement but additional design electives may then be taken and will count towards this SFO)	3

SE 413	Engineering Design Optimization (SE Design Electives - one course must be taken to fulfill the design elective requirement but additional design electives may then be taken and will count towards this SFO)	3 or 4
SE 423	Mechatronics (SE Design Electives - one course must be taken to fulfill the design elective requirement but additional design electives may then be taken and will count towards this SFO)	3
TAM 302	Engineering Design Principles	3
Engineering Administration		
Core Requirement:		
SE 400	Engineering Law	3 or 4
Elective Options:		
ACCY 200	Fundamentals of Accounting	3
ACCY 201	Accounting and Accountancy I	3
ACCY 202	Accounting and Accountancy II	3
ADV 150	Introduction to Advertising	3
BADM 310	Mgmt and Organizational Beh	3
BADM 311	Leading Individuals and Teams	3
BADM 312	Designing and Managing Orgs	3
BADM 313	Strategic Human Resource Management	3
BADM 375	Operations Strategy	3
BADM 380	International Business	3
BADM 381	Multinational Management	3
BTW 250	Principles Bus Comm	3
BTW 261	Principles Tech Comm	3
ECON 302	Inter Microeconomic Theory	3
FIN 221	Corporate Finance	3
GEOG 205	Business Location Decisions	3
IE 330	Industrial Quality Control	3
IE 340/PSYC 358	Human Factors	4
IE 361	Production Planning & Control	3
IE 420	Financial Engineering	3 or 4
IE 445	Human Performance and Cognition in Context	3 or 4
PS 321	Principles of Public Policy	3
SE 411	Reliability Engineering	3 or 4
Engineering Marketing		
Core Requirement:		
SE 400	Engineering Law	3 or 4
Elective Options:		
ACCY 200	Fundamentals of Accounting	3
ACCY 201	Accounting and Accountancy I	3
ACCY 202	Accounting and Accountancy II	3
ADV 150	Introduction to Advertising	3
BADM 310	Mgmt and Organizational Beh	3
BADM 320	Principles of Marketing	3
BADM 322	Marketing Research	3
BADM 323	Marketing Communications	3
BADM 325	Consumer Behavior	3
BADM 327	Marketing to Business and Govt	3
BADM 380	International Business	3
BADM 382	International Marketing	3
BADM 420	Advanced Marketing Management	3
BTW 250	Principles Bus Comm	3
BTW 261	Principles Tech Comm	3
PSYC 245	Industrial Org Psych	3
Environmental Quality		
ACE 310	Natural Resource Economics	3
CEE 330	Environmental Engineering	3
CEE 437	Water Quality Engineering	3
CEE 440	Fate Cleanup Environ Pollutant	4
CEE 442	Environmental Engineering Principles, Physical	4
CEE 443	Env Eng Principles, Chemical	4
CEE 444	Env Eng Principles, Biological	4
CEE 445		
CEE 446	Air Quality Engineering	4
ENVS 336	Tomorrow's Environment	3
ENVS 431	Environ Toxicology & Health	3
IB 105	Environmental Biology	3
NPRE 241	Intro to Radiation Protection	2
NRES 419	Env and Plant Ecosystems	3
NRES 472	Environmental Psychology	4
SE 400	Engineering Law	3 or 4
Internet of Things		
Core Requirements:		
ECE 385	Digital Systems Laboratory	3
SE 423	Mechatronics	3
Elective Options:		
CS 125	Introduction to Computer Science	4
CS 173	Discrete Structures	3
CS 225	Data Structures	4
CS 233	Computer Architecture	4
CS 241	System Programming	4
ECE 120	Introduction to Computing	4
Manufacturing Engineering		
ME 330	Engineering Materials (Credit will not be given for CEE 300, ME 330 and MSE 280 (only one course may be taken out of these three))	4
SE 400	Engineering Law	3 or 4
SE 423	Mechatronics	3
Other courses from Digital Protoyping and Control Systems SFO		
Nondestructive Testing and Evaluation		
Core Requirement:		
SE 412	Nondestructive Evaluation	3 or 4
Elective Options:		
CEE 300	Behavior of Materials (Credit is not give for CEE 300 and MSE 280)	4
CS 225	Data Structures	4
CS 440	Artificial Intelligence	3 or 4
CS 446	Machine Learning	3 or 4

ECE 470	Introduction to Robotics	4
ECE 473	Fund of Engrg Acoustics	3 or 4
ME 351		
ME 471	Finite Element Analysis	3 or 4
SE 400	Engineering Law	3 or 4
TAM 412	Intermediate Dynamics	4
TAM 456	Experimental Stress Analysis	3
Operations Research		
IE 360	Facilities Planning and Design	3
IE 361	Production Planning & Control	3
MATH 461	Probability Theory	3 or 4
MATH 464	Statistics and Probability II	3 or 4
ME 351		
ME 451	Computer-Aided Mfg Systems	3 or 4
SE 400	Engineering Law	3 or 4
SE 411	Reliability Engineering	3 or 4
Rehabilitation Engineering		
CHEM 232	Elementary Organic Chemistry I	3 or 4
ECE 414	Biomedical Instrumentation	3
ECE 415	Biomedical Instrumentation Lab	2
MCB 150	Molec & Cellular Basis of Life	4
MCB 250	Molecular Genetics	3
MCB 251	Exp Techniqs in Molecular Biol	2
REHB 401	Introduction to Rehabilitation	4
REHB 402	Medical Aspects of Disability	4
SE 400	Engineering Law	3 or 4
Theoretical and Applied Mechanics		
CEE 300	Behavior of Materials (Credit will not be given for CEE 300, ME 330 and MSE 280 (only one course may be taken out of these three))	4
ME 471	Finite Element Analysis	3 or 4
SE 400	Engineering Law	3 or 4
TAM 412	Intermediate Dynamics	4
TAM 424	Mechanics of Structural Metals	3 or 4
TAM 428	Mechanics of Composites	3
TAM 435	Intermediate Fluid Mechanics	4
TAM 445	Continuum Mechanics	4
TAM 451	Intermediate Solid Mechanics	4
TAM 456	Experimental Stress Analysis	3

Technical Electives

Code	Title	Hours
Design elective selected from the departmentally approved list of Design Electives below:		3
SE 410	Component Design	3
SE 420	Digital Control Systems	4
SE 423	Mechatronics	3
SE 413	Engineering Design Optimization	3 or 4
Engineering science elective selected from the departmentally approved list of Engineering Science Electives below:		3
ME 200	Thermodynamics	3
MSE 280	Engineering Materials	3

Electives

Code	Title	Hours
The Grainger College of Engineering Liberal Education course list, or additional courses from the campus General Education lists for Social and Behavioral Sciences or Humanities and the Arts [5]		6
Free electives. Additional unrestricted course work, subject to certain exceptions as noted by the College, so that there are at least 128 credit hours earned toward the degree. [6]		6
Total Hours of Curriculum to Graduate		**128**

1 *External transfer students take* ENG 300 *instead.*

2 MATH 220 *may be substituted, with four of the five credit hours applying toward the degree.* MATH 220 *is appropriate for students with no background in calculus.*

3 *Advanced Composition satisfied by completing the combination of* SE 494 *and* SE 495.

4 The following course substitutions may be used interchangeably to comply with prerequisites of specified courses in some of the secondary fields:

- CEE 202, IE 300, STAT 400
- CEE 201, IE 310
- MSE 406, CEE 300
- ECE 486, SE 320, ME 340

5 *The Grainger College of Engineering approved liberal education course list can be found* here *(*https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-GeneralEducationElectives*). Note that these credit hours could carry the required cultural studies designation required for campus general education requirements.*

6 *The Grainger College of Engineering restrictions to free electives can be found* here *(*https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements/#DegreeRequirements-FreeElectives*).*

for the degree of Bachelor of Science in Systems Engineering and Design (formerly General Engineering)

Suggested Sequence

The curriculum sequence below is a suggested sequence, as all Grainger Engineering students work with a department academic advisor to achieve their educational goals, specific to their needs and preparation. Dynamic and Static curricular maps, which include prerequisite sequencing, can be found here (https://grainger.illinois.edu/academics/undergraduate/majors-and-minors/systems-engineering-map/).

First Year

First Semester		Hours
SE 100	Introduction to ISE	1
ENG 100	Engineering Orientation	0
MATH 221 [1]	Calculus I	4
CHEM 102	General Chemistry I	3
CHEM 103	General Chemistry Lab I	1

RHET 105 or SE 101[2]	Writing and Research	4-3
General education elective[3]		3
	Semester Hours	16-15

Second Semester

MATH 231	Calculus II	3
PHYS 211	University Physics: Mechanics	4
CS 101	Intro Computing: Engrg Sci	3
ECE 110	Introduction to Electronics	3
SE 101 or RHET 105[2]	Engineering Graphics Design	3-4
	Semester Hours	16-17

Second Year

First Semester

MATH 241	Calculus III	4
PHYS 212	University Physics: Elec Mag	4
SE 261	Business Side of Engineering	1
TAM 211	Statics	3
General education elective[3]		3
	Semester Hours	15

Second Semester

SE 290	ISE Undergraduate Seminar	0
MATH 285	Intro Differential Equations	3
PHYS 213	Univ Physics: Thermal Physics	2
IE 300	Analysis of Data	3
TAM 212	Introductory Dynamics	3
TAM 251	Introductory Solid Mechanics	3
General education elective[3]		3
	Semester Hours	17

Third Year

First Semester

SE 310	Design of Structures and Mechanisms	3
SE 320	Control Systems	4
MATH 415	Applied Linear Algebra	3
ECE 211	Analog Circuits Systems	2
Secondary field option elective[4]		3
	Semester Hours	15

Second Semester

SE 311	Engineering Design Analysis	3
SE 312	Instrumentation and Test Lab	1
SE 424	State Space Design for Control	3
IE 310	Deterministic Models in Optimization	3
TAM 335	Introductory Fluid Mechanics	4
General education elective[3]		3
	Semester Hours	17

Fourth Year

First Semester

Secondary field option elective[4]		3-5
OR		
SE 494 & SE 495[5,6]		
Design elective[7]		3
Engineering science elective[8]		3
Secondary field option elective[4]		3
General education elective[3, 5]		3
	Semester Hours	15-17

Second Semester

SE 494 & SE 495[5,6]	Senior Engineering Project I	5-3
OR		
Secondary field option elective[4]		
Secondary field option elective[4]		3
General education elective[3]		3
Free electives		6
	Semester Hours	17-15
	Total Hours:	128

1 MATH 220 *may be substituted, with four of the five credit hours applying toward the degree. MATH 220 is appropriate for students with no background in calculus.*

2 *RHET 105 (or an alternative Composition I sequence) is taken either in the first or second semester of the first year, according to the student's UIN (Spring if your UIN is Odd). SE 101 is taken the other semester. Composition I guidelines can be found at* http://catalog.illinois.edu/general-information/degree-general-education-requirements/ *under Written Communication Requirement.*

3 *Students must take 6 hours from the campus General Education Social and Behavioral Sciences list, 6 hours from campus General Education Humanities and the Arts list, and 6 hours from a liberal education list approved by the college or from the campus General Education lists for Social and Behavioral Sciences or Humanities and the Arts. ECON 102 or ECON 103 must be one of the Social and Behavioral Sciences courses. Students must also complete the campus cultural studies requirement by completing (i) one western/comparative culture(s) course, (ii) one non-western culture(s) course, and (iii) one U.S. Minority Culture(s) course from the General Education cultural studies lists. Most students select general education courses that simultaneously satisfy these cultural studies requirements.*

4 *Selected from the departmentally approved* lists of Secondary Field Option Electives (http://ise.illinois.edu/undergraduate-programs/general-engineering-degree/secondary-field-option/preapproved-secondary-field/*) or by petition to the department.*

5 *SE 494 and SE 495 may be taken in the first or second semester of the fourth year as authorized. The alternative is a secondary field option elective.*

6 *Combination satisfies the General Education Advanced Composition requirement.*

7 *Selected from the departmentally approved* list of Design Electives (https://ise.illinois.edu/undergraduate/electives.html*).*

8 *Selected from the departmentally approved* list of Engineering Science Electives (https://ise.illinois.edu/undergraduate/electives.html*).*

Learning Outcomes: Systems Engineering and Design, BS

Learning Outcomes for the degree of Bachelor of Science Major in Systems Engineering and Design (formerly General Engineering)

Student learning outcomes are based on learning outcomes in line with the ABET accreditation process.

Systems Engineering and Design graduates will have:

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. An ability to communicate effectively with a range of audiences.
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Teaching of French, BA

for the degree of Bachelor of Arts in the Teaching of French

department website: https://frit.illinois.edu/
department faculty: French & Italian Faculty (https://frit.illinois.edu/directory/faculty/)
advising: French advising (https://frit.illinois.edu/academics/advising/) **and** Foreign Language Teacher advising (https://flte.illinois.edu/program-overview/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: french-italian@illinois.edu

Undergraduate degree programs in French & Italian:

French, BALAS (p. 201)

Teaching of French, BA (p. 421)

Italian, BALAS (p. 249)

for the degree of Bachelor of Arts in the Teaching of French

In order to remain in good standing in this program and be recommended for licensure, candidates are required to maintain UIUC, cumulative, content area, and professional education grade-point averages of 2.5 (A= 4.0). Candidates should consult their advisor or the Council on Teacher Education for the list of courses used to compute these grade-point averages.

Departmental distinction: A student must have a minimum 3.5 cumulative grade point average, including a 'Satisfactory' in the teaching practicum; complete two additional advanced-level courses in French or the teaching minor; complete FR 492, and provide two letters of recommendation as evidence of exceptional teaching potential. Consult the teacher education adviser for details.

General education: Consult the Curricula Preparatory to Teaching Foreign Languages (p. 201)**.**
Minimum required major and supporting course work: Normally equates to 37 hours of French courses and 29 hours of professional education courses. The required coursework could be 16 additional hours, respectively, if the student does not already have the equivalent of French 101-102-133-134. NOTE: FR 299 **is strongly recommended.**
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
FR 207	Writing and Grammar Workshop	3
FR 211	Introduction to Literary Studies	3
FR 212	Introduction to Cultural Analysis: French Identities	3
Language Courses		
FR 205	Oral French	2
FR 213	French Phonetics	2
FR 314	Advanced Grammar in Context	3
Culture Courses		
Choose two of the following:		6
FR 335	French Cultural History to 1789	
FR 336	French Cultural History 1789-1968	
FR 337	Contemporary France	
Literature Courses		
Two courses at the 300- or 400-level in French and/or Francophone literature		6
Medieval and Early Modern Period course		
Students must take one course focused on the medieval/early modern period. This course can be used to fulfill the Culture or Literature Courses requirement.		
FR 301	Medieval and Early Modern Literature	
or FR 335	French Cultural History to 1789	
Electives		
Three French courses at the 300- or 400-level in any of the following areas: Language and translation, business, cinema, culture, linguistics, literature, media.		9
Professional education courses. (See Foreign Languages-Curricula Preparatory to Teaching Foreign Languages.) (p. 201)		29
Total Hours		66

Learning Outcomes: Teaching of French, BA

Learning Outcomes for the degree of Bachelor of Arts in the Teaching of French

1. **Teacher Candidates* will be able to** demonstrate their understanding of SLA theories and methodologies through the instructional activities and materials that they design to support all students' learning and skill building in the three modes of communication.

2. Using Bloom's taxonomy and knowledge of cultural analysis, **Teacher Candidates will be able to** stimulate analytical skills in their second language learners when reading literary or historical texts or periodicals, such as newspapers, magazines, or blog posts discussing current events.
3. Using their knowledge of French linguistics and the sounds of French, **Teacher Candidates will be able to** model accurate and authentic pronunciation for their learners during instruction.
4. **Teacher Candidates will be able to** demonstrate her/his understanding of and skills in designing multiple methods of assessment that monitor learner progress in the three modes of communication, promote learner efficacy, and guide decision-making of the learner and teacher.

**BAT students = Teacher Candidates*

Teaching of German, BA

for the degree of Bachelor of Arts Major in the Teaching of German

department website: https://www.germanic.illinois.edu
department faculty: Germanic Languages & Literatures Faculty (https://germanic.illinois.edu/directory/faculty/)
advising: German advising (https://germanic.illinois.edu/academics/german/undergraduate-programs/undergraduate-advisor/) **and** Foreign Language Teacher advising (https://flte.illinois.edu/program-overview/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: germanic@illinois.edu

Undergraduate degree programs in Germanic Languages & Literatures:

Germanic Studies, BALAS (p. 217)

Teaching of German, BA (p. 422)

Scandinavian Studies Concentration within German Studies BALAS (p. 219)

for the degree of Bachelor of Arts Major in the Teaching of German

In order to remain in good standing in this program and be recommended for certification, candidates are required to maintain UIUC, cumulative, content area, and professional education, grade-point averages of 2.5 (A= 4.0). Candidates should consult their advisor or the Council on Teacher Education for the list of courses used to compute these grade-point averages.

Consult the certification officer at 505 East Green Suite 203 for additional information. http://www.cote.illinois.edu/

Departmental distinction: Students should consult their advisers by the second semester of the junior year for information pertaining to seminar honors work and honors awards in the department.

The total of 47 hours may be reduced by as much as 16 hours through prerequisite credit for work equivalent to GER 101-GER 104 taken in secondary school.

General education: Consult the Curricula Preparatory to Teaching Foreign Languages (p. 201)**.**
Minimum required major and supporting course work: Normally equates to 76 hours.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
Professional education courses. (See Foreign Languages-Curricula Preparatory to Teaching Foreign Languages.) (p. 201)		29
GER 101	Beginning German I	4
GER 102	Beginning German II	4
GER 103	Intermediate German I	4
GER 104	Intermediate German II	4
GER 211	Conversation and Writing I	3
GER 212	Conversation and Writing II	3
GER 331	Intro to German Literature	3
GER 332	German Literature and Culture	3
GER 401	Global Issues in German	3
GER 420	German Cultural History	4
Select one of the following:		3
GER 470	Middle Ages to Baroque	
GER 471	Enlightenment to Romanticism	
GER 472	Realism to Expressionism	
GER 473	1920s to Today	
GER 465	German Linguistics	3
Two German courses as electives		6
Total Hours		76

Learning Outcomes: Teaching of German, BA

Learning Outcomes for the degree of Bachelor of Arts Major in the Teaching of German

1. **Teacher Candidates* will be able to** demonstrate her/his understanding of SLA theories and methodologies through the instructional activities and materials that she/he designs to support all students' learning and skill building in the three modes of communication.
2. Using Bloom's taxonomy and knowledge of current events and popular culture in Germany, Austria, and Switzerland, **Teacher Candidates will be able to** foster evaluation skills in German second language learners through reading newspapers, magazines, or blog posts discussing politics, movies, television, and sports.
3. Using their knowledge of German linguistics and the sounds of German, **Teacher Candidates will be able to** model accurate and authentic pronunciation for their learners during instruction.
4. **Teacher Candidates will be able to** demonstrate her/his understanding of and skills in designing multiple methods of assessment that monitor learner progress in the three modes of communication, promote learner efficacy, and guide decision-making of the learner and teacher.

**BAT students = Teacher Candidates*

Teaching of Spanish, BA

for the degree of Bachelor of Arts in the Teaching of Spanish

department website: https://spanport.illinois.edu/
department faculty: Spanish & Portuguese Faculty (https://spanport.illinois.edu/directory/faculty/)
advising: Spanish Advising & (https://spanport.illinois.edu/academics/spanish-undergraduate/) **and** Foreign Language Teacher advising (https://flte.illinois.edu/program-overview/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: span-port@lists.illinois.edu

Undergraduate degree programs in Spanish & Portuguese
Spanish, BALAS (p. 381)

Teaching of Spanish, BA (p. 423)

Portuguese, BALAS (p. 359)

for the degree of Bachelor of Arts in the Teaching of Spanish

Prerequisite to application to the Teaching program
GPA of 2.5 in all Spanish content courses in the major.
Contact the Foreign Language Teacher Education Program for information:https://flte.illinois.edu/

In order to remain in good standing in this program and be recommended for licensure, candidates are required to maintain UIUC, cumulative, content area, and professional education, grade-point averages of 2.5 (A+= 4.0). Candidates should consult their advisor or the Council on Teacher Education for the list of courses used to compute these grade-point averages.
Illinois law requires all candidates for licensure in World Languages pass the appropriate language content-area test prior to student teaching, and an oral proficiency test in their content major language prior to licensure.

Departmental distinction: To be eligible for departmental distinction, a student must have a minimum grade point average of 3.0, display exceptional teaching ability, and complete an approved project or series of projects. Consult the Spanish departmental advisor for details.

Study Abroad: It is strongly recommended that future teachers of Spanish engage in one or more semesters of study in a Spanish-speaking country. A number of the curricular requirements may be met through the Year Abroad Program or other approved programs; see Study Abroad Programs (https://spanport.illinois.edu/academics/education-abroad/).

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: Minimum required course work normally equates to 33-36 hours in Teaching Area of Concentration and 33 hours of professional education courses.
Minimum hours required for graduation: 127 hours.

Code	Title	Hours
Core Spanish Courses		
SPAN 228	Spanish Composition	3
SPAN 477	Spanish Grammar and Communicative Language Teaching	3
27-30 additional hours of coursework in SPAN at the 200, 300, and/or 400 level, including at least two literature and culture courses and at least two linguisitics courses, chosen from among the following: SPAN 250, 252, 254, 303, 305, 307, 308, 309, 310, 312, 318, 320, 324, 326, 395, related SPAN 299 or SPAN 399 study abroad courses, or related SPAN 400-level courses with advisor approval.		27-30
Core Professional Education Courses		
FLTE 471	Introduction to Second Language Teaching	4
FLTE 475	Learning to Teach World Language	4
FLTE 478	Secondary World Language Teaching [1]	4
EPS 201	Foundations of Education	3
EPSY 201	Educational Psychology	3
SPED 405	General Educator's Role in Special Education	3
EDPR 442	Educational Practice in Secondary Education	12
Total Hours		63-68

[1] In the fall semester, students enroll for 3 hours with instruction occurring in the first 10 weeks. In the spring semester, students enroll for 1 hour with instruction occurring in the first 4 weeks.

Learning Outcomes: Teaching of Spanish, BA

Learning Outcomes for the degree of Bachelor of Arts in the Teaching of Spanish

1. **Teacher Candidates* will be able to** demonstrate their understanding of second language acquisition theories and methodologies through the instructional activities and materials that they design to support all students' learning and skill building in the three modes of communication.
2. Using Bloom's taxonomy and knowledge of cultural analysis, **Teacher Candidates will be able to** stimulate analytical skills in their second language learners when reading literary or historical texts or periodicals, such as newspapers, magazines, or blog posts discussing current events.
3. Using their knowledge of Spanish linguistics and the sounds of Spanish, **Teacher Candidates will be able to** model accurate and authentic pronunciation for their learners during instruction.
4. **Teacher Candidates will be able to** demonstrate their understanding of and skills in designing multiple methods of assessment that monitor learner progress in the three modes of communication, promote learner efficacy, and guide decision-making of the learner and teacher.

**BAT Students = Teacher Candidates*

Theatre, BFA

for the Bachelor of Fine Arts Major in Theatre

department website: https://theatre.illinois.edu
department faculty: https://theatre.illinois.edu/people/meet-our-faculty/
college catalog page: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/

Students pursuing this major select one of eight concentrations:

Acting (p. 424)
Arts & Entertainment Technology (p. 425)
Costume Design & Technology (p. 427)
Lighting Design & Technology (p. 428)
Scenic Design (p. 429)
Scenic Technology (p. 431)
Sound Design & Technology (p. 432)
Stage Management (p. 433)
Theatre Studies (p. 434)

The curricular concentrations in the Department of Theatre provide extensive preparation for the rigorous demands of a professional career in the theatre and allied arts.

The BFA is an intensive undergraduate professional training curriculum with concentrations in Acting, Costume Design and Technology, Lighting Design and Technology, Scenic Design, Scenic Technology, Sound Design and Technology, Stage Management, and Theatre Studies. The Theatre Studies concentration is intended for students who want to explore the many facets of theatre or plan to pursue advanced training in directing, dramaturgy, playwriting, arts management, social issues theatre, and theatre history and criticism.

As part of the application process, , prospective students must complete an interview and participate in auditions or portfolio reviews. Acting applicants should bring a resume/headshot and present 2 contrasting monologues of no more than 2 minutes each for their audition. Applicants who wish to pursue one of the concentrations in Design, Technology, or Management should bring a resume and a portfolio showing examples of their theatrical work, which can include a range of interests and experiences. Applicants who intend to pursue the Theatre Studies Concentration should present a writing portfolio that includes a resume and a short essay on theatre or another short, written creative work.

In the second year of study in the department, BFA Acting students are evaluated for promotion into the advanced studio classes in acting (Junior and Senior years.) In addition to successful completion of all classes in their first and second years, acceptance will be based on each student's potential for professional-caliber performance.

As one of the Resident Producing Organizations at the Krannert Center for the Performing Arts, the Department of Theatre produces six or seven fully mounted productions each academic year. The theatres, rehearsal halls and shops of the Krannert Center serve as laboratories for theatre students, who have the opportunity to learn and to work alongside an outstanding staff of resident theatre professionals and visiting artists. In addition, the department sponsors a small experimental theatre space for student-written and student-directed productions.

All theatre majors must successfully complete production crew assignments at the Krannert Center under THEA 100 (Practicum I) and THEA 200 (Practicum II). Students working on Department of Theatre productions in their specific concentration area also take THEA 300 (Practicum III) or THEA 400 (Practicum IV.) Design, Technology, and Management concentration students will also receive practicum credit for working on productions in Lyric Theatre, Department of Dance and Events.

Theatre: Acting, BFA

for the Bachelor of Fine Arts Major in Theatre, Acting Concentration

department website: https://theatre.illinois.edu
department faculty: https://theatre.illinois.edu/people/meet-our-faculty/
college catalog page: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/

Acting Concentration

The acting concentration provides intensive training in a wide range of performance aspects. In the first and second years, students take foundational courses in acting that include movement and vocal production. In the second year of study in the department, BFA Acting students are evaluated for promotion into the advanced studio classes in acting (Junior and Senior years.) In addition to successful completion of all classes in their first and second years, acceptance will be based on each student's potential for professional-caliber performance. Considerations include potential for expressive movement, effective voice and speech, emotionally connected characterization, intellectually thorough. Analysis and reliable discipline for intensive study. Students who are not promoted into the advanced studio classes may apply to the Theatre Studies concentration. Third- and fourth-year students meet in daily four-hour sessions, each of which includes voice and speech, movement and acting. Students acquire skills in stage combat and dialects. The four semesters of acting scene study focus on modern classical plays, musical theatre, Shakespeare and acting for the camera. Students. In the professional studio in acting are expected to audition for department productions and perform as cast.

for the Bachelor of Fine Arts Major in Theatre, Acting Concentration

A minimum of 128 hours of credit is required for the degree.

Twelve hours of 300 and 400-level courses in the major must be taken on this campus.
40 credits hours in degree required in 300-400 level coursework to meet IBHE requirements.

General Education Requirements for all University Students

Code	Title	Hours
	General Education Requirements: (40 hrs with Language requirements fulfilled)	
Composition I		4
Advanced Composition		3
Cultural Studies: Western Comparative Cultures		3
Cultural Studies: U.S. Minority Culture(s)		3
Cultural Studies: Non-Western Cultures		3
Quantitative Reasoning I		3
Quantitative Reasoning II		3

Humanities and the Arts	6
Natural Sciences and Technology	6
Social and Behavioral Sciences	6
Language Requirement [1]	0-12
Electives	
General, Non-Theatre Electives	9
Open Electives (as needed to total a minimum of 128 hours to earn the degree)	

[1] *General Education Language Requirement: Options to satisfy this requirement are noted in the* Course Explorer. *(*https://courses.illinois.edu/gened/DEFAULT/DEFAULT/*)*

Core Requirements for all Theatre Majors

Code	Title	Hours
FAA 101	Arts at Illinois	1
THEA 100	Practicum I	2
THEA 200	Practicum II	2
THEA 121	Theatre Foundations: Performance	3
THEA 122	Theatre Foundations: Theory and Practice	3
THEA 123	Theatre Foundations: Production	3
THEA 208	21st Century Dramaturgy	3
THEA 304	Global Theatre Performance	3
THEA 364	Topics in Theatre History	3
THEA 404	Professional Career Development	1
Total Hours		24

Summary of Credits for BFA in Theatre

Code	Title	Hours
Core Requirements for All Theatre Majors		24
General Education Requirements		31-40
Language Requirements, if needed		0-12
Concentration Requirements (see tables below for individual concentrations)		49-52
General Non-Theatre Electives		9
Open Electives as needed to total 128 hours		0-18
Total Credits for BFA in Theatre		**128**

Acting Concentration

Code	Title	Hours
THEA 175	Fundamentals of Acting II	3
THEA 270	Relationships in Acting I	3
THEA 271	Voice and Movement I	2
THEA 275	Relationships in Acting II	3
THEA 276	Voice and Movement II	2
THEA 371	Acting Studio I: Dynamics	1
THEA 372	Acting Studio I: Voice	2
THEA 373	Acting Studio I: Movement	2
THEA 374	Acting Studio I: Acting	3
THEA 375	Acting Studio II: Dynamics	1
THEA 376	Acting Studio II: Voice	2
THEA 377	Acting Studio II: Movement	2
THEA 378	Acting Studio II: Acting	3
THEA 400	Practicum IV	4
THEA 471	Acting Studio III: Dynamics	1
THEA 472	Acting Studio III: Voice	2
THEA 473	Acting Studio III: Movement	2
THEA 474	Acting Studio III: Acting	3
THEA 475	Acting Studio IV: Dynamics	1
THEA 476	Acting Studio IV: Voice	2
THEA 477	Acting Studio IV: Movement	2
THEA 478	Acting Studio IV: Acting	3
Total Hours		49

Learning Outcomes: Acting Concentration

Learning outcomes for the Bachelor of Fine Arts Major in Theatre, Acting Concentration

Student Learning Outcomes

1. Demonstrates a mature, effective ability to analyze, interpret, write critically and creatively, and discuss thoughtfully in the field of theatre and performance.
2. Demonstrates ability to creatively engage in the collaborative process in rehearsal, construction, and performance of works for the stage.
3. Demonstrates an ability to analyze, prepare, and perform in dramatic material including works from contemporary theatre, modern classics, Shakespeare, musical theatre, and media including film, television, and web, among others.
4. Demonstrates increasing ability to recognize and adjust voice, speech, and movement skills (including stage combat techniques) in application to performance for the stage.
5. Demonstrates an understanding of the expectations of professional practice in auditioning for and working in professional theatre, film, television, and other media.

Theatre: Arts & Entertainment Technology, BFA

for the Bachelor of Fine Arts Major in Theatre, Arts & Entertainment Technology Concentration

department website: https://theatre.illinois.edu
department faculty: https://theatre.illinois.edu/people/meet-our-faculty/
college catalog page: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/

Arts & Entertainment Technology Concentration

Level 21 reflects the design, technology and management disciplines in theatre arts. It has seven unique yet inter-related concentrations in: Arts + Entertainment Technology, Costume Design + Technology, Lighting Design + Technology, Scene Design, Scenic Technology, Sound Design + Technology, and Stage Management. Freshman and sophomore students learn the foundations of theatrical production with a focus on acquiring practical skills for application in advanced course work and in theatre productions. Junior and senior students participate in advanced study

in their chosen discipline supported by one-on-one faculty mentoring of assigned projects. Students in this area are the designers, technicians, managers, artisans and crew for over a dozen theater, musical theater, dance and opera productions at Krannert Center for the Performing Arts and work on these shows in various roles throughout their entire course of study.

for the Bachelor of Fine Arts Major in Theatre, Arts & Entertainment Technology Concentration

A minimum of 128 hours of credit is required for the degree.

Twelve hours of 300 and 400-level courses in the major must be taken on this campus.
40 credits hours in degree required in 300-400 level coursework to meet IBHE requirements.

General Education Requirements for all University Students

Code	Title	Hours
General Education Requirements: (40 hrs with Language requirements fulfilled)		
Composition I		4
Advanced Composition		3
Cultural Studies: Western Comparative Cultures		3
Cultural Studies: U.S. Minority Culture(s)		3
Cultural Studies: Non-Western Cultures		3
Quantitative Reasoning I		3
Quantitative Reasoning II		3
Humanities and the Arts		6
Natural Sciences and Technology		6
Social and Behavioral Sciences		6
Language Requirement [1]		0-12
Electives		
General, Non-Theatre Electives		9
Open Electives (as needed to total a minimum of 128 hours to earn the degree)		

[1] *General Education Language Requirement: Options to satisfy this requirement are noted in the* Course Explorer. *(*https://courses.illinois.edu/gened/DEFAULT/DEFAULT/*)*

Core Requirements for all Theatre Majors

Code	Title	Hours
FAA 101	Arts at Illinois	1
THEA 100	Practicum I	2
THEA 200	Practicum II	2
THEA 121	Theatre Foundations: Performance	3
THEA 122	Theatre Foundations: Theory and Practice	3
THEA 123	Theatre Foundations: Production	3
THEA 208	21st Century Dramaturgy	3
THEA 304	Global Theatre Performance	3
THEA 364	Topics in Theatre History	3
THEA 404	Professional Career Development	1
Total Hours		24

Summary of Credits for BFA in Theatre

Code	Title	Hours
Core Requirements for All Theatre Majors		24
General Education Requirements		31-40
Language Requirements, if needed		0-12
Concentration Requirements (see tables below for individual concentrations)		49-52
General Non-Theatre Electives		9
Open Electives as needed to total 128 hours		0-18
Total Credits for BFA in Theatre		**128**

Code	Title	Hours
Required Courses:		**32**
THEA 100	Practicum I (in addition to the THEA 100 credits required in the theatre core)	1
THEA 119	BFA Production Seminar (section AET)	4
THEA 126	Stagecraft	3
THEA 153	Introduction to Theatre Sound	3
THEA 220	Survey of Theatrical Design	3
THEA 223	Introduction to Stage Rigging	3
THEA 231	Intro to Lighting Design	3
THEA 300	Practicum III	4
THEA 400	Practicum IV	4
THEA 495	Capstone Project	2
THEA 496	Professional Exploration	2
Choose 6 credits from the following courses:		**6**
THEA 419	Theatrical CAD Drafting	2
THEA 421	Welding for the Stage	4
THEA 424	Automation for the Stage	3
THEA 429	Scenic Technology Topics	2
THEA 435	Professional Lighting Systems	2
THEA 497	Audio Engineering I	3
Choose 12 credits from the following courses:		**12**
THEA 151	Introduction to Digital Audio Workstations	3
THEA 419	Theatrical CAD Drafting (in addition to 6 cr requirement)	2
THEA 420	Shop Practice	4
THEA 421	Welding for the Stage (in addition to 6 cr requirement)	4
THEA 422	Structures for the Stage	3
THEA 424	Automation for the Stage (in addition to 6 cr requirement)	3
THEA 429	Scenic Technology Topics (may be repeated for various topics)	2
THEA 430	Technical Direction I	3
THEA 435	Professional Lighting Systems (in addition to 6 cr requirement)	2
THEA 437	Software for Lighting Design	2
THEA 461	Introduction to Media Design	3
THEA 492	Digital Rendering for Lighting	3
THEA 494	Advanced Problem Solving for Lighting Designers	3
THEA 497	Audio Engineering I (in addition to 6 cr requirement)	3

THEA 498	Audio Engineering II	3
RST 460	Event Management in Recreation, Sport and Tourism	3
RST 465	Event Implementation and Evaluation in Recreation, Sport and Tourism	3
PHYS 102	College Physics: E&M & Modern (Nat Sci & Tech and Quant Reasoning II Gen Ed)	5
PHYS 193	Physics of Music	2
PHYS 211	University Physics: Mechanics (Nat Sci & Tech Gen Ed)	4
PHYS 212	University Physics: Elec & Mag (Nat Sci & Tech Gen Ed)	4
Total Credits for Arts and Entertainment Technology Concentration		**50**

Theatre: Costume Design & Technology, BFA

for the Bachelor of Fine Arts Major in Theatre, Costume Design & Construction Concentration

department website: https://theatre.illinois.edu
department faculty: https://theatre.illinois.edu/people/meet-our-faculty/
college catalog page: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/

Level 21: Design, Technology and Management Concentrations

Level 21 reflects the design, technology and management disciplines in theatre arts. It has seven unique yet inter-related concentrations in: Arts + Entertainment Technology, Costume Design + Technology, Lighting Design + Technology, Scene Design, Scenic Technology, Sound Design + Technology, and Stage Management. Freshman and sophomore students learn the foundations of theatrical production with a focus on acquiring practical skills for application in advanced course work and in theatre productions. Junior and senior students participate in advanced study in their chosen discipline supported by one-on-one faculty mentoring of assigned projects. Students in this area are the designers, technicians, managers, artisans and crew for over a dozen theater, musical theater, dance and opera productions at Krannert Center for the Performing Arts and work on these shows in various roles throughout their entire course of study.

for the Bachelor of Fine Arts Major in Theatre, Costume Design & Construction Concentration

A minimum of 128 hours of credit is required for the degree.

Twelve hours of 300 and 400-level courses in the major must be taken on this campus.
40 credits hours in degree required in 300-400 level coursework to meet IBHE requirements.

General Education Requirements for all University Students

Code	Title	Hours
General Education Requirements: (40 hrs with Language requirements fulfilled)		
Composition I		4
Advanced Composition		3
Cultural Studies: Western Comparative Cultures		3
Cultural Studies: U.S. Minority Culture(s)		3
Cultural Studies: Non-Western Cultures		3
Quantitative Reasoning I		3
Quantitative Reasoning II		3
Humanities and the Arts		6
Natural Sciences and Technology		6
Social and Behavioral Sciences		6
Language Requirement [1]		0-12
Electives		
General, Non-Theatre Electives		9
Open Electives (as needed to total a minimum of 128 hours to earn the degree)		

[1] *General Education Language Requirement: Options to satisfy this requirement are noted in the* Course Explorer. *(*https://courses.illinois.edu/gened/DEFAULT/DEFAULT/*)*

Core Requirements for all Theatre Majors

Code	Title	Hours
FAA 101	Arts at Illinois	1
THEA 100	Practicum I	2
THEA 200	Practicum II	2
THEA 121	Theatre Foundations: Performance	3
THEA 122	Theatre Foundations: Theory and Practice	3
THEA 123	Theatre Foundations: Production	3
THEA 208	21st Century Dramaturgy	3
THEA 304	Global Theatre Performance	3
THEA 364	Topics in Theatre History	3
THEA 404	Professional Career Development	1
Total Hours		24

Summary of Credits for BFA in Theatre

Code	Title	Hours
Core Requirements for All Theatre Majors		24
General Education Requirements		31-40
Language Requirements, if needed		0-12
Concentration Requirements (see tables below for individual concentrations)		49-52
General Non-Theatre Electives		9
Open Electives as needed to total 128 hours		0-18
Total Credits for BFA in Theatre		**128**

Costume Design & Technology Concentration

Code	Title	Hours
THEA 100	Practicum I (must be repeated in addition to the THEA 100 Practicum I required in the core)	1
THEA 119	BFA Production Seminar (section CSM)	4
THEA 222	Introduction to Scenic Design	3
THEA 231	Intro to Lighting Design	3
THEA 242	Introduction to Costume Production	3
THEA 243	Introduction to Costume Design	3
THEA 300	Practicum III	4
THEA 400	Practicum IV	4
THEA 414	Figure Drawing for Theatre Design	3
THEA 442	Introduction to Costume Patterning and Draping	3
THEA 445	Costume History I	3
THEA 446	Costume History II	3
THEA 447	Costume Rendering	4
THEA 448	Costume Crafts	3
Choose 6 credits:		6
THEA 413	Advanced Costume Design	
THEA 426	History of Decor	
THEA 433	Business of Entertainment Design	
THEA 441	Advanced Costume Construction	
THEA 443	Flat Pattern Drafting	
THEA 444	Costume Draping	
THEA 449	Technology and Costume Crafts	
THEA 456	Properties Design	
THEA 482	Content Creation 2: Motion Graphics & VFX for Media Design	
Total Hours		50

Learning Outcomes: Costume & Design Technology Concentration

Learning outcomes for the Bachelor of Fine Arts Major in Theatre, Costume Design & Construction Concentration

Student Learning Outcomes

1. Demonstrates a mature, effective ability to analyze, interpret, write critically and creatively, and discuss thoughtfully in the field of theatre and performance.
2. Demonstrates ability to actively engage in the collaborative process in preparation, construction, and performance of works for the stage.
3. Demonstrates practical application of learned methodologies including the ability to communicate ideas, concepts, and requirements in order to successfully fulfill a role related to costume design and technology for a stage production
4. Demonstrates working knowledge of professional practices across genres of theatre, musical theatre, opera and dance.
5. Demonstrates necessary skills and knowledge to acquire an entry-level position in the field of costume design and technology including significant technical mastery, showing the capacity to produce work and solve problems independently.

Theatre: Lighting Design & Technology, BFA

for the Bachelor of Fine Arts Major in Theatre, Lighting Design & Technology Concentration

department website: https://theatre.illinois.edu
department faculty: https://theatre.illinois.edu/people/meet-our-faculty/
college catalog page: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/

Level 21: Design, Technology and Management Concentrations

Level 21 reflects the design, technology and management disciplines in theatre arts. It has seven unique yet inter-related concentrations in: Arts + Entertainment Technology, Costume Design + Technology, Lighting Design + Technology, Scene Design, Scenic Technology, Sound Design + Technology, and Stage Management. Freshman and sophomore students learn the foundations of theatrical production with a focus on acquiring practical skills for application in advanced course work and in theatre productions. Junior and senior students participate in advanced study in their chosen discipline supported by one-on-one faculty mentoring of assigned projects. Students in this area are the designers, technicians, managers, artisans and crew for over a dozen theater, musical theater, dance and opera productions at Krannert Center for the Performing Arts and work on these shows in various roles throughout their entire course of study.

for the Bachelor of Fine Arts Major in Theatre, Lighting Design & Technology Concentration

A minimum of 128 hours of credit is required for the degree.

Twelve hours of 300 and 400-level courses in the major must be taken on this campus.
40 credits hours in degree required in 300-400 level coursework to meet IBHE requirements.

General Education Requirements for all University Students

Code	Title	Hours
	General Education Requirements: (40 hrs with Language requirements fulfilled)	
Composition I		4
Advanced Composition		3
Cultural Studies: Western Comparative Cultures		3
Cultural Studies: U.S. Minority Culture(s)		3
Cultural Studies: Non-Western Cultures		3
Quantitative Reasoning I		3
Quantitative Reasoning II		3
Humanities and the Arts		6
Natural Sciences and Technology		6
Social and Behavioral Sciences		6

Language Requirement [1]	0-12
Electives	
General, Non-Theatre Electives	9
Open Electives (as needed to total a minimum of 128 hours to earn the degree)	

[1] *General Education Language Requirement: Options to satisfy this requirement are noted in the* Course Explorer. (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/)

Core Requirements for all Theatre Majors

Code	Title	Hours
FAA 101	Arts at Illinois	1
THEA 100	Practicum I	2
THEA 200	Practicum II	2
THEA 121	Theatre Foundations: Performance	3
THEA 122	Theatre Foundations: Theory and Practice	3
THEA 123	Theatre Foundations: Production	3
THEA 208	21st Century Dramaturgy	3
THEA 304	Global Theatre Performance	3
THEA 364	Topics in Theatre History	3
THEA 404	Professional Career Development	1
Total Hours		24

Summary of Credits for BFA in Theatre

Code	Title	Hours
Core Requirements for All Theatre Majors		24
General Education Requirements		31-40
Language Requirements, if needed		0-12
Concentration Requirements (see tables below for individual concentrations)		49-52
General Non-Theatre Electives		9
Open Electives as needed to total 128 hours		0-18
Total Credits for BFA in Theatre		**128**

Lighting Design & Technology Concentration

Code	Title	Hours
THEA 100	Practicum I (in addition to the THEA 100 credits required in the theatre core)	1
THEA 119	BFA Production Seminar (section LTG)	4
THEA 126	Stagecraft	3
THEA 153	Introduction to Theatre Sound	3
THEA 222	Introduction to Scenic Design	3
THEA 231	Intro to Lighting Design	3
THEA 300	Practicum III	4
THEA 400	Practicum IV	4
THEA 423	Advanced Lighting Design	3
THEA 426	History of Decor	3
THEA 431	The Lighting Laboratory	3
THEA 433	Business of Entertainment Design	3
THEA 435	Professional Lighting Systems	2
THEA 437	Software for Lighting Design	2
THEA 451	Principles of Stage Management	3
Choose 3 credit hours:		3
THEA 242	Introduction to Costume Production	
THEA 243	Introduction to Costume Design	
Choose 3 credit hours:		3
THEA 432	Lighting for Non-Theatrical Spaces and Styles	
THEA 491	Advanced CAD Drafting for Lighting Designers	
THEA 492	Digital Rendering for Lighting	
THEA 493	Lighting Opera & Musicals	
THEA 494	Advanced Problem Solving for Lighting Designers	
Total Hours		
Total Hours		50

Learning Outcomes: Lighting Design & Technology Concentration

Learning outcomes for the Bachelor of Fine Arts Major in Theatre, Lighting Design Concentration

Student Learning Outcomes

1. Communicate design and production ideas to collaborators through graphic skills, language and research and the ability to analyze and interpret creative, critical and theoretical works.
2. Demonstrates the practical application of learned methodologies including the ability to communicate ideas, concepts, and requirements in order to successfully fulfill a role related to lighting design for a stage production.
3. Demonstrates working knowledge of professional practices across genres of theatre, musical theatre, opera, dance and non-traditional venues and styles of design.
4. Gain the practical ability to see their designs come to life from concept through realization by collaborating on current productions with peers, faculty, staff and guest artists.
5. Demonstrates necessary skills and knowledge to acquire an entry-level position in the field of lighting design and technology including significant technical mastery, showing the capacity to produce work and solve problems independently.

Theatre: Scenic Design, BFA

for the Bachelor of Fine Arts Major in Theatre, Scenic Design Concentration

department website: https://theatre.illinois.edu
department faculty: https://theatre.illinois.edu/people/meet-our-faculty/
college catalog page: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/

Level 21: Design, Technology and Management Concentrations

Level 21 reflects the design, technology and management disciplines in theatre arts. It has seven unique yet inter-related concentrations in: Arts + Entertainment Technology, Costume Design + Technology, Lighting Design + Technology, Scene Design, Scenic Technology, Sound Design +

Technology, and Stage Management. Freshman and sophomore students learn the foundations of theatrical production with a focus on acquiring practical skills for application in advanced course work and in theatre productions. Junior and senior students participate in advanced study in their chosen discipline supported by one-on-one faculty mentoring of assigned projects. Students in this area are the designers, technicians, managers, artisans and crew for over a dozen theater, musical theater, dance and opera productions at Krannert Center for the Performing Arts and work on these shows in various roles throughout their entire course of study.

for the Bachelor of Fine Arts Major in Theatre, Scenic Design Concentration

A minimum of 128 hours of credit is required for the degree.

Twelve hours of 300 and 400-level courses in the major must be taken on this campus.
40 credits hours in degree required in 300-400 level coursework to meet IBHE requirements.

General Education Requirements for all University Students

Code	Title	Hours
General Education Requirements: (40 hrs with Language requirements fulfilled)		
Composition I		4
Advanced Composition		3
Cultural Studies: Western Comparative Cultures		3
Cultural Studies: U.S. Minority Culture(s)		3
Cultural Studies: Non-Western Cultures		3
Quantitative Reasoning I		3
Quantitative Reasoning II		3
Humanities and the Arts		6
Natural Sciences and Technology		6
Social and Behavioral Sciences		6
Language Requirement [1]		0-12
Electives		
General, Non-Theatre Electives		9
Open Electives (as needed to total a minimum of 128 hours to earn the degree)		

[1] *General Education Language Requirement: Options to satisfy this requirement are noted in the* Course Explorer. *(*https://courses.illinois.edu/gened/DEFAULT/DEFAULT/*)*

Core Requirements for all Theatre Majors

Code	Title	Hours
FAA 101	Arts at Illinois	1
THEA 100	Practicum I	2
THEA 200	Practicum II	2
THEA 121	Theatre Foundations: Performance	3
THEA 122	Theatre Foundations: Theory and Practice	3
THEA 123	Theatre Foundations: Production	3
THEA 208	21st Century Dramaturgy	3
THEA 304	Global Theatre Performance	3
THEA 364	Topics in Theatre History	3
THEA 404	Professional Career Development	1
Total Hours		24

Summary of Credits for BFA in Theatre

Code	Title	Hours
Core Requirements for All Theatre Majors		24
General Education Requirements		31-40
Language Requirements, if needed		0-12
Concentration Requirements (see tables below for individual concentrations)		49-52
General Non-Theatre Electives		9
Open Electives as needed to total 128 hours		0-18
Total Credits for BFA in Theatre		**128**

Scenic Design Concentration

Code	Title	Hours
THEA 100	Practicum I (must be repeated in addition to the THEA 100 practicum I required in the core)	1
THEA 119	BFA Production Seminar (section SDS)	4
THEA 126	Stagecraft	3
THEA 222	Introduction to Scenic Design	3
THEA 225	Scenographic Drafting	3
THEA 231	Intro to Lighting Design	3
THEA 300	Practicum III	4
THEA 400	Practicum IV	4
THEA 415	Scenic Design I	3
THEA 416	Scenic Design II	3
THEA 426	History of Decor	6
THEA 427	Scenic Painting I	3
THEA 438	Traditional Rendering Techniques	3
THEA 458	Digital Rendering Techniques	3
Choose 3 credit hours:		3
THEA 242	Introduction to Costume Production	
THEA 243	Introduction to Costume Design	
Choose 3 credit hours:		3
THEA 223	Introduction to Stage Rigging	
THEA 453	Introduction to Theatre Sound	
THEA 456	Properties Design	
THEA 461	Introduction to Media Design	
Total Hours		52

Learning Outcomes: Scenic Design Concentration

Learning outcomes for the Bachelor of Fine Arts Major in Theatre, Scenic Design Concentration

Student Learning Outcomes

1. Demonstrates a mature, effective ability to analyze, interpret, and discuss creative and theoretical works.

2. Demonstrates necessary knowledge of materials, tools, techniques, methodologies, and safe working habits of all essential theatrical production environments.
3. Demonstrates practical application of learned methodologies including the ability to communicate ideas, concepts, and requirements in order to successfully fulfill a collaborative role related to scenic design for a stage production.
4. Demonstrates working knowledge of professional practices across genres of theatre, musical theatre, and opera.
5. Demonstrates necessary skills and knowledge to acquire an entry-level position in the field of scenic design including significant technical mastery, showing the capacity to produce work and solve problems independently.

Theatre: Scenic Technology, BFA

for the Bachelor of Fine Arts Major in Theatre, Scenic Technology Concentration

department website: https://theatre.illinois.edu
department faculty: https://theatre.illinois.edu/people/meet-our-faculty/
college catalog page: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/

Level 21: Design, Technology and Management Concentrations

Level 21 reflects the design, technology and management disciplines in theatre arts. It has seven unique yet inter-related concentrations in: Arts + Entertainment Technology, Costume Design + Technology, Lighting Design + Technology, Scene Design, Scenic Technology, Sound Design + Technology, and Stage Management. Freshman and sophomore students learn the foundations of theatrical production with a focus on acquiring practical skills for application in advanced course work and in theatre productions. Junior and senior students participate in advanced study in their chosen discipline supported by one-on-one faculty mentoring of assigned projects. Students in this area are the designers, technicians, managers, artisans and crew for over a dozen theater, musical theater, dance and opera productions at Krannert Center for the Performing Arts and work on these shows in various roles throughout their entire course of study.

for the Bachelor of Fine Arts Major in Theatre, Scenic Technology Concentration

A minimum of 128 hours of credit is required for the degree.

Twelve hours of 300 and 400-level courses in the major must be taken on this campus.
40 credits hours in degree required in 300-400 level coursework to meet IBHE requirements.

General Education Requirements for all University Students

Code	Title	Hours
General Education Requirements: (40 hrs with Language requirements fulfilled)		
Composition I		4
Advanced Composition		3
Cultural Studies: Western Comparative Cultures		3
Cultural Studies: U.S. Minority Culture(s)		3
Cultural Studies: Non-Western Cultures		3
Quantitative Reasoning I		3
Quantitative Reasoning II		3
Humanities and the Arts		6
Natural Sciences and Technology		6
Social and Behavioral Sciences		6
Language Requirement [1]		0-12
Electives		
General, Non-Theatre Electives		9
Open Electives (as needed to total a minimum of 128 hours to earn the degree)		

[1] *General Education Language Requirement: Options to satisfy this requirement are noted in the* Course Explorer. *(*https://courses.illinois.edu/gened/DEFAULT/DEFAULT/*)*

Core Requirements for all Theatre Majors

Code	Title	Hours
FAA 101	Arts at Illinois	1
THEA 100	Practicum I	2
THEA 200	Practicum II	2
THEA 121	Theatre Foundations: Performance	3
THEA 122	Theatre Foundations: Theory and Practice	3
THEA 123	Theatre Foundations: Production	3
THEA 208	21st Century Dramaturgy	3
THEA 304	Global Theatre Performance	3
THEA 364	Topics in Theatre History	3
THEA 404	Professional Career Development	1
Total Hours		24

Summary of Credits for BFA in Theatre

Code	Title	Hours
Core Requirements for All Theatre Majors		24
General Education Requirements		31-40
Language Requirements, if needed		0-12
Concentration Requirements (see tables below for individual concentrations)		49-52
General Non-Theatre Electives		9
Open Electives as needed to total 128 hours		0-18
Total Credits for BFA in Theatre		**128**

Scenic Technology Concentration

Code	Title	Hours
THEA 100	Practicum I (in addition to the THEA 100 credits required in the theatre core)	1
THEA 119	BFA Production Seminar (section STS)	4
THEA 126	Stagecraft	3
THEA 220	Survey of Theatrical Design	3
THEA 223	Introduction to Stage Rigging	3
THEA 300	Practicum III	4
THEA 400	Practicum IV	4

THEA 419	Theatrical CAD Drafting	4
THEA 421	Welding for the Stage	4
THEA 422	Structures for the Stage	3
THEA 426	History of Decor	3
THEA 427	Scenic Painting I	3
THEA 430	Technical Direction I	3
THEA 495	Capstone Project	2
Choose 6 credits:		6
THEA 222	Introduction to Scenic Design	
THEA 231	Intro to Lighting Design	
THEA 242	Introduction to Costume Production	
THEA 243	Introduction to Costume Design	
THEA 451	Principles of Stage Management	
THEA 452	Principles of Arts Management	
THEA 453	Introduction to Theatre Sound	
THEA 456	Properties Design	
THEA 461	Introduction to Media Design	
Total Hours		50

Learning Outcomes: Scenic Technology Concentration

Learning outcomes for the Bachelor of Fine Arts Major in Theatre, Scenic Technology Concentration

Student Learning Outcomes

1. Demonstrates practical application of learned methodologies to successfully fulfill a leadership role for a stage production.
2. Demonstrate proficiency in technical, managerial and leadership skills required to attain professional, entry-level positions in the live entertainment industry.
3. Demonstrate the ability to effectively communicate ideas, concepts and outcomes through the build, load in, tech and performance of a stage production.
4. Demonstrate the ability to synthesize independently acquired knowledge through the successful execution of a capstone project.
5. Demonstrates the ability to analyze and interpret creative, critical and theoretical works in the field of theatre and performance, both past and present.

Theatre: Sound Design & Technology, BFA

for the Bachelor of Fine Arts Major in Theatre, Sound Design & Technology Concentration

department website: https://theatre.illinois.edu
department faculty: https://theatre.illinois.edu/people/meet-our-faculty/
college catalog page: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/

Level 21: Design, Technology and Management Concentrations

Level 21 reflects the design, technology and management disciplines in theatre arts. It has seven unique yet inter-related concentrations in: Arts + Entertainment Technology, Costume Design + Technology, Lighting Design + Technology, Scene Design, Scenic Technology, Sound Design + Technology, and Stage Management. Freshman and sophomore students learn the foundations of theatrical production with a focus on acquiring practical skills for application in advanced course work and in theatre productions. Junior and senior students participate in advanced study in their chosen discipline supported by one-on-one faculty mentoring of assigned projects. Students in this area are the designers, technicians, managers, artisans and crew for over a dozen theater, musical theater, dance and opera productions at Krannert Center for the Performing Arts and work on these shows in various roles throughout their entire course of study.

for the Bachelor of Fine Arts Major in Theatre, Sound Design & Technology Concentration

A minimum of 128 hours of credit is required for the degree.

Twelve hours of 300 and 400-level courses in the major must be taken on this campus.
40 credits hours in degree required in 300-400 level coursework to meet IBHE requirements.

General Education Requirements for all University Students

Code	Title	Hours
General Education Requirements: (40 hrs with Language requirements fulfilled)		
Composition I		4
Advanced Composition		3
Cultural Studies: Western Comparative Cultures		3
Cultural Studies: U.S. Minority Culture(s)		3
Cultural Studies: Non-Western Cultures		3
Quantitative Reasoning I		3
Quantitative Reasoning II		3
Humanities and the Arts		6
Natural Sciences and Technology		6
Social and Behavioral Sciences		6
Language Requirement [1]		0-12
Electives		
General, Non-Theatre Electives		9
Open Electives (as needed to total a minimum of 128 hours to earn the degree)		

[1] *General Education Language Requirement: Options to satisfy this requirement are noted in the* Course Explorer. (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/)

Core Requirements for all Theatre Majors

Code	Title	Hours
FAA 101	Arts at Illinois	1
THEA 100	Practicum I	2
THEA 200	Practicum II	2

THEA 121	Theatre Foundations: Performance	3
THEA 122	Theatre Foundations: Theory and Practice	3
THEA 123	Theatre Foundations: Production	3
THEA 208	21st Century Dramaturgy	3
THEA 304	Global Theatre Performance	3
THEA 364	Topics in Theatre History	3
THEA 404	Professional Career Development	1
Total Hours		24

Summary of Credits for BFA in Theatre

Code	Title	Hours
Core Requirements for All Theatre Majors		24
General Education Requirements		31-40
Language Requirements, if needed		0-12
Concentration Requirements (see tables below for individual concentrations)		49-52
General Non-Theatre Electives		9
Open Electives as needed to total 128 hours		0-18
Total Credits for BFA in Theatre		**128**

Sound Design & Technology Concentration

Code	Title	Hours
Concentration Requirements		
THEA 100	Practicum I (in addition to the THEA 100 credits required in the theatre core)	1
THEA 119	BFA Production Seminar (section SND)	4
THEA 126	Stagecraft	3
THEA 151	Introduction to Digital Audio Workstations	3
THEA 153	Introduction to Theatre Sound	3
THEA 225	Scenographic Drafting	3
THEA 300	Practicum III	4
THEA 400	Practicum IV	4
THEA 451	Principles of Stage Management	3
THEA 454	Sound Design I	3
THEA 497	Audio Engineering I	3
Choose 9 credits from:		**9**
THEA 222	Introduction to Scenic Design	
THEA 223	Introduction to Stage Rigging	
THEA 231	Intro to Lighting Design	
THEA 242	Introduction to Costume Production	
THEA 243	Introduction to Costume Design	
THEA 426	History of Decor	
THEA 456	Properties Design	
Choose 9 credits from:		**9**
THEA 455	Sound Design II (can be repeated)	
THEA 498	Audio Engineering II (can be repeated)	
Total Hours		52

Learning Outcomes: Sound Design & Technology Concentration

Learning outcomes for the Bachelor of Fine Arts Major in Theatre, Sound Design & Technology Concentration

Student Learning Outcomes

1. Demonstrates a mature, effective ability to analyze, interpret, write critically and creatively, and discuss thoughtfully in the field of theatre and performance.
2. Demonstrates ability to actively engage in the collaborative process in preparation, construction, and performance of works for the stage.
3. Demonstrates practical application of learned methodologies including the ability to communicate ideas, concepts, and requirements in order to successfully fulfill a role related to sound design for a stage production.
4. Demonstrates working knowledge of professional practices across genres of theatre, musical theatre, opera and dance.
5. Demonstrates necessary skills and knowledge to acquire an entry-level position in the field of sound design and technology including significant technical mastery, showing the capacity to produce work and solve problems independently.

Theatre: Stage Management, BFA

for the Bachelor of Fine Arts Major in Theatre, Stage Management Concentration

department website: https://theatre.illinois.edu
department faculty: https://theatre.illinois.edu/people/meet-our-faculty/
college catalog page: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/

Level 21: Design, Technology and Management Concentrations

Level 21 reflects the design, technology and management disciplines in theatre arts. It has seven unique yet inter-related concentrations in: Arts + Entertainment Technology, Costume Design + Technology, Lighting Design + Technology, Scene Design, Scenic Technology, Sound Design + Technology, and Stage Management. Freshman and sophomore students learn the foundations of theatrical production with a focus on acquiring practical skills for application in advanced course work and in theatre productions. Junior and senior students participate in advanced study in their chosen discipline supported by one-on-one faculty mentoring of assigned projects. Students in this area are the designers, technicians, managers, artisans and crew for over a dozen theater, musical theater, dance and opera productions at Krannert Center for the Performing Arts and work on these shows in various roles throughout their entire course of study.

for the Bachelor of Fine Arts Major in Theatre, Stage Management Concentration

A minimum of 128 hours of credit is required for the degree.

Twelve hours of 300 and 400-level courses in the major must be taken on this campus.
40 credits hours in degree required in 300-400 level coursework to meet IBHE requirements.

General Education Requirements for all University Students

Code	Title	Hours
	General Education Requirements: (40 hrs with Language requirements fulfilled)	
Composition I		4
Advanced Composition		3
Cultural Studies: Western Comparative Cultures		3
Cultural Studies: U.S. Minority Culture(s)		3
Cultural Studies: Non-Western Cultures		3
Quantitative Reasoning I		3
Quantitative Reasoning II		3
Humanities and the Arts		6
Natural Sciences and Technology		6
Social and Behavioral Sciences		6
Language Requirement [1]		0-12
	Electives	
General, Non-Theatre Electives		9
Open Electives (as needed to total a minimum of 128 hours to earn the degree)		

[1] *General Education Language Requirement: Options to satisfy this requirement are noted in the* Course Explorer. *(*https://courses.illinois.edu/gened/DEFAULT/DEFAULT/*)*

Core Requirements for all Theatre Majors

Code	Title	Hours
FAA 101	Arts at Illinois	1
THEA 100	Practicum I	2
THEA 200	Practicum II	2
THEA 121	Theatre Foundations: Performance	3
THEA 122	Theatre Foundations: Theory and Practice	3
THEA 123	Theatre Foundations: Production	3
THEA 208	21st Century Dramaturgy	3
THEA 304	Global Theatre Performance	3
THEA 364	Topics in Theatre History	3
THEA 404	Professional Career Development	1
Total Hours		24

Summary of Credits for BFA in Theatre

Code	Title	Hours
Core Requirements for All Theatre Majors		24
General Education Requirements		31-40
Language Requirements, if needed		0-12
Concentration Requirements (see tables below for individual concentrations)		49-52
General Non-Theatre Electives		9
Open Electives as needed to total 128 hours		0-18
Total Credits for BFA in Theatre		**128**

Stage Management Concentration

Code	Title	Hours
THEA 100	Practicum I (in addition to the THEA 100 credits required in the theatre core)	1
THEA 126	Stagecraft	3
THEA 153	Introduction to Theatre Sound	3
THEA 212	Introduction to Directing	3
THEA 220	Survey of Theatrical Design	3
THEA 231	Intro to Lighting Design	3
THEA 300	Practicum III	6
THEA 359	Professional Stage Management	8
THEA 400	Practicum IV	4
THEA 406	Opera/Dance Stage Management	3
THEA 408	AEA Union Stage Management	3
THEA 450	Management Seminar	4
THEA 451	Principles of Stage Management	3
THEA 452	Principles of Arts Management	3
Total Hours		50

Learning Outcomes: Stage Management Concentration

Learning outcomes for the Bachelor of Fine Arts Major in Theatre, Stage Management Concentration

Student Learning Outcomes

1. Demonstrates the ability to analyze, interpret, write critically and creatively, and discuss thoughtfully in the field of theatre and performance.
2. Demonstrates an understanding of general professional production practices in rehearsal, design, construction and performance across the theatre, musical theatre, opera and dance.
3. Demonstrates practical application of learned methodologies including the ability to communicate ideas, concepts and requirements in order to successfully fulfill a role related to stage management of a stage production.
4. Demonstrates necessary skills and knowledge to acquire an entry-level position in professional stage management.

Theatre: Theatre Studies, BFA

for the Bachelor of Fine Arts Major in Theatre, Theatre Studies Concentration

department website: https://theatre.illinois.edu
department faculty: https://theatre.illinois.edu/people/meet-our-faculty/
college catalog page: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/

Theatre Studies Program

The theatre studies concentration focuses on the practical applications of theatre and explores theatrical productions as a collaborative art form that is grounded in practice, theory, criticism, history, research and writing. The theatre studies concentration is intended to lay the

foundation for students planning to pursue professional careers in the areas of theatre for which advanced training or specialization at the graduate level is normally required. These areas include, but are not limited to: directing, dramaturgy, playwriting, arts management, social issues theatre and theatre history and criticism. Emphasis is given to a comprehensive study of theatre practices of the past, participation in theatre practices of the present and the discovery and development of theatre practices for the future.

for the Bachelor of Fine Arts Major in Theatre, Theatre Studies Concentration

A minimum of 128 hours of credit is required for the degree.

Twelve hours of 300 and 400-level courses in the major must be taken on this campus.
40 credits hours in degree required in 300-400 level coursework to meet IBHE requirements.

General Education Requirements for all University Students

Code	Title	Hours
General Education Requirements: (40 hrs with Language requirements fulfilled)		
Composition I		4
Advanced Composition		3
Cultural Studies: Western Comparative Cultures		3
Cultural Studies: U.S. Minority Culture(s)		3
Cultural Studies: Non-Western Cultures		3
Quantitative Reasoning I		3
Quantitative Reasoning II		3
Humanities and the Arts		6
Natural Sciences and Technology		6
Social and Behavioral Sciences		6
Language Requirement [1]		0-12
Electives		
General, Non-Theatre Electives		9
Open Electives (as needed to total a minimum of 128 hours to earn the degree)		

[1] *General Education Language Requirement: Options to satisfy this requirement are noted in the* Course Explorer. *(*https://courses.illinois.edu/gened/DEFAULT/DEFAULT/*)*

Core Requirements for all Theatre Majors

Code	Title	Hours
FAA 101	Arts at Illinois	1
THEA 100	Practicum I	2
THEA 200	Practicum II	2
THEA 121	Theatre Foundations: Performance	3
THEA 122	Theatre Foundations: Theory and Practice	3
THEA 123	Theatre Foundations: Production	3
THEA 208	21st Century Dramaturgy	3
THEA 304	Global Theatre Performance	3
THEA 364	Topics in Theatre History	3
THEA 404	Professional Career Development	1
Total Hours		24

Summary of Credits for BFA in Theatre

Code	Title	Hours
Core Requirements for All Theatre Majors		24
General Education Requirements		31-40
Language Requirements, if needed		0-12
Concentration Requirements (see tables below for individual concentrations)		49-52
General Non-Theatre Electives		9
Open Electives as needed to total 128 hours		0-18
Total Credits for BFA in Theatre		**128**

Theatre Studies Concentration

Code	Title	Hours
THEA 175	Fundamentals of Acting II	3
THEA 211	Introduction to Playwriting	3
THEA 212	Introduction to Directing	3
THEA 220	Survey of Theatrical Design	3
THEA 391	Individual Topics	2
THEA 392	Individual Topics	2
THEA 400	Practicum IV	3
Choose 3 credit hours:		3
THEA 218	Intro to Social Issues Theatre	
THEA 270	Relationships in Acting I	
Other THEA 200-level course		
Choose 6 credit hours:		6
THEA 410	Dramaturgs Workshop	
THEA 411	Playwrights' Workshop	
THEA 412	Directors Workshop	
Choose 12 credit hours:		12
Any 300 or 400 level Theatre courses		
Supporting Professional Electives: theatre, dance or music courses, or other courses as approved by Theatre advisor		9
Total Hours		49

Learning Outcomes: Theatre Studies Concentration

Learning outcomes for the Bachelor of Fine Arts Major in Theatre, Theatre Studies Concentration

Student Learning Outcomes

1. Demonstrates a mature, effective ability to analyze, interpret, write critically and creatively, and discuss thoughtfully in the field of theatre and performance.
2. Demonstrates ability to actively engage in the collaborative process in preparation, construction, and performance of works for the stage. Demonstrates comprehension of theory and application of practices in areas of emphasis through production related activities.
3. Demonstrates necessary skills and knowledge to acquire an entry-level position in the theatre showing the capacity to work and solve

problems independently and with initiative (demonstrated through participation in a professional internship).

4. Demonstrates practical application of learned methodologies including the ability to communicate ideas, concepts, and outcomes of creative research (demonstrated in public presentation of a senior thesis project).

Urban Studies & Planning, BA

For the degree of Bachelor of Arts Major in Urban Studies & Planning

department website: https://urban.illinois.edu
department faculty: https://urban.illinois.edu/people/meet-our-faculty/
college catalog page: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/

Students pursuing this major select one of four concentrations:

Global Cities (p. 436)
Policy & Planning (p. 437)
Social Justice (p. 439)
Sustainability (p. 440)

The Department of Urban and Regional Planning offers a program leading to the degree of Bachelor of Arts in Urban Studies and Planning. The aim of urban planning is to sustain and enhance the quality of life in cities and regions. Therefore, in addition to technical skills, students also acquire a broad liberal education that leads to an understanding of the natural and social environments, their problems, and their potential for enriching human life. The urban planning degree emphasizes skills in analysis, problem solving, and communication within complex urban and social contexts. As a result, undergraduate planning education leads to diverse professional careers or graduate study in urban planning or related professions, such as law, business, public policy or public administration. Continuation in the program requires the student to maintain a 2.00 grade point average. The degree is professionally accredited by the Planning Accreditation Board.

A transfer student must have completed 30 or more semester hours of acceptable undergraduate college work (including introductory courses in microeconomics, statistics, and sociology; a sequence in English composition is desirable) with an earned grade point average of at least 2.75 (A = 4.0). Transfer applicants not meeting these requirements will be considered in special cases.

For the degree of Bachelor of Arts Major in Urban Studies & Planning

Summary of Requirements

Code	Title	Hours
1st Year		
UP 101	Introduction to City Planning	
UP 201	Planning in Action	
4 Foundation Courses		
2nd Year		
UP 203	Cities: Planning & Urban Life	
or UP 204	Chicago: Planning & Urban Life	
Concentration Gateway Course		
3rd Year		
UP 312	Communication for Planners	
UP 316	Urban Informatics II	
Concentration Electives		
UP 301	Capstone Preparation	
4th Year		
Concentration Workshop (UP 447, UP 455, UP 456, UP 457, or UP 478)		
Capstone Experience (UP 390 or UP 397)		
UP 401	Undergraduate Capstone Seminar	
Plus 15 hours of UP electives, GE not met by UP foundation & core, and open electives.		

Urban Studies & Planning: Global Cities, BA

For the degree of Bachelor of Arts Major in Urban Studies & Planning, Global Cities Concentration

department website: https://urban.illinois.edu
department faculty: https://urban.illinois.edu/people/meet-our-faculty/
college catalog page: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/

The Department of Urban and Regional Planning offers a program leading to the degree of Bachelor of Arts in Urban Studies and Planning. The aim of urban planning is to sustain and enhance the quality of life in cities and regions. Therefore, in addition to technical skills, students also acquire a broad liberal education that leads to an understanding of the natural and social environments, their problems, and their potential for enriching human life. The urban planning degree emphasizes skills in analysis, problem solving, and communication within complex urban and social contexts. As a result, undergraduate planning education leads to diverse professional careers or graduate study in urban planning or related professions, such as law, business, public policy or public administration. Continuation in the program requires the student to maintain a 2.00 grade point average. The degree is professionally accredited by the Planning Accreditation Board.

A transfer student must have completed 30 or more semester hours of acceptable undergraduate college work (including introductory courses in microeconomics, statistics, and sociology; a sequence in English composition is desirable) with an earned grade point average of at least 2.75 (A = 4.0). Transfer applicants not meeting these requirements will be considered in special cases.

For the degree of Bachelor of Arts Major in Urban Studies & Planning, Global Cities Concentration

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum hours required for graduation: 120 hours.

Foundation Courses

Code	Title	Hours
RHET 105	Writing and Research (or equivalent)	4
3-4 hours selected from:		
AAS 100	Intro Asian American Studies	
AFRO 100	Intro to African American St	
AIS 102	Contemp Issues in Ind Country	
GEOG 101	Global Development&Environment	
GEOG 104	Social and Cultural Geography	
LLS 100	Intro Latina/Latino Studies	
SOC 100	Introduction to Sociology	
ECON 102	Microeconomic Principles	3
or ACE 100	Introduction to Applied Microeconomics	
UP 116	Urban Informatics I (or equivalent)	3
or STAT 100	Statistics	
Total Hours		10

Urban Studies & Planning Core

Code	Title	Hours
UP 101	Introduction to City Planning	3
UP 201	Planning in Action	3
UP 203	Cities: Planning & Urban Life (or UP 204 Chicago: Planning and Urban Life)	3
UP 312	Communication for Planners	4
UP 316	Urban Informatics II	3
Select one workshop from:		4
UP 447	Land Use Planning Workshop	
UP 455	Economic Development Workshop	
UP 456	Sustainable Planning Workshop	
UP 457	Small Town/Rural Planning Workshop	
UP 478	Community Development Workshop	
Plus 15 hours of UP electives, GE not met by UP foundation & core, and open electives		15

Capstone

Required Courses:	Required Hours
Capstone Preparation: During the 3rd year, students enroll in UP 301, Capstone Preparation. Students meet individually with their capstone advisor to develop a plan to meet the capstone requirement. To pass this course students must turn in a proposal at the end of the semester.	1
Capstone Experience: Students engage in a semester or summer-long applied activity outside of the classroom. The Capstone Experience is intended to engage the students in the real world and prepare them for the job market. Students typically complete this requirement during their junior year, but have the option to complete it during the summer between their 3rd and 4th year. Examples include a paid or unpaid internship, volunteer work, consulting project with a client, summer research and more. Students enroll in UP 390, Planning Internship, and/or UP 397, Undergraduate Project, to receive credit.	3
Capstone Seminar: During the 4th year, students enroll in UP 401 for 2 semesters. Students will participate in monthly activities to discuss and reflect on the Capstone Experience. In addition. students will present a poster summarizing their capstone experience in a public setting; for example at a public engagement conference, public meeting or community meeting, McNair Scholars conference, James Scholars event, Illinois American Planning Association meeting, undergraduate research symposium, or other venue. The seminar sessions also include career development such as resume writing, interviewing and networking with professionals through the Wetmore Lecture Series.	2

Global Cities Concentration

Code	Title	Hours
UP 185	Cities in a Global Perspective (Gateway)	3
Select 2 courses from:		6-8
UP 246	International Environmental Planning and Governance	
UP 335	Cities and Immigrants	
UP 406	Urban Ecology	
UP 423	Community Development in the Global South	
UP 486	Planning with Climate Change	

Urban Studies & Planning: Policy & Planning, BA

For the degree of Bachelor of Arts Major in Urban Studies & Planning, Policy & Planning Concentration

department website: https://urban.illinois.edu
department faculty: https://urban.illinois.edu/people/meet-our-faculty/
college catalog page: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/

The Department of Urban and Regional Planning offers a program leading to the degree of Bachelor of Arts in Urban Studies and Planning. The aim of urban planning is to sustain and enhance the quality of life in cities and regions. Therefore, in addition to technical skills, students also acquire a broad liberal education that leads to an understanding of the natural and social environments, their problems, and their potential for enriching human life. The urban planning degree emphasizes skills in analysis, problem solving, and communication within complex urban and social contexts. As a result, undergraduate planning education leads to diverse professional careers or graduate study in urban planning or related professions, such as law, business, public policy or public administration. Continuation in the program requires the student to maintain a 2.00 grade point average. The degree is professionally accredited by the Planning Accreditation Board.

A transfer student must have completed 30 or more semester hours of acceptable undergraduate college work (including introductory courses in microeconomics, statistics, and sociology; a sequence in English composition is desirable) with an earned grade point average of at least 2.75 (A = 4.0). Transfer applicants not meeting these requirements will be considered in special cases.

For the degree of Bachelor of Arts Major in Urban Studies & Planning, Policy & Planning Concentration

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum hours required for graduation: 120 hours.

Foundation Courses

Code	Title	Hours
RHET 105	Writing and Research (or equivalent)	4
3-4 hours selected from:		
AAS 100	Intro Asian American Studies	
AFRO 100	Intro to African American St	
AIS 102	Contemp Issues in Ind Country	
GEOG 101	Global Development&Environment	
GEOG 104	Social and Cultural Geography	
LLS 100	Intro Latina/Latino Studies	
SOC 100	Introduction to Sociology	
ECON 102	Microeconomic Principles	3
or ACE 100	Introduction to Applied Microeconomics	
UP 116	Urban Informatics I (or equivalent)	3
or STAT 100	Statistics	
Total Hours		10

Urban Studies & Planning Core

Code	Title	Hours
UP 101	Introduction to City Planning	3
UP 201	Planning in Action	3
UP 203	Cities: Planning & Urban Life (or UP 204 Chicago: Planning and Urban Life)	3
UP 312	Communication for Planners	4
UP 316	Urban Informatics II	3
Select one workshop from:		4
UP 447	Land Use Planning Workshop	
UP 455	Economic Development Workshop	
UP 456	Sustainable Planning Workshop	
UP 457	Small Town/Rural Planning Workshop	
UP 478	Community Development Workshop	
Plus 15 hours of UP electives, GE not met by UP foundation & core, and open electives		15

Capstone

Required Courses:	Required Hours
Capstone Preparation: During the 3rd year, students enroll in UP 301, Capstone Preparation. Students meet individually with their capstone advisor to develop a plan to meet the capstone requirement. To pass this course students must turn in a proposal at the end of the semester.	1
Capstone Experience: Students engage in a semester or summer-long applied activity outside of the classroom. The Capstone Experience is intended to engage the students in the real world and prepare them for the job market. Students typically complete this requirement during their junior year, but have the option to complete it during the summer between their 3rd and 4th year. Examples include a paid or unpaid internship, volunteer work, consulting project with a client, summer research and more. Students enroll in UP 390, Planning Internship, and/or UP 397, Undergraduate Project, to receive credit.	3

Capstone Seminar: During the 4th year, students enroll in UP 401 for 2 semesters. Students will participate in monthly activities to discuss and reflect on the Capstone Experience. In addition. students will present a poster summarizing their capstone experience in a public setting; for example at a public engagement conference, public meeting or community meeting, McNair Scholars conference, James Scholars event, Illinois American Planning Association meeting, undergraduate research symposium, or other venue. The seminar sessions also include career development such as resume writing, interviewing and networking with professionals through the Wetmore Lecture Series.	2

Policy and Planning Concentration

Code	Title	Hours
UP 211	Local Planning, Gov't and Law (Gateway)	3
Select 2 courses from:		6-8
UP 330	The Modern American City	
UP 340	Planning for Healthy Cities	
UP 345	Economic Development Planning	
UP 407	State and Local Public Finance	
UP 420	Plng for Historic Preservation	
UP 430	Urban Transportation Planning	
UP 431	Urban Transportation Modeling	
UP 460	Transportation/Land Use Policy	
UP 473	Housing & Urban Policy	
UP 474	Neighborhood Revitalization	

Urban Studies & Planning: Social Justice, BA

For the degree of Bachelor of Arts Major in Urban Studies & Planning, Social Justice Concentration

department website: https://urban.illinois.edu
department faculty: https://urban.illinois.edu/people/meet-our-faculty/
college catalog page: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/

The Department of Urban and Regional Planning offers a program leading to the degree of Bachelor of Arts in Urban Studies and Planning. The aim of urban planning is to sustain and enhance the quality of life in cities and regions. Therefore, in addition to technical skills, students also acquire a broad liberal education that leads to an understanding of the natural and social environments, their problems, and their potential for enriching human life. The urban planning degree emphasizes skills in analysis, problem solving, and communication within complex urban and social contexts. As a result, undergraduate planning education leads to diverse professional careers or graduate study in urban planning or related professions, such as law, business, public policy or public administration. Continuation in the program requires the student to maintain a 2.00 grade point average. The degree is professionally accredited by the Planning Accreditation Board.

A transfer student must have completed 30 or more semester hours of acceptable undergraduate college work (including introductory courses in microeconomics, statistics, and sociology; a sequence in English composition is desirable) with an earned grade point average of at least 2.75 (A = 4.0). Transfer applicants not meeting these requirements will be considered in special cases.

For the degree of Bachelor of Arts Major in Urban Studies & Planning, Social Justice Concentration

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum hours required for graduation: 120 hours.

Foundation Courses

Code	Title	Hours
RHET 105	Writing and Research (or equivalent)	4
3-4 hours selected from:		
AAS 100	Intro Asian American Studies	
AFRO 100	Intro to African American St	
AIS 102	Contemp Issues in Ind Country	
GEOG 101	Global Development&Environment	
GEOG 104	Social and Cultural Geography	
LLS 100	Intro Latina/Latino Studies	
SOC 100	Introduction to Sociology	
ECON 102	Microeconomic Principles	3
or ACE 100	Introduction to Applied Microeconomics	
UP 116	Urban Informatics I (or equivalent)	3
or STAT 100	Statistics	
Total Hours		10

Urban Studies & Planning Core

Code	Title	Hours
UP 101	Introduction to City Planning	3
UP 201	Planning in Action	3
UP 203	Cities: Planning & Urban Life (or UP 204 Chicago: Planning and Urban Life)	3
UP 312	Communication for Planners	4
UP 316	Urban Informatics II	3
Select one workshop from:		4
UP 447	Land Use Planning Workshop	
UP 455	Economic Development Workshop	
UP 456	Sustainable Planning Workshop	
UP 457	Small Town/Rural Planning Workshop	
UP 478	Community Development Workshop	

Plus 15 hours of UP electives, GE not met by UP foundation & core, and open electives	15

Capstone

Required Courses:	Required Hours
Capstone Preparation: During the 3rd year, students enroll in UP 301, Capstone Preparation. Students meet individually with their capstone advisor to develop a plan to meet the capstone requirement. To pass this course students must turn in a proposal at the end of the semester.	1
Capstone Experience: Students engage in a semester or summer-long applied activity outside of the classroom. The Capstone Experience is intended to engage the students in the real world and prepare them for the job market. Students typically complete this requirement during their junior year, but have the option to complete it during the summer between their 3rd and 4th year. Examples include a paid or unpaid internship, volunteer work, consulting project with a client, summer research and more. Students enroll in UP 390, Planning Internship, and/or UP 397, Undergraduate Project, to receive credit.	3
Capstone Seminar: During the 4th year, students enroll in UP 401 for 2 semesters. Students will participate in monthly activities to discuss and reflect on the Capstone Experience. In addition. students will present a poster summarizing their capstone experience in a public setting; for example at a public engagement conference, public meeting or community meeting, McNair Scholars conference, James Scholars event, Illinois American Planning Association meeting, undergraduate research symposium, or other venue. The seminar sessions also include career development such as resume writing, interviewing and networking with professionals through the Wetmore Lecture Series.	2

Social Justice Concentration

Code	Title	Hours
UP 160	Race, Social Justice, and Cities	3
Select 2 courses from:		6-8
UP 260	Social Inequality and Planning	
UP 335	Cities and Immigrants	
UP 340	Planning for Healthy Cities	
UP 423	Community Development in the Global South	
UP 473	Housing & Urban Policy	
UP 479	Community Engagement in Planning	

Urban Studies & Planning: Sustainability, BA

For the degree of Bachelor of Arts Major in Urban Studies & Planning, Sustainability Concentration

department website: https://urban.illinois.edu
department faculty: https://urban.illinois.edu/people/meet-our-faculty/
college catalog page: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/

The Department of Urban and Regional Planning offers a program leading to the degree of Bachelor of Arts in Urban Studies and Planning. The aim of urban planning is to sustain and enhance the quality of life in cities and regions. Therefore, in addition to technical skills, students also acquire a broad liberal education that leads to an understanding of the natural and social environments, their problems, and their potential for enriching human life. The urban planning degree emphasizes skills in analysis, problem solving, and communication within complex urban and social contexts. As a result, undergraduate planning education leads to diverse professional careers or graduate study in urban planning or related professions, such as law, business, public policy or public administration. Continuation in the program requires the student to maintain a 2.00 grade point average. The degree is professionally accredited by the Planning Accreditation Board.

A transfer student must have completed 30 or more semester hours of acceptable undergraduate college work (including introductory courses in microeconomics, statistics, and sociology; a sequence in English composition is desirable) with an earned grade point average of at least 2.75 (A = 4.0). Transfer applicants not meeting these requirements will be considered in special cases.

For the degree of Bachelor of Arts Major in Urban Studies & Planning, Sustainability Concentration

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum hours required for graduation: 120 hours.

Foundation Courses

Code	Title	Hours
RHET 105	Writing and Research (or equivalent)	4
3-4 hours selected from:		
AAS 100	Intro Asian American Studies	
AFRO 100	Intro to African American St	

AIS 102	Contemp Issues in Ind Country	
GEOG 101	Global Development&Environment	
GEOG 104	Social and Cultural Geography	
LLS 100	Intro Latina/Latino Studies	
SOC 100	Introduction to Sociology	
ECON 102	Microeconomic Principles	3
or ACE 100	Introduction to Applied Microeconomics	
UP 116	Urban Informatics I (or equivalent)	3
or STAT 100	Statistics	
Total Hours		10

Urban Studies & Planning Core

Code	Title	Hours
UP 101	Introduction to City Planning	3
UP 201	Planning in Action	3
UP 203	Cities: Planning & Urban Life (or UP 204 Chicago: Planning and Urban Life)	3
UP 312	Communication for Planners	4
UP 316	Urban Informatics II	3
Select one workshop from:		4
UP 447	Land Use Planning Workshop	
UP 455	Economic Development Workshop	
UP 456	Sustainable Planning Workshop	
UP 457	Small Town/Rural Planning Workshop	
UP 478	Community Development Workshop	
Plus 15 hours of UP electives, GE not met by UP foundation & core, and open electives		15

Capstone

Required Courses:	Required Hours
Capstone Preparation: During the 3rd year, students enroll in UP 301, Capstone Preparation. Students meet individually with their capstone advisor to develop a plan to meet the capstone requirement. To pass this course students must turn in a proposal at the end of the semester.	1
Capstone Experience: Students engage in a semester or summer-long applied activity outside of the classroom. The Capstone Experience is intended to engage the students in the real world and prepare them for the job market. Students typically complete this requirement during their junior year, but have the option to complete it during the summer between their 3rd and 4th year. Examples include a paid or unpaid internship, volunteer work, consulting project with a client, summer research and more. Students enroll in UP 390, Planning Internship, and/or UP 397, Undergraduate Project, to receive credit.	3
Capstone Seminar: During the 4th year, students enroll in UP 401 for 2 semesters. Students will participate in monthly activities to discuss and reflect on the Capstone Experience. In addition. students will present a poster summarizing their capstone experience in a public setting; for example at a public engagement conference, public meeting or community meeting, McNair Scholars conference, James Scholars event, Illinois American Planning Association meeting, undergraduate research symposium, or other venue. The seminar sessions also include career development such as resume writing, interviewing and networking with professionals through the Wetmore Lecture Series.	2

Sustainability Concentration

Code	Title	Hours
UP 205	Ecology & Environmental Sustainability (Gateway)	3
Select 2 courses from:		6-8
UP 136	Urban Sustainability	
UP 246	International Environmental Planning and Governance	
UP 405	Watershed Ecology and Planning	
UP 406	Urban Ecology	
UP 420	Plng for Historic Preservation	
UP 434	Pedestrian and Bicycle Planning	
UP 446	Sustainable Planning Seminar	
UP 460	Transportation/Land Use Policy	
UP 466	Energy & the Built Environment	
UP 480	Sustainable Design Principles	
UP 486	Planning with Climate Change	

Learning Outcomes: Urban Studies & Planning

Learning outcomes for the degree of Bachelor of Arts Major in Urban Studies & Planning

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To be consistent with our accreditation requirements, we are using the Knowledge, Skills, and Values identified by the Planning Accreditation Board as desired outcomes for planning education:

1. General planning knowledge:
    a. Purpose and Meaning of Planning:.
    b. Planning Theory:
    c. Planning Law:
    d. Human Settlements and History of Planning:
    e. The Future:
    f. Global Dimensions of Planning:
2. Planning skills:
    a. Research Written, Oral and Graphic Communication:
    b. Quantitative and Qualitative Methods:
    c. Plan Creation and Implementation: is able to use
    d. Planning Process Methods:
    e. Leadership:
3. Values and ethics
    a. Professional Ethics and Responsibility:
    b. Governance and Participation:
    c. Sustainability and Environmental Quality:
    d. Growth and Development:
    e. Social Justice:

BACHELOR + MASTER PROGRAMS

Aerospace Engineering, BS-MS (p. 444)
Aerospace Engineering, BS and Engineering: Energy Systems, MEng (p. 443)
Agricultural & Biological Engineering, BS and Engineering: Energy Systems, MEng (p. 445)
Agricultural & Consumer Economics, BS and Agricultural & Applied Economics, MAAE (p. 446)
Animal Sciences BS-MANSC (p. 447)
Community Health, BS & Epidemiology, MPH (p. 462)
Community Health, BS and Public Health, MPH (p. 118)
Computer Science, BS-MCS (p. 450)
Computer Science, BS-MS (p. 451)
Computer Science + Animal Sciences BS-MANSC (p. 452)
Computer Science + Crop Sciences, BS & Crop Sciences, MS (p. 454)
Crop Sciences, BS-MS (p. 456)
Engineering Physics, BS and Engineering: Energy Systems, MEng (p. 457)
Industrial Engineering, BS and Engineering: Energy Systems, MEng (p. 457)
Interdisciplinary Health Sciences, BS and Epidemiology, MPH (p. 458)
Interdisciplinary Health Sciences, BS and Public Health, MPH (p. 460)
Journalism, BS-MJ (p. 460)
Kinesiology, BS & Epidemiology, MPH (p. 463)
Kinesiology, BS & Public Health, MPH (p. 465)
Materials Science & Engineering, BS and Engineering: Energy Systems, MEng (p. 466)
Materials Science & Engineering, BS and Materials Engineering, MEng (p. 467)
Nuclear, Plasma & Radiological Engineering, BS and Engineering: Energy Systems, MEng (p. 467)
Physics (Engineering), BS and Engineering: Energy Systems, MEng (p. 457)
Recreation, Sport & Tourism, BS-MS (p. 468)
Sustainable Design, BS and Urban Planning, MUP (p. 469)
Systems Engineering & Design, BS and Engineering: Energy Systems, MEng (p. 471)
Urban Studies & Planning, BA and Urban Planning, MUP (p. 471)

Aerospace Engineering, BS and Engineering: Energy Systems, MEng

for the joint degree of Bachelor of Science in Aerospace Engineering and Master of Engineering in Engineering, Energy Systems Concentration

department website: https://aerospace.illinois.edu/
department faculty: Aerospace Engineering Faculty (https://aerospace.illinois.edu/directory/faculty/faculty-members/)
college website: https://grainger.illinois.edu/
email: aerospace@illinois.edu

The joint B.S.-M.Eng. in Engineering with a Concentration in Energy Systems program combines two degrees: a B.S. in select engineering undergraduate majors with the M.Eng. in Engineering with a Concentration in Energy Systems. The B.S. degree within the B.S. - M.Eng. program is accredited by the Engineering Accreditation Commission of ABET, https://www.abet.org, under the same criteria as the traditional 128 hour B.S. degree. Current Illinois students enrolled in the College of Engineering with junior standing (normally at least 90 credit hours, including those in process, and at least one year of undergraduate coursework remaining) who maintain superior academic performance are eligible to apply for this program. The program is designed to broaden a student's knowledge beyond that possible in a standard 4-year curriculum. Students admitted to the program will receive both degrees once all requirements for both the B.S.-M.Eng. degree have been successfully completed but will be permitted to participate in the B.S. degree graduation ceremonies with their class if they have completed the equivalent number of credit hours. This program is not intended for students intending to pursue a Ph.D. degree.

Admissions

For deadlines and procedures, consult the department Web site (https://www.ae.illinois.edu/). Current Illinois Engineering students who are in their junior year (normally at least 90 credit hours, including those in progress, and at least one year of undergraduate coursework remaining) with an overall GPA of at least 3.0 and a technical GPA 3.0 may apply for provisional admission to the program.
Admission decisions are based on overall academic performance, letters of reference, and statement of purpose.
Admissions to this program will occur both in the fall and spring term. The application deadline for spring term will be December 1 and for fall term will be July 1. The Energy and Sustainability Engineering M.Eng. admissions committee will review applications for this program and students accepted into the program will be given "provisional admission."
Students provisionally admitted to the program:
• are assigned a graduate academic advisor when admitted.
• must maintain an overall GPA of 3.0 through completion of the B.S. component of the degree to remain in the program.
• may register for graduate courses and earn graduate hours credit, with approval from their graduate academic advisor, if they have less than 12 credit hours remaining in their B.S. component.
• must earn at least 124 hours of undergraduate credit and satisfy all B.S. requirements of this program to be officially admitted to the Graduate College.
Upon successful completion of the B.S. component, students:
• must apply and be officially admitted into the Graduate College.
• will be issued letters of admission from the Graduate College and the NPRE Department, at which time they will be considered graduate students and assessed graduate tuition the following semester.
• must satisfy the graduate student minimum residence requirement, which is 24 graduate credit hours.
• must continue to maintain a graduate GPA of 3.00 or better in order to remain in the combined program.

Withdrawal

Students may withdraw from the program at any time by notifying the Office of the Associate Dean for Undergraduate Programs. Students who do not complete both the B.S.-M.Eng. degree program requirements may request by petition to have graduate hours earned converted to undergraduate hours and applied toward the student's traditional engineering undergraduate major. Students reverting to the traditional B.S. degree program must complete 128 hours and must satisfy all degree requirements. Graduate credit not used to fulfill the B.S. degree

requirements will remain on the transcript and may, at some future point, be considered for transfer to another degree program.

for the joint degree of Bachelor of Science in Aerospace Engineering and Master of Engineering in Engineering, Energy Systems Concentration

Course Requirements

B.S. Component (124 hours):

- Same required courses as the traditional B.S. degree with the minimum hours required reduced from 128 to 124 hours.
  - The reduction of 4 credit hours is based on the utilization of 4 hours in free elective in the student's undergraduate curriculum.
- Illinois undergraduate student minimum residence requirement satisfied.
- Overall grade point average (GPA) of 3.0 maintained through completion of B.S. component of the program.

M.Eng. Component (32 additional hours of coursework)

- Identical to the current M.Eng. in Engineering with a concentration in Energy Systems (http://catalog.illinois.edu/graduate/concentrations/energy-systems-meng/). A total of 32 hours (including the shared coursework) are required.
- Satisfy Illinois' graduate student minimum residence requirement.
- Overall GPA of 3.00 must be maintained through completion of M.Eng. component of the program.

Aerospace Engineering, BS-MS

for the joint degree of Bachelor of Science in Aerospace Engineering and Master of Science in Aerospace Engineering

department website: https://aerospace.illinois.edu/
department faculty: Aerospace Engineering Faculty (https://aerospace.illinois.edu/directory/faculty/faculty-members/)
college website: https://grainger.illinois.edu/
email: aerospace@illinois.edu

The joint B.S.-M.S. program in AE combines two degrees: a B.S. in AE with a M.S. in AE. Current AE students enrolled in The Grainger College of Engineering with junior standing (normally at least 90 credit hours, including those in process, and at least one year of undergraduate coursework remaining) who maintain superior academic performance are eligible to apply for this program. The B.S. degree within the B.S. - M.S. program is accredited by the Engineering Accreditation Commission of ABET, https://www.abet.org, under the same criteria as the traditional 128 hour B.S. degree. The program is designed to broaden a student's knowledge beyond that in the standard four-year curriculum. Students admitted to the program will receive both degrees once all requirements for both the B.S.-M.S. degree have been successfully completed.

Admission

For deadlines and procedures, consult the department web site (https://aerospace.illinois.edu/). Current Grainger AE students can apply after they complete their junior-level courses, but before they start their senior year. Students with an overall GPA of at least 3.00 may apply for admission to the program. Admission decisions are based on overall academic performance, letters of reference, and statement of purpose. The GRE general test is not required.

Students provisionally admitted to the program:

- are assigned a graduate academic advisor when admitted.
- must maintain an overall GPA of 3.00 through completion of the B.S. component of the program in order to remain in the program.
- must maintain a technical GPA of 3.40 through completion of the B.S. component of the program.
- may register for graduate courses and earn graduate hour credits, with approval from their graduate academic advisor, when they have less than 12 credit hours remaining in their B.S. component.
- must earn at least 121 hours of undergraduate credit and satisfy all B.S. requirements of this program to be officially admitted to the Graduate College.

Upon successful completion of the B.S. component students:

- must apply and be officially admitted into the Graduate College.
- are assigned a graduate academic advisor when B.S. courses are completed.
- will be issued letters of admission from the Graduate College and the AE Department, at which time they will be considered graduate students and assessed graduate tuition the following semester.
- must satisfy the graduate student minimum residence requirement, which is 24 graduate credit hours.
- must continue to maintain a graduate GPA of 3.00 or better in order to remain in the combined program.

Withdrawal

Students may withdraw from the program at any time by notifying the AE Undergraduate Programs Office. Students who do not complete all 5-year B.S.-M.S. degree program requirements may request by petition to have graduate hours earned converted to undergraduate hours and applied toward a traditional B.S. in AE degree. Students reverting to a traditional B.S. degree program must complete 128 hours and satisfy all degree requirements. Graduate credit not used to fulfill the B.S. degree requirements will remain on the transcript and may, at some future point, be considered for transfer to another degree program.

for the joint degree of Bachelor of Science in Aerospace Engineering and Master of Science in Aerospace Engineering

Course Requirements

B.S. Component (121 hours)[1]

- Same required courses as the traditional B.S. degree with minimum hours required reduced from 128 to 121.
- The reduction of 7 credit hours includes:
  a. 4 hours in Free Electives in both AE curricula
  b. 3 hours in other non-AE Technical Electives
- Overall GPA of 3.40 must be maintained through completion of B.S. component of the program.
- Students can apply after they complete their junior-level courses, but before they start their senior year.
- Illinois undergraduate student minimum residence requirement must be satisfied.

At the graduate level, requirements are identical for both the M.S. Non-Thesis Track (http://catalog.illinois.edu/graduate/ms-aero-engin/#degreerequirementstext) (32 additional hours of coursework) and the M.S. Thesis Track (http://catalog.illinois.edu/graduate/ms-aero-engin/#degreerequirementstext) (32 additional hours of coursework).

[1] *If the student withdraws from the MS component they must revert to the traditional BS degree program and satisfy all degree requirements of the BS curriculum.*

Agricultural & Biological Engineering, BS and Engineering: Energy Systems, MEng

for the joint degree of Bachelor of Science in Agricultural & Biological Engineering and Master of Engineering in Engineering, Energy Systems Concentration

department website: https://abe.illinois.edu/undergraduate/
department faculty: Agricultural & Biological Engineering Faculty (https://abe.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/)
college websites: https://aces.illinois.edu/ **and** https://grainger.illinois.edu/
email: abe@illinois.edu

The joint B.S.-M.Eng. in Engineering with a Concentration in Energy Systems program combines two degrees: a B.S. in select engineering undergraduate majors with the M.Eng. in Engineering with a Concentration in Energy Systems. The B.S. degree within the B.S. - M.Eng. program is accredited by the Engineering Accreditation Commission of ABET, https://www.abet.org, under the same criteria as the traditional 128 hour B.S. degree. Current Illinois students enrolled in the College of Engineering with junior standing (normally at least 90 credit hours, including those in process, and at least one year of undergraduate coursework remaining) who maintain superior academic performance are eligible to apply for this program. The program is designed to broaden a student's knowledge beyond that possible in a standard 4-year curriculum. Students admitted to the program will receive both degrees once all requirements for both the B.S.-M.Eng. degree have been successfully completed but will be permitted to participate in the B.S. degree graduation ceremonies with their class if they have completed the equivalent number of credit hours. This program is not intended for students intending to pursue a Ph.D. degree.

Admissions

For deadlines and procedures, consult the department Web site (https://abe.illinois.edu/). Current Illinois Engineering students who are in their junior year (normally at least 90 credit hours, including those in progress, and at least one year of undergraduate coursework remaining) with an overall GPA of at least 3.0 and a technical GPA 3.0 may apply for provisional admission to the program.
Admission decisions are based on overall academic performance, letters of reference, and statement of purpose.
Admissions to this program will occur both in the fall and spring term. The application deadline for spring term will be December 1 and for fall term will be July 1. The Energy and Sustainability Engineering M.Eng. admissions committee will review applications for this program and students accepted into the program will be given "provisional admission."
Students provisionally admitted to the program:
• are assigned a graduate academic advisor when admitted.
• must maintain an overall GPA of 3.0 through completion of the B.S. component of the degree to remain in the program.
• may register for graduate courses and earn graduate hours credit, with approval from their graduate academic advisor, if they have less than 12 credit hours remaining in their B.S. component.
• must earn at least 124 hours of undergraduate credit and satisfy all B.S. requirements of this program to be officially admitted to the Graduate College.
Upon successful completion of the B.S. component, students:
• must apply and be officially admitted into the Graduate College.
• will be issued letters of admission from the Graduate College and the NPRE Department, at which time they will be considered graduate students and assessed graduate tuition the following semester.
• must satisfy the graduate student minimum residence requirement, which is 24 graduate credit hours.
• must continue to maintain a graduate GPA of 3.00 or better in order to remain in the combined program.

Withdrawal

Students may withdraw from the program at any time by notifying the Office of the Associate Dean for Undergraduate Programs. Students who do not complete both the B.S.-M.Eng. degree program requirements may request by petition to have graduate hours earned converted to undergraduate hours and applied toward the student's traditional engineering undergraduate major. Students reverting to the traditional B.S. degree program must complete 128 hours and must satisfy all degree requirements. Graduate credit not used to fulfill the B.S. degree requirements will remain on the transcript and may, at some future point, be considered for transfer to another degree program.

for the joint degree of Bachelor of Science in Agricultural & Biological Engineering and Master of Engineering in Engineering, Energy Systems Concentration

Course Requirements

B.S. Component (124 hours):

- Same required courses as the traditional B.S. degree with the minimum hours required reduced from 128 to 124 hours.
  - The reduction of 4 credit hours is based on the utilization of 4 hours in free elective in the student's undergraduate curriculum.
- Illinois undergraduate student minimum residence requirement satisfied.
- Overall grade point average (GPA) of 3.0 maintained through completion of B.S. component of the program.

M.Eng. Component (32 additional hours of coursework)

- Identical to the current M.Eng. in Engineering with a concentration in Energy Systems (http://catalog.illinois.edu/graduate/concentrations/energy-systems-meng/). A total of 32 hours (including the shared coursework) are required.
- Satisfy Illinois' graduate student minimum residence requirement.

- Overall GPA of 3.00 must be maintained through completion of M.Eng. component of the program.

Agricultural & Consumer Economics, BS and Agricultural & Applied Economics, MAAE

for the degrees of Bachelor of Science Major in Agricultural & Consumer Economics and Master of Agricultural & Applied Economics in Agricultural & Applied Economics

department website: https://ace.illinois.edu/
department faculty: https://ace.illinois.edu/faculty (https://ace.illinois.edu/faculty/)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college website: https://aces.illinois.edu/

The MAAE program includes a combined BS/MAAE option for ACE undergraduates. Combined program students must meet all requirements for their BS degree in ACE, and take an additional 26 hours of graduate credit to earn the MAAE degree. Six hours of upper-level electives will count jointly for both degrees. As a combined program, students will receive both degrees at the completion of both programs.

for the degrees of Bachelor of Science Major in Agricultural & Consumer Economics and Master of Agricultural & Applied Economics in Agricultural & Applied Economics

BS Program Component

Prescribed Core Courses including Campus General Education

Code	Title	Hours
Composition I and Speech [1]		
RHET 105 & CMN 101	Writing and Research and Public Speaking (or equivalent (see College Composition I requirement)	7
Advanced Composition [2]		
Select from campus-approved list		3-4
Foreign Language		
Coursework at or above the third level is required for graduation.		
Quantitative Reasoning I		
Select one of:		7-8
MATH 124	Finite Mathematics	
MATH 125	Elementary Linear Algebra	
MATH 231	Calculus II	
Select one of:		
MATH 220	Calculus	
MATH 221	Calculus I	
MATH 234	Calculus for Business I	
Quantitative Reasoning II		**6**
ACE 262	Applied Statistical Methods and Data Analytics I	
ACE 264	Applied Statistical Methods & Data Analytics 2	
Humanities and the Arts		
Selected from campus approved list.		6
Natural Sciences and Technology		
Selected from campus approved list.		6
Social and Behavioral Sciences		
Selected from campus approved list.		6
Cultural Studies		
Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists.		9
ACES Prescribed		
ACES 101	Contemporary Issues in ACES (for freshmen only)	2
Department Requirements		
Minimum Hours in the College of ACES of which 20 must be in the Department of ACE		35
Minimum of two 400-level courses in ACE		6
ACE 100	Introduction to Applied Microeconomics [1]	4
ACE 161	Microcomputer Applications	3
or CS 105	Intro Computing: Non-Tech	
ACE 300	Intermediate Applied Microeconomics [2]	3
ACE 341	Issues&Careers in Applied Econ	1 or 2
ACCY 201	Accounting and Accountancy I	3
ECON 103	Macroeconomic Principles	3
At least 3 hours of credit for study abroad or one international course selected from:		3-4
ACE 435	Global Agribusiness Management	
ACE 436	International Business Immersion	
ACE 451	Agriculture in Intl Dev	
ACE 452	The Latin American Economies	
ACE 454	Econ Dev of Tropical Africa	
ACE 455	International Trade in Food and Agriculture	
Required Concentration		**15-27**
Concentration prescribed courses. See specific requirements for the concentration listed below.		
Total Hours		**126**

1 *Requirement must be satisfied by end of first year.*
2 *Students are encouraged to complete this requirement prior to the seventh semester.*

MAAE Component

Code	Title	Hours
Microeconomic Theory		
ACE 500	Applied Economic Theory	4
Quantitative Methods		
Applied Econometrics:		8
ACE 562	Applied Regression Models I	
ACE 564	Applied Regression Models II	
Other Quantitative methods:		
4 hours of approved graduate course work in quantitative methods		

Field of Specialization		
12 hours of approved graduate field courses		12
(Must include at least 8 total hours at the 500-level and 8 total hours in ACE		
Professional/Research Internship Requirement		
ACE 592	Special Topics (Graduate Internship)	2
Total MAAE Component Hours [1]		**26**

[1] *Six hours of upper level electives will count jointly in the BS and Masters programs.*

Animal Sciences BS-MANSC

for the degree of Bachelor of Science Major in Animal Sciences and Master of Animal Sciences in Animal Science

department website: https://ansc.illinois.edu/
department faculty: Animal Sciences Faculty (https://ansc.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college website: https://aces.illinois.edu/

The joint BS/MANSC program in Animal Sciences integrates a baccalaureate (BS) in Animal Sciences preparation with a non-thesis Master of Animal Sciences (MANSC) preparation. Students enrolled in the BS in Animal Sciences program that have completed a minimum of 60 credit hours of degree requirements and that have a minimum GPA of 3.0 are eligible to apply and be admitted to this program. Students that have a GPA above 2.75 may be admitted on probationary status. The Department of Animal Sciences will support the application to the MANSC program of the students in this joint program that have completed the required 126 credit hours towards a BS in Animal Sciences degree (including a minimum of 40 hours of 300- or 400- level courses) and that have a minimum GPA of 3.0. Up to 12 graduate-level (400- or 500-level) credit hours from the BS program will count towards the 32 credit-hour requirement of the MANSC program.

for the degree of Bachelor of Science Major in Animal Sciences and Master of Animal Sciences in Animal Science

The joint BS/MANSC program in Animal Sciences integrates a baccalaureate (BS) in Animal Sciences preparation with a non-thesis Master of Animal Sciences (MANSC) preparation. Students enrolled in the BS in Animal Sciences program that have completed a minimum of 60 credit hours of degree requirements and that have a minimum GPA of 3.0 are eligible to apply and be admitted to this program. Students that have a GPA above 2.75 may be admitted on probationary status.

The Department of Animal Sciences will support the application to the MANSC program of the students in this joint program that have completed the required 126 credit hours towards a BS in Animal Sciences degree (including a minimum of 40 hours of 300- or 400- level courses) and that have a minimum GPA of 3.0. Up to 12 graduate-level (400- or 500-level) credit hours from the BS program will count towards the 32 credit-hour requirement of the MANSC program.

For the Degree of Bachelor of Science Major in Animal Sciences

Code	Title	Hours
Composition I and Speech		
RHET 105	Writing and Research (or equivalent) (see college Composition I requirement)	4
CMN 101	Public Speaking	3
Advanced Composition		
Select from campus approved list.		3-4
Cultural Studies		
Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists.		9
Foreign Language		
Coursework at or above the third level is required for graduation.		
Quantitative Reasoning I		
Select one of the following:		4-5
MATH 220	Calculus	
MATH 221	Calculus I	
MATH 234	Calculus for Business I	
Quantitative Reasoning II		
Select one of the following:		3-4
ACE 261	Applied Statistical Methods	
CPSC 241	Intro to Applied Statistics	
ECON 202	Economic Statistics I	
PSYC 235	Intro to Statistics	
STAT 100	Statistics	
SOC 280	Intro to Social Statistics	
Natural Sciences and Technology		
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	4
CHEM 104 & CHEM 105	General Chemistry II and General Chemistry Lab II	4
MCB 100 & MCB 101	Introductory Microbiology and Intro Microbiology Laboratory	5
Humanities and the Arts		
Courses selected from campus approved list		6
Social Sciences		
ECON 102	Microeconomic Principles	3
or ACE 100	Introduction to Applied Microeconomics	
Additional social or behavioral science course; cannot be an economics course.		3-4
ACES Required		
ACES 101	Contemporary Issues in ACES	2
Animal Sciences Required		
ANSC 100	Intro to Animal Sciences	4
ANSC 101	Contemporary Animal Issues	3
ANSC 103	Working With Farm Animals	2
ANSC 221	Cells, Metabolism and Genetics	3
ANSC 222	Anatomy and Physiology	3
ANSC 223	Animal Nutrition	3
ANSC 224	Animal Reproduction and Growth	4
ANSC 298	Undergraduate Seminar	1

ANSC 398	UG Experiential Learning [1]	1
ANSC 498	Integrating Animal Sciences	2

Other Requirements

Requirement	Description
Minimum 300- and 400- level courses included in the 126 hours for the B.S. degree	40
Minimum GPA:	3.0

[1] ANSC 398 only fulfills the degree requirement when taken for a standard letter grade.

For the Bachelor of Science students must choose one of the concentrations, Companion Animal & Equine Science, Food Animal Production & Management, or Science, Pre-Veterinary & Medical listed below:

Code	Title	Hours
Companion Animal and Equine Science Concentration Required		
Choose one group: [1]		6
ANSC 250 & ANSC 307	Companion Animals in Society and Companion Animal Management	
or		
ANSC 206 & ANSC 306	Horse Management and Equine Science	
Select two of the following Applied Sciences courses: [1]		6
ANSC 201	Principles of Dairy Production	
ANSC 204	Intro Dairy Cattle Evaluation	
ANSC 205	World Animal Resources	
ANSC 206	Horse Management [1]	
ANSC 211	Breeding Animal Evaluation	
ANSC 219	Meat Technology	
ANSC 250	Companion Animals in Society [1]	
ANSC 301	Food Animal Production, Management, and Evaluation	
ANSC 305	Human Animal Interactions	
ANSC 306	Equine Science	
ANSC 307	Companion Animal Management [1]	
ANSC 309	Meat Production and Marketing	
ANSC 310	Meat Selection and Grading	
ANSC 312	Advanced Livestock Evaluation	
ANSC 313	Horse Appraisal	
ANSC 314	Adv Dairy Cattle Evaluation	
ANSC 322	Livestock Feeds and Feeding	
ANSC 370	Companion Animal Policy	
ANSC 400	Dairy Herd Management	
ANSC 401	Beef Production	
ANSC 402	Sheep and Goat Production	
ANSC 403	Pork Production	
ANSC 404	Poultry Science	
ANSC 405	Advanced Dairy Management	
ANSC 407	Animal Shelter Management	
ANSC 424	Pet Food & Feed Manufacturing	
ANSC 435	Milk Quality and Udder Health	
ANSC 437	Adv Reproductive Management	
ANSC 471	ANSC Leaders & Entrepreneurs	
Select two of the following Basic Sciences courses:		6
ANSC 251	Epidemics and Infectious Diseases	
ANSC 331	Biology of Reproduction	
ANSC 350	Cellular Metabolism in Animals	
ANSC 363	Behavior of Domestic Animals	
ANSC 366	Animal Behavior	
ANSC 406	Zoo Animal Conservation Sci	
ANSC 409	Meat Science	
ANSC 420	Ruminant Nutrition	
ANSC 421	Minerals and Vitamins	
ANSC 422	Companion Animal Nutrition	
ANSC 431	Advanced Reproductive Biology	
ANSC 438	Lactation Biology	
ANSC 440	Applied Statistical Methods I	
ANSC 441	Human Genetics	
ANSC 444	Applied Animal Genetics	
ANSC 445	Statistical Methods	
ANSC 446	Population Genetics	
ANSC 447	Advanced Genetics and Genomics	
ANSC 448	Math Modeling in Life Sciences	
ANSC 449	Biological Modeling	
ANSC 450	Comparative Immunobiology	
ANSC 451	Microbes and the Anim Indust	
ANSC 452	Animal Growth and Development	
ANSC 453	Stem Cell Biology	
ANSC 467	Applied Animal Ecology	
ANSC 509	Muscle Biology	
ANSC 520	Protein and Energy Nutrition	
ANSC 521	Regulation of Metabolism	
ANSC 522	Advanced Ruminant Nutrition	
ANSC 523	Techniques in Animal Nutrition	
ANSC 524	Nonruminant Nutrition Concepts	
ANSC 525	Topics in Nutrition Research	
ANSC 526	Adv Companion Animal Nutrition	
ANSC 533	Repro Physiology Lab Methods	
ANSC 541	Regression Analysis	
ANSC 542	Applied Bioinformatics	
ANSC 543	Bioinformatics	
ANSC 545	Statistical Genomics	
ANSC 554	Immunobiological Methods	
ANSC 561	Animal Stress Physiology	
Additional elective courses must be completed to yield at least 126 total Hours for graduation.		25-29
Total Hours		**126**

[1] ANSC 206, 250, 306 and 307 may NOT be used to meet more than one requirement.

Code	Title	Hours
Food Animal Production and Management Concentration Required		

Select four of the following Applied Sciences courses:		12
ANSC 201	Principles of Dairy Production	
ANSC 204	Intro Dairy Cattle Evaluation	
ANSC 205	World Animal Resources	
ANSC 206	Horse Management	
ANSC 211	Breeding Animal Evaluation	
ANSC 219	Meat Technology	
ANSC 250	Companion Animals in Society	
ANSC 301	Food Animal Production, Management, and Evaluation	
ANSC 305	Human Animal Interactions	
ANSC 306	Equine Science	
ANSC 307	Companion Animal Management	
ANSC 309	Meat Production and Marketing	
ANSC 310	Meat Selection and Grading	
ANSC 312	Advanced Livestock Evaluation	
ANSC 313	Horse Appraisal	
ANSC 314	Adv Dairy Cattle Evaluation	
ANSC 322	Livestock Feeds and Feeding	
ANSC 370	Companion Animal Policy	
ANSC 400	Dairy Herd Management	
ANSC 401	Beef Production	
ANSC 402	Sheep and Goat Production	
ANSC 403	Pork Production	
ANSC 404	Poultry Science	
ANSC 405	Advanced Dairy Management	
ANSC 407	Animal Shelter Management	
ANSC 424	Pet Food & Feed Manufacturing	
ANSC 435	Milk Quality and Udder Health	
ANSC 437	Adv Reproductive Management	
ANSC 471	ANSC Leaders & Entrepreneurs	
Select two of the following Basic Sciences courses:		6
ANSC 251	Epidemics and Infectious Diseases	
ANSC 331	Biology of Reproduction	
ANSC 350	Cellular Metabolism in Animals	
ANSC 363	Behavior of Domestic Animals	
ANSC 366	Animal Behavior	
ANSC 406	Zoo Animal Conservation Sci	
ANSC 409	Meat Science	
ANSC 420	Ruminant Nutrition	
ANSC 421	Minerals and Vitamins	
ANSC 422	Companion Animal Nutrition	
ANSC 431	Advanced Reproductive Biology	
ANSC 438	Lactation Biology	
ANSC 440	Applied Statistical Methods I	
ANSC 441	Human Genetics	
ANSC 444	Applied Animal Genetics	
ANSC 445	Statistical Methods	
ANSC 446	Population Genetics	
ANSC 447	Advanced Genetics and Genomics	
ANSC 448	Math Modeling in Life Sciences	
ANSC 449	Biological Modeling	
ANSC 450	Comparative Immunobiology	
ANSC 451	Microbes and the Anim Indust	
ANSC 452	Animal Growth and Development	
ANSC 453	Stem Cell Biology	
ANSC 467	Applied Animal Ecology	
ANSC 509	Muscle Biology	
ANSC 520	Protein and Energy Nutrition	
ANSC 521	Regulation of Metabolism	
ANSC 522	Advanced Ruminant Nutrition	
ANSC 523	Techniques in Animal Nutrition	
ANSC 524	Nonruminant Nutrition Concepts	
ANSC 525	Topics in Nutrition Research	
ANSC 526	Adv Companion Animal Nutrition	
ANSC 533	Repro Physiology Lab Methods	
ANSC 541	Regression Analysis	
ANSC 542	Applied Bioinformatics	
ANSC 543	Bioinformatics	
ANSC 545	Statistical Genomics	
ANSC 554	Immunobiological Methods	
ANSC 561	Animal Stress Physiology	
Additional elective courses must be completed to yield at least 126 total Hours for graduation.		20-29
Total Hours		**126**

Code	Title	Hours
Science, Pre-Veterinary and Medical Concentration Required		
Select two of the following Applied Sciences courses:		6
ANSC 201	Principles of Dairy Production	
ANSC 204	Intro Dairy Cattle Evaluation	
ANSC 205	World Animal Resources	
ANSC 206	Horse Management	
ANSC 211	Breeding Animal Evaluation	
ANSC 219	Meat Technology	
ANSC 250	Companion Animals in Society	
ANSC 301	Food Animal Production, Management, and Evaluation	
ANSC 305	Human Animal Interactions	
ANSC 306	Equine Science	
ANSC 307	Companion Animal Management	
ANSC 309	Meat Production and Marketing	
ANSC 310	Meat Selection and Grading	
ANSC 312	Advanced Livestock Evaluation	
ANSC 313	Horse Appraisal	
ANSC 314	Adv Dairy Cattle Evaluation	
ANSC 322	Livestock Feeds and Feeding	
ANSC 370	Companion Animal Policy	
ANSC 400	Dairy Herd Management	
ANSC 401	Beef Production	
ANSC 402	Sheep and Goat Production	
ANSC 403	Pork Production	
ANSC 404	Poultry Science	
ANSC 405	Advanced Dairy Management	
ANSC 407	Animal Shelter Management	

ANSC 424	Pet Food & Feed Manufacturing	
ANSC 435	Milk Quality and Udder Health	
ANSC 437	Adv Reproductive Management	
ANSC 471	ANSC Leaders & Entrepreneurs	
Select four of the following Basic Sciences courses:		12
ANSC 251	Epidemics and Infectious Diseases	
ANSC 331	Biology of Reproduction	
ANSC 350	Cellular Metabolism in Animals	
ANSC 363	Behavior of Domestic Animals	
ANSC 366	Animal Behavior	
ANSC 406	Zoo Animal Conservation Sci	
ANSC 409	Meat Science	
ANSC 420	Ruminant Nutrition	
ANSC 421	Minerals and Vitamins	
ANSC 422	Companion Animal Nutrition	
ANSC 431	Advanced Reproductive Biology	
ANSC 438	Lactation Biology	
ANSC 440	Applied Statistical Methods I	
ANSC 441	Human Genetics	
ANSC 444	Applied Animal Genetics	
ANSC 445	Statistical Methods	
ANSC 446	Population Genetics	
ANSC 447	Advanced Genetics and Genomics	
ANSC 448	Math Modeling in Life Sciences	
ANSC 449	Biological Modeling	
ANSC 450	Comparative Immunobiology	
ANSC 451	Microbes and the Anim Indust	
ANSC 452	Animal Growth and Development	
ANSC 453	Stem Cell Biology	
ANSC 467	Applied Animal Ecology	
ANSC 509	Muscle Biology	
ANSC 520	Protein and Energy Nutrition	
ANSC 521	Regulation of Metabolism	
ANSC 522	Advanced Ruminant Nutrition	
ANSC 523	Techniques in Animal Nutrition	
ANSC 524	Nonruminant Nutrition Concepts	
ANSC 525	Topics in Nutrition Research	
ANSC 526	Adv Companion Animal Nutrition	
ANSC 533	Repro Physiology Lab Methods	
ANSC 541	Regression Analysis	
ANSC 542	Applied Bioinformatics	
ANSC 543	Bioinformatics	
ANSC 545	Statistical Genomics	
ANSC 554	Immunobiological Methods	
ANSC 561	Animal Stress Physiology	
Additional elective courses must be completed to yield at least 126 total Hours for graduation.		20-29
Total Hours		**126**

[1] ANSC 398 only fulfills the degree requirement when taken for a standard letter grade.

For the Degree of Master of Science in Animal Sciences Major in Animal Sciences

Code	Title	Hours
ANSC 590	Animal Sciences Seminar [1]	2
or ANSC 591	Grad Bioinformatics Seminar	
ANSC 440	Applied Statistical Methods I [1]	3-4
or ANSC 445	Statistical Methods	
or ANSC 448	Math Modeling in Life Sciences	
or ANSC 449	Biological Modeling	
Elective 400- or 500-level ANSC courses	(excludes ANSC 590, ANSC 591, ANSC 593) [2]	18 to 19
ANSC 593	Res Studies in Animal Sciences [3]	8
Total Hours		**32**

Other Requirements

Requirement	Description
Other Requirements and conditions may overlap	
Maximum Hours Overall Required Within the Unit	12
Maximum graduate-level credit hours from the B.S. degree that will count towards the MANSC degree	12
Minimum 500-level Hours Required Overall	12
Minimum GPA:	3.0

[1] Equivalent course requires departmental approval

[2] In consultation with their Animal Sciences faculty advisor, students will select courses that support the individual research studies project and strengthen career opportunities.

[3] The individual research studies project or internship experience and a written report will fulfill the ANSC 593 (Research Studies in Animal Sciences) capstone project requirement. The project or internship and the written product will be supervised by the Animal Sciences faculty mentor and provide evidence that the student can understand and apply the scientific method, interpret scientific information; and effectively communicate scientific information in a field of animal sciences.

Computer Science, BS-MCS

for the joint degree of Bachelor of Science in Computer Science and Master of Computer Science in Computer Science

department website: https://cs.illinois.edu
department faculty: Computer Science Faculty (https://cs.illinois.edu/people/faculty/)
college website: https://grainger.illinois.edu/

The 5-year program in Computer Science combines two degrees: a B.S. in Computer Science with an M.C.S. in Computer Science. This program is competitive and admission is based on overall academic performance, letters of recommendation, and statement of purpose.

Admission

For deadlines and procedures, please consult the department website (https://cs.illinois.edu/academics/graduate/fifth-year-masters-programs/5-year-bs-mcs-program/). Current Computer Science students enrolled in The Grainger College of Engineering with a junior standing (must have at least one year left of their undergraduate study after admitted into the program) who maintain an excellent academic performance are eligible to apply for this program. Students admitted to this program will receive both degrees once all requirements for both degrees have been successfully completed. Transfer students entering the CS undergraduate program their junior year are also eligible to apply to this program.

Students provisionally admitted to the program:

- are assigned a graduate academic advisor.
- must maintain an overall GPA of 3.0 through completion of the B.S. component of the program to remain in the program.
- may register for graduate courses and earn graduate credit hours, with approval from their graduate academic advisor, if they have 12 hours or less to complete in their FINAL semester of their undergraduate studies. Please note that students cannot transfer more than 12 credit hours of coursework over to their M.C.S. degree, which includes the shared coursework.
- must earn at least 120 hours of undergraduate credit, 9 hours of graduate credit (this is the "Breadth Requirement (http://cs.illinois.edu/prospective-students/graduate-students/professional-masters-mcs/professional-masters-mcs-degree-requ/)"), and satisfy all B.S. requirements to be officially recommended for admission to the Graduate College.

Upon successful completion of the B.S. component (including grades of B- or better in the "Breadth Requirement (http://cs.illinois.edu/prospective-students/graduate-students/professional-masters-mcs/professional-masters-mcs-degree-requ/)"), and an overall GPA of at least 3.0 GPA, students

- will be officially admitted into the Graduate College, with the application fee paid by the department.
- will be issued letter of admission from the Graduate College Admission Office and the Department of Computer Science, at which time they will be considered graduate students and assessed graduate tuition the following semester. International students may be required to submit additional documentation at this time.
- must continue to maintain a graduate GPA of 3.0 or better in order to remain in the combined program.
- must complete all the remaining M.C.S. degree requirements within two semesters (fall-spring, spring-summer, or spring-fall). Please note that if you finish your B.S. requirements in less than four years, you will not be given extra time to complete the M.C.S. degree requirements. You will just finish this joint program in less than 5-years and be able to start working sooner!

Withdrawal

Students who do not complete all 5-Year B.S.- M.C.S. degree program requirements may request by petition to have graduate hours earned, including the Breadth Requirement coursework, converted to undergraduate hours and applied toward a traditional B.S. in Computer Science degree. Students reverted back to the B.S. degree program must earn the minimum number of hours and satisfy all degree requirements of whichever version of the B.S. curriculum appropriate. Graduate credit not used to fulfill the B.S. degree requirements will remain on the transcript and may, at some future point, be considered for transfer to another degree program.

for the joint degree of Bachelor of Science in Computer Science and Master of Computer Science in Computer Science

Requirements

B.S. Component: 120 hours plus 3 "Breadth Requirement" courses for 9-12 graduate hours

- Same required courses as the traditional B.S. degree with the minimum hours required reduced to 120 hours.
- Must complete 3 out of the 4 "Breadth Requirement" courses: four different courses, each from a different area, from the following eight core areas with a grade of B- or higher.
- University undergraduate minimum residence requirement satisfied.
- Overall GPA of 3.0 or higher maintained through the completion of the B.S. component of the program.

M.C.S. Component: Minimum 20-23 additional coursework hours

- Program is identical to the traditional M.C.S. program with the 3 out 4 "Breadth Requirement (http://cs.illinois.edu/prospective-students/graduate-students/professional-masters-mcs/professional-masters-mcs-degree-requ/)" courses satisfied while still classified as an undergraduate.
- Students who take the "Breadth Requirement (http://cs.illinois.edu/prospective-students/graduate-students/professional-masters-mcs/professional-masters-mcs-degree-requ/)" courses for 3 credit hours instead of 4 will need to complete a minimum of 23 additional graduate level coursework hours.
- Students must satisfy the university's graduate student minimum residence requirement.
- Students must complete remaining M.C.S. degree requirements in two semesters (fall-spring, spring-summer, or spring-fall).
- Students must maintain an overall GPA of 3.0 through completion of the M.C.S. component of the program.

Computer Science, BS-MS

for the joint degree of Bachelor of Science in Computer Science and Master of Science in Computer Science

department website: https://cs.illinois.edu
department faculty: Computer Science Faculty (https://cs.illinois.edu/people/faculty/)
college website: https://grainger.illinois.edu/

The five-year B.S.-M.S. program in Computer Science combines two degrees: a B.S. in Computer Science with an M.S. (with thesis) in Computer Science. Current Computer Science students enrolled in The Grainger College of Engineering with junior standing who maintain superior academic performance are eligible to apply for this program. Students admitted to the program will receive both degrees once all requirements for the 5-year B.S.-M.S. degree program have been successfully completed.

Admission

For deadlines and procedures, consult the department website (https://cs.illinois.edu/academics/graduate/fifth-year-masters-programs/5-year-bs-ms-program/). Current Grainger Engineering Computer Science students who are in their junior year (normally at least 90+ credit hours, including those in progress, and at least one year of undergraduate course work remaining) with an overall GPA of at least 3.50 may apply for provisional admission to the program. The 5-year program is highly competitive. Admission is based on overall academic performance, letters of reference, and statement of purpose. The GRE General Test is not required.

Students provisionally admitted to the program:

- are assigned a graduate academic advisor when admitted.
- must maintain an overall GPA of 3.00 through completion of the B.S. component of the program, to remain in the program.
- may register for graduate courses and earn graduate hours credit, with approval from their graduate academic advisor, even if they are more than 10 hours from completing the B.S. component.
- must earn at least 120 hours of undergraduate credit, 9 hours of graduate credit (in the Breadth Requirement courses), and satisfy all B.S. requirements to be officially admitted to the Graduate College.

Upon successful completion of the B.S. component (including grades of B- or better in the Breadth Requirement), and an overall GPA of at least 3.00 in all graduate course work, students:

- will be officially admitted into the Graduate College.
- will be issued letters of admission from the Office of Admissions and Records and the Computer Science Department, at which time they will be considered graduate students and assessed graduate tuition the following semester.
- may apply or be considered for graduate research or teaching assistantships, tuition waivers, as well as fellowships and scholarships available to graduate students.
- must continue to maintain a graduate GPA of 3.00 or better in order to remain in the combined program.

Withdrawal

Students may withdraw from the program at any time by notifying the Office of the Associate Dean for Undergraduate Programs and the Assistant Director of CS Graduate Programs. Students who do not complete all 5-year B.S.- M.S. degree program requirements may upon request have all graduate hours earned, including the Breadth Requirement course work converted to undergraduate hours and applied toward a traditional B.S. in Computer Science degree. Students reverted back to the B.S. degree program must earn the minimum number of hours and satisfy all degree requirements of whichever version of the B.S. curriculum is appropriate. Graduate credit not used to fulfill the B.S. degree requirements will remain on the transcript and may, at some future point, be considered for transfer to another degree program.

Continued Graduate Study

Students in the program are eligible to apply for the Ph.D. program in Computer Science near completion of the M.S. component. If admitted, the combined degree will count as Stage 1 of the Ph.D. program, as if the student is admitted with a master's degree.

Students are strongly advised to seek faculty counsel about the 5-year program to be sure they understand the pros and cons of pursuing a master's degree via the 5-year program. If their intention is to ultimately pursue a Ph.D., then it may be preferable to avoid the rapid pace of the 5-year program and instead invest time in research as an undergraduate. For admission to competitive Ph.D. programs, the expectation of publications and extensive research experience is higher for M.S. graduates. Therefore, as an alternative to the 5-year program, many top students may prefer to conduct research, possibly leading to a B.S. thesis, as a way to improve their admissions chances into top Ph.D. programs.

for the joint degree of Bachelor of Science in Computer Science and Master of Science in Computer Science

Requirements

B.S. Component (120 hours plus three 400-level courses for 9-12 graduate hours):

- Same required courses as the traditional B.S. degree with the minimum hours required – not counting technical electives taken for graduate credit (see below) – reduced from 128 to 120.
- Course work shared by the B.S. and M.S. components must include three courses and at most 12 credit hours of 400-level CS courses required for the B.S. which also count towards the Breadth Requirement course work of the M.S. component, all of which must be taken for graduate credit. (Students must take the graduate section of the courses if offered and are strongly encouraged to take the 4-hour section if available). The CS Graduate academic advisor will assist students in mapping out this course work.
- Illinois undergraduate student minimum residence requirement satisfied
- Overall grade point average (GPA) of 3.00 maintained through completion of B.S. component of the program.

M.S. Component (minimum 16 additional credit hours plus 4 hours of CS 599):

- Identical to the traditional M.S. program with the Breadth Requirement course work satisfied while still classified as undergraduate (though held to the standards of a graduate student). A total of 32 credit hours (including the shared course work) are required.
- Satisfy Illinois' graduate student minimum residence requirement.
- Overall GPA of 3.00 must be maintained through completion of M.S. component of the program.

Computer Science & Animal Sciences, BS & Animal Science, MANSC

for the degree of Bachelor of Science in Computer Science & Animal Sciences and the Master of Animal Sciences in Animal Science

animal sciences department information: https://ansc.illinois.edu/
computer science degree information: https://cs.illinois.edu/academics/undergraduate/degree-program-options/cs-x-degree-programs#requirements (https://cs.illinois.edu/academics/undergraduate/degree-program-options/cs-x-degree-programs/#requirements)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college websites: https://aces.illinois.edu/ **and** https://engineering.illinois.edu
computer science email: undergrad@cs.illinois.edu (academic@cs.illinois.edu)
animal sciences email: ANSCadvising@illinois.edu

Please see the Computer Science advisor in 1210 Siebel Center, as well as the Animal Sciences Undergraduate Curriculum Coordinator, Dr. David Miller, 116 Animal Sciences Lab.

for the degree of Bachelor of Science in Computer Science & Animal Sciences and the Master of Animal Sciences in Animal Science

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The joint BS (CS+ANSC)/MANSC program integrates a baccalaureate degree (BS) preparation in Computer Sciences and Animal Sciences (CS+ANSC) with a non-thesis Master of Animal Sciences (MANSC) preparation. Students enrolled in the BS (CS+ANSC) program that have completed at least 60 credit hours of degree requirements and that have a minimum GPA of 3.0 are eligible to apply and be admitted to this program. Students that have a GPA above 2.75 may be admitted on probationary status.

The Department of Animal Sciences will support the application to the MANSC program of the students in this joint program that have completed the required 126 credit hours towards a BS (CS+ANSC) degree (including 40 hours of 300- or 400- level courses) and that have a minimum GPA of 3.0. Up to 12 graduate-level (400- or 500-level) credit hours from the BS program will count towards the 32 credit-hour requirement of the MANSC program.

for the Degree of Bachelor of Science Major in Computer Science & Animal Sciences

Code	Title	Hours
Composition and Speech (choose 1 from):		**6-7**
RHET 105 & CMN 101	Writing and Research and Public Speaking	
CMN 111 & CMN 112	Oral & Written Comm I and Oral & Written Comm II	
Advanced Composition (students select from Gen Ed List)		**3-4**
Cultural Studies		
Western Culture (students select from Gen Ed List)		
Non-Western Culture (students select from Gen Ed List)		
US Minority Culture (students select from Gen Ed List)		
Language other than English (at or above 3rd level)		
Natural Sciences and Technology		**8**
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	
CHEM 104 & CHEM 105	General Chemistry II and General Chemistry Lab II	
Humanities and the Arts (students select from Gen Ed List)		**6**
Social and Behavioral Sciences		**6-7**
ECON 102	Microeconomic Principles	
or ACE 100	Introduction to Applied Microeconomics	
Students choice from Gen Ed List		
Mathematical Foundations (fulfills Quantitative Reasoning I & II)		
CS 361	Probability & Statistics for Computer Science	
MATH 220	Calculus	
or MATH 221	Calculus I	
MATH 225	Introductory Matrix Theory	
MATH 231	Calculus II	
Computer Sciences Core		
CS 100	Freshman Orientation	
CS 125	Introduction to Computer Science	
CS 126	Software Design Studio	
CS 173	Discrete Structures	
CS 225	Data Structures	
CS 374	Introduction to Algorithms & Models of Computation	
CS 357	Numerical Methods I	
or CS 421	Programming Languages & Compilers	
Computer Science Technical Track (two options)		
CS 233 & CS 241	Computer Architecture and System Programming	
OR		
CS 240	Introduction to Computer Systems	
& Two CS 400	Any two (2) 400-level CS courses except CS 491	
Animal Sciences Core		
ANSC 100	Intro to Animal Sciences	
ANSC 221	Cells, Metabolism and Genetics	
ANSC 222	Anatomy and Physiology	
ANSC 223	Animal Nutrition	
ANSC 224	Animal Reproduction and Growth	
ANSC 398	UG Experiential Learning	
ANSC 498	Integrating Animal Sciences	
Applied Animal Sciences Courses (choose 3)		**9**
ANSC 201	Principles of Dairy Production	
ANSC 204	Intro Dairy Cattle Evaluation	
ANSC 205	World Animal Resources	
ANSC 206	Horse Management	
ANSC 211	Breeding Animal Evaluation	
ANSC 219	Meat Technology	
ANSC 250	Companion Animals in Society	
ANSC 301	Food Animal Production, Management, and Evaluation	
ANSC 305	Human Animal Interactions	
ANSC 307	Companion Animal Management	
ANSC 309	Meat Production and Marketing	
ANSC 310	Meat Selection and Grading	
ANSC 312	Advanced Livestock Evaluation	
ANSC 313	Horse Appraisal	

ANSC 314	Adv Dairy Cattle Evaluation	
ANSC 322	Livestock Feeds and Feeding	
ANSC 370	Companion Animal Policy	
ANSC 400	Dairy Herd Management	
ANSC 401	Beef Production	
ANSC 402	Sheep and Goat Production	
ANSC 403	Pork Production	
ANSC 404	Poultry Science	
ANSC 405	Advanced Dairy Management	
ANSC 407	Animal Shelter Management	
ANSC 424	Pet Food & Feed Manufacturing	
ANSC 435	Milk Quality and Udder Health	
ANSC 437	Adv Reproductive Management	
ANSC 471	ANSC Leaders & Entrepreneurs	
Basic Animal Sciences Courses (choose 3)		**9**
ANSC 251	Epidemics and Infectious Diseases	
ANSC 306	Equine Science	
ANSC 331	Biology of Reproduction	
ANSC 350	Cellular Metabolism in Animals	
ANSC 363	Behavior of Domestic Animals	
ANSC 366	Animal Behavior	
ANSC 406	Zoo Animal Conservation Sci	
ANSC 409	Meat Science	
ANSC 420	Ruminant Nutrition	
ANSC 421	Minerals and Vitamins	
ANSC 422	Companion Animal Nutrition	
ANSC 431	Advanced Reproductive Biology	
ANSC 438	Lactation Biology	
ANSC 440	Applied Statistical Methods I	
ANSC 441	Human Genetics	
ANSC 444	Applied Animal Genetics	
ANSC 445	Statistical Methods	
ANSC 446	Population Genetics	
ANSC 447	Advanced Genetics and Genomics	
ANSC 448	Math Modeling in Life Sciences	
ANSC 449	Biological Modeling	
ANSC 450	Comparative Immunobiology	
ANSC 451	Microbes and the Anim Indust	
ANSC 452	Animal Growth and Development	
ANSC 453	Stem Cell Biology	
ANSC 467	Applied Animal Ecology	
ANSC 509	Muscle Biology	
ANSC 520	Protein and Energy Nutrition	
ANSC 521	Regulation of Metabolism	
ANSC 522	Advanced Ruminant Nutrition	
ANSC 523	Techniques in Animal Nutrition	
ANSC 524	Nonruminant Nutrition Concepts	
ANSC 525	Topics in Nutrition Research	
ANSC 526	Adv Companion Animal Nutrition	
ANSC 533	Repro Physiology Lab Methods	
ANSC 541	Regression Analysis	
ANSC 542	Applied Bioinformatics	
ANSC 543	Bioinformatics	
ANSC 545	Statistical Genomics	
ANSC 554	Immunobiological Methods	
ANSC 561	Animal Stress Physiology	
Total Hours		**126**

Other Requirements

Requirement
The required 126 hours must include a minimum of 40 hours of 300- and 400-level courses.

For the Degree of Master of Science in Animal Sciences Major in Animal Sciences

Code	Title	Hours
ANSC 590	Animal Sciences Seminar [1]	2
or ANSC 591	Grad Bioinformatics Seminar	
ANSC 440	Applied Statistical Methods I [1]	3-4
or ANSC 445	Statistical Methods	
or ANSC 448	Math Modeling in Life Sciences	
or ANSC 449	Biological Modeling	
Elective 400- or 500-level ANSC courses	(excludes ANSC 590, ANSC 591, ANSC 593) [2]	18 to 19
ANSC 593	Res Studies in Animal Sciences [3]	8
Total Hours		**32**

Other Requirements

Requirement
Other Requirements and conditions may overlap
Minimum Hours Overall Required Within the Unit: 12
A maximum of 12 graduate-level credit hours from the B.S. degree will count towards the MANSC degree
Minimum 500-level Hours Required Overall: 12
Minimum GPA: 3.0

1. Equivalent course requires departmental approval
2. In consultation with their Animal Sciences faculty advisor, students will select courses that support the individual research studies project and strengthen career opportunities.
3. The individual research studies project or internship experience and a written report will fulfill the ANSC 593 (Research Studies in Animal Sciences) capstone project requirement. The project or internship and the written product will be supervised by the Animal Sciences faculty mentor and provide evidence that the student can understand and apply the scientific method, interpret scientific information; and effectively communicate scientific information in a field of animal sciences.

Computer Science + Crop Sciences, BS & Crop Sciences, MS

for the degree of Bachelor of Science in Computer Science + Crop Sciences and the Master of Crop Sciences

crop sciences department information: https://cropsciences.illinois.edu/
computer science degree information: https://cs.illinois.edu/academics/undergraduate/degree-program-options/cs-x-degree-programs#requirements (https://cs.illinois.edu/academics/undergraduate/degree-program-options/cs-x-degree-programs/#requirements)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college websites: https://aces.illinois.edu/ **and** https://engineering.illinois.edu
computer science contact: undergrad@cs.illinois.edu (academic@cs.illinois.edu)
crop sciences contact: ugrad@cropsciences.illinois.edu

The five-year joint B.S.-M.S. program in Crop Sciences combines a B.S. in Crop Sciences with a non-thesis M.S. in Crop Sciences or a B.S. in Computer Science and Crop Sciences with a nonthesis M.S. in Crop Sciences. Current University of Illinois at Urbana-Champaign undergraduate students enrolled in the Department of Crop Sciences who have completed between 60 and 96 credit hours, maintain superior academic performance are eligible to apply for this program. Students admitted to the program will receive both degrees once all requirements for the B.S.-M.S. program are completed.

for the degree of Bachelor of Science in Computer Science + Crop Sciences and the Master of Crop Sciences

For the Computer Science + Crop Sciences, BS

Prescribed Courses including Campus General Education

Code	Title	Hours
Composition I and Speech		**6-7**
RHET 105 & CMN 101	Writing and Research and Public Speaking	
OR		
CMN 111 & CMN 112	Oral & Written Comm I and Oral & Written Comm II	
Advanced Composition		
Select from campus-approved list.		3-4
Cultural Studies		
Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists.		9
Foreign Language		
Coursework at or above the third level is required for graduation.		0-15
Quantitative Reasoning I		
See Mathematical Foundations for specific requirement.		3
Quantitative Reasoning II		
See Mathematical Foundations for specific requirement.		3
Natural Sciences and Technology		
See Crop Sciences Core for specific requirement.		6
Humanities and the Arts		
Select from campus-approved list.		6
Social and Behavioral Sciences		
Select from campus-approved list.		6
ACES Required		
ACES 101	Contemporary Issues in ACES	2
Computer Science Core		**22**
CS 100	Freshman Orientation (recommended)	1
CS 125	Introduction to Computer Science	4
CS 126	Software Design Studio	3
CS 173	Discrete Structures	3
CS 225	Data Structures	4
CS 374	Introduction to Algorithms & Models of Computation	4
CS 421	Programming Languages & Compilers	3
Computer Science Technical Track		**8-11**
Choose from the following options:		
CS 233 & CS 241	Computer Architecture and System Programming	
OR		
CS 240	Introduction to Computer Systems	
& Two CS 4XX	Any two (2) 400-level CS courses except CS 491	
Mathematical Foundations (fulfills Quantitative Reasoning I and II)		**12-13**
CS 361	Probability & Statistics for Computer Science	3
MATH 220	Calculus	4-5
or MATH 221	Calculus I	
MATH 225	Introductory Matrix Theory	2
MATH 231	Calculus II	3
Crop Sciences Core		**16**
CPSC 102	Foundational Skills in Crop Sciences	2
CPSC 112	Introduction to Crop Sciences	4
CPSC 393	Crop Sciences Internship	3
or CPSC 395	Undergrad Research or Thesis	
CPSC 498	Crop Sci Professional Develpmt	1
Select two of the following:		6
CPSC 226		
CPSC 270	Applied Entomology	
PLPA 204		
Foundational Data Analytics		**6-8**
CPSC 440	Applied Statistical Methods I	4
And select one of the following:		
CPSC 441		
CPSC 444	Introduction to Spatial Analytics	
Crop Sciences Electives		**6**
CPSC/HORT/PLPA 4XX	At least one (1) 400-level CPSC/HORT/PLPA course	
CPSC/HORT/PLPA XXX	Any CPSC/HORT/PLPA course except CPSC 241	
Total Hours		**126**

For the Crop Sciences, MS Non-Thesis Option

Code	Title	Hours
CPSC 594	Professional Orientation CPSC	1
CPSC 598	Seminar (when presenting)	1
Electives including at least 4 hours of graded coursework at the 500 level other than CPSC 599		30
Total Hours [1]		**32**

Other Requirements

Requirement
Other requirements and conditions may overlap
Minimum Hours Required Within the Unit: 1
Minimum 500-level Hours Required overall: 12
Minimum GPA: 3.0

[1] *Twelve (12) hours of graduate level concentration electives in the BS requirements will overlap with 12 hours of electives required for the MS requirements.*

Crops Sciences, BS-MS

for the degrees of Bachelor of Science and Master of Science, Major in Crop Sciences

department website: https://cropsciences.illinois.edu/
department faculty: https://cropsciences.illinois.edu/people/faculty (https://cropsciences.illinois.edu/people/faculty/)/
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college website: https://aces.illinois.edu/

crop sciences contact: ugrad@cropsciences.illinois.edu

The five-year joint B.S.-M.S. program in Crop Sciences combines a B.S. in Crop Sciences with a non-thesis M.S. in Crop Sciences. Current University of Illinois at Urbana-Champaign undergraduate students enrolled in the Department of Crop Sciences who have completed between 60 and 96 credit hours, maintain superior academic performance are eligible to apply for this program. Students admitted to the program will receive both degrees once all requirements for the B.S.-M.S. program are completed.

for the degrees of Bachelor of Science and Master of Science, Major in Crop Sciences

for the Crop Sciences, BS

Prescribed Courses including Campus General Education

Code	Title	Hours
Composition I and Speech		
RHET 105	Writing and Research	4
or equivalent - see College Composition I requirement (3 or 4)		
CMN 101	Public Speaking	3
Advanced Composition		
Select from campus approved list.		3-4
Cultural Studies		
Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists.		9
Foreign Language		
Coursework at or above the third level is required for graduation.		
Quantitative Reasoning I		
Select one of the following:		4-5
MATH 220	Calculus	
MATH 221	Calculus I	
MATH 234	Calculus for Business I	
Quantitative Reasoning II		
CPSC 241	Intro to Applied Statistics	3
Natural Sciences and Technology		
See Specific Concentration Requirements		
Humanities and the Arts		
Select from campus approved list		6
Social and Behavioral Sciences		
ACE 100	Introduction to Applied Microeconomics [1]	3-4
or ECON 102	Microeconomic Principles	
Select from campus approved list.		3-4
ACES required		
ACES 101	Contemporary Issues in ACES	2
Required Concentration		**58-79**
Concentration prescribed courses. See specific concentration requirements. [2]		
Total Hours		**126**

[1] ACE 100 or ECON 102 are not required for the Biological Sciences Concentration.

[2] Required concentration 58-79 hours.

For the Crop Sciences, MS Non-Thesis Option

Code	Title	Hours
CPSC 594	Professional Orientation CPSC	1
CPSC 598	Seminar (when presenting)	1
Electives including at least 4 hours of graded coursework at the 500 level other than CPSC 599		30
Total Hours [1]		**32**

Other Requirements

Requirement
Other requirements and conditions may overlap
Minimum Hours Required Within the Unit: 1
Minimum 500-level Hours Required overall: 12
Minimum GPA: 3.0

[1] *Twelve (12) hours of graduate level concentration electives in the BS requirements will overlap with 12 hours of electives required for the MS requirements.*

Engineering Physics, BS and Engineering: Energy Systems, MEng

for the joint degree of Bachelor of Science in Engineering Physics and Master of Engineering in Engineering, Energy Systems Concentration

department website: Department of Physics (https://physics.illinois.edu)
department faculty: Physics Faculty (https://physics.illinois.edu/people/directory/faculty/)
overview of college admissions & requirements: The Grainger College of Engineering (https://grainger.illinois.edu/admissions/)
college website: https://grainger.illinois.edu/

The joint B.S.-M.Eng. in Engineering with a Concentration in Energy Systems program combines two degrees: a B.S. in select engineering undergraduate majors with the M.Eng. in Engineering with a Concentration in Energy Systems. Current Illinois students enrolled in the College of Engineering with junior standing (normally at least 90 credit hours, including those in process, and at least one year of undergraduate coursework remaining) who maintain superior academic performance are eligible to apply for this program. The program is designed to broaden a student's knowledge beyond that possible in a standard 4-year curriculum. Students admitted to the program will receive both degrees once all requirements for both the B.S.-M.Eng. degree have been successfully completed but will be permitted to participate in the B.S. degree graduation ceremonies with their class if they have completed the equivalent number of credit hours. This program is not intended for students intending to pursue a Ph.D. degree.

Admissions

For deadlines and procedures, consult the department Web site. Current Grainger Engineering students who are in their junior year (normally at least 90 credit hours, including those in progress, and at least one year of undergraduate coursework remaining) with an overall GPA of at least 3.0 and a technical GPA 3.0 may apply for provisional admission to the program.
Admission decisions are based on overall academic performance, letters of reference, and statement of purpose.
Admissions to this program will occur both in the fall and spring term. The application deadline for spring term will be December 1 and for fall term will be July 1. The Energy and Sustainability Engineering M.Eng. admissions committee will review applications for this program and students accepted into the program will be given "provisional admission."
Students provisionally admitted to the program:
• are assigned a graduate academic advisor when admitted.
• must maintain an overall GPA of 3.0 through completion of the B.S. component of the degree to remain in the program.
• may register for graduate courses and earn graduate hours credit, with approval from their graduate academic advisor, if they have less than 12 credit hours remaining in their B.S. component.
• must earn at least 124 hours of undergraduate credit and satisfy all B.S. requirements of this program to be officially admitted to the Graduate College.
Upon successful completion of the B.S. component, students:
• must apply and be officially admitted into the Graduate College.
• will be issued letters of admission from the Graduate College and the NPRE Department, at which time they will be considered graduate students and assessed graduate tuition the following semester.
• must satisfy the graduate student minimum residence requirement, which is 24 graduate credit hours.
• must continue to maintain a graduate GPA of 3.00 or better in order to remain in the combined program.

Withdrawal

Students may withdraw from the program at any time by notifying the Office of the Associate Dean for Undergraduate Programs. Students who do not complete both the B.S.-M.Eng. degree program requirements may request by petition to have graduate hours earned converted to undergraduate hours and applied toward the student's traditional engineering undergraduate major. Students reverting to the traditional B.S. degree program must complete 128 hours and must satisfy all degree requirements. Graduate credit not used to fulfill the B.S. degree requirements will remain on the transcript and may, at some future point, be considered for transfer to another degree program.

for the joint degree of Bachelor of Science in Engineering Physics and Master of Engineering in Engineering, Energy Systems Concentration

Course Requirements

B.S. Component (124 hours):

- Same required courses as the traditional B.S. degree with the minimum hours required reduced from 128 to 124 hours.
  - The reduction of 4 credit hours is based on the utilization of 4 hours in free elective in the student's undergraduate curriculum.
- Illinois undergraduate student minimum residence requirement satisfied.
- Overall grade point average (GPA) of 3.0 maintained through completion of B.S. component of the program.

M.Eng. Component (32 additional hours of coursework)

- Identical to the current M.Eng. in Engineering with a concentration in Energy Systems (http://catalog.illinois.edu/graduate/concentrations/energy-systems-meng/). A total of 32 hours (including the shared coursework) are required.
- Satisfy Illinois' graduate student minimum residence requirement.
- Overall GPA of 3.00 must be maintained through completion of M.Eng. component of the program.

Industrial Engineering, BS and Engineering: Energy Systems, MEng

for the joint degree of Bachelor of Science in Industrial Engineering and Master of Engineering in Engineering, Energy Systems Concentration

department website: https://ise.illinois.edu (https://ise.illinois.edu/)
department faculty: Industrial & Enterprise Systems Faculty (https://ise.illinois.edu/directory/faculty.html)
overview of college admissions & requirements: The Grainger College of Engineering (https://grainger.illinois.edu/admissions/)
college website: https://grainger.illinois.edu/

The joint B.S.-M.Eng. in Engineering with a Concentration in Energy Systems program combines two degrees: a B.S. in select engineering undergraduate majors with the M.Eng. in Engineering with a Concentration in Energy Systems. The B.S. degree within the B.S. - M.Eng. program is accredited by the Engineering Accreditation Commission of ABET, https://www.abet.org, under the same criteria as the traditional 128 hour B.S. degree. Current Illinois students enrolled in The Grainger College of Engineering with junior standing (normally at least 90 credit hours, including those in process, and at least one year of undergraduate coursework remaining) who maintain superior academic performance are eligible to apply for this program. The program is designed to broaden a student's knowledge beyond that possible in a standard 4-year curriculum. Students admitted to the program will receive both degrees once all requirements for both the B.S.-M.Eng. degree have been successfully completed but will be permitted to participate in the B.S. degree graduation ceremonies with their class if they have completed the equivalent number of credit hours. This program is not intended for students intending to pursue a Ph.D. degree.

Admissions

For deadlines and procedures, consult the department Web site. Current Grainger Engineering students who are in their junior year (normally at least 90 credit hours, including those in progress, and at least one year of undergraduate coursework remaining) with an overall GPA of at least 3.0 and a technical GPA 3.0 may apply for provisional admission to the program.
Admission decisions are based on overall academic performance, letters of reference, and statement of purpose.
Admissions to this program will occur both in the fall and spring term. The application deadline for spring term will be December 1 and for fall term will be July 1. The Energy and Sustainability Engineering M.Eng. admissions committee will review applications for this program and students accepted into the program will be given "provisional admission."
Students provisionally admitted to the program:
• are assigned a graduate academic advisor when admitted.
• must maintain an overall GPA of 3.0 through completion of the B.S. component of the degree to remain in the program.
• may register for graduate courses and earn graduate hours credit, with approval from their graduate academic advisor, if they have less than 12 credit hours remaining in their B.S. component.
• must earn at least 124 hours of undergraduate credit and satisfy all B.S. requirements of this program to be officially admitted to the Graduate College.
Upon successful completion of the B.S. component, students:
• must apply and be officially admitted into the Graduate College.
• will be issued letters of admission from the Graduate College and the NPRE Department, at which time they will be considered graduate students and assessed graduate tuition the following semester.
• must satisfy the graduate student minimum residence requirement, which is 24 graduate credit hours.
• must continue to maintain a graduate GPA of 3.00 or better in order to remain in the combined program.

Withdrawal

Students may withdraw from the program at any time by notifying the Office of the Associate Dean for Undergraduate Programs. Students who do not complete both the B.S.-M.Eng. degree program requirements may request by petition to have graduate hours earned converted to undergraduate hours and applied toward the student's traditional engineering undergraduate major. Students reverting to the traditional B.S. degree program must complete 128 hours and must satisfy all degree requirements. Graduate credit not used to fulfill the B.S. degree requirements will remain on the transcript and may, at some future point, be considered for transfer to another degree program.

for the joint degree of Bachelor of Science in Industrial Engineering and Master of Engineering in Engineering, Energy Systems Concentration

Course Requirements

B.S. Component (124 hours):

- Same required courses as the traditional B.S. degree with the minimum hours required reduced from 128 to 124 hours.
  - The reduction of 4 credit hours is based on the utilization of 4 hours in free elective in the student's undergraduate curriculum.
- Illinois undergraduate student minimum residence requirement satisfied.
- Overall grade point average (GPA) of 3.0 maintained through completion of B.S. component of the program.

M.Eng. Component (32 additional hours of coursework)

- Identical to the current M.Eng. in Engineering with a concentration in Energy Systems (http://catalog.illinois.edu/graduate/concentrations/energy-systems-meng/). A total of 32 hours (including the shared coursework) are required.
- Satisfy Illinois' graduate student minimum residence requirement.
- Overall GPA of 3.00 must be maintained through completion of M.Eng. component of the program.

Interdisciplinary Health Sciences, BS & Epidemiology, MPH

for the degrees of Bachelor of Science Major in Interdisciplinary Health Sciences and Master of Public Health in Epidemiology

Department Website: http://www.kch.illinois.edu/
Department Faculty: Kinesiology & Community Health Faculty (http://www.kch.illinois.edu/)
College Catalog Page: Applied Health Sciences (http://catalog.illinois.edu/schools/ahs/academic-units/)
College Website: http://www.ahs.illinois.edu/

Programs in Community Health and Kinesiology

Undergraduate Programs:

- **major:** Community Health, BS (p. 105)
  - **concentration:** Community Health: Health Education & Promotion, BS (p. 106)
  - **concentration:** Community Health: Health Planning & Administration, BS (p. 110)
  - **concentration:** Community Health: Rehabilitation Studies, BS (p. 114)
- **major:** Kinesiology, BS (p. 251)
  - **concentration:** Kinesiology: Teacher Certification, BS (p. 253)
- **minor:** Kinesiology (p. 507)
- **minor:** Disability Studies (http://catalog.illinois.edu/undergraduate/ahs/minors/disability-studies/)
- **joint degree:** Community Health, BS and Public Health, MPH (p. 118)
- **joint degree:** Community Health, BS and Epidemiology, MPH (p. 462)
- **joint degree:** Kinesiology, BS and Public Health, MPH (p. 465)
- **joint degree:** Kinesiology, BS and Epidemiology, MPH (p. 463)
- **joint degree:** Interdisciplinary Health Sciences, BS & Epidemiology, MPH (p. 458)

Graduate Programs:

- **degree:** Kinesiology, MS (http://catalog.illinois.edu/graduate/ms_kines/)
- **degree:** Kinesiology, PhD (http://catalog.illinois.edu/graduate/graduate-majors/kinesiology/#doctoratestext)
- **degree:** Community Health, MS (http://catalog.illinois.edu/graduate/graduate-majors/community-health/ms-comm-health/)
- **degree:** Rehabilitation, MS (http://catalog.illinois.edu/graduate/graduate-majors/community-health/ms-rehab/)
- **degree:** Public Health, MPH (http://catalog.illinois.edu/graduate/graduate-majors/community-health/master-pub-health/)
- **joint degree:** Community Health, BS and Public Health, MPH (p. 118)
- **joint degree:** Kinesiology, BS and Public Health, MPH (p. 465)

for the degrees of Bachelor of Science Major in Interdisciplinary Health Sciences and Master of Public Health in Epidemiology

for the Interdisciplinary Health Science, BS Summary of Degree Requirements

Code	Title	Hours
General Education		36-39
Health Major Requirements		42
Concentration Requirements		22-23
Free Electives		24-28
Total Hours		128

The curriculum requires certain existing courses from the approved lists be taken as noted below. The prescribed courses prepare the student for upper division study and may be used to satisfy General Education Requirements provided they are on the appropriate General Education List.

General Education Requirements

Code	Title	Hours
Communication Arts		
Composition I		3-6
Advanced Composition		3
Quantitative Reasoning I & II		
From approved campus list		6
Humanities and the Arts		
From approved campus list		6
Social and Behavioral Sciences		
From approved campus list		6
Natural Sciences and Technology		
From approved campus list		6
Cultural Studies [1]		
From Western cultures approved campus list		3
From non-Western cultures approved campus list		3
From U.S. minority cultures approved campus list		3
Total Hours		39-42

[1] *Courses in cultural studies may be completed through other categories where appropriate.*

Code	Title	Hours
Health Major Requirements		
CHLH 101	Introduction to Public Health	3
CHLH 274	Introduction to Epidemiology	3
CHLH 456	Organization of Health Care	2-4
KIN 122	Physical Activity and Health	3
RST 100	Recreation, Sport, and Tourism in Modern Society	3
SHS 170	Intro Hum Comm Sys & Disorders	3
FSHN 120	Contemporary Nutrition	3
PSYC 100	Intro Psych	4
STAT 100	Statistics	3
REHB 330	Disability in American Society	3
IHLT 101	Introduction to i-Health	1
IHLT 102	Survey of Interdisc Health	1
IHLT 375	Interdis Collab in Health Serv	4
IHLT 474	Pre-Field Experience in Health	1
IHLT 475	Field Experience in i-Health	4
Total Hours		42

Free Electives

Code	Title	Hours
Free Electives		24-28
Total Hours		24-28

Course List for the Epidemiology, MPH

Code	Title	Hours
CHLH 410	Public Health Practice	4
CHLH 469	Environmental Health	3 or 4
CHLH 550	Health Policy: United States	4

CHLH 568	Computer Packages in Health Research	2
CHLH 572	Principles of Epidemiology	4
CHLH 573	Biostatistics in Public Health	4
CHLH 576	Analytical Epidemiology	4
CHLH 578	Applied Epidemiology	4
CHLH 581	Professionalism in Public Health (2 semesters)	2
CHLH 582	Advanced Biostatistics	4
CHLH 587	MPH Applied Practice Experience	4
CHLH 589	MPH Integrative Learning Experience	2
Electives	**2 courses, 3-4 hours each**	**8**
Total Hours	**(minimum required)**	**48**

Other Requirements

Required Courses:	Required Hours
Minimum 500-level hours Required Overall:	12 (8 within the unit)
Minimum GPA	3.0

Interdisciplinary Health Sciences, BS and Public Health, MPH

for the degrees of Bachelor of Science Major in Interdisciplinary Health Science and Master of Public Health in Public Health

department website: http://ihealth.illinois.edu/
department faculty: I-Health Faculty and Staff (http://ihealth.illinois.edu/faculty-staff/)
college catalog page: Applied Health Sciences Catalog (p. 1187)
college website: http://www.ahs.illinois.edu/

The Interdisciplinary Health Sciences, BS degree program includes a set of three concentrations, of which a student must complete at least one:

Health & Aging Concentration (p. 243)

Health Behavior Change Concentration (p. 244)

Health Diversity Concentration (http://catalog.illinois.edu/undergraduate/ahs/interdisciplinary-health-sciences/health-diverse/)

A 5 year BS MPH joint degree program is available for students majoring in Community Health, I-Health, or Kinesiology. Students apply for the program in the latter part of their third year (junior year) of study. Students accepted into the BS MPH joint degree program take 12 credit hours of coursework in their senior year that apply to both BS and MPH degrees. In the 5th year of study, students complete the remaining requirements for the MPH degree, and graduate simultaneously with both BS and MPH degrees. The requirements are explained in more detail on the MPH program website: http://www.mph.illinois.edu/Program/.

for the degrees of Bachelor of Science Major in Interdisciplinary Health Science and Master of Public Health in Public Health

Only students who have completed their junior year but have not yet completed their senior year are eligible to apply. The curriculum, degree requirements, and faculty for the 5-year BS-MPH program (MPH portion) are the same as the regular MPH program.

The BS-MPH program is accelerated. Students take a heavier course load during the fifth year, called the MPH year. The MPH year consists of one Fall semester, one Spring semester, and one Summer semester. For students in the Epidemiology concentration, the MPH portion of the degree consists of one Fall semester, one Spring semester, one Summer semester, and a second Fall semester, with students graduating in December.

Journalism, BS-MJ

for the degrees of Bachelor of Science in Journalism and Master of Journalism in Journalism

head of department: Stephanie Craft
director of graduate studies: Brant Houston
email: journ@illinois.edu
department website: https://media.illinois.edu/journalism (https://media.illinois.edu/journalism/degrees-programs/)
department faculty: https://media.illinois.edu/journalism/faculty (https://media.illinois.edu/journalism/faculty/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://media.illinois.edu/
department office: 119 Gregory Hall, 810 S. Wright Street, Urbana, IL 61801
phone: (217) 333-0709

Master of Journalism

The Department of Journalism offers the M.J. degree as part of a 4+1 program focused on the development of a broad range of professional skills for undergraduates enrolled in the Bachelor of Science in Journalism program at the University of Illinois at Urbana-Champaign. Students can apply for the B.S./M.J. program in the first semester of their junior year; admitted students select their remaining undergraduate journalism elective courses according to a plan of study that reserves certain upper-division courses for the graduate portion of their program.

Programs in Journalism

Undergraduate Programs:
- **major:** Journalism, BS (p. 250)
- **major:** Journalism, BS-MJ (p. 460)
- **minors:** Journalism (p. 506) | Media (p. 513)

Graduate Programs:
- **degree:** Journalism, BS-MJ (p. 460)
- **degree:** Journalism, MS (p. 828)
- **joint degree:** Journalism, MS and Law, JD (p. 1156)

The department does not offer a Ph.D. degree. For the program leading to the Doctor of Philosophy in Communications, see Communications and Media, PhD (p. 672).

Admission

The M.J. program places a strong emphasis on journalism, and candidates who are accepted are most often those with a demonstrated

interest in practicing journalism. It is imperative that all applicants supply writing samples.

Applicants to the M.J. program must be University of Illinois at Urbana-Champaign students in the B.S. in Journalism program with a cumulative GPA of at least a 3.40 and have junior standing (at least 60 but no more than 89 credit hours) to be eligible to apply. Because the master's program has an enrollment ceiling, some applicants with grade point averages of 3.4 or higher may not be admitted.

Letters of recommendation are required. An interview with the head of the department or director of graduate studies is helpful but not required. Students whose native language is not English must present their official scores on the Test of English as a Foreign Language (TOEFL) examination as part of their applications. The department follows the Graduate College's recommendations for English proficiency. Detailed information about admissions and financial aid can be found on the department's website (https://media.illinois.edu/journalism/degrees-programs/masters/).

Financial Aid

M.J. students may not hold assistantships or other tuition and fee waiver-generating appointments. A limited number of merit-based scholarships are available for B.S./M.J. students.

for the degrees of Bachelor of Science in Journalism and Master of Journalism in Journalism

Total hours: 32 for M.J. portion, 152 for B.S. and M.J. combined

The B.S./M.J. is an integrated, accelerated program for Illinois Journalism majors that may be completed in less time than is required to complete both degrees separately and provides sharper focus on professional multimedia skills than would be available with the two existing degrees combined. Students who maintain superior academic performance are eligible to apply as juniors (after earning at least 60 but not more than 89 credit hours). Accepted students then work on both degrees simultaneously and will receive both at the same time, once all requirements for each have been completed.

For additional details and requirements, refer to the department and the Graduate College Handbook *(*https://grad.illinois.edu/gradhandbook/*).*

Journalism, B.S. component

Code	Title	Hours
In College of Media		
JOUR 200	Introduction to Journalism	3
JOUR 205	History of American Journalism	3
JOUR 210	Newsgathering Across Platforms	4
JOUR 215	Multimedia Reporting	4
JOUR 220	News Editing	4
JOUR 250	Journalism Ethics & Diversity	3
JOUR 311	Media Law	3
JOUR 315	Adv Public Affairs Reporting	4
JOUR 335	Audio Journalism	4
JOUR 340	Video Reporting & Storytelling	4
Choose one of the following:		4
JOUR 425	Multimedia Editing and Design	
JOUR 445	Video Storytelling 2-Producing	
Unrestricted electives within College of Media		8
Total in College of Media		**48**

Code	Title	Hours
Outside College of Media		
CS 105	Intro Computing: Non-Tech	3
ECON 102	Microeconomic Principles	3
ECON 103	Macroeconomic Principles	3
PSYC 100	Intro Psych	4
RHET 105	Writing and Research (or Comp. I equivalent)	4
STAT 100	Statistics	3
Campus general education requirements not met by classes listed above		
Recognized minor or one 18-hour specialization or two 9-hour specializations, approved by advisor, from outside College of Media and Department of Communication. May include hours listed above. Students may choose to complete a Public Relations minor in addition to the non-Media minor or specialization.		18
Total outside College of Media		**72**
Total B.S. component		**120**

Upon completion of the B.S. component, students must apply and be officially admitted into the Graduate College. They will be issued letters of admission from the Graduate College and the Journalism Department, at which time they will be considered graduate students and assessed graduate tuition beginning with the following semester. Students must satisfy the graduate student minimum residence requirement of 24 graduate credit hours and continue to maintain a graduate GPA of at least 3.0 to remain in the combined program.

Master of Journalism component

May begin after completing 60 hours

Code	Title	Hours
Both of these, completing whichever was not taken for B.S. component:		
JOUR 425	Multimedia Editing and Design	4
JOUR 445	Video Storytelling 2-Producing	4
These three 500-level courses:		
JOUR 500	Current Issues in Journalism	4
JOUR 515	Master's Project (Part 1)	4
JOUR 515	Master's Project (Part 2)	4
Choose 16 hours from the following electives:		16
JOUR 450	Media and Public Opinion	
JOUR 451	Research Methods in Journalism	
JOUR 452	Great Books of Journalism	
JOUR 453	Crisis Communications	
JOUR 454	Propaganda & the News Media	
JOUR 460	Special Topics	
JOUR 470	International Reporting	
JOUR 471	Science Journalism	
JOUR 472	Business Reporting	
JOUR 475	In-Depth Writing Styles	
JOUR 480	Advanced Reporting Topics	
JOUR 481	Literary Feature Writing	

JOUR 482	Immersion Journalism	
JOUR 483	Investigative Journalism	
JOUR 490	Professional Project	
JOUR 495	Internship Seminar	
Total M.J. component		**32**
TOTAL HOURS FOR BOTH DEGREES		**152**

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	3.5

Community Health, BS & Epidemiology, MPH

for the degrees of Bachelor of Science Major in Community Health and Master of Public Health in Epidemiology

Department Website: http://www.kch.illinois.edu/
Department Faculty: Kinesiology & Community Health Faculty (http://www.kch.illinois.edu/)
College Catalog Page: Applied Health Sciences (http://catalog.illinois.edu/schools/ahs/academic-units/)
College Website: http://www.ahs.illinois.edu/

Programs in Community Health and Kinesiology

Undergraduate Programs:

- **major:** Community Health, BS (p. 105)
  - **concentration:** Community Health: Health Education & Promotion, BS (p. 106)
  - **concentration:** Community Health: Health Planning & Administration, BS (p. 110)
  - **concentration:** Community Health: Rehabilitation Studies, BS (p. 114)
- **major:** Kinesiology, BS (p. 251)
  - **concentration:** Kinesiology: Teacher Certification, BS (p. 253)
- **minor:** Kinesiology (p. 507)
- **minor:** Disability Studies (http://catalog.illinois.edu/undergraduate/ahs/minors/disability-studies/)
- **joint degree:** Community Health, BS and Public Health, MPH (p. 118)
- **joint degree:** Community Health, BS and Epidemiology, MPH (p. 462)
- **joint degree:** Kinesiology, BS and Public Health, MPH (p. 465)
- **joint degree:** Kinesiology, BS and Epidemiology, MPH (p. 463)
- **joint degree:** Interdisciplinary Health Sciences, BS & Epidemiology, MPH (p. 458)

Graduate Programs:

- **degree:** Kinesiology, MS (http://catalog.illinois.edu/graduate/ms_kines/)
- **degree:** Kinesiology, PhD (http://catalog.illinois.edu/graduate/graduate-majors/kinesiology/#doctoratestext)
- **degree:** Community Health, MS (http://catalog.illinois.edu/graduate/graduate-majors/community-health/ms-comm-health/)
- **degree:** Rehabilitation, MS (http://catalog.illinois.edu/graduate/graduate-majors/community-health/ms-rehab/)
- **degree:** Public Health, MPH (http://catalog.illinois.edu/graduate/graduate-majors/community-health/master-pub-health/)
- **joint degree:** Community Health, BS and Public Health, MPH (p. 118)
- **joint degree:** Kinesiology, BS and Public Health, MPH (p. 465)

for the degrees of Bachelor of Science Major in Community Health and Master of Public Health in Epidemiology

for the Community Health, BS

General Education

Code	Title	Hours
Communication Arts		
Composition I and an approved speech performance course; or CMN 111 and CMN 112		6-7
Advanced Composition (CHLH 304 fulfills requirement)		3-4
Quantitative Reasoning I & II		
From approved campus list (must include a course in statistics from approved campus list) (CHLH 244 and CHLH 421 fulfills requirement)		6
Humanities and the Arts		
From approved campus list (CHLH 260 fulfills 3 hours of requirement)		9
Social and Behavioral Sciences		

From approved campus list	9
Natural Sciences and Technology	
From approved campus list	9
Cultural Studies [1]	
One course from Non-Western Cultures approved campus list.	3
One course from U.S. Minority Cultures approved campus list	3
One course from Western Cultures approved campus list	3
Foreign Language: Completion through the third level of the same language in high school or college	
Total Hours	51-53

Code	Title	Hours
Community Health Program Core Requirements		
CHLH 100	Contemporary Health	3
CHLH 125	Orientation KIN & Comm Health	1
CHLH 201	Public Health Research Methods	3
CHLH 210	Community Health Organizations	2
CHLH 250	Health Care Systems	3
CHLH 274	Introduction to Epidemiology	3
CHLH 304	Foundations of Health Behavior	4
CHLH 410	Public Health Practice	4
CHLH 421	Health Data Analysis	3
Kinesiology and Community Health Department Core Requirements		
CHLH 101	Introduction to Public Health	3
KIN 122	Physical Activity and Health	3
Correlate Areas (see Correlates List Tab)		**18**
Each student completes correlates that are planned with the assigned advisor. These courses are designed to enhance and support career goals.		
Electives		**9-11**
Concentration Requirements		**18**
Total Hours		**128**

[1] *Courses in cultural studies may be completed through other categories where appropriate.*

Course List for the Epidemiology, MPH

Code	Title	Hours
CHLH 410	Public Health Practice	4
CHLH 469	Environmental Health	3 or 4
CHLH 550	Health Policy: United States	4
CHLH 568	Computer Packages in Health Research	2
CHLH 572	Principles of Epidemiology	4
CHLH 573	Biostatistics in Public Health	4
CHLH 576	Analytical Epidemiology	4
CHLH 578	Applied Epidemiology	4
CHLH 581	Professionalism in Public Health (2 semesters)	2
CHLH 582	Advanced Biostatistics	4
CHLH 587	MPH Applied Practice Experience	4
CHLH 589	MPH Integrative Learning Experience	2
Electives	**2 courses, 3-4 hours each**	**8**
Total Hours	**(minimum required)**	**48**

Other Requirements

Required Courses:	Required Hours
Minimum 500-level hours Required Overall:	12 (8 within the unit)
Minimum GPA	3.0

Kinesiology, BS & Epidemiology, MPH

for the degrees of Bachelor of Science Major in Kinesiology and Master of Public Health in Epidemiology

Department Website: http://www.kch.illinois.edu/
Department Faculty: Kinesiology & Community Health Faculty (http://www.kch.illinois.edu/)
College Catalog Page: Applied Health Sciences (http://catalog.illinois.edu/schools/ahs/academic-units/)
College Website: http://www.ahs.illinois.edu/

Programs in Community Health and Kinesiology

Undergraduate Programs:

- **major:** Community Health, BS (p. 105)
  - **concentration:** Community Health: Health Education & Promotion, BS (p. 106)
  - **concentration:** Community Health: Health Planning & Administration, BS (p. 110)
  - **concentration:** Community Health: Rehabilitation Studies, BS (p. 114)
- **major:** Kinesiology, BS (p. 251)
  - **concentration:** Kinesiology: Teacher Certification, BS (p. 253)
- **minor:** Kinesiology (p. 507)
- **minor:** Disability Studies (http://catalog.illinois.edu/undergraduate/ahs/minors/disability-studies/)
- **joint degree:** Community Health, BS and Public Health, MPH (p. 118)
- **joint degree:** Community Health, BS and Epidemiology, MPH (p. 462)
- **joint degree:** Kinesiology, BS and Public Health, MPH (p. 465)
- **joint degree:** Kinesiology, BS and Epidemiology, MPH (p. 463)
- **joint degree:** Interdisciplinary Health Sciences, BS & Epidemiology, MPH (p. 458)

Graduate Programs:

- **degree:** Kinesiology, MS (http://catalog.illinois.edu/graduate/ms_kines/)
- **degree:** Kinesiology, PhD (http://catalog.illinois.edu/graduate/graduate-majors/kinesiology/#doctoratestext)
- **degree:** Community Health, MS (http://catalog.illinois.edu/graduate/graduate-majors/community-health/ms-comm-health/)
- **degree:** Rehabilitation, MS (http://catalog.illinois.edu/graduate/graduate-majors/community-health/ms-rehab/)
- **degree:** Public Health, MPH (http://catalog.illinois.edu/graduate/graduate-majors/community-health/master-pub-health/)
- **joint degree:** Community Health, BS and Public Health, MPH (p. 118)
- **joint degree:** Kinesiology, BS and Public Health, MPH (p. 465)

for the degrees of Bachelor of Science Major in Kinesiology and Master of Public Health in Epidemiology

Requirements Including General Education

The Kinesiology Program requires that General Education requirements must be selected from the Campus General Education course list. The prescribed courses prepare the student for upper division study and may be used to satisfy General Education requirements provided they are on the appropriate General Education list. Specifically required General Education courses are listed below.

Code	Title	Hours
Communication Arts		
Composition I and an approved speech performance course; or CMN 111 and CMN 112		6-7
Advanced Composition (KIN 340 fulfills requirement)		3
Quantitative Reasoning I & II		
From the approved campus list (KIN 201 fulfills QRII requirement)		6
Humanities and Arts		
From the approved campus list		6
Behavioral and Social Sciences [1]		
KIN 140	Social Sci of Human Movement (Social Science)	3
KIN 259	Motor Development and Control	3
Natural Sciences		
KIN 150	Bioscience of Human Movement (Life Science)	3
From the approved campus physical science list		3
Cultural Studies [2]		
From Western Cultures approved campus list		3
From Non-Western Cultures approved campus list		3
From U.S. Minority Cultures approved campus list		3
Foreign language: Completion through the third level of the same language in high school or college		
Anatomy		
MCB 244 & MCB 245	Human Anatomy & Physiology I and Human Anat & Physiol Lab I	5
MCB 246 & MCB 247	Human Anatomy & Physiology II and Human Anat & Physiol Lab II	5
Kinesiology and Community Health Department Core		
CHLH 101	Introduction to Public Health	3
KIN 122	Physical Activity and Health	3
Kinesiology Core Requirements		
KIN 125	Orientation KIN & Comm Health	1
KIN 140	Social Sci of Human Movement [3]	3
KIN 150	Bioscience of Human Movement [3]	3
KIN 201	Physical Activity Research Methods [3]	3
KIN 259	Motor Development and Control [3]	3
KIN 340	Social & Psychological Aspects of Physical Activity [3]	3
KIN 352	Bioenergetics of Movement	3
KIN 355	Biomechanics of Human Movement	3

[1] *Students pursuing teacher licensure must complete* PSYC 100 *or* PSYC 103 in addition to KIN 259.

[2] *Courses in cultural studies may be completed through other categories where appropriate.*

[3] *Fulfills University General Education Requirements*

Kinesiology Program Guided Electives

Code	Title	Hours
Elective Kinesiology Courses		
All courses must be at the 200, 300, or 400 level. At least six or more hours must be at the 400 level (at least 12 hours).		12
Correlate Area Studies		
Students select a standardized correlate that will prepare them for further education toward their career goals (at least 18 hours).		18

Summary of Degree Requirements

Code	Title	Hours
General Education and supporting coursework		49
Kinesiology and Community Health Department Core		6
Kinesiology Core		22
Elective Kinesiology courses		12
Correlate Area		18
Free electives		21
Total Hours		128

Course List for the Epidemiology, MPH

Code	Title	Hours
CHLH 410	Public Health Practice	4
CHLH 469	Environmental Health	3 or 4
CHLH 550	Health Policy: United States	4
CHLH 568	Computer Packages in Health Research	2
CHLH 572	Principles of Epidemiology	4
CHLH 573	Biostatistics in Public Health	4
CHLH 576	Analytical Epidemiology	4
CHLH 578	Applied Epidemiology	4
CHLH 581	Professionalism in Public Health (2 semesters)	2
CHLH 582	Advanced Biostatistics	4
CHLH 587	MPH Applied Practice Experience	4
CHLH 589	MPH Integrative Learning Experience	2
Electives	**2 courses, 3-4 hours each**	**8**
Total Hours	**(minimum required)**	**48**

Other Requirements

Required Courses:	Required Hours
Minimum 500-level hours Required Overall:	12 (8 within the unit)
Minimum GPA	3.0

Kinesiology, BS & Public Health, MPH

for the degrees of Bachelor of Science Major in Kinesiology and Master of Public Health in Public Health

Department Website: http://www.kch.illinois.edu/
Department Faculty: Kinesiology & Community Health Faculty (http://www.kch.illinois.edu/)
College Catalog Page: Applied Health Sciences (http://catalog.illinois.edu/schools/ahs/academic-units/)
College Website: http://www.ahs.illinois.edu/

Programs in Community Health and Kinesiology

Undergraduate Programs:

- **major:** Community Health, BS (p. 105)
  - **concentration:** Community Health: Health Education & Promotion, BS (p. 106)
  - **concentration:** Community Health: Health Planning & Administration, BS (p. 110)
  - **concentration:** Community Health: Rehabilitation Studies, BS (p. 114)
- **major:** Kinesiology, BS (p. 251)
  - **concentration:** Kinesiology: Teacher Certification, BS (p. 253)
- **minor:** Kinesiology (p. 507)
- **minor:** Disability Studies (http://catalog.illinois.edu/undergraduate/ahs/minors/disability-studies/)
- **joint degree:** Community Health, BS and Public Health, MPH (p. 118)
- **joint degree:** Community Health, BS and Epidemiology, MPH (p. 462)
- **joint degree:** Kinesiology, BS and Public Health, MPH (p. 465)
- **joint degree:** Kinesiology, BS and Epidemiology, MPH (p. 463)
- **joint degree:** Interdisciplinary Health Sciences, BS & Epidemiology, MPH (p. 458)

Graduate Programs:

- **degree:** Kinesiology, MS (http://catalog.illinois.edu/graduate/ms_kines/)
- **degree:** Kinesiology, PhD (http://catalog.illinois.edu/graduate/graduate-majors/kinesiology/#doctoratestext)
- **degree:** Community Health, MS (http://catalog.illinois.edu/graduate/graduate-majors/community-health/ms-comm-health/)
- **degree:** Rehabilitation, MS (http://catalog.illinois.edu/graduate/graduate-majors/community-health/ms-rehab/)
- **degree:** Public Health, MPH (http://catalog.illinois.edu/graduate/graduate-majors/community-health/master-pub-health/)
- **joint degree:** Community Health, BS and Public Health, MPH (p. 118)
- **joint degree:** Kinesiology, BS and Public Health, MPH (p. 465)

The Kinesiology curriculum leads to a bachelor of science degree that will prepare students for careers in human movement-related fields and/or advanced professional or graduate study. The undergraduate program provides the student with a broad general education, a departmental core integral to the understanding of the diverse aspects of human movement, and a correlate area of courses specific to the student's area of concentration within Kinesiology.

The Kinesiology program is committed to the study and research of human movement in all its dimensions. Undergraduate study focuses on exercise stress, movement efficiency, and fitness; the social, cultural, and psychological aspects of participation in physical activity and sport; coordination, control, and skill of physical activity; physical growth, development, and body form throughout the lifespan; the effects of therapeutic techniques of Kinesiology upon recovery from physical injury; and the instructional process of teaching/coaching of physical activity and sport.

The curriculum combines a comprehensive liberal arts and sciences education with in-depth study in a particular area of interest. The program of study provides knowledge and understanding essential for human movement and sport careers in either public or private agencies. The

hours required for graduation include prescribed courses for all students as well as requirements determined by the various areas of emphasis selected by the student. Teaching and research emphasize hands-on learning through the use of technology and modern laboratory equipment. Graduates find employment in a variety of fields including teaching, corporate fitness, coaching, and athletic training. Many students continue their education and become physical therapists, physicians, exercise physiologists, and sport psychologists.

A 5 year BS MPH joint degree program is available for students majoring in Community Health, I-Health, or Kinesiology. Students apply for the program in the latter part of their third year (junior year) of study. Students accepted into the BS MPH joint degree program take 12 credit hours of coursework in their senior year that apply to both BS and MPH degrees. In the 5th year of study, students complete the remaining requirements for the MPH degree, and graduate simultaneously with both BS and MPH degrees. The requirements are explained in more detail on the MPH program website: http://www.mph.illinois.edu/Program/.

for the degrees of Bachelor of Science Major in Kinesiology and Master of Public Health in Public Health

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Only students who have completed their junior year but have not yet completed their senior year are eligible to apply. The curriculum, degree requirements, and faculty for the 5-year BS-MPH program (MPH portion) are the same as the regular MPH program.

The BS-MPH program is accelerated. Students take a heavier course load during the fifth year, called the MPH year. The MPH year consists of one Fall semester, one Spring semester, and one Summer semester. For students in the Epidemiology concentration, the MPH portion of the degree consists of one Fall semester, one Spring semester, one Summer semester, and a second Fall semester, with students graduating in December.

Materials Science & Engineering, BS and Engineering: Energy Systems, MEng

for the joint degree of Bachelor of Science in Materials Science & Engineering and Master of Engineering in Engineering, Energy Systems Concentration

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department website: https://matse.illinois.edu
department faculty: Materials Science & Engineering Faculty (https://matse.illinois.edu/people/faculty/)
overview of college admissions & requirements: The Grainger College of Engineering (https://grainger.illinois.edu/admissions/)
college website: https://grainger.illinois.edu/

The joint B.S.-M.Eng. in Engineering with a Concentration in Energy Systems program combines two degrees: a B.S. in any engineering undergraduate major with the M.Eng. in Engineering with a Concentration in Energy Systems. The B.S. degree within the B.S. - M.Eng. program is accredited by the Engineering Accreditation Commission of ABET, https://www.abet.org, under the same criteria as the traditional 128 hour B.S. degree. Current Illinois students enrolled in The Grainger College of Engineering with junior standing (normally at least 90 credit hours, including those in process, and at least one year of undergraduate coursework remaining) who maintain superior academic performance are eligible to apply for this program. The program is designed to broaden a student's knowledge beyond that possible in a standard 4-year curriculum. Students admitted to the program will receive both degrees once all requirements for both the B.S.-M.Eng. degree have been successfully completed but will be permitted to participate in the B.S. degree graduation ceremonies with their class if they have completed the equivalent number of credit hours. This program is not intended for students intending to pursue a Ph.D. degree.

Admissions

For deadlines and procedures, consult the department Web site. Current Grainger Engineering students who are in their junior year (normally at least 90 credit hours, including those in progress, and at least one year of undergraduate coursework remaining) with an overall GPA of at least 3.0 and a technical GPA 3.0 may apply for provisional admission to the program.
Admission decisions are based on overall academic performance, letters of reference, and statement of purpose.
Admissions to this program will occur both in the fall and spring term. The application deadline for spring term will be December 1 and for fall term will be July 1. The Energy and Sustainability Engineering M.Eng. admissions committee will review applications for this program and students accepted into the program will be given "provisional admission."
Students provisionally admitted to the program:
• are assigned a graduate academic advisor when admitted.
• must maintain an overall GPA of 3.0 through completion of the B.S. component of the degree to remain in the program.
• may register for graduate courses and earn graduate hours credit, with approval from their graduate academic advisor, if they have less than 12 credit hours remaining in their B.S. component.
• must earn at least 124 hours of undergraduate credit and satisfy all B.S. requirements of this program to be officially admitted to the Graduate College.
Upon successful completion of the B.S. component, students:
• must apply and be officially admitted into the Graduate College.
• will be issued letters of admission from the Graduate College and the NPRE Department, at which time they will be considered graduate students and assessed graduate tuition the following semester.
• must satisfy the graduate student minimum residence requirement, which is 24 graduate credit hours.
• must continue to maintain a graduate GPA of 3.00 or better in order to remain in the combined program.

Withdrawal

Students may withdraw from the program at any time by notifying the Office of the Associate Dean for Undergraduate Programs. Students who do not complete both the B.S.-M.Eng. degree program requirements may request by petition to have graduate hours earned converted to undergraduate hours and applied toward the student's traditional engineering undergraduate major. Students reverting to the traditional B.S. degree program must complete 128 hours and must satisfy all degree requirements. Graduate credit not used to fulfill the B.S. degree requirements will remain on the transcript and may, at some future point, be considered for transfer to another degree program.

for the joint degree of Bachelor of Science in Materials Science & Engineering and Master of Engineering in Engineering, Energy Systems Concentration

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Course Requirements

B.S. Component (124 hours):

- Same required courses as the traditional B.S. degree with the minimum hours required reduced from 128 to 124 hours.
  - The reduction of 4 credit hours is based on the utilization of 4 hours in free elective in the student's undergraduate curriculum.
- Illinois undergraduate student minimum residence requirement satisfied.
- Overall grade point average (GPA) of 3.0 maintained through completion of B.S. component of the program.

M.Eng. Component (32 additional hours of coursework)

- Identical to the current M.Eng. in Engineering with a concentration in Energy Systems (http://catalog.illinois.edu/graduate/concentrations/energy-systems-meng/). A total of 32 hours (including the shared coursework) are required.
- Satisfy Illinois' graduate student minimum residence requirement.
- Overall GPA of 3.00 must be maintained through completion of M.Eng. component of the program.

Materials Science & Engineering, BS and Materials Engineering, MEng

for the joint degrees of Bachelor of Science Major in Materials Science & Engineering and Materials Engineering, MEng

This program is not currently accepting applications.

for the joint degrees of Bachelor of Science Major in Materials Science & Engineering & Materials Engineering, MEng

Requirements

B.S. Component (120 hours)

- Same required courses as the traditional B.S. degree with minimum hours reduced to 120 hours
- The reduction of 8 credit hours includes:
  - 5 hours of free electives.
  - 3 hours of the area specialty course in a different area (the latter becomes part of M.Eng. program requirements)
- At least one semester (or 2 summers) devoted to an industrial internship or co-op.2
- It is strongly suggested that the student take 2 courses in some aspect of business, economics, environmental studies, labor and industrial relations, technology entrepreneurship or technology and management as the elective component of their Liberal Education requirements. Partial or complete fulfillment of the Technology and Management or Business minor or the Technology Commercialization Certificate is recommended for those admitted by application if available hours permit. The students are expected to complete, during the combined program, at least 10 hours of courses in the areas of business, technology management and/or entrepreneurship from an approved list (available from the department), with additional hours recommended. It is noted that since receipt of the B.S. degree is delayed until the requirements for the M. Eng are completed, the student has the opportunity to complete the undergraduate minors while taking the M. Eng requirements.
- Overall GPA of 3.00 maintained through completion of B.S. component of the program and minimum residency requirements satisfied.

M.Eng. Component (minimum 36 additional hours of coursework)

- 36 hours course work, including at least 19 graduate hours of MatSE courses with 12 hours credit overall in 500-level courses. The course work shall include MSE 585 (two semesters or equivalent, 30 weeks total, of industrial internships or co-ops; one of the semesters can be during the B.S. program)[1], 6 hours of 400- or 500-level area specialty courses in the student's area, 3 hours of 400- or 500- level MSE courses from a different area, 2 hours of MSE 595, and 2 hours of MSE 529 or MSE 559. Ten hours of courses in one or more of the areas of business or technology management, and entrepreneurship are required to be included in the overall program. Completion of the requirements for the various Certificates granted by the Technology Entrepreneur Center is recommended
- MSE 492; credit does not count toward degree.

[1] *Students find internship companies and positions with the help of the departmental and College Placement offices. The* MSE 585 *internship requires approval by the departmental Director of Graduate Studies to insure that it matches the student's individual career objectives and meets the learning goals of the program. Students taking an internship as part of their undergraduate B.S program should also check with the Director of Graduate Studies; his/her approval is required if the student is already accepted in the combined B.S./M. Eng. Program. Students will be expected to present an oral report on their internship in either* MSE 529 *or* MSE 559*, as appropriate, the semester following completion of the internship.*

Nuclear, Plasma & Radiological Engineering, BS and Engineering: Energy Systems, MEng

for the joint degree of Bachelor of Science in Nuclear, Plasma & Radiological Engineering and Master of Engineering in Engineering, Energy Systems Concentration

department website: https://npre.illinois.edu/
department faculty: Nuclear, Plasma, & Radiological Engineering Faculty (https://npre.illinois.edu/directory/faculty/)
overview of college admissions & requirements: The Grainger College of Engineering (https://grainger.illinois.edu/admissions/)
college website: https://grainger.illinois.edu/

The joint B.S.-M.Eng. in Engineering with a Concentration in Energy Systems program combines two degrees: a B.S. in select engineering undergraduate majors with the M.Eng. in Engineering with a Concentration in Energy Systems. Current Illinois students enrolled in the College of Engineering with junior standing (normally at least 90 credit hours, including those in process, and at least one year of undergraduate coursework remaining) who maintain superior academic performance are eligible to apply for this program. The program is designed to broaden a student's knowledge beyond that possible in a standard 4-year curriculum. Students admitted to the program will receive both

degrees once all requirements for both the B.S.-M.Eng. degree have been successfully completed but will be permitted to participate in the B.S. degree graduation ceremonies with their class if they have completed the equivalent number of credit hours. This program is not intended for students intending to pursue a Ph.D. degree.

Admissions

For deadlines and procedures, consult the department Web site. Current Grainger Engineering students who are in their junior year (normally at least 90 credit hours, including those in progress, and at least one year of undergraduate coursework remaining) with an overall GPA of at least 3.0 and a technical GPA 3.0 may apply for provisional admission to the program.
Admission decisions are based on overall academic performance, letters of reference, and statement of purpose.
Admissions to this program will occur both in the fall and spring term. The application deadline for spring term will be December 1 and for fall term will be July 1. The Energy and Sustainability Engineering M.Eng. admissions committee will review applications for this program and students accepted into the program will be given "provisional admission."
Students provisionally admitted to the program:
• are assigned a graduate academic advisor when admitted.
• must maintain an overall GPA of 3.0 through completion of the B.S. component of the degree to remain in the program.
• may register for graduate courses and earn graduate hours credit, with approval from their graduate academic advisor, if they have less than 12 credit hours remaining in their B.S. component.
• must earn at least 124 hours of undergraduate credit and satisfy all B.S. requirements of this program to be officially admitted to the Graduate College.*
Upon successful completion of the B.S. component, students:
• must apply and be officially admitted into the Graduate College.
• will be issued letters of admission from the Graduate College and the NPRE Department, at which time they will be considered graduate students and assessed graduate tuition the following semester.
• must satisfy the graduate student minimum residence requirement, which is 24 graduate credit hours.
• must continue to maintain a graduate GPA of 3.00 or better in order to remain in the combined program.

Withdrawal

Students may withdraw from the program at any time by notifying the Office of the Associate Dean for Undergraduate Programs. Students who do not complete both the B.S.-M.Eng. degree program requirements may request by petition to have graduate hours earned converted to undergraduate hours and applied toward the student's traditional engineering undergraduate major. Students reverting to the traditional B.S. degree program must complete 128 hours and must satisfy all degree requirements. Graduate credit not used to fulfill the B.S. degree requirements will remain on the transcript and may, at some future point, be considered for transfer to another degree program.

*The 124-hour B.S. degree from the B.S. - M.Eng. program is ABET accredited as long as the credits taken from the 128-hour B.S. degree don't reduce math and basic science below 30 credit hours, nor engineering topics below 45 credit hours, and don't include senior design if applicable.

for the joint degree of Bachelor of Science in Nuclear, Plasma & Radiological Engineering and Master of Engineering in Engineering, Energy Systems Concentration

Course Requirements

B.S. Component (124 hours):

- Same required courses as the traditional B.S. degree with the minimum hours required reduced from 128 to 124 hours.
  - The reduction of 4 credit hours is based on the utilization of 4 hours in free elective in the student's undergraduate curriculum.
- Illinois undergraduate student minimum residence requirement satisfied.
- Overall grade point average (GPA) of 3.0 maintained through completion of B.S. component of the program.

M.Eng. Component (32 additional hours of coursework)

- Identical to the current M.Eng. in Engineering with a concentration in Energy Systems (http://catalog.illinois.edu/graduate/concentrations/energy-systems-meng/). A total of 32 hours (including the shared coursework) are required.
- Satisfy Illinois' graduate student minimum residence requirement.
- Overall GPA of 3.00 must be maintained through completion of M.Eng. component of the program.

Recreation, Sport & Tourism, BS-MS

for the degrees of Bachelor of Science and Master of Science, Major in Recreation, Sport & Tourism

department website: http://rst.illinois.edu/
department faculty: Recreation, Sport, & Tourism Faculty (http://rst.illinois.edu/faculty/)
college catalog page: Applied Health Sciences (http://catalog.illinois.edu/schools/ahs/academic-units/)
college website: http://ahs.illinois.edu/

The Department of Recreation, Sport and Tourism (RST) offers an integrated and accelerated program for outstanding students that combines a bachelor's and master's degree, referred to as the 5-year BS/MS option. This option can be completed in less time than is required for the two degrees separately. The 5-year BS/MS option is designed to provide students with the academic and professional skills needed to succeed in the recreation, sport and tourism industry.
RST majors with a GPA of 3.5 are eligible to apply at the beginning of their junior year. Accepted students will then work on both degrees simultaneously and will receive both degrees at the same time, once all requirements for each have been completed. Although their degrees will not officially be awarded, students may participate in the bachelor's graduation ceremonies once they have completed the 120 credit-hour requirement for that degree.

for the degrees of Bachelor of Science and Master of Science, Major in Recreation, Sport & Tourism

Code	Title	Hours
Undergraduate Coursework		
General Education		39
RST Core		30
Electives (12 of which are restricted)		32
Concentration Requirements		9
Internship		12
Graduate Coursework		
RST 501	Concepts & Applications in Recreation, Sport & Tourism	4
RST 512	Managing Recreation, Sport & Tourism Organizations	4
RST 515	Marketing in RST	4
RST 516	Finance & Budgeting in RST	4
RST 519	Strategic Management in RST	4
Select one Option Area Course from:		4
RST 502	Critical Issues Recreation Mgt	
RST 520	Critical Issues Sport Mgt	
RST 530	Critical Issues Tourism Mgt	
Restricted Electives		12
Total Hours		158

Sustainable Design, BS and Urban Planning, MUP

For the degrees of Bachelor of Science Major in Sustainable Design and Master of Urban Planning in Urban Planning

BS department website: https://faa.illinois.edu/bachelor-science-sustainable-design (https://faa.illinois.edu/bachelor-science-sustainable-design/)
BS faculty committee: https://faa.illinois.edu/majors-minors/people (https://faa.illinois.edu/majors-minors/people/)
MUP department website: https://urban.illinois.edu
MUP department faculty: Urban & Regional Planning Faculty (https://urban.illinois.edu/people/meet-our-faculty/)
college catalog page: Fine & Applied Arts (p. 1190)
college website: https://www.faa.illinois.edu/

The five-year joint BSSD/MUP 4 + 1 program combines a B.S. in Sustainable Design with a M.U.P. in Urban Planning. Current University of Illinois at Urbana-Champaign undergraduate students enrolled in the Sustainable Design undergraduate major who have completed between 60 and 96 credit hours and maintain superior academic performance are eligible to apply for this program. Students admitted to the program will receive the B.S. degree after four years and the M.U.P. degree after one additional year.

Students interested in the BSSD/MUP 4 + 1 program will need to plan their schedules well in advance of their Junior year to ensure they have taken the appropriate course work. By judicious selection of general education courses and major electives in their sophomore and junior years, students will be prepared to apply to the 4+1 program in their junior year.

For additional details and requirements refer to the MUP department's Web site (https://urban.illinois.edu) and the Graduate College Handbook (https://grad.illinois.edu/handbooks-policies/).

For the degrees of Bachelor of Science Major in Sustainable Design and Master of Urban Planning in Urban Planning

For additional details and requirements refer to the department's Web site (https://urban.illinois.edu) and the Graduate College Handbook (https://grad.illinois.edu/handbooks-policies/).

Bachelor of Science in Sustainable Design degree requirements

Code	Title	Hours
General Education Requirements		
Composition I		4
Advanced Composition (UP 312)		3
Humanities & the Arts (ARTH 211 & 1 other)		6
Cultural Studies: Western/Comparative Culture(s)		3
Cultural Studies: Non-Western Culture(s)		3
Cultural Studies: US Minority Culture(s)		3
Natural Sciences and Technology		6
Social and Behavioral Sciences (UP 136 & UP 210 or ECON 102 or ACE 100)		6
Quantitative Reasoning I and II (UP 116 or STAT 100 & UP 316)		6
Language Other than English [1]		0-12
Total Hours (with Language requirement fulfilled, not counting UP/SD required courses)		**22**

Code	Title	Hours
Major Requirements		
Students should plan to complete all requirements prior to senior year, except for FAA 430 and FAA 431 which will be taken during senior year.		
FAA 101	Arts at Illinois	1
LA 101	Introduction to Landscape Arch	2
UP 136	Urban Sustainability (Gen Ed: Social/Behavioral Sci)	3
ARCH 171	Concepts and Theories of Architectural Design	3
ARTH 211	Design History Survey (Gen Ed: Humanities & the Arts)	3
ARTD 225	Design Drawing	3
FAA 230	Sustainable Design of the Built Environment	3
ARCH 231	Anatomy of Buildings	4
ARTD 451	Ethics of a Designer in a Global Economy	4
ARTD 326	Sustainability & Manufacturing	3
FAA 330	Making Sustainable Design	5
ARCH 273	Strategies of Architectural Design	3
FAA 430	Capstone Seminar	3
FAA 431	Capstone Studio	5
Total Hours		**45**

Code	Title	Hours
Major Electives		
All 16 hours of major electives are met with the full completion of the requirements below.		

Code	Title	Hours
UP Coursework taken prior to Senior Year		
Students who follow this program will be eligible for a minor in Urban Studies and Planning regardless of their admission to the 4+1 program		
UP 101	Introduction to City Planning	3
UP 116	Urban Informatics I (Gen Ed: Quant Reasoning I)	3
or STAT 100	Statistics	
UP 210	Environmental Economics (Gen Ed: Social/ Behavioral Sci)	3
or ECON 102	Microeconomic Principles	
or ACE 100	Introduction to Applied Microeconomics	
UP 203	Cities: Planning & Urban Life	3
or UP 204	Chicago: Planning & Urban Life	
UP 312	Communication for Planners (Gen Ed: Advanced Composition)	4
UP 316	Urban Informatics II (Gen Ed: Quant Reasoning II)	3
Pick one:		3-4
UP 405	Watershed Ecology and Planning	
UP 406	Urban Ecology	
UP 418	GIS for Planners	
UP 420	Plng for Historic Preservation	
UP 430	Urban Transportation Planning	
UP 434	Pedestrian and Bicycle Planning	
UP 456	Sustainable Planning Workshop	
UP 479	Community Engagement in Planning	
UP 486	Planning with Climate Change	
UP 494	Special Topics in Planning (section LB, Public Transportation Planning, or section SK Food Systems Planning)	
One additional course at the 400 level in the Department of Urban & Regional Planning (may also pick an additional course from pick one list above)		3

Code	Title	Hours
Senior Year Courses		
A BSSD student admitted to the 4+1 program is expected to enroll in the first year MUP core courses in their senior year, although they are not yet admitted to the MUP program. Typically, a 4+1 student will take FAA 430 & FAA 431 (3 & 5 hours), as required by the BSSD program, plus the first-year MUP core courses:		
UP 501	Planning History and Theory	4
UP 503	Physical Planning	4
UP 504	Urban History and Theory	4
UP 505	Urban and Regional Analysis	4
UP 511	Law and Planning	4

Master of Urban Planning in Urban Planning degree requirements

Code	Title	Hours
UP 510	Plan Making	4
UP 591	Capstone Seminar (enrollment required for two semesters- 0 hours total)	0
UP 598	Master's Project	8
or UP 599	Thesis Research	
Once admitted to the MUP program, a 4+1 student must take 32 hours of graduate courses, 20 of which must be UP courses. These courses include the capstone requirement and master's project or thesis. Up to two MUP core courses may be included among the 32 hours. The 32 hours of graduate courses is a minimum requirement for the MUP degree; it cannot be reduced by UP 590 **internship or course waivers.**		**32**
Minimum GPA:		3.0

Summary of Credits for the Joint BSSD/ MUP Program

Code	Title	Hours
BS in Sustainable Design [2]		**120**
General Education		22
Major Requirements		45
Major Electives		0
Additional UP Course Requirements		25
Senior Year Graduate Courses		20
MUP in Urban Planning [3]		**32**

[1] **Language Requirements**

This requirement may be satisfied by:

• Successfully completing a third-semester college-level course in a language other than English;

• Successful completion, in high school, of the third year of a language other than English; or

• Demonstrating proficiency at the third semester level in a language proficiency examination approved by the College of Liberal Arts and Sciences and the appropriate department

• Current list of courses approved to satisfy the language requirement. If you enter UIUC without three years of language other than English in high school, you must take a language placement test to determine the courses in which you should enroll

[2] **Advanced Hours Requirement:** A minimum of 40 credits at the 300 or 400 course level are required.

[3] **Minimum 500-level Hours Required Overall:** 16 (12 in UP)

Systems Engineering & Design, BS and Engineering: Energy Systems, MEng

for the joint degree of Bachelor of Science in Systems Engineering & Design and Master of Engineering in Engineering, Energy Systems Concentration

department website: https://ise.illinois.edu/
department faculty: Industrial & Enterprise Systems Faculty (https://ise.illinois.edu/directory/faculty.html)
overview of college admissions & requirements: The Grainger College of Engineering (https://grainger.illinois.edu/admissions/)
college website: https://grainger.illinois.edu/

The joint B.S.-M.Eng. in Engineering with a Concentration in Energy Systems program combines two degrees: a B.S. in select engineering undergraduate majors with the M.Eng. in Engineering with a Concentration in Energy Systems. The B.S. degree within the B.S. - M.Eng. program is accredited by the Engineering Accreditation Commission of ABET, https://www.abet.org, under the same criteria as the traditional 128 hour B.S. degree. Current Illinois students enrolled in the College of Engineering with junior standing (normally at least 90 credit hours, including those in process, and at least one year of undergraduate coursework remaining) who maintain superior academic performance are eligible to apply for this program. The program is designed to broaden a student's knowledge beyond that possible in a standard 4-year curriculum. Students admitted to the program will receive both degrees once all requirements for both the B.S.-M.Eng. degree have been successfully completed but will be permitted to participate in the B.S. degree graduation ceremonies with their class if they have completed the equivalent number of credit hours. This program is not intended for students intending to pursue a Ph.D. degree.

Admissions

For deadlines and procedures, consult the department Web site. Current Illinois Engineering students who are in their junior year (normally at least 90 credit hours, including those in progress, and at least one year of undergraduate coursework remaining) with an overall GPA of at least 3.0 and a technical GPA 3.0 may apply for provisional admission to the program.
Admission decisions are based on overall academic performance, letters of reference, and statement of purpose.
Admissions to this program will occur both in the fall and spring term. The application deadline for spring term will be December 1 and for fall term will be July 1. The Energy and Sustainability Engineering M.Eng. admissions committee will review applications for this program and students accepted into the program will be given "provisional admission."
Students provisionally admitted to the program:
• are assigned a graduate academic advisor when admitted.
• must maintain an overall GPA of 3.0 through completion of the B.S. component of the degree to remain in the program.
• may register for graduate courses and earn graduate hours credit, with approval from their graduate academic advisor, if they have less than 12 credit hours remaining in their B.S. component.
• must earn at least 124 hours of undergraduate credit and satisfy all B.S. requirements of this program to be officially admitted to the Graduate College.
Upon successful completion of the B.S. component, students:
• must apply and be officially admitted into the Graduate College.
• will be issued letters of admission from the Graduate College and the NPRE Department, at which time they will be considered graduate students and assessed graduate tuition the following semester.
• must satisfy the graduate student minimum residence requirement, which is 24 graduate credit hours.
• must continue to maintain a graduate GPA of 3.00 or better in order to remain in the combined program.

Withdrawal

Students may withdraw from the program at any time by notifying the Office of the Associate Dean for Undergraduate Programs. Students who do not complete both the B.S.-M.Eng. degree program requirements may request by petition to have graduate hours earned converted to undergraduate hours and applied toward the student's traditional engineering undergraduate major. Students reverting to the traditional B.S. degree program must complete 128 hours and must satisfy all degree requirements. Graduate credit not used to fulfill the B.S. degree requirements will remain on the transcript and may, at some future point, be considered for transfer to another degree program.

for the joint degree of Bachelor of Science in Systems Engineering & Design and Master of Engineering in Engineering, Energy Systems Concentration

Course Requirements

B.S. Component (124 hours):

- Same required courses as the traditional B.S. degree with the minimum hours required reduced from 128 to 124 hours.
  - The reduction of 4 credit hours is based on the utilization of 4 hours in free elective in the student's undergraduate curriculum.
- Illinois undergraduate student minimum residence requirement satisfied.
- Overall grade point average (GPA) of 3.0 maintained through completion of B.S. component of the program.

M.Eng. Component (32 additional hours of coursework)

- Identical to the current M.Eng. in Engineering with a concentration in Energy Systems (http://catalog.illinois.edu/graduate/concentrations/energy-systems-meng/). A total of 32 hours (including the shared coursework) are required.
- Satisfy Illinois' graduate student minimum residence requirement.
- Overall GPA of 3.00 must be maintained through completion of M.Eng. component of the program.

Urban Studies & Planning, BA & Urban Planning, MUP

For the degrees of Bachelor of Arts Major in Urban Studies & Planning and Master of Urban Planning in Urban Planning

department website: https://urban.illinois.edu
department faculty: Urban & Regional Planning Faculty (https://urban.illinois.edu/people/meet-our-faculty/)
college catalog page: Fine & Applied Arts (p. 1190)
college website: https://www.faa.illinois.edu/

The 4+1 program allows for students completing the BAUSP degree in the Department to complete the MUP on an accelerated timeline--BAUSP and MUP degrees in five years. To be eligible to participate in the 4+1program, the student should be a Junior BAUSP major with a minimum 3.5 GPA. Junior BAUSP majors who do not meet these requirements are welcome to inquire about applying to the program, but their applications will need to provide extraordinary evidence of preparedness for the MUP program in order to gain admission.

Eligible BAUSP students should submit their application packet as a single PDF document to Professor Andrew Greenlee, Director of MUP Admissions (agreen4@illinois.edu) by December 15 of their Junior year. Application packet should include a cover letter, statement of purpose, resume and work examples. Students will be notified by January 15 of their Junior year if they have been accepted into the 4+1 program.

At the end of their senior year, 4+1 students wishing to complete the MUP degree will formally apply to the MUP program, submitting a full application package including recommendations, resume and transcripts.

For the degrees of Bachelor of Arts Major in Urban Studies & Planning and Master of Urban Planning in Urban Planning

BAUSP

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
RHET 105	Writing and Research (or equivalent)	4
3-4 hours selected from:		
AAS 100	Intro Asian American Studies	
AFRO 100	Intro to African American St	
AIS 102	Contemp Issues in Ind Country	
GEOG 101	Global Development&Environment	
GEOG 104	Social and Cultural Geography	
LLS 100	Intro Latina/Latino Studies	
SOC 100	Introduction to Sociology	
ECON 102	Microeconomic Principles	3
or ACE 100	Introduction to Applied Microeconomics	
UP 116	Urban Informatics I (or equivalent)	3
or STAT 100	Statistics	
Total Hours		10

Code	Title	Hours
UP 101	Introduction to City Planning	3
UP 201	Planning in Action	3
UP 203	Cities: Planning & Urban Life (or UP 204 Chicago: Planning and Urban Life)	3
UP 312	Communication for Planners	4
UP 316	Urban Informatics II	3
Capstone Preparation: During the 3rd year, students enroll in UP 301, Capstone Preparation. Students meet individually with their capstone advisor to develop a plan to meet the capstone requirement. To pass this course students must turn in a proposal at the end of the semester.		1
Capstone Experience: Students engage in a semester or summer-long applied activity outside of the classroom. The Capstone Experience is intended to engage the students in the real world and prepare them for the job market. Students typically complete this requirement during their junior year, but have the option to complete it during the summer between their 3rd and 4th year. Examples include a paid or unpaid internship, volunteer work, consulting project with a client, summer research and more. Students enroll in UP 390, Planning Internship, and/or UP 397, Undergraduate Project, to receive credit.		3
Capstone Seminar: During the 4th year, students enroll in UP 401 for 2 semesters. Students will participate in monthly activities to discuss and reflect on the Capstone Experience. In addition. students will present a poster summarizing their capstone experience in a public setting; for example at a public engagement conference, public meeting or community meeting, McNair Scholars conference, James Scholars event, Illinois American Planning Association meeting, undergraduate research symposium, or other venue. The seminar sessions also include career development such as resume writing, interviewing and networking with professionals through the Wetmore Lecture Series.		2
Concentration (select one): Sustainability, Policy & Planning, Social Justice, or Global Cities		9-11
Total Hours		31-33

Code	Title	Hours
BAUSP Senior Year		
The MUP core courses meet the BAUSP requirements for UP electives and planning-related electives. 4+1 students are expected to enroll in the first year MUP core courses in their senior year, although they are not yet admitted to the MUP program.		
Senior Workshop (pick 1 from the following or discuss other offerings with your advisor)		4
UP 447	Land Use Planning Workshop	
UP 455	Economic Development Workshop	
UP 456	Sustainable Planning Workshop	
UP 457	Small Town/Rural Planning Workshop	
UP 478	Community Development Workshop	
UP 501	Planning History and Theory	4
UP 503	Physical Planning	4
UP 504	Urban History and Theory	4
UP 505	Urban and Regional Analysis	4
UP 511	Law and Planning	4

MUP

Code	Title	Hours
UP 510	Plan Making	4
UP 591	Capstone Seminar (enrollment required for two semesters- 0 hours total)	0
UP 598	Master's Project	8
or UP 599	Thesis Research	
Once admitted to the MUP program, a 4+1 student must take 32 hours of graduate courses, 20 of which must be UP courses. These courses include the capstone seminar and master's project or thesis. The 32 hours of graduate courses is a minimum requirement for the MUP degree; it cannot be reduced by UP 590 **internship or course waivers.**		**32**

Requirement	Description
Other MUP Requirements	
Up to two MUP core courses may be included among the 32 hours. If more core courses are needed, then correspondingly more than 32 hours will be required for the MUP degree.	
Minimum Hours Required Within the Unit:	20
Minimum 500-level Hours Required Overall:	16 (12 in UP)
Minimum GPA:	3.0

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Adult Development Minor

for the minor in Adult Development

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department website: http://hdfs.illinois.edu/
department faculty: https://hdfs.illinois.edu/directory/faculty (https://hdfs.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/undergraduate/aces/)
college website: https://aces.illinois.edu/

The Adult Development minor combines theoretical and practical approaches to understanding issues faced by adults as individuals, partners, family members, learners, caregivers, and clients of social agencies. Course work examines adults from age 25 to 90+ in the contexts of evolving family roles, health issues, and social service needs. Students anticipating careers in social or health-related services will find an understanding of adult development and its attendant issues a valuable complement to other professional skills.

The minor requires a minimum of 18 hours. Students may count three hours earned in a community-based practicum or research project related to adult development toward the minor.

Minimum required hours and supporting course work: At least six hours of advanced coursework must be distinct from credit earned for the student's major or another minor. Courses in the minor may not be taken Credit/No Credit. Students may count three hours earned in a community-based practicum or research project related to adult development toward the minor.

Minimum hours for minor: 18 hours.

Code	Title	Hours
Foundation courses		**9**
HDFS 105	Intro to Human Development	
HDFS 120	Intro to Family Studies	
HDFS 310	Adult Development [1]	
One course selected from:		
Adult roles in the family context		**3-4**
HDFS 225	Close Relationships	
HDFS 425	Family Stress and Change	
HDFS 426	Family Conflict Management	
Adult choices/challenges		**6**
Choose at least 6 hours from:		
AGED 490	Adult Learning Principles	
CMN 336	Family Communication	
CMN 368	Sexual Communication	
EPSY 407	Adult Learning and Development	
HDFS/CHLH 404	Gerontology	
PSYC 361	The Psychology of Aging	
RST 316	Human Development and Recreation, Sport and Tourism	
SOCW 240	Death & Dying	
SOCW 315	Social Work Services for Older Adults	
Credit from HDFS 294, HDFS 450, or HDFS 494 may count towards the minor as approved by the minor advisor. [2]		
Total Hours		**18-19**

[1] *HDFS majors pursuing the minor may not use this course to meet a major requirement.*

[2] *HDFS 294 - Research Internship, HDFS 450 - Practicum in HDFS, or HDFS 494-Applied Research Methods may count towards the Adult Development minor if these field/research experiences are focused on adults ages 25 - 90+. No more than 3 combined hours of HDFS 294, HDFS 450, HDFS 494 or equivalent field/research experience may be counted toward minor requirements.*

African-American Studies Interdisciplinary Minor

Interdisciplinary Minor in African-American Studies

department website: https://afro.illinois.edu/
department faculty: African American Studies Faculty (https://afro.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: afro-public@illinois.edu

The Department of African American Studies offers a campus-wide interdisciplinary minor in African American Studies. The minor is premised on the following principles: Interdisciplinarity, the centrality of Black women and gender, the use of the Global Africa/African Diaspora as a contextualizing framework and an emphasis on black agency or self-determining activity of African peoples. A minimum grade point average of 2.33 is required for completion of courses taken in the program. The Department of African American Studies must approve a student's minor course plan.

Code	Title	Hours
I. Core course requirements		
AFRO 100	Intro to African American St	3
AFRO 490	Theory in African American St	3
or AFRO 220	Intro to Research Methods AfAm	
AFRO 495	Senior Thesis Seminar	3
II. Areas of Concentration		
A. Comparitive Race, Racialized Communities & Identities. Students must take at least one course in this area. Students may choose courses from a list in the Department office.		3-4
B. Cultural Production & Cultural Movements. Students must take at least one course in this area. Students may choose courses from a list in the Department office.		3-4
C. Political Economy, Public Policy & Contemporary Issues. Students must take at least one course in this area. Students may choose courses from a list in the Department office.		3-4
Elective in any of the above areas		3
Students must take at least one course focusing on Black Women, Gender, and Sexuality Studies chosen from a list in the Department office. Students may count this course toward any of the required areas above.		
Total Hours		21

Students must not take more than 6 hours of 100-level courses. A minimum of 6 hours of 300- and 400-level courses is required.

Agricultural Safety & Health Minor

for the Minor in Agricultural Safety & Health

department website: https://abe.illinois.edu/
department faculty: https://abe.illinois.edu/directory/faculty (https://abe.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college website: https://aces.illinois.edu/

Admissions prerequisites: This minor has prerequisites of a minimum of 30 hours with a 2.5 GPA.

Code	Title	Hours
TSM 421	Ag Safety-Injury Prevention	3
TSM 422	Ag Health-Illnesses Prevention	3
TSM 425	Managing Ag Safety Risk	3
A minimum of three credit hours is required from the following courses:		3
TSM 293	Off-Campus Internship	
TSM 295	Undergrad Research or Thesis	
TSM 496	Independent Study	
A minimum of six credit hours selected from:		6
CHLH 101	Introduction to Public Health	
CHLH 244	Health Statistics	
CHLH 274	Introduction to Epidemiology	
CHLH 304	Foundations of Health Behavior	
CHLH 469	Environmental Health	
CHLH 474	Principles of Epidemiology	
CHLH 540	Health Behavior: Theory	
FSHN 480	Basic Toxicology	
HDFS 105	Intro to Human Development	
KIN 262	Motor Develop, Growth & Form	
PSYC 100	Intro Psych	
PSYC 103	Intro Experimental Psych	
PSYC 358	Human Factors	
PSYC 456	Human Performance and Cognition in Context	
Total Hours		18

American Indian Studies Minor

for the Minor in American Indian Studies

program website: http://ais.illinois.edu
program faculty: American Indian Studies Faculty (https://ais.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: ais@illinois.edu

American Indian Studies (AIS) prepares students in a range of methodologies, theories, technologies, and teaching approaches that compliments a thorough undergraduate education.

Specifically, an undergraduate minor is designed to assist students in preparing for graduate school or for careers in a variety of pursuits including public and business administration, education, public relations,

marketing, politics, and government, especially as they relate to American Indian and Native American constituencies. Career opportunities also exist in agencies such as Indian Health Services, the Bureau of Indian Affairs, and the Bureau of Land Management.

For many, AIS is an ideal minor that presents a critical and intellectual foundation for success in an increasingly challenging world.

American Indian Studies (AIS) is an interdisciplinary program with four subject areas:

1. Culture, Identity, Ethics, and Community
2. Sovereignty, Governance, and Politics
3. Literature, Language, and Performance
4. Colonialism, Decolonization, and Indigeneity

The courses chosen must form a coherent program of study and be approved by an AIS advisor.

Code	Title	Hours
Foundation Courses		
AIS 101	Intro to Amer Indian Studies	3
AIS 102	Contemp Issues in Ind Country	3
Subject Area Courses		
Students must complete 12 hours selected from 3 of the 4 subject areas.		12
Culture, Identity, Ethics, and Community		
AIS 140	Native Religious Traditions	
AIS 165	Lang & Culture Native North Am	
AIS 288	American Indians of Illinois	
Sovereignty, Governance, and Politics		
AAS 215	US Citizenship Comparatively	
HIST 277	Encounters in Native America	
HIST 278	Native American History	
AIS 280	Intro to Federal Indian Policy	
AIS 430	Indigenous Governance	
Literature, Language, and Performance		
AIS 265	Intro to American Indian Lit	
AIS 275	Am Indian and Indigenous Film	
AIS 451	Politics in Children's Lit	
AIS 459	Topics in American Indian Lit	
AIS 461	Politics of Popular Culture	
Colonialism, Decolonization, and Indigeneity		
AIS 285	Indigenous Thinkers	
AIS 481	History of American Indian Education	
Total Hours		18

Only three courses (9 hours total) at the 100-level may be counted toward the minor. Students also are required to complete two courses (6 hours) at the 300- or 400-level. These advanced course credits must be distinct from credit earned for the student's major or another minor

Animal Sciences Minor

for the Minor in Animal Sciences

department website: https://ansc.illinois.edu/
department faculty: Animal Sciences Faculty (https://ansc.illinois.edu/directory/faculty/)
college website: https://aces.illinois.edu/

The minor in Animal Sciences is designed to provide students with a basic understanding and knowledge of a discipline subject matter area of their choice. Subject matter areas include animal production and management, nutrition, genetics, animal behavior, immunology, meat science/muscle biology, microbiology, reproductive physiology, and molecular biology. Courses in the minor cannot be completed Credit/No Credit.

Code	Title	Hours
Courses Required		
ANSC 100	Intro to Animal Sciences	4
ANSC 101	Contemporary Animal Issues	3
Select two of the following:		6-7
ANSC 223	Animal Nutrition	
ANSC 224	Animal Reproduction and Growth	
ANSC 221	Cells, Metabolism and Genetics	
ANSC 222	Anatomy and Physiology	
Courses Required		
Minimum two additional 300- or 400-level ANSC courses. These courses must be distinct from the student's major or an additional minor. ANSC 398 and ANSC 499 do not count toward the minor.		6-8
Total Hours		20

Anthropology Minor

for the Minor in Anthropology

department website: https://anthro.illinois.edu/
department faculty: Anthropology Faculty (https://anthro.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: anthro@illinois.edu

The minor in anthropology may be tailored to each student's individual needs, thus accommodating students with interests as diverse as premedicine, prelaw, geography, and art history.

Code	Title	Hours
Select at least two of the following:		6
ANTH 220	Introduction to Archaeology	
ANTH 230	Sociocultural Anthropology	
ANTH 240	Biological Anthropology	
ANTH 270	Language in Culture	
Minimum of six hours of 300- or 400-level courses. Only 3 hours of ANTH 499 may be used to fulfill this requirement.		6
Anthropology courses at any level		6
Total Hours		18

Arabic Studies Minor

for the Minor in Arabic Studies

department website: https://linguistics.illinois.edu/
department faculty: Linguistics Faculty (https://linguistics.illinois.edu/directory/faculty/)
advising: Linguistics advising (https://linguistics.illinois.edu/academics/undergraduate-program/undergraduate-advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/

The minor in Arabic Studies is designed for students interested in developing an expertise in one, or more, aspect of the Arab World, as complement to their disciplinary major. Completion of the minor requires at least 18 hours in applicable courses. For advising information please visit the Linguistics advising page (https://linguistics.illinois.edu/academics/undergraduate-program/undergraduate-advising/).

Code	Title	Hours
Language requirement		6
ARAB 405	Advanced Standard Arabic I	
ARAB 406	Advanced Standard Arabic II	
Arabic Culture and Linguistics courses		6
Choose two courses from the following in consultation with the advisor: ARAB 150- Lang;Culture of Arab World OR ARAB 210: Colloquial Arabic I OR ARAB 412: Business Arabic OR a Study Abroad Equivalent (must be approved by the advisor)		
Two Interdisciplinary courses related to the Arab World (To be chosen from the following list in consultation with the advisor)		6
ARAB 407	Topics Stand Arabic Lang&Lit I	
ARAB 408	Topics Stand Arabic LangLit II	
ARAB 409	Adv Top Stand Arabic LangLit I	
ARAB 410	AdvTop Stand Arabic LangLit II	
ARAB 413	Arabic-English Translation	
CWL 205	Islam & West Through Lit	
CWL 481	Topics in Arabic Literature & Culture	
HIST 135	History of Islamic Middle East	
HIST 334	Modern Palestinian History	
HIST 335	Middle East 1566-1914	
HIST 337	Middle East Since World War I	
HIST 338	Egypt Since World War I	
PS 347	Gov & Pol of Middle East	
REL 213		
REL 214	Introduction to Islam	
REL 223	The Qur'an (Koran)	
REL 260	Mystics and Saints in Islam	
REL 403	Women in Muslim Societies	
REL 408	Islam & Politics in Mid. East	
REL 481	Muslim Ethics in Global Age	
REL 482	Muslim-Christian Interactions	
Total Hours		18

Architectural Studies Minor

for the Minor in Architectural Studies

School website: https://arch.illinois.edu/
Overview of college admissions & requirements: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
College website: https://faa.illinois.edu/
Email: architecture@illinois.edu

The minor in Architectural Studies allows non-architecture undergraduate students to gain an overview of architecture by taking a series of required courses in architecture. This is the only undergraduate minor offered by the School of Architecture.

Course Requirements

The architecture minor requires the successful completion of a minimum of 19 hours of architecture courses. Students entering the program with advanced credit for required courses must take courses from the Additional Courses list to attain the total hours needed for completion of the minor. All students in the minor must have at least 6 hours of 300- or 400-level courses. ARCH 231 and ARCH 273 must be taken concurrently.

Code	Title	Hours
Required Courses		
ARCH 171	Concepts and Theories of Architectural Design	3
ARCH 210	Introduction to the History of World Architecture	3
ARCH 231	Anatomy of Buildings	4
ARCH 273	Strategies of Architectural Design	3
Elective courses: Must choose six credit hours minimum from the following:		
ARCH 321	Environment, Architecture, and Global Health	
ARCH 434	Environmental Control Systems I	
ARCH 314	History of World Landscapes	
ARCH 402	Introduction to the History of Architectural Theory	
ARCH 403	Special Topics in Architectural History	
ARCH 407	Rome: City of Visible History	
ARCH 410	Ancient Egyptian & Greek Arch	
ARCH 411	Ancient Roman Architecture	
ARCH 412	Medieval Architecture	
ARCH 413	Renaissance Architecture	
ARCH 414	Baroque & Rococo Arch	
ARCH 415	Modernity's Mirror: Nineteenth-Century Architecture 1750-1900	
ARCH 416	The Architecture of the United States, c.1650 to Present	
ARCH 417	Modern and Contemporary Global Architecture	
ARCH 418	History of the Urban Environment	

Total credit hours required for Architectural Studies Minor: 19 minimum

Prerequisites

Students must comply with the prerequisite requirements of courses to be taken under this program. Some of these requirements may be satisfied while in the program.

Admission

Admission to the minor will be processed by the School of Architecture Undergraduate Programs Office. Students may enter the Minor in Architectural Studies from sophomore year until such time that allows the completion of the minor before graduating in their major area of study.

Advising

Advising of students in the minor will be conducted by the advisors in the Undergraduate Programs Office of the School of Architecture.

Certification of Successful Completion

The Associate Dean for Undergraduate Academic Affairs in the College of Fine and Applied Arts (FAA) will certify successful completion of the minor.

Students must declare their intentions in the spring and be admitted to the program for the fall to pursue the Minor in Architectural Studies.

Art & Design Minor

for the minor in Art & Design

minor office: 129 Art and Design Building, Champaign, IL 61820
minor advisor: Guen Montgomery
email: montgo@illinois.edu
phone: (217) 333-0855

school website: School of Art & Design (https://art.illinois.edu/)
school faculty: Art & Design Faculty (https://art.illinois.edu/index.php/people/faculty-staff/)
overview of college admissions & requirements: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: Fine & Applied Arts (https://faa.illinois.edu/)

The Art and Design Minor provides students with the opportunity to integrate creative art and design practices with other academic or research pursuits. Students selecting the Art and Design Minor do not necessarily wish to pursue a career as a practicing artist or designer, but do want the chance to work creatively in the visual arts and design, and develop related skills. Students can choose to focus on one particular art form (e.g., photography) or a variety of different media (e.g., photography, typography, and ceramics).

Applicants for admission to the Minor in Art+Design should submit a personal essay explaining their interest in art and design to the Minor Advisor. A minimum cumulative GPA of 2.00 is required.

Course Requirements

Students must meet the following course requirements for a total of 18 hours.

Students will be required to have passed one of the approved courses for non-majors (ART 102-105, 140) for entry into the Minor.

Code	Title	Hours
Distribution of Courses		
A minimum of 2 courses from the academic course menu. Academic courses include: ART 100, ART 140, ARTE 260, ARTE 475, ARTE 480, ARTH 110 or any 100, 200, 300, or 400 level ARTH course. [1]		6
A minimum of 3 courses from the studio course menu. Studio courses include: ART (except 100, 140), ARTD, ARTE (except 260, 475, 480), ARTF, and ARTS courses. [2]		9
At least 1 additional course in either an academic or studio course menu.		3
A minimum of six hours must be completed at the 300 or 400 level.		
Total Hours		18

[1] At least one of these courses must be chosen from the following: ARTH 110, ART 100 or ART 140.

[2] High demand Industrial Design and Graphic Design courses are typically not available to minors.

Art History Minor

for the minor in Art History

minor office: 140 Art and Design Building, Champaign, IL 61820
minor advisor: Bryan VanGinhoven
email: bvanginh@illinois.edu
phone: (217) 300-2520

school website: School of Art & Design (https://art.illinois.edu/)
school faculty: Art & Design Faculty (https://art.illinois.edu/index.php/people/faculty-staff/)
overview of college admissions & requirements: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: Fine & Applied Arts (https://faa.illinois.edu/)

The minor in art history is designed for students who seek to study art history in depth as a compliment to their major area of study. The minor provides students with an education in art history that is balanced and diverse culturally, temporally, and geographically. It allows students to choose from a variety of introductory courses that cover a variety of regions, cultures, and periods.

Minimum required major and supporting course work: Students must meet the following course requirements for a total of 18 hours

Code	Title	Hours
A maximum of one course from other universities will satisfy the requirements for upper-level Art History courses.		
ARTH 110	Introduction to the History of Art and Visual Culture	3
Select one course below, which focuses on a subject outside of Europe and the Modern Americas		3
ARCH 222	Islamic Gardens & Architecture	
LA 218	S Asian Cultural Landscapes	
LA 220	Exploring African Cities	
LA 222	Islamic Gardens & Architecture	

ARTH 342	Arts of Colonial Latin America	
ARTH 402	Ways of Seeing in Edo Japan	
ARTH 403	Word and Image in Chinese Art	
Other courses may be approved in consultation with the minor advisor.		
Additional ARTH courses at the 200, 300 or 400 level		6
Additional ARTH courses at the 300 or 400 level		3
At least 6 hours of the minor must be advanced (300 or 400) level courses.		
ARTH 400-level designated seminar course		3
Total credits required for Art History Minor: 18		

Code	Title	Hours
A maximum of one course from either section below at UIUC will count toward the requirements of the Art History Minor		
History of Architecture courses		
ARCH 222	Islamic Gardens & Architecture	3
ARCH 314	History of World Landscapes	4
ARCH 402	Introduction to the History of Architectural Theory	3
ARCH 412	Medieval Architecture	3
ARCH 413	Renaissance Architecture	3
ARCH 414	Baroque & Rococo Arch	3
ARCH 415	Modernity's Mirror: Nineteenth-Century Architecture 1750-1900	3
ARCH 416	The Architecture of the United States, c.1650 to Present	3
ARCH 417	Modern and Contemporary Global Architecture	3
History of Landscape Architecture courses		
LA 218	S Asian Cultural Landscapes	3
LA 220	Exploring African Cities	3
LA 222	Islamic Gardens & Architecture	3
LA 242	Nature and American Culture	3
LA 314	History of World Landscapes	4
LA 315	History of Modern Landscape Architecture	3

Asian American Studies Interdisciplinary Minor

for the Interdisciplinary Minor in Asian American Studies

department website: http://www.asianam.illinois.edu/
department faculty: Asian American Studies Faculty (http://www.asianam.illinois.edu/people/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: aas@illinois.edu

The Asian American Studies Department offers a campus-wide Interdisciplinary Minor. This minor represents a coherent program for students who wish to deepen their study of Asian American histories, experiences, contemporary issues and social problems as a part of their liberal education and understanding of race and diversity in the United States and transnationally. It is relevant to curricula such as letters and sciences, business, economics, education, health studies, pre-law, social work, or urban and regional planning.

Code	Title	Hours
AAS 100	Intro Asian American Studies	3
Asian American Studies Core Coursework		
AAS 200	U.S. Race and Empire	3
AAS 215	US Citizenship Comparatively	3
AAS 300	Theories of Race, Gender, and Sexuality	3
Approved Electives		**6**
Students complete 6 hours of AAS coursework (a minimum of 3 hours must be at the 300- or 400-level)		
Total Hours		18

Astronomy Minor

for the Minor in Astronomy

department website: https://astro.illinois.edu/
department faculty: Astronomy Faculty (https://astro.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: astronomy@illinois.edu

The minor in astronomy is designed to broaden the student's knowledge of science and our place in the universe. The minor in Astronomy will benefit especially those students who are eager to learn astronomy but who do not anticipate it to be their career. The Astronomy minor is also suitable for students who intend to pursue careers in areas that may benefit from a good knowledge of astronomy such as aerospace industry, science writing, scientific journalism, or science teaching in schools.

Code	Title	Hours
Basic Astronomy		
Select one of the following:		3-6
ASTR 100	Introduction to Astronomy [1]	
ASTR 121 & ASTR 122	Solar System and Worlds Beyond and Stars and Galaxies [1]	
ASTR 210	Introduction to Astrophysics	
Advanced Astronomy		
300- or 400-level courses taught by the Department of Astronomy [2]		9
Courses at any level taught by the Department of Astronomy [2]		3-6
Minimum total hours		**18**

[1] *Credit not granted for both* ASTR 100 *and the* ASTR 121/ASTR 122 *sequence.*

[2] *No more than 4 hours of* ASTR 390 *will be counted towards the minor.*

Atmospheric Sciences Minor

Minor in Atmospheric Sciences

department website: https://atmos.illinois.edu/
department faculty: Atmospheric Sciences Faculty (https://atmos.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: atmos-sci@illinois.edu

The minor in Atmospheric Sciences is designed for students who desire a significant background in Atmospheric Sciences to support work in their major field. This minor will especially benefit students who choose to pursue careers in environmental areas in which multidisciplinary background is essential. The Atmospheric Science minor can complement majors in engineering and agriculture; or scientific pursuits such as chemistry, physics, biology, and scientific writing.

Code	Title	Hours
Choose from the following:		0-6
ATMS 100	Introduction to Meteorology	
ATMS 120	Severe and Hazardous Weather	
ATMS 140	Climate and Global Change	
ATMS 201	General Physical Meteorology	
300- and 400-level courses from the approved course list. Please see the Atmospheric Sciences advisor for a current list.		12-18
Total Hours		18

Bioengineering Minor

for the Minor in Bioengineering

College: The Grainger College of Engineering (https://grainger.illinois.edu/)
webpage: Bioengineering Minor (https://bioengineering.illinois.edu/academics/undergraduate/minors/)

Bioengineering is a broad, interdisciplinary field that brings together engineering, biology, and medicine to create new techniques, devices, and understanding of living systems to improve the quality of human life. Its practice ranges from the fundamental study of the behavior of biological materials at the molecular level to the design of medical devices to help the disabled.

Any of the existing engineering programs can provide a good foundation for work in bioengineering. However, the engineering undergraduate needs additional education in the biologically oriented sciences to obtain a strong background for bioengineering. With such a background, the student should be able to progress rapidly on the graduate level in any branch of bioengineering. In industry, the graduate will be competent to handle engineering tasks related to biology.

For students pursuing the Bioengineering Minor from non-engineering backgrounds, please note that upper level electives may have engineering courses as prerequisites and these, and any subsequent prerequisite courses, are required for anyone taking the course.

Students may fulfill the requirements for a minor in bioengineering by completing the following course sequence. Engineering students who are proficient in biology may waive MCB 150 as a prerequisite for courses in this minor.

Code	Title	Hours
BIOE 120	Introduction to Bioengineering	1
BIOE 414	Biomedical Instrumentation	3
or CHBE 472	Techniques in Biomolecular Eng	
CHEM 232	Elementary Organic Chemistry I	3
MCB 244	Human Anatomy & Physiology I	3
MCB 246	Human Anatomy & Physiology II	3
or MCB 250	Molecular Genetics	
MCB 252	Cells, Tissues & Development	3
MCB 253	Exp Techniqs in Cellular Biol	2
Bioengineering Related Technical Electives. See list below:		3
BIOE 414	Biomedical Instrumentation	3
CHBE 472	Techniques in Biomolecular Eng	3
BIOE 480	Magnetic Resonance Imaging	3
CHBE 471	Biochemical Engineering	3
CHBE 473	Biomolecular Engineering	3
CHBE 474	Metabolic Engineering	3
ECE 473	Fund of Engrg Acoustics	3
MCB 400	Cancer Cell Biology	3
MCB 450	Introductory Biochemistry	3
MSE 470	Design and Use of Biomaterials	3
TAM 461	Cellular Biomechanics	4
Other Department Specialities related to Bioengineering (taken as electives)		3 to 4

For more information regarding the Bioengineering minor, visit the Bioengineering minor Web site (http://bioengineering.illinois.edu/undergraduate-programs/undergraduate-minor/bioengineering-minor-engineering-students/), contact the Bioengineering Department Office (1240 Everitt Lab, 217-300-8066, bioe-ugradprograms@illinois.edu, (bioe-ugradprograms@illinois.edu)or visit the Office of the Associate Dean for Undergraduate Programs, 206 Engineering Hall.

Biomolecular Engineering Minor

for the Minor in Biomolecular Engineering

department website: https://chbe.illinois.edu/
department faculty: Chemical & Biomolecular Engineering Faculty (http://chbe.illinois.edu/directory/)
advising: SCS Academic Advising (https://scs.illinois.edu/academics/advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/

Biomolecular Engineering is a broad, interdisciplinary field with its main goal of engineering value-added biomolecules and biomolecular systems for applications in medical, chemical, agricultural and food industries. Its practice ranges from fundamental study of biomolecules and biomolecular systems to the design of cellular factories and artificial organs. The Biomolecular Engineering minor is designed to better prepare non-chemical engineering students for careers in the food, pharmaceutical, personal care, and biotechnology industries. This minor is not open to students majoring in chemical engineering. Those students

should instead take the biomolecular engineering concentration if they are interested in biomolecular engineering coursework.

Students may fulfill the requirements for a minor in biomolecular engineering by completing the following course sequence. For further information, please contact the Department of Chemical and Biomolecular Engineering.

Code	Title	Hours
MCB 450	Introductory Biochemistry	3
CHBE 221	Principles of CHE	3
CHEM 232	Elementary Organic Chemistry I	3
Biomolecular Engineering Electives [1]		9
Technical Electives [2]		3
Total Hours		21

[1] *Students must take at least three "Biomolecular Engineering" courses offered by the Department of Chemical and Biomolecular Engineering (for example, including* CHBE 471*,* CHBE 472*,* CHBE 473*, and* CHBE 474*). Students may obtain a current list of courses that may be used to satisfy this requirement in Room 99 RAL.*

[2] *Course to be selected from a departmentally approved list of biomolecular engineering related technical electives.*

For more information regarding to the Biomolecular Engineering minor, contact the Chemical and Biomolecular Engineering Department Office, 114 Roger Adams Laboratory, (217) 244-2021, chbe-advising@scs.illinois.edu.

Business Minor for Non-Business Majors

for the Minor in Business for Non-Business Majors

department catalog page: Gies College of Business (http://catalog.illinois.edu/schools/gies-business/academic-units/)
department website: U (https://www.business.illinois.edu/ba/)ndergraduate Programs (https://giesbusiness.illinois.edu/programs/undergraduate/)
department faculty: G (https://business.illinois.edu/ba/directories/all-faculty/)ies College of Business faculty (https://giesbusiness.illinois.edu/faculty-research/faculty-profiles/)
minor email: busminor@business.illinois.edu
overview of business minor admissions & requirements: Business Minor website (https://business.illinois.edu/minor/)
college website: Gies College of Business (https://www.las.illinois.edu/)

Please refer to the Business Minor website (https://business.illinois.edu/minor/) for further information.

The Business Minor is for students earning undergraduate degrees in colleges other than the Gies College of Business. The Business Minor provides coursework through which Non-Business students learn skills used in business. The Business Minor is not available to Gies College students and Technology and Management Minor students. The Business Minor is not to be considered as preparation for transfer into the Gies College to earn an undergraduate Business degree.

To declare their Business Minors, Non-Business students must submit their Statement of Intent to Pursue a Campus-Approved Minor (http://provost.illinois.edu/files/2017/01/Intent-to-Pursue-Minor.pdf) (Statements) to 1055 Business Instructional Facility (BIF) at any time.

1. Please note that not every Business Minor course will be offered every Fall and Spring Semesters, Winter Term and Summer Sessions. Students must select judiciously and enroll in the Business Minor courses when they are offered throughout any academic year.
2. Business Minor Students and Prospective Business Minor Students must register for the online sections of all Minor courses if online sections are offered.
3. Business Minor course enrollment instructions are noted in the fall and spring semesters, winter term, and summer session Class Schedule course's Section Detail & Information in Course Explorer. Students must complete all Business Minor course prerequisites. Students who have not completed a Minor course's prerequisite will have their enrollment canceled in that specific course by the academic departments.
4. A minimum number of off-campus transfer courses will be permitted to fulfill the Minor Core and Elective Course Requirements. You should use the Transferology Program to confirm the off-campus course's transferability to fulfill the Minor requirements. You may confirm with the Business Minor Program if a proposed off-campus course will fulfill the Minor requirements.
5. Courses taken through a University of Illinois's Study Abroad Programs will fulfill the Business Minor Core and Elective Course Requirements. These requirements are fulfilled only if the course taken exactly matches course articulations of the Gies Business course. For example, the study abroad exact equivalent course to our campus's BADM 380 course is an acceptable Business Minor Elective course. Study Abroad BADM 3- - and BADM 4- - courses will not fulfill the Minor's Core and Elective Course Requirements. In addition, Minor Core and Elective Course Requirements are not fulfilled with study abroad courses in Finance, Information Systems, Operations Management, Management, Marketing, and Supply Chain Management.

The Minor is designed to be completed within three academic years. The Gies College cannot guarantee Minor completion.

Contact busminor@business.illinois.edu to address academic questions.

Minimum required Minor and supporting course work: All six Business Minor courses must be earned with Letter Grades. Sophomore standing required to enroll in the four Core Courses. For all Business Minor courses for which online delivery is available, students pursuing the Minor *must enroll* in the online sections.

Code	Title	Hours
Core Courses Requirement		**12**
ACCY 200	Fundamentals of Accounting	3
OR		
ACCY 201 & ACCY 202	Accounting and Accountancy I and Accounting and Accountancy II	
BADM 310	Mgmt and Organizational Beh	3
BADM 320	Principles of Marketing	3
FIN 221	Corporate Finance [1]	3
Elective Courses Requirement	**Choose ONLY 2 from the following**	**6**
BADM 300	The Legal Environment of Bus	

BADM 311	Leading Individuals and Teams
BADM 312	Designing and Managing Orgs
BADM 313	Strategic Human Resource Management
BADM 314	Leading Negotiations
BADM 323	Marketing Communications
BADM 326	Pricing Strategy
BADM 340	Ethical Dilemmas of Business
BADM 350	IT for Networked Organizations
BADM 375	Operations Strategy
BADM 380	International Business
BADM 381	Multinational Management
FIN 230	Introduction to Insurance

Other Requirements

Requirement	Description
Minimum 300- or 400- level credit hours	6
Minimum of six hours of coursework must be distinct from credits earned for the student's major or another minor.	6
Minimum GPA to earn the minor.	2.00

[1] ECON 102 or ECON 103 is the prerequisite.

Chemistry Minor

for minor in Chemistry

department website: https://chemistry.illinois.edu
department faculty: Chemistry Faculty (https://chemistry.illinois.edu/directory/faculty-by-type/)
advising: SCS Academic Advising (http://advising.scs.illinois.edu/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/

Code	Title	Hours
Choose one group of Chemistry courses below		8-10
CHEM 102	General Chemistry I	
CHEM 103	General Chemistry Lab I	
CHEM 104	General Chemistry II	
CHEM 105	General Chemistry Lab II	
or		
CHEM 202	Accelerated Chemistry I	
CHEM 203	Accelerated Chemistry Lab I	
CHEM 204	Accelerated Chemistry II	
CHEM 205	Accelerated Chemistry Lab II	
CHEM 232	Elementary Organic Chemistry I	3 or 4
or CHEM 236	Fundamental Organic Chem I	
CHEM 233	Elementary Organic Chem Lab I	2
or CHEM 237	Structure and Synthesis	
Choose two 3-4 credit hour courses from the List of Advanced Courses Approved for Chemistry Minor Credit (300- and 400-level Chemistry courses, not research or independent study, 3 hours credit or more). The two courses to be taken should be from different subdisciplines of Chemistry. [1]		6-8
Total Hours		19-24

[1] *The following courses may not be used to complete the minor:* CHEM 492, CHEM 495.

Cinema Studies Undergraduate Minor

for the Minor in Cinema Studies - Undergraduate

department website: https://media.illinois.edu/media-cinema-studies (https://media.illinois.edu/media-cinema-studies/)
department faculty: https://media.illinois.edu/media-cinema-studies/faculty (https://media.illinois.edu/media-cinema-studies/faculty/)
overview of college admissions & requirements: College of Media (p. 1198)
college website: https://media.illinois.edu/

The Cinema Studies minor provides undergraduate students with core coursework in the film studies discipline while also allowing them freedom to explore various approaches to the subject, presented by world-class Media & Cinema Studies department faculty as well as film scholars throughout campus.

Students pursuing the Cinema Studies minor will take coursework that is core to the discipline with themes including contemporary movies, surveys of world cinema, and film theory and criticism. Students will take at least one course related to either non-U.S. cinema or about identity, culture, and politics within the United States as it interfaces with film.

Programs in Cinema Studies

Undergraduate Programs:
- **major:** Media & Cinema Studies, BS (p. 301)
- **minors:** Cinema Studies (p. 484) | Critical Film Production (p. 489) | Media (p. 513)

Graduate Programs:
- **minor:** Cinema Studies (p. 1128)

Minor in Cinema Studies - Undergraduate

Students are expected to complete 18 hours of approved Cinema Studies minor coursework, of which 6 hours must be at the 300- or 400-level. At least 3 hours of 300- or 400-level coursework must be offered by or cross-listed with the Department of Media & Cinema Studies (MACS), other than those used to fulfill the requirements below.

Code	Title	Hours
Required Courses		**12**
MACS 203	Contemporary Movies	3
MACS 261	Survey of World Cinema I	3
MACS 262	Survey of World Cinema II	3
MACS 361	Film Theory and Criticism	3
Select one course from EITHER Non-US Cinema OR Identity Culture and Politics		**3**

Non-US Cinema (Contact department for complete list)	
MACS 207	Indian Cinema in Context
MACS 382	French & Comparative Cinema I
MACS 383	French & Comparative Cinema II
MACS 419	Russian & East European Film
MACS 466	Japanese Cinema
MACS 470	Topics in Italian Cinema
MACS 490	Green Screen: Film and Nature
MACS 493	German Cinema I
ANTH 266	African Film and Society
ITAL 270	Introduction to Italian Cinema
Identity Culture and Politics (Contact department for complete list)	
MACS 205	Introduction to Documentary
MACS 211	Intro to African-American Film
MACS 250	Latina/os on the Bronze Screen
MACS 275	Am Indian and Indigenous Film
MACS 335	Film, TV, and Gender
MACS 356	Sex & Gender in Popular Media
MACS 365	Asian American Media and Film
MACS 375	Latina/o Media in the US
MACS 381	Black Women and Film
MACS 432	Commodifying Difference
MACS 461	Politics of Popular Culture
MDIA 223	Watching the Environment
MDIA 380	
ENGL 272	Minority Images in Amer Film
Select one additional course (300-level or above) on film offered by or cross-listed with MACS, other than those used to fulfill the requirements above	**3**

Classical Civilizations Minor

for the Undergraduate Minor in Classical Civilizations

department website: http://www.classics.illinois.edu/
department faculty: Classics Faculty (https://classics.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: classics@illinois.edu

This minor is sponsored by the Department of the Classics. The department also sponsors a minor in Classical Languages (p. 485).

Code	Title	Hours
18 hours in classical civilization or archaeology courses at the level of 114 and above. A maximum of 6 hours is allowed at the 100-level. At least 6 of these hours must be at the advanced (300 or 400) level. Choose courses from the following, in consultation with the Department of the Classics Director of Undergraduate Studies.		18
CLCV 114	Introduction to Greek Culture	
CLCV 115	Mythology of Greece and Rome	
CLCV 116	The Roman Achievement	
CLCV 120	The Classical Tradition	
CLCV 131	Classical Archaeology, Greece	
CLCV 132	Class Archaeology, Rome-Italy	
CLCV 133	Archaeology of Israel	
CLCV 160	Ancient Greek & Roman Religion	
CLCV 206	Classical Allusions in Cinema	
CLCV 220	Origins of Western Literature	
CLCV 221	Odysseus and Other Heroes	
CLCV 222	Introduction to Greek and Roman Theater	
CLCV 223	Myth,History,Fiction,Tradition	
CLCV 224	American Race and Ethnicity in the Classical Tradition	
CLCV 225	Greco-Roman Demo, Econ, Cult	
CLCV 230	Ancient Engineering	
CLCV 231	Development of Ancient Cities	
CLCV 232	Ancient Greek Sanctuaries	
CLCV 240	Gender & Sexuality in Greco-Roman Antiquity	
CLCV 323	The Comic Imagination	
CLCV 443	The Archaeology of Greece	
CLCV 444	The Archaeology of Italy	
CLCV 490	Topics in Classical Literature	
CLCV 491	Topics Classic Arch & Civ	
Total Hours		18

Classical Languages Minor

for the Undergraduate Minor in Classical Languages

department website: http://www.classics.illinois.edu/
department faculty: Classics Faculty (https://classics.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: classics@illinois.edu

This minor is sponsored by the Department of the Classics. The department also sponsors a minor in Classical Civilizations (p. 485).

Ancient Greek Track

GRK 101, Elementary Greek I, is a prerequisite for subsequent GRK courses and does not count toward the 18 hours for the minor.

Code	Title	Hours
Ancient Greek Track		Hours
GRK 102	Elementary Greek II	4
GRK 201	Classical & Koine Greek I	4
GRK 202	Classical & Koine Greek II	4
6 hours in GRK courses at the 400-level, chosen from the following:		6
GRK 401	Survey of Greek Literature	
GRK 411	Greek Prose Composition	
GRK 491	Readings in Greek Literature	

GRK 493	Independent Reading	
Total Hours		18

Modern Greek Track

GRKM 201 Elementary Modern Greek I (prerequisite for subsequent GRK courses; does not count toward the 18 hours)

Code	Title	Hours
Modern Greek Track		Hours
GRKM 202	Elementary Modern Greek II	5
GRKM 403	Intermediate Modern Greek I	4
GRKM 404	Intermediate Modern Greek II	4
5 hours in GRK courses at the 400-level chosen from the following:		5
GRK 491	Readings in Greek Literature	
GRK 493	Independent Reading	
Total Hours		18

Latin Track

LAT 101, Elementary Latin I is a prerequisite for subsequent Latin courses and does not count toward 18 hours for the minor.

Code	Title	Hours
Latin Track		Hours
LAT 102	Elementary Latin II	4
LAT 201	Intermediate Latin	4
LAT 202	Intro to Latin Literature	4
6 hours in Latin courses at the 400-level from the following:		6
LAT 401	Survey of Latin Literature	
LAT 411	Intermediate Prose Composition	
LAT 460	Medieval Latin	
LAT 491	Readings in Latin Literature	
LAT 493	Independent Reading	
Total Hours		18

Communication Minor

for the Minor in Communication

department website: https://communication.illinois.edu/
department faculty: Communication Faculty (https://communication.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: communication@illinois.edu

The undergraduate minor in Communication is designed for students who wish to obtain a deeper understanding of communication processes and how they influence social, cultural, and political processes. It is appropriate for students majoring in a variety of disciplines in the social sciences or humanities and for students in professionally-oriented programs.

Code	Title	Hours
CMN 101	Public Speaking [1]	3
or CMN 112	Oral & Written Comm II	
CMN 102	Introduction to Communication	4
At least one course from each of two areas of specialization within the Department of Communication (Communication and Culture, Communication and Health, Communication and Organizations, Interpersonal Communication, Mediated Communication and Technology, and Rhetoric and Public Communication). These courses must be numbered at the 200-level or above. A list of courses is available from the Communication undergraduate advisor.		6
Additional hours in Communication. These courses must be numbered at the 200-level or above.		6
Total Hours		19

[1] CMN 111 *is a prerequisite for* CMN 112. *Credit in* CMN 111 *will not count towards the 19 hours of Communication courses required for the minor.*

At least 6 hours must be at the 300-level or 400-level.

Community-Based Art Education Minor

for the minor in Community-Based Art Education

minor office: 129 Art and Design Building, Champaign, IL 61820
minor advisor: Jennifer Bergmark
email: bergmar1 (bergmar1@illinois.edu)@illinois.edu (mavery@illinois.edu)
phone: (217) 244-7467

school website: School of Art & Design (https://art.illinois.edu/)
school faculty: Art & Design Faculty (https://art.illinois.edu/index.php/people/faculty-staff/)
overview of college admissions & requirements: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: Fine & Applied Arts (https://faa.illinois.edu/)

The Community-Based Art Education Minor is designed for students who seek to study the role of the visual arts in a variety of locations including cultural centers, museums, hospitals, nursing homes, adult day care centers, schools, recreation centers, and other community settings. In addition to the completion of the required art education foundation courses, students choose electives in art education, art history, design, and art studio. Throughout their course of study, students will engage Art Education as it meets the challenges of the 21st century, including emerging technologies, new social formations, and new forms of cultural expression.

This minor does not lead to Illinois State Board of Education K-12 certification to teach art.

Minimum required major and supporting course work: Students must meet the following course requirements for a total of 18 hours. A minimum of six hours must be completed at the 300 or 400 level.

Code	Title	Hours
ARTE 201	Foundations of Art Education	3
ARTE 202	Facilitating the Art Experience	3
Electives from Art Education Division Offerings		
Select 6 to 12 hours from the following:		6-12
ART 140	Introduction to Art	
ARTE 260	Museums in Action	
ARTE 402	Artistic Development	
ARTE 480	Popular Visual Culture	
Electives from the School of Art and Design in the following areas: ART, ARTD, ARTE, ARTH, ARTS		0-6
Total Hours		18

Computational Science & Engineering Minor

for the Minor in Computational Science & Engineering

College: The Grainger College of Engineering (https://grainger.illinois.edu/)
webpage: Computational Science & Engineering Minor (https://cse.illinois.edu/cse-educational-programs/undergraduate-minor/)

Code	Title	Hours
Core Courses		**9**
Programming		
CS 101	Intro Computing: Engrg & Sci	3
CS 125	Introduction to Computer Science	4
CS 225	Data Structures	4
ECE 220	Computer Systems & Programming	4
LING 402	Tools & Tech Spch & Lang Proc	3
Applied Math		
ECE 493	Advanced Engineering Math	3 or 4
MATH 441	Differential Equations	3 or 4
or MATH 442	Intro Partial Diff Equations	
or MATH 489	Dynamics & Differential Eqns	
MATH 415	Applied Linear Algebra	3 or 4
MATH 444	Elementary Real Analysis	3 or 4
or MATH 447	Real Variables	
MATH 446	Applied Complex Variables	3 or 4
or MATH 448	Complex Variables	
MATH 482	Linear Programming	3 or 4
or MATH 484	Nonlinear Programming	
STAT 408	Actuarial Statistics I	4
or STAT 409	Actuarial Statistics II	
or STAT 410	Statistics and Probability II	
or STAT 420	Methods of Applied Statistics	
or STAT 430	Topics in Applied Statistics	
or MATH 461	Probability Theory	
Computational Methods		
CS 411	Database Systems	3 or 4
CS 450	Numerical Analysis	3 or 4
or CSE 401	Numerical Analysis	
CS 466	Introduction to Bioinformatics	3 or 4
ECE 448	Artificial Intelligence	3 or 4
GEOG 489	Programming for GIS	4
LING 402	Tools & Tech Spch & Lang Proc	3
STAT 440	Statistical Data Management	3 or 4
TAM 470	Computational Mechanics	3 or 4
or CSE 450	Computational Mechanics	
Application Coursework/Computing Elective		**9**
OPTION 1		
Three 400-level CSE courses; see list below:		
Core Courses:		
CSE 401	Numerical Analysis	3 or 4
CSE 402	Parallel Progrmg: Sci & Engrg	3 or 4
CSE 408	Applied Parallel Programming	4
CSE 510	Numerical Methods for PDEs	4
CSE 527	Scientific Visualization	4
Computing Electives. Courses below are topically organized and are cross listed with many departments. Double counting from Core courses and application courses is not allowed. Choose Option 1 or Option 2 below.		
Option 1		
Biological, Chemical and Atmospheric Sciences:		
CHEM 576	Computational Chemical Biology	4
CS 466	Introduction to Bioinformatics	3 or 4
CEE 534	Surface Water Quality Modeling	4
CEE 557	Groundwater Modeling	4
CSE 566	Numerical Fluid Dynamics	4
CHEM 550	Advanced Quantum Dynamics	4
Computer Software, Hardware and Graphics		
CSE 402	Parallel Progrmg: Sci & Engrg	3 or 4
CSE 422	Computer System Organization	3 or 4
CSE 423	Operating Systems Design	3 or 4
CSE 426	Software Engineering I	3 or 4
CSE 427	Interactive Computer Graphics	3 or 4
CSE 429	Software Engineering II	3 or 4
CSE 521	Computer Architecture	4
CSE 522	Parallel Computer Architecture	4
CSE 527	Scientific Visualization	4
Electronics and Electromagnetics:		
CSE 530	Computational Electromagnetics	4
CSE 532	Numerical Circuit Analysis	4
Fluid Mechanics		
CSE 450	Computational Mechanics	3 or 4
CSE 461	Computational Aerodynamics	3 or 4
CSE 560	Computational Fluid Mechanics	4
CSE 561		
CSE 566	Numerical Fluid Dynamics	4
CSE 412	Numerical Thermo-Fluid Mechs	2 to 4
Numerical Computing:		
CSE 401	Numerical Analysis	3 or 4

CSE 414	Algorithms	4
CSE 441	Introduction to Optimization	3 or 4
CSE 510	Numerical Methods for PDEs	4
CSE 511	Iterative & Multigrid Methods	4
CSE 512	Parallel Numerical Algorithms	4
CSE 513	Topics in Numerical Analysis	4
CSE 515	Algorithms	4
CS 598	Special Topics (Integral Equation and Fast Algorithms)	2 to 4
CSE 517	Adv Finite Element Methods	4
CSE 553	Computational Inelasticity	4
Other Related Fields:		
TAM 598	Advanced Special Topics (Uncertainty Quantification)	1 to 4
CS 598	Special Topics (Integeral Equations and Fast Methods)	2 to 4
CEE 528	Construction Data Modeling	4
ASTR 510	Computational Astrophysics	4
Physics and Materials Science:		
CSE 485	Atomic Scale Simulations	3 or 4
MSE 498	Special Topics (Atomic Scale Simulations)	1 to 4
AE 598	Special Topics (Mult-scale Modeling of Materials)	1 to 4
Power Systems, Control and Signal and Image Processing:		
CSE 441	Introduction to Optimization	3 or 4
CSE 543	Topics in Image Processing	4
ECE 513	Vector Space Signal Processing	4
ECE 558	Digital Imaging	4
Solid Mechanics:		
CSE 450	Computational Mechanics	3 or 4
CSE 451	Finite Element Analysis	3 or 4
CSE 517	Adv Finite Element Methods	4
CSE 551	Finite Element Methods	4
CSE 552	Nonlinear Finite Elements	4
ME 570	Nonlinear Solid Mech Design	4
TAM 598	Advanced Special Topics (Computational Nonlinear Dynamics)	1 to 4
Statistics and Data Sciences:		
CSE 428	Statistical Computing	3 or 4
CSE 440	Statistical Data Management	3 or 4
CSE 448	Advanced Data Analysis	4
CSE 525	Computational Statistics	4
STAT 530	Bioinformatics	4
CSE 542	Statistical Learning	4
STAT 430	Topics in Applied Statistics (Big Data Analysis Foundation; Basics of Statistical Learning)	3 or 4
STAT 432	Basics of Statistical Learning	3 or 4
CS 412	Introduction to Data Mining	3 or 4
CS 410	Text Information Systems	3 or 4
OPTION 2		
Two 400-level CSE courses listed above AND an independent study on a computational topic. In order for an independent study to fulfill the minor requirement, the student must conduct the undergraduate research with one of the CSE affiliated faculty.		

Computer Science Undergrad Minor

for the Undergraduate Minor in Computer Science

College: The Grainger College of Engineering (https://grainger.illinois.edu/)
webpage: CS Minor (https://cs.illinois.edu/academics/undergraduate/degree-program-options/minor-computer-science/)
email: undergrad@cs.illinois.edu

This minor is offered by the Department of Computer Science for students seeking significant knowledge of digital computers without the more complete treatment of a major in computer science. This minor may be taken by any student except majors in the Computer Science programs and in Computer Engineering.

Code	Title	Hours
The following four courses are required: [1]		13
CS 173	Discrete Structures [2]	
CS 124	Introduction to Computer Science I [2]	
CS 128	Introduction to Computer Science II [2]	
CS 225	Data Structures [2]	
Students must take two upper level courses, each from CS at the 300 level or 400 level. At the 300 level, all CS courses are allowed, except CS 397 and CS 398, each of which may only be used by prior special permission from the CS Academic Office. At the 400 level, all CS courses are allowed, excluding CS 400, CS 401, CS 402, CS 403, CS 413, CS 491, CS 492, CS 493, CS 494, CS 497, and CS 499. The two upper level courses must be taken as University of Illinois credit (though one may be taken in a Study Abroad program). [3]		6

1 *Transfer equivalents of* CS 124*,* CS 125*,* CS 128*,* CS 173 *and/or* CS 225 *may satisfy these requirements – even if the number of credits for the transfer courses do not equal that for the UIUC equivalents, as long as the student completes at least 16 total credit hours for the minor.*
If fulfilling the course requirements described herein does not yield 16 credits as a result of differing credits for transfer courses, then the student must take additional CS coursework that is approved by the CS Academic Office, sufficient to yield a minimum of 16 credit hours for the minor.

2 *The following substitutions are allowed: (*ECE 120 *and* ECE 220*) for (*CS 124 *and* CS 128*);* CS 125 *for* CS 124*;* CS 126 *for* CS 128*; one of* MATH 213*,* MATH 347*,* MATH 412 *or* MATH 413 *for* CS 173*. Credit for these substituted courses will count toward the total credit hours for the minor.* MATH 347*,* MATH 412*, and* MATH 413 *will not count as upper level courses for this minor.*

3 *Students must submit a course modification for any study abroad course used in this category.*

For more information, please visit the CS minor Web site (https://cs.illinois.edu/academics/undergraduate/degree-program-options/minor-computer-science/), contact the Computer Science Academic Office (1210 Siebel Center, 217-333-4428, undergrad@cs.illinois.edu), or

visit the Office of the Associate Dean for Undergraduate Programs, 206 Engineering Hall.

Creative Writing Minor

for the Minor in Creative Writing

department website: English (http://www.english.illinois.edu/)
creative writing website: Creative Writing (https://english.illinois.edu/academics/undergraduate-studies/majors-minors/creative-writing-major/)
department faculty: English Faculty (https://english.illinois.edu/directory/specialty-areas/)
advising: English & Creative Writing advising (https://www.english.illinois.edu/undergraduate/advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu (https://las.illinois.edu/)
email: englishadvising@illinois.edu

The Creative Writing minor, administered by the Department of English's Creative Writing Program, is designed to augment majors from all over campus with a program of small workshops (poetry or fiction) and a variety of other writing, literature, and film courses. The result should be the development of a range of analytical and creative skills that will enrich the undergraduate experience and help prepare students for work in any number of fields.

Code	Title	Hours
CW 100	Intro to Creative Writing	3
Creative Writing Coursework		**9**
Students complete 9 hours of creative writing coursework by choosing one of the following 3-course (9-hour) sequences:		
CW 106	Poetry Workshop I	
CW 206	Poetry Workshop II	
CW 406	Poetry Workshop III	
OR		
CW 104	Fiction Workshop I	
CW 204	Fiction Workshop II	
CW 404	Fiction Workshop III	
Approved Electives		**6**
Students complete 6 hours of coursework in any of the following areas (a minimum of 3 hours must be at the advanced 300 /400 level):		
Any ENGL or CW course		
CMN 310	The Rhetorical Tradition	
CMN 423	Rhetorical Criticism	
JOUR 475	In-Depth Writing Styles	
THEA 211	Introduction to Playwriting	
IS 410	Storytelling	
Total Hours		18

Criminology, Law, & Society Minor

for the Minor in Criminology, Law, & Society

department website: https://sociology.illinois.edu/
department faculty: Sociology Faculty (https://sociology.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: soc@illinois.edu

Criminology, Law, and Society provides a foundation for students seeking to supplement their major area of study, to develop knowledge and skills needed for criminological, law, and justice related occupations, or to lay foundation for law school or graduate study in sociology, criminology, or justice fields. Students take a range of sociology courses that provide theoretical and practical knowledge while exposing students to current sociological, legal, and justice issues.

Code	Title	Hours
SOC 100	Introduction to Sociology	3-4
or SOC 163	Social Problems	
SOC 275	Criminology	3
One of the following courses:		3
SOC 378	Sociology of Law	
SOC 477	Law and Society- ACP	
SOC 479	Law and Society [1]	
Choose three courses from the following (9 hours minimum); at least 3 hours must be at the 300- or 400-level:		**9**
SOC 101	Sociology of Gender	
SOC 225	Race and Ethnicity	
SOC 310	Sociology of Deviance	
SOC 373	Social Inequality	
SOC 375	Criminal Justice System	
SOC 378	Sociology of Law [1]	
SOC 390	Individual Study [2]	
SOC 396	Topics in Sociology [2]	
SOC 400	Internships [2]	
SOC 477	Law and Society- ACP [1]	
SOC 479	Law and Society	
SOC 490	Advanced Independent Study [2]	
SOC 496	Advanced Topics in Sociology [2]	
Total Hours		18

[1] *If not taken as part of the core. Credit is not given for* SOC 477 *and* SOC 479.

[2] *Advisor approval required -- course topic must be focused in criminology and/or law.*

Critical Film Production Minor

for the Minor in Critical Film Production - Undergraduate

department website: https://media.illinois.edu/media-cinema-studies (https://media.illinois.edu/media-cinema-studies/)
department faculty: https://media.illinois.edu/media-cinema-studies/faculty (https://media.illinois.edu/media-cinema-studies/faculty/)
overview of college admissions & requirements: College of Media (p. 1198)
college website: https://media.illinois.edu/

The Minor in Critical Film Production provides undergraduate students with a rigorous introduction to core critical, formal, and technical aspects of filmmaking through the four required courses. The additional electives allow students to gain deeper theoretical, historical and/or methodological knowledge to enrich their filmmaking practice.

Programs in Cinema Studies

Undergraduate Programs:
major: Media & Cinema Studies, BS (p. 301)
minors: Cinema Studies (p. 484) | Critical Film Production (p. 489) | Media (p. 513)
Graduate Programs:
minor: Cinema Studies (p. 1128)

for the Minor in Critical Film Production - Undergraduate

The Minor in Film Production requires a minimum of 21 hours distributed over six courses as follows. At least six hours of advanced (300- or 400-level) courses are included. A course cannot be used to satisfy more than one requirement within the minor.

Code	Title	Hours
Required Courses (12 hours)		
MACS 150	Introduction to Digital Media Production	4
MACS 260	Film Production	4
MACS 370	Cinematography and Sound Design	4
or MACS 371	Editing and Post-production for Cinema	
MACS 370 and MACS 371 do not count toward elective credits in the minor.		
Select ONE of the following foundational study electives (3 hours)		
MACS 261	Survey of World Cinema I [1]	3
MACS 262	Survey of World Cinema II [1]	3
MACS 361	Film Theory and Criticism [1]	3
Select TWO electives from the following list of film history, theory, and criticism courses (6 hours)		
At least one of the elective courses must be at the 300-level or above		
MACS 203	Contemporary Movies	3
MACS 205	Introduction to Documentary	3
MACS 261	Survey of World Cinema I [1]	3
MACS 262	Survey of World Cinema II [1]	3
MACS 282	A World of Death and Blood: The Horror Movie	3
MACS 284	Animated Media from Mickey to GIFs	3
MACS 361	Film Theory and Criticism [1]	3
MACS 372	Screenwriting	3
MACS 380	21st Century Documentaries	3
MACS 464	Film Festivals	3 or 4
MACS 485	Making Video Essays	3 or 4

[1] *A course cannot be used toward more than one requirement in the minor.*

Crop & Soil Management Minor

for the Minor in Crop and Soil Management

department website: https://cropsciences.illinois.edu/
department faculty: https://cropsciences.illinois.edu/people/faculty (https://cropsciences.illinois.edu/people/faculty/)/
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college website: https://aces.illinois.edu/

The Crop and Soil Management minor is designed for students who desire a significant background in crop and soil systems to support study and practice of their major field. Selection of additional courses beyond the core will depend on the student's major and interests. Courses in the minor cannot be taken Credit/No Credit. **At least six hours of coursework for the minor should be advanced (300-level or 400-level courses) and must be distinct from credit earned for the student's major or another minor.**

Code	Title	Hours
CPSC 112	Introduction to Crop Sciences	4
CPSC 418	Crop Growth and Management	3
NRES 201	Introductory Soils	4
NRES 488	Soil Fertility and Fertilizers	3
Select one course from the following:		3
NRES 438	Soil Nutrient Cycling	
NRES 471	Pedology	
NRES 474	Soil and Water Conservation	
NRES 475	Environmental Microbiology	
Select 3 hours from any CPSC, HORT, or PLPA course (excluding CPSC 393/HORT 393 & CPSC 395/HORT 395/PLPA 395).		3
Total Hours		20

Earth, Society, & Environment Minor

for the Minor in Earth, Society, and Environment

school website: https://www.earth.illinois.edu/
school faculty: Earth, Society & Environment Faculty (https://earth.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
E-mail: sese-info@illinois.edu

The Earth, Society & Environment (ESE) minor is designed for students who desire to obtain a background in topics related to environmental

studies, in order to support study and practice of their major field. A minimum of 18 hours is required.

Course lists can be found on the School's ESE Minor site (https://earth.illinois.edu/academics/earth-society-and-environmental-sustainability-academics/eses-minor-requirements/).

Code	Title	Hours
Introductory course from the Earth's Physical Systems, Resources, and Hazards Area course list.		3-4
Introductory course from either the Environment and the Human Response or Sustainability, Policy, and Global Change Area course lists		3-4
ESE 200	Earth Systems	3
Three Advanced Courses from a list maintained by the minor advisor, at least two of which must be listed or cross listed as ESE courses		9-12
Total Hours		18-23

East Asian Languages & Cultures Minor

Minor in East Asian Languages and Cultures

department website: https://ealc.illinois.edu/
department faculty: East Asian Languages & Cultures Faculty (https://ealc.illinois.edu/directory/faculty-by-area/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/

Code	Title	Hours
Select one of the following:		5
CHIN 204	Intermediate Chinese II	
JAPN 204	Intermediate Japanese II	
KOR 204	Intermediate Korean II	
Non-language courses as follows:		15
EALC 120	East Asian Civilizations	
12 additional hours of East Asia-related courses (at least 6 of these hours must be at the 300 or 400 level)		
Total Hours		20

Note: Completion of CHIN 204, JAPN 204, or KOR 204 satisfies the LAS foreign language requirement.

Ecology & Conservation Biology Minor

for the Minor in Ecology & Conservation Biology

department website: http://sib.illinois.edu/
department faculty: School of Integrative Biology Faculty (http://sib.illinois.edu/people/faculty/)
advising: SIB advising (http://sib.illinois.edu/undergraduate/advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: sib@illinois.edu

The minor, administered by the School of Integrative Biology, is designed for students interested in gaining strength in this subdiscipline of biology. Preparation for many careers is advanced by coursework in ecology and conservation, e.g. environmental lawyer, environmental consultant, conservation technician, environmental educator, and environmental engineer.

Code	Title	Hours
IB 150	Organismal & Evolutionary Biol	4
IB 203	Ecology	4
IB 204	Genetics	3-4
Select two of the following:		6-8
NRES/IB 348	Fish and Wildlife Ecology	
IB 362	Marine Biology	
IB 431	Behavioral Ecology	
CPSC 431/ IB 440	Plants and Global Change	
IB 443	Evolutionary Ecology	
IB 444	Insect Ecology	
IB 451	Conservation Biology	
IB 452	Ecosystem Ecology	
IB 453	Community Ecology	
Total Hours		17-20

Economics Minor

for the Minor in Economics

department website: https://economics.illinois.edu/
department faculty: Economics Faculty (https://economics.illinois.edu/directory/faculty/)
advising: Economics Advising (https://economics.illinois.edu/academics/undergraduate-program/academic-advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: econug@illinois.edu

The minor in economics, administered by the Department of Economics, is designed to provide students who are not majoring in economics with a basic foundation in economic analysis. The minor offers training in economic theory through the intermediate level, instruction in quantitative methods of econometrics, and opportunity for advanced work in a student's particular area of interest following the microeconomic, macroeconomic, or econometric track. Students completing the minor in economics will enhance their major field of study and prepare them for a career in their chosen field and/or for graduate studies in a variety of fields. The minor consists of 18-21 hours within

economics. Students must complete the prerequisite mathematics and economics courses with the required grade/GPA in order to apply. Interested students should work with the Economics Undergraduate Studies Office. Students must choose from the Microeconomics, Macroeconomics, or Econometrics Track.

Prerequisite to applying for the Economics Minor:

Microeconomics and Macroeconomics tracks:

- MATH 220-Calculus or MATH 221- Calculus I with a grade of C or higher. *MATH 234 can substitute for MATH 220 or MATH 221, with a grade of C or higher. Discuss your intended plan with the Department of Economics Advising Office to ensure MATH 234 will prepare you for advanced Economics coursework.*
- ECON 102 and ECON 202 with a 2.33 or higher Illinois Economics GPA. At least one ECON course must be taken on campus (please see an Economics Academic Advisor if you have completed these courses off-campus or have other credit).

Econometrics track:

- MATH 220-Calculus or MATH 221- Calculus I with a grade of C or higher.
- MATH 225 with a grade of C or higher. (Recommended prior to application, but not required)
- ECON 102, ECON 202 and ECON 203 with a 2.33 or higher Illinois Economics GPA. At least one ECON course must be taken on campus (please see an Economics Academic Advisor if you have completed these courses off-campus or have other credit).

Code	Title	Hours
Core Economics Requirements		
ECON 102	Microeconomic Principles	3
ECON 202	Economic Statistics I	3
ECON 203	Economic Statistics II	3
ECON 302	Inter Microeconomic Theory	3
Students will select one of the following tracks:		
Microeconomics Track		**6**
Two 400-level elective courses in Microeconomics:		
ECON 411	Public Sector Economics	
ECON 414	Urban Economics	
ECON 440	Economics of Labor Markets	
ECON 450	Development Economics	
ECON 451	Program Evaluation in Developing Economies	
ECON 452	The Latin American Economies	
ECON 480	Industrial Comp and Monopoly	
ECON 481	Govt Reg of Economic Activity	
ECON 483	Econ of Innovation and Tech	
ECON 482	Economics of the Digital Economy	
ECON 484	Law and Economics	
ECON 490	Topics in Economics	
Macroeconomics Track		**9**
ECON 103	Macroeconomic Principles	
ECON 303	Inter Macroeconomic Theory	
One 400-level elective course in Macroeconomics:		
ECON 420	International Economics	
ECON 452	The Latin American Economies	
ECON 462		
ECON 490	Topics in Economics (Including: Monetary Policy, Economic Growth))	
Econometrics Track		**9**
ECON 471	Intro to Applied Econometrics	
Two 400-level elective courses in Econometrics:		
ECON 465		
ECON 490	Topics in Economics (Including: Financial Econometrics, Economic Forecasting, Topics in Econometrics, Numerical Methods for Economics)	
Total Hours		**18-21**

Electrical & Computer Engineering Minor

for the Minor in Electrical & Computer Engineering

College: The Grainger College of Engineering (https://grainger.illinois.edu/)
webpage: Electrical & Computer Engineering Minor (https://ece.illinois.edu/academics/ugrad/ece-minor/)

Electrical and Computer Engineering (ECE) transforms our day-to-day lives through a multitude of innovative technologies and products. The ECE minor is intended to expose students from other disciplines to the unlimited opportunities for innovation in this exciting field, and to the methodologies and tools used by electrical and computer engineers for the exploration and design of new technologies and products. The minor is open to undergraduates outside the ECE Department. Computer Science majors cannot elect the Computer Engineering Option within the minor.

Code	Title	Hours
Circuits Requirement:		**4**
Select one of the following:		3
ECE 110	Introduction to Electronics	
ECE 205	Electrical and Electronic Circuits	
Programming Requirement: [1]		**3-4**
Select one of the following (with no particular preference):		3-4
CS 101	Intro Computing: Engrg & Sci	
CS 125	Introduction to Computer Science	
A probability or statistics course chosen from an approved list below:		**3-4**
ECE 313	Probability with Engrg Applic	3
IE 300	Analysis of Data	3
BIOE 310	Comp Tools Bio Data	3
MATH 461	Probability Theory	3 or 4
MATH 463	Statistics and Probability I	4
CEE 202	Engineering Risk & Uncertainty	3
CS 361	Probability & Statistics for Computer Science	3

Select one of the following options below. Both the Core and Advanced Core courses from Option A or B must be completed		**9-11**
A. Electrical Engineering Option		
Core requirement:		
ECE 210	Analog Signal Processing	
Advanced Core Electives:		
Two ECE courses chosen from an approved list below:		
ECE 310	Digital Signal Processing	3
ECE 329	Fields and Waves I	3
ECE 330	Power Ckts & Electromechanics	3
ECE 340	Semiconductor Electronics	3
ECE 342 & ECE 343	Electronic Circuits and Electronic Circuits Laboratory	3
B. Computing Engineering Option		
Core Requirement:		
ECE 120	Introduction to Computing	
ECE 220	Computer Systems & Programming	
Advanced Core Electives:		
Two ECE courses chosen from an approved list below:		
ECE 385	Digital Systems Laboratory	3
ECE 391	Computer Systems Engineering	4
ECE 411	Computer Organization & Design	4
Elective ECE Courses to achieve a minimum of 18 hours of ECE course work. [2]		**0-5**

[1] *If the student will be taking* ECE 220 *following* ECE 120*, this requirement will be waived.*

[2] *Completion of the minor requires a minimum of 18 hours ECE course work. No additional hours are needed in this category if all courses taken to satisfy the previous requirements are ECE courses. Otherwise choose from any 300 and 400 level classes except* ECE 316, ECE 317, ECE 396, ECE 397, ECE 496, ECE 499.

English as a Second Language Minor

department website: https://linguistics.illinois.edu/
department faculty: Linguistics Faculty (https://linguistics.illinois.edu/directory/faculty/)
advising: Linguistics advising (https://linguistics.illinois.edu/academics/undergraduate-program/undergraduate-advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/

The English as a Second Language minor, sponsored by the Department of Linguistics, prepares a student to teach English overseas and in contexts other than U.S. public schools. Completion of the minor fulfills the course work requirement for a Certificate in Teaching English as a Second Language (TESL). To receive a Certificate in TESL and a letter of completion from the department, the student must apply for the Certificate after completing all certificate requirements. Students must declare their minor at the start of their study. The Certificate in TESL does not lead to ISBE State certification for K-12 Schools.

Code	Title	Hours
Introduction to Linguistics (select one of the following)		3
LING 100	Intro to Language Science	
LING 400	Intro to Linguistic Structure	
EIL 487	Topics in Second Lang Studies	
LING 489	Theoretical Foundations of SLA	3
EIL 411	Intro to TESL Methodology	3
Select three of the following:		9
EIL 422	Engl Grammar for ESL Teachers	
EIL 445	Second Lang Reading & Writing	
EIL 456	Lang and Social Interaction I	
EIL 460	Principles of Language Testing	
EIL 488	Phonology for Second Language Teachers	
Total Hours		18

English Minor

for the Minor in English

department website: https://www.english.illinois.edu/
department faculty: English Faculty (https://english.illinois.edu/directory/faculty/)
advising: English Advising (https://www.english.illinois.edu/undergraduate/advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: englishadvising@illinois.edu

Code	Title	Hours
ENGL 200	Introduction to the Study of Literature and Culture	3
ENGL 301	Introduction to Critical Theory	3
One 200-level course in British literature before 1800		3
One 200-level course in British or American literature after 1800		3
Two additional 300- or 400-level courses in English		6
One English or Creative Writing course selected in consultation with an English Department advisor		3
Total Hours		21

Environmental Economics & Law Minor

for the Minor in Environmental Economics and Law

The minor in Environmental Economics and Law is designed to provide students with basic skills in economic and legal analysis, and to teach them how to apply those tools to environmental problems. Students will emerge from this minor with in-depth knowledge about issues related to environmental protection and natural resource management and possibly sustainable development or land-use planning. The 300- and 400-level courses may have additional prerequisites not included in requirements for the minor.

Code	Title	Hours
Required for the Minor in Environmental Economics and Law		
ACE 210	Environmental Economics	3

ACE 310	Natural Resource Economics	3
Select one of the following:		3-4
ACE 100	Introduction to Applied Microeconomics	
ECON 102	Microeconomic Principles	
Select two of the following:		6
ACE 306	Food Law	
ACE 403	Agricultural Law	
ACE 406	Environmental Law	
ACE 456	Agr and Food Policies	
BADM 300	The Legal Environment of Bus	
Select one of the following:		3
ACE 410	Energy Economics	
ACE 411	Environment and Development	
CEE 434	Environmental Systems I	
ECON 414	Urban Economics	
ECON 484	Law and Economics	
Total Hours		18-19

A minimum of 18 hours must be completed for this minor. Courses in the minor cannot be completed Credit/No Credit.

Enrollment in the Environmental Economics and Law minor is not available to students enrolled in the Environmental Economics and Policy concentration of the Department of ACE. Enrollment is also not available to those enrolled in the Human Dimensions of the Environment concentration of the major in Natural Resources and Environmental Sciences if enrolled in that concentration was prior to January, 2013.

Food & Agribusiness Management Minor

for the Minor in Food and Agribusiness Management

The Food and Agribusiness Management minor is designed for students to deepen their knowledge of the economics and management of agribusinesses as a complement to studies and practices in their major field. Courses will address food, biofuels, biotechnology, agriculture, the environment, and management within the global agribusiness system.

Code	Title	Hours
Required for the Minor in Food and Agribusiness Management		
ACE 100	Introduction to Applied Microeconomics	3-4
or ECON 102	Microeconomic Principles	
ACE 222	Agricultural Marketing	3
ACE 231	Food and Agribusiness Mgt	3
Select at least three hours from:		3
ACE 210	Environmental Economics	
ACE 251	The World Food Economy	
ACE 306	Food Law	
ACE 335	Food Marketing and Behavior	
ACE 345	Finan Decision Indiv Sm Bus	
Select two of the following:		6-7
ACE 427	Commodity Price Analysis	
ACE 428	Commodity Futures and Options	
ACE 430	Food Marketing	
ACE 431	Agri-food Strategic Management	
ACE 435	Global Agribusiness Management	
ACE 436	International Business Immersion	
ACE 444	Financial Services & Investing Planning	
Total Hours:		**18-20**

A minimum of 18 hours must be completed for this minor. Courses in the minor cannot be completed Credit/No Credit.

Enrollment in the Food and Agribusiness Minor is not available to students enrolled in the Agribusiness Markets and Management concentration of the Department of ACE, but students in other concentrations in ACE may be admitted to the minor. The 300- and 400-level courses may have additional prerequisites not included in requirements for the minor.

Food & Environmental Systems Minor

for the Minor in Food and Environmental Systems

The Minor in Food and Environmental Systems is designed primarily for students who are enrolled in the Agricultural Communications Major which is jointly administered by the College of ACES and the College of Media. The eighteen hours of coursework in this minor provide a significant background in consumer sciences, agricultural management and production, and environmental and natural resources to support the study and practice of Agricultural Communications. Selection of additional courses beyond the core will depend on the student's major and interests.

Enrollment in ACES 102, FSHN 101, and NRES 100, four hours from selected 100- and 200-level courses, and six hours of 300-and 400-level courses as listed below is required for all students completing this minor. Courses in the minor cannot be taken Credit/No Credit.This minor is administratively based in ACES Academic Programs. Student advising will take place in this unit.

Required Courses for the Food and Environmental Systems Minor

Code	Title	Hours
ACES 102	Intro Sustainable Food Systems	3
FSHN 101	The Science of Food and How it Relates to You	3
NRES 100	Fundamentals of Env Sci	3
Select a minimum of three hours from the following introductory level courses:		3
ANSC 100	Intro to Animal Sciences	
ANSC 101	Contemporary Animal Issues	
ANSC 110	Life With Animals and Biotech	
ANSC 223	Animal Nutrition	
ANSC 224	Animal Reproduction and Growth	
ANSC 250	Companion Animals in Society	
ACE 100	Introduction to Applied Microeconomics	
ACE 210	Environmental Economics	
ACE 222	Agricultural Marketing	
ACE 231	Food and Agribusiness Mgt	
ACE 232	Farm Management	
ACE 251	The World Food Economy	
CPSC 112	Introduction to Crop Sciences	

CPSC 116	The Global Food Production Web	
CPSC 226		
FSHN 120 or FSHN 220	Contemporary Nutrition Principles of Nutrition	
FSHN 232	Science of Food Preparation	
FSHN 260	Raw Materials for Processing	
HORT 105	Vegetable Gardening	
HORT 106	The Sustainable Home Garden	
NRES 109	Global Environmental Issues	
NRES 201	Introductory Soils	
NRES 219	Applied Ecology	
NRES 287	Environment and Society	
PLPA 204		
TSM 100	Technical Systems in Agr	
Select a minimum of six hours from the following advanced level courses:		6
ACE 306	Food Law	
ACE 310	Natural Resource Economics	
ACE 346	Tax Policy and Finan Planning	
ACE 403	Agricultural Law	
ACE 406	Environmental Law	
ACE 411	Environment and Development	
ACE 430	Food Marketing	
ACE 431	Agri-food Strategic Management	
ACE 432	Advanced Farm Management	
ACE 435	Global Agribusiness Management	
ACE 436	International Business Immersion	
ACE 451	Agriculture in Intl Dev	
ACE 456	Agr and Food Policies	
ANSC 305	Human Animal Interactions	
ANSC 306	Equine Science	
ANSC 309	Meat Production and Marketing	
ANSC 322	Livestock Feeds and Feeding	
ANSC 363	Behavior of Domestic Animals	
ANSC 400	Dairy Herd Management	
ANSC 401	Beef Production	
ANSC 402	Sheep and Goat Production	
ANSC 403	Pork Production	
ANSC 404	Poultry Science	
ANSC 405	Advanced Dairy Management	
ANSC 406	Zoo Animal Conservation Sci	
ANSC 407	Animal Shelter Management	
ANSC 409	Meat Science	
ANSC 422	Companion Animal Nutrition	
ANSC 423	Advanced Dairy Nutrition	
ANSC 431	Advanced Reproductive Biology	
ANSC 438	Lactation Biology	
ANSC 444	Applied Animal Genetics	
ANSC 446	Population Genetics	
ANSC 450	Comparative Immunobiology	
ANSC 451	Microbes and the Anim Indust	
ANSC 452	Animal Growth and Development	
ANSC 467	Applied Animal Ecology	
CPSC 407	Diseases of Field Crops	
CPSC 418	Crop Growth and Management	
CPSC 431	Plants and Global Change	
FSHN 302	Sensory Evaluation of Foods	
FSHN 322	Nutrition and the Life Cycle	
FSHN 425	Food Marketing	
FSHN 428	Community Nutrition	
NRES 325	Natural Resource Policy Mgmt	
NRES 330	Environmental Communications [1]	
NRES 348	Fish and Wildlife Ecology	
NRES 370	Environmental Sustainability	
NRES 409	Fishery Ecol and Conservation	
NRES 419	Env and Plant Ecosystems	
NRES 420	Restoration Ecology	
NRES 430	Comm in Env Social Movements [1]	
NRES 431	Plants and Global Change	
NRES 474	Soil and Water Conservation	
NRES 488	Soil Fertility and Fertilizers	
PLPA 407		
TSM 311	Humanity in the Food Web	
Total Hours		18

[1] Theses courses may only be used to satisfy the requirements of the major in Ag Communications or the Food and Environmental Systems minor, but not both.

Food Science Minor

for the Minor in Food Science

The minor in Food Science is designed to broaden the student's knowledge of science and in particular food chemistry, food microbiology, and food engineering. The Food Science minor is also suitable for students who intend to pursue careers in engineering, microbiology, chemistry, scientific journalism, hospitality management, or science secondary education.

Code	Title	Hours
Courses required for minor in food science		
FSHN 101	The Science of Food and How it Relates to You	3
FSHN 414	Food Chemistry	3
FSHN 471	Food & Industrial Microbiology	3
Select one of the following:		**3-6**
FSHN 465 or FSHN 461 & FSHN 462	Principles of Food Technology and	
Select one of the following: [1]		**3-6**
FSHN 232	Science of Food Preparation	
FSHN 260	Raw Materials for Processing	
FSHN 302	Sensory Evaluation of Foods	
FSHN 416	Food Chemistry Laboratory	
FSHN 418	Food Analysis	
FSHN 460	Food Processing Engineering	

FSHN 466	Food Product Development	
ANSC 350	Cellular Metabolism in Animals	
MCB 450	Introductory Biochemistry	
ABE 483	Engineering Properties of Food Materials	
Total Hours Required		**18**

[1] *Students who take FSHN 461 & FSHN 462 for 6 hours only need to select one course (3 hours) at minimum from the second list to reach the total minimum required hours. Students who take FSHN 465, 3 hours, will need to select two courses (6 hours) at minimum from the second list to reach the total minimum required hours.*
For a FS minor with an emphasis in food processing it is recommended that students select the FSHN 461 and FSHN 462 option. However, FSHN 461 and FSHN 462 have prerequisites that not every student seeking a minor may choose to meet.
Students cannot take both FSHN 461 and FSHN 462 and FSHN 465.

French Minor

for the French Minor

department website: https://frit.illinois.edu/
department faculty: French & Italian Faculty (https://frit.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: french-italian@illinois.edu

Code	Title	Hours
FR 207	Writing and Grammar Workshop	3
FR 211	Introduction to Literary Studies	3
FR 212	Introduction to Cultural Analysis: French Identities	3
FR 205	Oral French	2
or FR 213	French Phonetics	
Select one of the following:		3
FR 335	French Cultural History to 1789	
FR 336	French Cultural History 1789-1968	
FR 337	Contemporary France	
Two French courses at the 300- or 400-level in any of the following areas: language and translation, business, cinema, culture, linguistics, literature, media		6
Total Hours		20

Gender & Women's Studies Minor

for the Minor in Gender and Women's Studies

department website: https://www.gws.illinois.edu/
department faculty: Gender & Women's Studies Faculty (https://gws.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: gws-email@illinois.edu

A minor in GWS provides complementary tools for many majors in the humanities, arts and sciences. The minor advocates actively reading, questioning, challenging, and understanding racialized, sexualized, and gendered bodies. The Department of Gender and Women's Studies must approve a student's minor course plan. Students must register their minor with the Gender and Women's Studies advisor.

Code	Title	Hours
Select two of the following:		6
GWS 201	Race, Gender & Power	
GWS 202	Sexualities	
GWS 350	Feminist & Gender Theory	
Additional Coursework- At least 9 additional hours of coursework offered by the Gender and Women's Studies Department at the 300- or 400-level. Required courses consist of a selected list of courses offered by the Department of Gender & Women's Studies; they are on an approved list maintained in the department office and with the GWS advisor. [1]		9
3 hours of area electives at any level. For a list of approved courses contact the GWS department office or the GWS advisor.		3
Total Hours		18

[1] *Topics courses (*GWS 395*,* GWS 495*) may count up to 3 hours toward additional coursework with consent of the GWS advisor.* GWS 390 *or* GWS 490 *may count up to 3 hours toward additional coursework with consent of the GWS advisor.*

At least 6 hours of advanced coursework must be distinct from credit earned for the student's major or another minor.

Geography & Geographic Information Science Minor

for the Minor in Geography & GIS

department website: https://ggis.illinois.edu/
department faculty: Geography & GIS Faculty (https://ggis.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: geography@illinois.edu

The minor in Geography and GIS will expose students to a comprehensive selection of courses embracing our three broad areas of study: human geography, physical/environmental geography, and geographic information science. Students select 6 hours at the 100 level, then 3 hours each from the human, physical/environmental, and geospatial sub-disciplines (as listed below), and then 3 additional hours from any of the three sub-disciplines for a total of 18 credits. At least 6 hours total must be at the 300 or 400 level.

Code	Title	Hours
Two courses selected from the following:		6
ATMS/GEOG 100	Introduction to Meteorology	
GEOG 101	Global Development&Environment	

GEOG 103	Earth's Physical Systems	
GEOG 104	Social and Cultural Geography	
GEOG 105	The Digital Earth	
GEOG 106	Geographies of Globalization	
GEOG 221	Geographies of Global Conflict	
One course in human geography, selected from the following:		3
GEOG 204	Cities of the World	
GEOG 205	Business Location Decisions	
GEOG 224	Environmental Data Science	
GEOG 254	American People, Places, & Environments	
GEOG 350	Sustainability and the City	
GEOG 356	Sustainable Development in South Asia	
GEOG 384	Population Geography	
GEOG 405	Geography Field Course	
GEOG 410	Green Development	
GEOG 438	Geography of Health Care	
GEOG 455	Geog of Sub-Saharn Africa	
GEOG 465	Transportation & Sustainability	
GEOG 466	Environmental Policy	
GEOG 471	Recent Trends in Geog Thought	
GEOG 483	Urban Geography	
GEOG 484	Cities, Crime, and Space	
One course in physical/environmental geography, selected from the following:		3
GEOG 210	Social & Environmental Issues	
GEOG 222	Big Rivers of the World	
ESE 320	Water Planet, Water Crisis	
NRES/GEOG 401	Watershed Hydrology	
GEOG 405	Geography Field Course	
GEOG 406	Fluvial Geomorphology	
GEOG 408	Humans and River Systems	
GEOG 412	Geospatial Tech & Society	
GEOG 459	Ecohydraulics	
GEOG 496	Climate & Social Vulnerability	
One course in geographic information science, selected from the following:		3
GEOG 371	Spatial Analysis	
GEOG 379	Intro to GIS Systems	
GEOG 380	GIS II: Spatial Prob Solving	
GEOG 412	Geospatial Tech & Society	
GEOG 440	Business Applications of GIS	
PATH 439	Health Applications of GIS	
GEOG 460	Aerial Photo Analysis	
GEOG 468	Biological Modeling	
GEOG 473	Digital Cartography & Map Design	
GEOG 476	Applied GIS to Environ Studies	
GEOG 477	Introduction to Remote Sensing	
GEOG 478	Techniques of Remote Sensing	
GEOG 479	Advanced Topics in GIS	
GEOG 480	Principles of GIS	
One 200-400 level course selected from any of the above.		3
Total Hours		18

At least 6 hours total must be at the 300 or 400 level.

Geology Minor

for the Minor in Geology

department website: https://www.geology.illinois.edu/undergraduate (https://www.geology.illinois.edu/undergraduate/)
department faculty: Geology Faculty (https://www.geology.illinois.edu/cms/One.aspx?portalId=127672&pageId=225782)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: geology@illinois.edu

The geology minor is designed for students who desire a significant background in Geology to support study and practice of their major field. Selection of courses at the 300- or 400- level will depend on the major and interests of the student.

Code	Title	Hours
GEOL 107	Physical Geology [1]	4
GEOL 208	History of the Earth System	4
Select at least 10 hours of advanced geology courses from the following:		10-11
GEOL 333	Earth Materials and the Env	
GEOL 380	Environmental Geology	
400-level courses taught by the Department of Geology		
Total Hours		18-19

[1] *Students who decide to follow the curriculum after first taking* GEOL 100 *or GEOL 103 should enroll in* GEOL 208. GEOL 100 *or GEOL 103 will be accepted as a substitute for* GEOL 107, *but students should be aware that these courses are not intended for science majors.*

German Minor

for the Minor in German

department website: https://www.germanic.illinois.edu
department faculty: Germanic Languages & Literatures Faculty (https://germanic.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: german@illinois.edu

The minor in German offers students a background in the language through the advanced undergraduate level, an introduction to the study of German literary classics, and a knowledge of the history of German culture.

Code	Title	Hours
GER 211	Conversation and Writing I	3
GER 420	German Cultural History	4

Elective courses, including at least one 300- or 400-level course from the list below:		11-12
GER 103	Intermediate German I	
GER 104	Intermediate German II	
GER 201	German Popular Culture	
GER 205	Germany and Europe	
GER 212	Conversation and Writing II	
GER 250	Grimms' Fairy Tales - ACP	
or GER 251	Grimm's Fairy Tales in Context	
GER 260	The Holocaust in Context - ACP	
or GER 261	The Holocaust in Context	
GER 270	Sexuality and Literature	
GER 331	Intro to German Literature	
GER 332	German Literature and Culture	
GER 401	Global Issues in German	
PS 385	Politics of the European Union	
GER 403	German-English Translation: Theory & Practice	
GER 465	German Linguistics	
GER 470	Middle Ages to Baroque	
GER 471	Enlightenment to Romanticism	
GER 472	Realism to Expressionism	
GER 473	1920s to Today	
GER 493	German Cinema I	
GER 494	German Cinema II	
Total Hours		18-19

German Business & Commercial Studies Minor

for the degree of Minor in German Business & Commercial Studies

department website: http://www.germanic.illinois.edu/undergraduate/
department faculty: Germanic Languages & Literatures Faculty (https://germanic.illinois.edu/directory/faculty/)
advising: German advising (https://germanic.illinois.edu/academics/german/undergraduate-programs/undergraduate-advisor/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: germanic@illinois.edu

Code	Title	Hours
GER 211	Conversation and Writing I	3
GER 320	German for Business	3
GER 321	German for Economics	3
GER 420	German Cultural History	4
Select two courses from the list below:		6-8
GER 103	Intermediate German I	
GER 104	Intermediate German II	
GER 201	German Popular Culture	
GER 205	Germany and Europe	
GER 212	Conversation and Writing II	
GER 250	Grimms' Fairy Tales - ACP	
or GER 251	Grimm's Fairy Tales in Context	
GER 260	The Holocaust in Context - ACP	
or GER 261	The Holocaust in Context	
GER 270	Sexuality and Literature	
GER 331	Intro to German Literature	
GER 332	German Literature and Culture	
GER 401	Global Issues in German	
PS 385	Politics of the European Union	
GER 403	German-English Translation: Theory & Practice	
GER 465	German Linguistics	
GER 470	Middle Ages to Baroque	
GER 471	Enlightenment to Romanticism	
GER 472	Realism to Expressionism	
GER 473	1920s to Today	
GER 493	German Cinema I	
GER 494	German Cinema II	
Total Hours		19-21

Global Labor Studies Minor

for the minor in Global Labor Studies

website: https://ler.illinois.edu/labor-education/
email: illinoislabored@illinois.edu
overview of school admissions & requirements: Labor & Employment Relations (http://catalog.illinois.edu/ler/)

Global Labor Studies analyzes the interplay of class, gender, race, and labor organizations in the workplace, the economy, and the political arena from a multi-disciplinary and global perspective. A minor in Global Labor Studies requires 18 credit hours in LER Global Labor Studies Courses.

A minimum grade point average of 2.75 is required for completion of the minor and all courses required for the minor must be taken for a grade.

Code	Title	Hours
LER 100	Introduction to Labor Studies	3
LER 130	Intro Labr Wrkng Class History	3
Minimum of six hours 300- or 400-level courses.		6
Two courses that focus on international or comparative labor issues. (LER 200, LER 240, LER 330 and LER 410).		6
Total Hours		18

Global Markets & Society Minor

for the Minor in Global Markets & Society

department website: https://globalstudies.illinois.edu/
department faculty: Global Studies Faculty (https://globalstudies.illinois.edu/directory/faculty-and-staff/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: globalstudies@illinois.edu

The LAS **Global Markets and Society** Minor enables students at the University of Illinois to gain interdisciplinary knowledge of global market-society relations through historical and global perspectives that emphasize the social, political, and economic forces that shape market institutions and practices. The minor requires 18-21 hours of coursework completed through six courses, *with a minimum of six hours at the advanced level (300- or 400-level)*. A professional development capstone experience course is optional and can be met by completing an internship or participating in a research experience and/or written project. The LAS Global Markets and Society Minor is open to undergraduate students in any major at the University of Illinois at Urbana-Champaign campus.

Applications Requirements and Procedures

Completion of 30 hours of undergraduate coursework by the end of the Spring semester of application.

Students are admitted by application into the LAS Global Markets and Society Minor. Interested students will be asked to demonstrate a commitment to the program through (a) completing an application to the program, including a written statement of goals for participation in the program and/or evidence of or commitment to participation in activities designed to enhance leadership, and (b) developing a program plan with the program coordinator and/or their academic advisor prior to admission.

Only students officially admitted into the LAS Global Markets and Society Minor may earn the minor.

Code	Title	Hours
GLBL 270	Introduction to Global Markets and Society	3
Core Courses		**6**
Choose 2 from the following list (Courses used in the core cannot be used again in your Specialization Track)		
CMN 211	Business and Professional Communication	
CS 105	Intro Computing: Non-Tech	
ECON 102	Microeconomic Principles	
GEOG 205	Business Location Decisions	
HIST 259	20thC World from Midcentury	
PS 220	Intro to Public Policy	
PSYC 245	Industrial Org Psych	
SOC 160	Global Ineq and Social Change	
Specialization Track		**9**
Choose three courses in your track. At least 2 of the 3 courses must be at the 300- or 400-level. Alternate courses may be considered on a case-by-case basis.		
Students choose courses from a list maintained by LAS Global Studies, and reviewed annually by the Global Markets and Society Advisory Committee. (http://www.globalstudies.illinois.edu/current/academics/globalmarket/)		
Global Markets and Governance. The economy is intricately connected to institutions at the local, national, and international levels that affect market practices and outcomes. This track focuses on the institutions and social relations that govern global market practices.		
Science, Technology, and Markets. Technological innovations in transportation and communications are driving business location decision-making and operations at the global scale. This track is aimed at science and technology majors with entrepreneurial ambitions as well as students in the social sciences and humanities investigating the interface between science, technology, and society.		
Global Encounters. Participation in the global economy requires firms to be geographically dispersed and capable of partnering with a global audience of stakeholders. This track is focused on the historical and cross-cultural understanding necessary to engage in global markets.		
Markets, Development, and the Environment. Global markets can create positive environmental outcomes in the locations where they operate. This track focuses on the challenges in designing, building, and evaluating sustainable environmental and development outcomes, including ecological modernization, market environmentalism, and political ecology.		
The Global Workforce. Global production systems depend on the effective organization and participation of workers in the global workforce. This track focuses on human resources, organizational structures, and group communication in the contexts of working class history and global labor markets.		
Analytical Approaches & Languages. Investigating global market-society relations requires a basic level of competence in communication skills, research methods, and analytical techniques. This track offers students a range of market language, methods, and skills oriented courses that build such competency.		
OPTIONAL Professional Development Capstone Experience (3 hours)		
Choose one option in consultation with the Global Markets and Society minor advisor:		
Internship or Field Experience in a market-focused organization		
Research Experience with a Faculty Member		
Analytical/Research Paper with Faculty Guidance		
Credit is awarded for each of these three options on the basis of an analytical/research paper written by the student under the supervision of a faculty adviser		
Total Minimum Hours		**18**

Global Studies Minor

for the Minor in Global Studies

department website: https://globalstudies.illinois.edu/
department faculty: Global Studies Faculty (https://globalstudies.illinois.edu/directory/faculty-and-staff/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: globalstudies@illinois.edu

The Global Studies Minor provides a multidisciplinary study of a global theme with the requirement of advanced language training to promote the development of intercultural skills. In consultation with an advisor, students select 21 hours of thematically-related courses from a variety of departments to form a coherent program of study suited to individual interests, educational and/or career aspirations. The Global Studies Minor can complement any major.

Code	Title	Hours
Global Studies. Three courses must be selected from the approved course list; they must include no more than one course each from three of the following departments: Anthropology, Economics, Geography, History, Political Science, and Sociology.		9
Language and Culture. Select courses from the approved course list in a language other than your primary language. These various courses represent the 5th level of study or above.		3
Thematic Area: Students choose an approved thematic area and, in consultation with a Global Studies advisor, construct an appropriate customized curriculum. Students must choose 200- to 400-level courses and at least 6 hours must be at the 300- or 400-level.		9
Total Hours		21

A minimum of 6 hours of 300- and 400-level course work must be completed.

Hindi Studies Minor

for the Minor in Hindi Studies

department website: https://linguistics.illinois.edu/
department faculty: Linguistics Faculty (https://linguistics.illinois.edu/directory/faculty/)
advising: Linguistics advising (https://linguistics.illinois.edu/academics/undergraduate-program/undergraduate-advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/

The minor in Hindi Studies is designed for students interested in receiving training in processing and using Hindi in a wide variety of authentic (from informal to institutional) contexts. Students will be encouraged to read authentic Hindi material from different genres and registers (including Hindi print media). Completion of the minor requires at least 19 hours in applicable courses.

Code	Title	Hours
Hindi language requirement		10
HNDI 404	Intermediate Hindi II	
HNDI 405	Advanced Hindi I	
HNDI 406	Advanced Hindi II	
Two courses in Indian Linguistics/sociolinguistics (to be chosen from the following list in consultation with advisor)		6
LING 115	Language and Culture in India	
HNDI 412	Business Hindi	
LING 111		
One historically significant language course related to Modern Hindi or a course on Indian/South Asian Literature		3-5
SNSK 201	Elementary Sanskrit I	
SNSK 202	Elementary Sanskrit II	
ARAB 201	Elementary Standard Arabic I	
ARAB 202	Elementary Standard Arabic II	
PERS 201	Elementary Persian I	
PERS 202	Elementary Persian II	
HNDI 408	Intro to South Asian Lit	
Students with prior knowledge of any of the languages mentioned above can also meet the 3-5 credit requirement by taking upper level courses of the languages.		
Total Hours		19-21

History Minor

for the Minor in History

department website: https://www.history.illinois.edu/ (https://history.illinois.edu/)
department faculty: History Faculty (https://history.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: history@illinois.edu

The history minor is designed for students who would like to pursue a passion for history in conjunction with any major at the university. History minors graduate with an advanced capacity to think contextually, locate and analyze evidence, evaluate competing viewpoints, assess causation, offer new interpretations, and solve complex problems. There is considerable flexibility in the minor, with course options that may be selected based on student interests.

Code	Title	Hours
HIST 200	Intro Hist Interpretation	3
One History course focused on Non-Western (African, Asian, Global, Latin American, Middle Eastern) history, chosen from a list maintained in the department		3
Additional History coursework, selected with an advisor		12
Total Hours [1]		**18**

[1] *At least 6 hours must be at the 300- or 400-level; no more than 6 hours at the 100-level. With permission, 3 hours may be study abroad hours.*

Horticulture Minor

for the Minor in Horticulture

department website: https://cropsciences.illinois.edu/
department faculty: https://cropsciences.illinois.edu/people/faculty (https://cropsciences.illinois.edu/people/faculty/)/
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college website: https://aces.illinois.edu/

The Horticulture minor is designed for students who desire a significant background in horticulture to support study and practice of their major field. Selection of additional courses beyond the core will depend on the student's major and interests. Enrollment in the Horticulture minor is not available to students enrolled in the Horticultural Food Systems concentration within the Crop Sciences major. Courses in the minor cannot be taken Credit/No Credit. **At least six hours of coursework for the minor should be advanced (300-level or 400-level courses) and must be distinct from credit earned for the student's major or another minor.**

Code	Title	Hours
Core Requirements		**7**
HORT 100	Introduction to Horticulture	
HORT 341	Greenhouse Mgmt and Production	
HORT Electives		**11**
At least 2 additional hours of HORT 3XX-4XX. [1]		
Select a minimum of 9 hours from any HORT courses (excluding HORT 393 and HORT 395).		
Total Hours		18

[1] *At least six hours of coursework for the minor should be advanced (300-level or 400-level courses) and must be distinct from credit earned for the student's major or another minor.*

Integrative Biology Minor

for the Minor in Integrative Biology

department website: http://sib.illinois.edu/
department faculty: School of Integrative Biology Faculty (http://sib.illinois.edu/people/faculty/)
advising: SIB advising (http://sib.illinois.edu/undergraduate/advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: advising@sib.illinois.edu

The minor, administered by the School of Integrative Biology, is designed for students intending to have a career in a field other than biology, but for whom a background in biology is nevertheless complementary, e.g. law, technology, bioinformatics, business, scientific writing, and engineering. A minor in integrative biology provides an understanding of fundamental principles for one major subdiscipline of biology, whether this be organismal and evolutionary biology; behavior, ecology and the environment; or integrative anatomy, physiology, and molecular biology.

Code	Title	Hours
Select one of the following:		4
IB 150	Organismal & Evolutionary Biol	
IB 103	Introduction to Plant Biology	
IB 104	Animal Biology	
Select two of the following:		6-8
IB 202	Physiology	
IB 203	Ecology	
IB 204	Genetics	
IB 302	Evolution	
Two additional courses at the 300 or 400 level (3-4 hours, some 5 hours) selected from the IB Area Courses. The prerequisite course(s) must be taken if specified by an advanced course. (http://sib.illinois.edu/courses/area/)		6-8
Total Hours		16-20

Other possible combinations of courses are possible for the Integrative Biology minor, if an SIB advisor approves the combination.

Interdisciplinary Minor in African Studies

for the Interdisciplinary Minor in African Studies

center website: http://www.afrst.illinois.edu/
center faculty: African Studies Faculty (http://www.afrst.illinois.edu/people/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: african@illinois.edu

The Center for African Studies offers an interdisciplinary minor as a complement to any major. The 20 hours selected by students for the African studies minor should form a coherent program of study. This program must be approved by the Center for African Studies. The Dean of the College of Liberal Arts and Sciences will verify that the student has completed the program on the recommendation of the Director of the Center for African Studies and on completion of the requirements below.

Requirements

Code	Title	Hours
Study of an indigenous African Language. Acceptable languages include but are not limited to Arabic, Bamana, Lingala, Swahili, Wolof, and Zulu.		5
African Studies core courses. These courses contain a minimum of 50 percent African content and are defined according to a list maintained and regularly updated by the Center for African Studies. Courses completed to satisfy the core must come from at least 3 separate departments and must include the following three components:		
Course-work surverying the continent. Choose one of the following:		3
AFST 210	Introduction to Modern African Literature	
AFST 222	Introduction to Modern Africa	
AFST 254	Economic Systems in Africa	
HIST 111	History of Africa to 1800	
HIST 112	History of Africa from 1800	
SOC 122	Africa in World Perspective	
300- or 400-level core courses. Language courses cannot be used to meet this requirement.		6

Additional core courses at any level. African language courses may be used to satisfy this requirement if they are at the advanced level (fifth semester or higher). Only 3 hours of AFST 199 may be used to satisfy the requirements of the minor.	6
Total Hours	20

Interdisciplinary Minor in Aging

for the Interdisciplinary Minor in Aging

department website: http://ihealth.illinois.edu/
department faculty: I-Health Faculty and Staff (http://ihealth.illinois.edu/faculty-staff/)
college catalog page: Applied Health Sciences Catalog (p. 1187)
college website: http://www.ahs.illinois.edu/

The Interdisciplinary Minor in Aging provides students with the opportunity to study aging as it relates to health, communication, development and activity. The minor is offered through the College of Applied Health Sciences. There are no prerequisites for the minor. Minors should be declared by filling out the intent to pursue a minor form which can be found at http://provost.illinois.edu/programs/advising/declare.html and turning the form into Beth Frasca, Interdisciplinary Health Sciences Program, in 226 Huff Hall or contact Beth Frasca at bfrasca@illinois.edu. (bfrasca@illinois.edu)

Code	Title	Hours
Required Courses		9
IHLT 240, Health and Aging Policy		
CHLH 404	Gerontology	
PSYC 361	The Psychology of Aging	
Additional aging-related courses chosen from the following list: [1]		9
KIN 459	Physical Activity & Aging	
SOCW 240	Death & Dying	
SOCW 315	Social Work Services for Older Adults	
CHLH 494	Special Topics [2]	
RST 316	Human Development and Recreation, Sport and Tourism	
RST 335	Leisure and Consumer Culture	
SHS 271	Communication and Aging	
KIN 386	Exercise Instruction & Elderly	
EPSY 407	Adult Learning and Development	
UP 340	Planning for Healthy Cities	
Total Hours		18

[1] *Students may also earn elective credit by participating in an aging-related internship or independent study that is also pre-approved by the advisor for the minor. Minor modification forms should be filled out if you are requesting to use an independent study or internship. Forms can be found at* http://provost.illinois.edu/files/2017/01/Minor-Modification-Form.pdf.

[2] *Special Topics courses must include aging-related content and be approved by the Aging minor advisor.*

Interdisciplinary Minor in Jewish Culture & Society

for the Interdisciplinary Minor in Jewish Culture and Society

program website: https://jewishculture.illinois.edu/
program faculty: Jewish Culture & Society Faculty (https://jewishculture.illinois.edu/directory/affiliate-faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: jewishculture@illinois.edu

The Program in Jewish Culture and Society offers an interdisciplinary minor and a concentration in Jewish Studies (through the LAS Interdisciplinary Studies Major (http://catalog.illinois.edu/undergraduate/las/academic-units/interdisc-studies/jewish-studies-concentration/)).

Code	Title	Hours
One course in the cluster of Religion, chosen from a list of courses maintained by the Advisor in the Program in Jewish Culture and Society Office.		3
One course in the cluster of Culture, chosen from a list of courses maintained by the Advisor in the Program in Jewish Culture and Society Office.		3
One course in the cluster of History, chosen from a list of courses maintained by the Advisor in the Program in Jewish Culture and Society Office.		3
Electives within the minor. Students may choose additional courses from any of the three clusters or can choose from the following language courses:		9
HEBR 199	Undergraduate Open Seminar	
HEBR 201	Elementary Modern Hebrew I	
HEBR 202	Elementary Modern Hebrew II	
HEBR 205	Intensive Biblical Hebrew	
HEBR 403	Intermediate Modern Hebrew I [1]	
HEBR 404	Intermediate Modern Hebrew II [1]	
HEBR 405	Advanced Modern Hebrew I	
HEBR 406	Advanced Modern Hebrew II	
HEBR 407	Topics Hebrew Lang & Lit	
YDSH 103	Intermediate Yiddish I	
YDSH 104	Intermediate Yiddish II	
Total Hours		18

Of the 18 required hours, two courses (6 hours) must be 300-or 400-level courses. HEBR 403 and HEBR 404 cannot be used to satisfy this requirement.

[1] HEBR 403 *and* HEBR 404 *cannot be used to satisfy* LAS Advanced Hours requirement (http://www.las.illinois.edu/students/requirements/minimum/) *or the 6 hours of 300- or 400- level courses for the Jewish Culture and Society Interdisciplinary Minor.*

No more than 6 hours (two courses) may be at the 100 level.

The 18 hours selected by students for a minor in Jewish Culture and Society should form a coherent program and must be approved by the undergraduate advisor for the Program in Jewish Culture and Society.

A list of courses, regularly updated by the Program in Jewish Culture and Society, is available from the Program Office (http://www.jewishculture.illinois.edu/), 109 English Bldg., 608 South Wright Street, Urbana, Illinois, 61801.

Interdisciplinary Minor in Medieval Studies

for the Interdisciplinary Minor in Medieval Studies

department website: http://www.medieval.illinois.edu/education/undergrad/
department faculty: Medieval Studies Faculty (http://www.medieval.illinois.edu/people/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: medievalstudies@illinois.edu

This minor introduces students to medieval (ca. 500- ca. 1500 CE) cultures across the world, providing them with an understanding of periods and movements, institutions, material culture, ideas, beliefs, and values of the diverse cultures that comprise the medieval globe. The coursework spans both geographical regions and disciplines to introduce students to the breadth of medieval cultures as well as to the diversity of methods and perspectives for their study.

The minor includes a minimum of 21 hours, divided into (I) an introductory course in global medieval literatures and cultures; (II) geographical distribution coursework as specified below; and (III) advanced medieval coursework selected by the student in consultation with a faculty advisor. 3 hours of appropriate language study can be applied to the Additional Medieval Studies Coursework.

Code	Title	Hours
Introduction to Medieval Studies [1]		
ENGL 202/ MDVL 201/ CWL 253	Medieval Literature and Culture	3
Geographical Distribution Coursework [2]		**9**
3 hours- Medieval Europe- One course chosen from the following:		
ARTH/MDVL 111	Ancient to Medieval Art	
ARTH/MDVL 222	Medieval Art	
ARTH/MDVL 231	Northern Renaissance Art	
ITAL/MDVL 240	Italy Middle Ages & Renaiss	
HIST/MDVL 245	Wives, Workers and Witches in Pre-Modern Europe	
HIST/MDVL 247	Medieval Europe	
SCAN/MDVL 251	Viking Mythology	
SCAN/MDVL 252	Viking Sagas in Translation	
HIST/MDVL 255	British Isles to 1688	
ARCH/MDVL 412	Medieval Architecture	
3 hours-Classical and Medieval East Asia- One course chosen from the following:		
HIST 220	Traditional China	
HIST 226	Premodern Japanese History	
EALC 240	Chinese Civilization	
EALC 275	Masterpieces of East Asian Lit	
REL 287	Introduction to Buddhism	
3 hours-Medieval Central Asia, South Asia, or the Middle East- One course chosen from the following:		
HIST 130	History of South Asia	
HIST 135	History of Islamic Middle East	
LA 218	S Asian Cultural Landscapes	
LA 222	Islamic Gardens & Architecture	
REL 213 or REL 214	Introduction to Islam	
REL 223	The Qur'an (Koran)	
REL 260	Mystics and Saints in Islam	
REL 283	Jewish Sacred Literature	
CWL 208	Cultures & Literatures of South Asia	
Additional Medieval Studies Coursework		**9**
Medieval-related coursework from participating departments selected in consultation with the minor advisor. At least 6 hours must be at the 300- or 400-level. A list of courses is maintained on the Medieval Studies Program website. 3 hours of appropriate language study can be applied to meet this requirement with approval of the Director of the Program in Medieval Studies. [3]		
Total Hours		21

[1] *A student may substitute the "Medieval World" section of* HIST 100 *by petition to the Director of Medieval Studies. Only the section of* HIST 100 *devoted to the Middle Ages may be substituted.*

[2] *A student may substitute 3 hours in geographical distribution coursework with a course on the medieval civilizations of the Americas:* ANTH 277 *or* ANTH 278.

[3] List of courses to fulfill Additional Medieval Studies Coursework. (http://www.medieval.illinois.edu/education/undergrad/)

International Business Minor

for the Minor in International Business

department website: U (https://www.business.illinois.edu/ba/)ndergraduate Programs (https://giesbusiness.illinois.edu/programs/undergraduate/)
department faculty: G (https://business.illinois.edu/ba/directories/all-faculty/)ies College of Business faculty (https://giesbusiness.illinois.edu/faculty-research/faculty-profiles/)
college website: Gies College of Business (https://giesbusiness.illinois.edu/)
minor email: ba@business.illinois.edu
overview of business minor admissions & requirements:

Please refer to the *International Business Minor* website for important changes to the application process and requirements.

The International Business Minor is for students earning Undergraduate degrees in the Gies College of Business and is not open to students earning Undergraduate degrees in colleges other than the Gies College. The International Business Minor provides a program of study that exposes students to global business in a manner that complements their existing studies in Accountancy, Finance, Information Systems, Management, Marketing, Operations Management, Supply Chain Management, and Strategic Business Development & Entrepreneurship.

Specifically, the Minor provides students with a clear understanding of the opportunities and challenges involved with international business transactions, as global managers face a diverse set of circumstances when engaging in cross-border business: e.g., enhanced globalization (& de-globalization) forces, cross-national variation in institutions and cultures, increased competition from emerging economies, and altered economic incentives. Thus, the International Business Minor is designed to educate and train future business leaders, decision-makers and strategic thinkers to skillfully manage in the evolving global business environment.

To declare their Minors, Business students must submit their *Statement of Intent to Pursue a Campus-Approved Minor* (Statements) to 1055 Business Instructional Facility (BIF) at any time.

Code	Title	Hours
Minor Core Requirements		**15**
BADM 338	Global Supply Chain Management	3
BADM 380	International Business	3
BADM 381	Multinational Management	3
BADM 382	International Marketing	3
BADM 383	Topics in International Business	3
Minor Elective Requirements [1]		**3**
BADM 383	Topics in International Business	3
Any 200-level langugage course [2]		3
Total Hours		**18**

[1] In order to fulfill the elective requirement, students have the option of taking either a second 'Topics in International Business' section or a 200-level language course. The Academic Director of the minor will also consider substitutes for the elective requirement (e.g., study-abroad courses) upon petition.

[2] Any course taught in any modern foreign language beyond Beginning and Intermediate language instruction (which in most, but not all, language departments is numbered in the 200-series) will be counted.

International Development Economics Minor

Minor in International Development Economics

Code	Title	Hours
Required for the Minor in International Development Economics		
ACE 100	Introduction to Applied Microeconomics	3-4
or ECON 102	Microeconomic Principles	
ACE 251	The World Food Economy	3
Select one of the following:		3
ACE 222	Agricultural Marketing	
ACE 254	Economic Systems in Africa	
ACE 255	Economics of Food and Environmental Justice	
ACE 270	Consumer Economics	
Select two of the following:		6
ACE 411	Environment and Development	
ACE 436	International Business Immersion	
ACE 451	Agriculture in Intl Dev	
ACE 452	The Latin American Economies	
ACE 454	Econ Dev of Tropical Africa	
ACE 455	International Trade in Food and Agriculture	
At least 12 hours taken from the preceding two categories		3
TOTAL HOURS		18-19

Some of these courses have additional non-ACE prerequisites. A semester-long study abroad experience in an emerging market or development economy (i.e. countries not part of the OECD) will be accepted in lieu of one of these courses.

The minor should consist of at least 18 hours of course work. At least 6 hours of the minor must be advanced (300 or 400) level courses.

Courses in the minor cannot be completed Credit/No-Credit.

International Minor in Agricultural, Consumer, & Environmental Sciences

for the International Minor in Agricultural, Consumer, and Environmental Sciences

This minor will help students prepare for life and work in a global society and will provide the international skills employers expect of our graduates. While it is the intent of this minor to encourage students to spend time abroad and to develop proficiency in a foreign language, neither is required.

Students enrolled in this minor will be able to draw on resources outside the college as well as select from courses offered by the seven departments in the College of ACES. At least 12 of the total 21 credit hours required for this minor must be College of ACES courses. At least 6 credit hours (ACES or non-ACES) must come from 400-level courses. Courses in the minor cannot be completed Credit/No Credit.

This minor is administratively based in ACES Academic Programs. Student advising will take place in this unit.

Required Courses for the ACES International Minor

Code	Title	Hours
Global Study in the Social Science Disciplines		
Minimum of 3 hours, maximum of 9 hours selected from:		3-9
ACE 251	The World Food Economy	
ACE 411	Environment and Development	
ACE 435	Global Agribusiness Management	
ACE 451	Agriculture in Intl Dev	
ACE 455	International Trade in Food and Agriculture	
AGCM 320	Public Information Campaigns	
ANTH 262	Women's Lives	
BADM 380	International Business	
BADM 381	Multinational Management	
BADM 382	International Marketing	
ECON 420	International Economics	
ECON 450	Development Economics	
FIN 451	Intl Financial Markets	
GEOG 204	Cities of the World	
GEOG 210	Social & Environmental Issues	
GEOG 410	Green Development	
HDFS 220	Families in Global Perspective	
HIST 258	20thC World to Midcentury	
HIST 259	20thC World from Midcentury	
NRES 287	Environment and Society	
PS 241	Comp Politics in Dev Nations	
PS 280	Intro to Intl Relations	
PS 382	Intl Political Economy	
PS 389	International Communications	
REL 110	World Religions	
UP 423	Community Development in the Global South	
Global Study in the Natural Science Disciplines		
Minimum of 3 hours, maximum of 9 hours, selected from:		3-9
ANSC 205	World Animal Resources	
ATMS 140	Climate and Global Change	
CPSC 116	The Global Food Production Web	
CPSC 431	Plants and Global Change	
NRES 109	Global Environmental Issues	
PLPA 200	Plants, Pathogens, and People	
TSM 311	Humanity in the Food Web	
Regional Specialization		
The following four approaches/options can be used (separately or in combinations) to complete this portion of the minor.		3-9
Academic credit earned through study or supervised activities outside the U.S. through:		
ACES 293	International Internship	
ACES 298	International Experience	
ACES 299	ACES Study Abroad	
Completion of one or more of the following courses offered by the Department of Agricultural and Consumer Economics		
ACE 254	Economic Systems in Africa	
ACE 452	The Latin American Economies	
ACE 454	Econ Dev of Tropical Africa	
Completion of courses that are approved by Area Studies Programs (see minor advisor)		
Center for African Studies		
Center for East Asian and Pacific Studies		
Center for Latin American and Caribbean Studies		
Program in South Asian and Middle Eastern Studies		
European Union Center		
Foreign language courses that exceed College of ACES graduation requirements.		
Total Hours		**21**

International Minor in Engineering

for the International Minor in Engineering

international minor website: https://students.grainger.illinois.edu/ipeng/international-minor-in-engineering/
college website: https://grainger.illinois.edu/

Many Grainger Engineering graduates will be involved in international activities during their professional careers. In anticipation of such involvement, the college offers an opportunity for students to complete an international minor as part of any engineering degree program. All international minor requirements must be satisfied before graduation.

Below are the Regional Specialization Areas. Specific courses approved for each region can be seen below by clicking on the appropriate region.

Regional Specialization Areas

Africa (https://students.grainger.illinois.edu/get_file/?pid=b56d1d7dc89ff21f2876157bc262d2703ca6e285ebe2d7e2e4d7976f8b2295c57bfa

Korea (https://students.grainger.illinois.edu/get_file/?pid=d1c8466f85ef2d7d7e4d7976f8b2295c57bfa

China/East Asia (https://students.grainger.illinois.edu/get_file/?pid=614423b0c0766348b0566b4cfe74247)

Latin America/Caribbean (https://drive.google.com/file/d/1P-otqIuaILbbUUx6NWI1pjexBodEbcf7/4ab8a9c785e8d304382ff0a835a6a8e3)

France (https://students.grainger.illinois.edu/get_file/?pid=318bf2e1aab1b5d5fbe7e3da4a5pid=b9d66f5733f0137b8f3f2e3898329222142)

Middle East (https://students.grainger.illinois.edu/get_file/?pid=b9d66f5733f0137b8f3f2e3898329222142)

Germany (https://students.grainger.illinois.edu/get_file/?pid=5bea432c6d587d5ad635b36f89a5d26246b8c6c2b2b94a345a8b1f64caeea7c4)

Russia/Eastern Europe (https://students.grainger.illinois.edu/get_file/?pid=5b2f6f9ce5b2b94a345a8b1f64caeea7c4)

Great Britain (https://students.grainger.illinois.edu/get_file/?pid=934748fb18375f013e9f80bde3d962e352f649de582d64c58b7e9a27ade4e73e96b

Scandinavia (https://students.grainger.illinois.edu/get_file/?pid=352f649de582d64c58b7e9a27ade4e73e96b

Italy (https://students.grainger.illinois.edu/get_file/?pid=44b9757c87413d8111cc12a8dep19e8b4c2fcae5a25c85ea9a5b978bc8e2da0a6f193

South/Southeast Asia (https://students.grainger.illinois.edu/get_file/?pid=9b4c2fcae5a25c85ea9a5b978bc8e2da0a6f

Japan (https://students.grainger.illinois.edu/get_file/?pid=f6edaeeee56a77cb8e575fc32a9[illegible])	Spain (https://students.grainger.illinois.edu/get_file/?pid=[illegible])

Completion of courses in Program Requirement sections are tabled below.

Code	Title	Hours
Language Courses, maximum of 12 credit hours [1]		12
Non-engineering, globally focused courses [2,3]		9
ENG 299	Engineering Study Abroad [4]	0
Total Hours		21

[1] Students completing a minor in Great Britain or Australian studies will not have to complete a language requirement. Instead, the courses will all be chosen from the non-engineering, globally focused course lists.

[2] Must include one 300/400 level course.

[3] Must include one political science or economics related course.

[4] At least 4 weeks in residence for work or study in chosen country or region.

For more information regarding the International Minor (IM), contact the Engineering Study Abroad Office (3300 Digital Computer Lab, (217) 244-0054, ipeng@illinois.edu) or visit the Office of the Associate Dean for Undergraduate Programs, 206 Engineering Hall.

Italian Minor

for the Minor in Italian

department website: http://www.frit.illinois.edu/ (https://frit.illinois.edu/)
department faculty: French & Italian Faculty (https://frit.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: french-italian@illinois.edu

Code	Title	Hours
Minimum of 19 hours of course work in Italian language and literature beyond ITAL 103 including:		
ITAL 104	Intermediate Italian II	4
Minimum of 15 hours of electives at the 200- to 400-level. Choose from the following: [1]		15
ITAL 200	Italian Studies in a Mediterranean Context	
ITAL 210	Practical Review Italian	
ITAL 220	Contemporary Italian, Oral and Written	
ITAL 240	Italy Middle Ages & Renaiss	
ITAL 270	Introduction to Italian Cinema	
ITAL 310	Advanced Grammar	
ITAL 380	Ital Business & Profess	
ITAL 390	Spec Topics Italian Studies	
ITAL 406	Italian Culture and Globalization	
ITAL 413	Dante	
ITAL 414	Petrarch & Boccaccio	
EURO 415	Europe and the Mediterranean	
ITAL 420	Masterpieces Renaiss Lit	
ITAL 440	Modern Italian Novel	
ITAL 450	Italian Syntax & Phonology	
ITAL 470	Topics in Italian Cinema	
ITAL 490	Italian Critical Theory	
ITAL 491	Honors Senior Thesis	
Total Hours		19

[1] *At least 6 of the 15 hours must be taken from among the following advanced-level courses:* ITAL 310, ITAL 380, ITAL 406, ITAL 413, ITAL 414, ITAL 420, ITAL 440, ITAL 450, ITAL 470, ITAL 490.

Journalism Minor

for the Minor in Journalism

department website: https://media.illinois.edu/journalism (https://media.illinois.edu/journalism/)
department faculty: https://media.illinois.edu/journalism/faculty (https://media.illinois.edu/journalism/faculty/)
overview of college admissions & requirements: College of Media (p. 1198)
college website: https://media.illinois.edu/

The Minor in Journalism allows a student to explore the role of journalism in a democracy and to assess how journalism is meeting its social responsibility to engage, enlighten and empower citizens. The minor equips students to participate in the ever-changing world of media delivery and consumption.

Fundamental journalistic skills—identifying questions, obtaining answers, then communicating them effectively—are huge advantages in virtually every profession. Students of all majors can learn how to find engaging topics, locate and interview key sources, analyze and visualize important data, and present material impactfully in written, audio/visual, and interactive forms across media platforms. Students explore introductory principles in four courses in writing, history, ethics, and law, which also may fulfill General Education requirements, then choose at least two elective courses, which again may meet General Education requirements, from a list that includes research and practical courses.

Programs in Journalism

Undergraduate Programs:
- **major:** Journalism, BS (p. 250)
- **major:** Journalism, BS-MJ (p. 460)
- **minor:** Journalism (p. 506) | Media (p. 513)

Graduate Programs:
- **degree:** Journalism, BS-MJ (p. 460)
- **degree:** Journalism, MS (p. 828)
- **joint degree:** Journalism, MS and Law, JD (p. 1156)

The department does not offer a Ph.D. degree. For the program leading to the Doctor of Philosophy in Communications, see Communications and Media, PhD (p. 672).

for the Minor in Journalism

Code	Title	Hours
JOUR 200	Introduction to Journalism	3
JOUR 205	History of American Journalism	3
JOUR 250	Journalism Ethics & Diversity	3
JOUR 311	Media Law	3
Select two courses from the following:		**6-7**
JOUR 210	Newsgathering Across Platforms [1]	
JOUR 220	News Editing	
JOUR 360	Working with the Press	
JOUR 361	Classics of Sports Journalism	
JOUR 450	Media and Public Opinion	
JOUR 451	Research Methods in Journalism [2]	
JOUR 452	Great Books of Journalism	
JOUR 453	Crisis Communications	
JOUR 454	Propaganda & the News Media	
JOUR 470	International Reporting	
JOUR 471	Science Journalism	
JOUR 482	Immersion Journalism	
JOUR 483	Investigative Journalism	
Total Hours		18-19

[1] *JOUR 200 is a prerequisite for JOUR 210.*

[2] *JOUR 200 and Quantitative Reasoning I are prerequisites for JOUR 451.*

Kinesiology Minor

department website: http://www.kch.illinois.edu/
department faculty: Kinesiology & Community Health Faculty (http://www.kch.illinois.edu/)
college catalog page: Applied Health Sciences (http://catalog.illinois.edu/schools/ahs/academic-units/)
college website: http://www.ahs.illinois.edu/

To declare the minor or ask questions about the requirements, please contact:
Alicia Richards, M.S.; alrich17@illinois.edu; 217-300-1058

Programs in Community Health and Kinesiology

Undergraduate Programs:

- **major:** Community Health, BS (p. 105)
  - **concentration:** Community Health: Health Education & Promotion, BS (p. 106)
  - **concentration:** Community Health: Health Planning & Administration, BS (p. 110)
  - **concentration:** Community Health: Rehabilitation Studies, BS (p. 114)
- **major:** Kinesiology, BS (p. 251)
  - **concentration:** Kinesiology: Teacher Certification, BS (p. 253)
- **minor:** Kinesiology (p. 507)
- **minor:** Disability Studies (http://catalog.illinois.edu/undergraduate/ahs/minors/disability-studies/)
- **joint degree:** Community Health, BS and Public Health, MPH (p. 118)
- **joint degree:** Community Health, BS and Epidemiology, MPH (p. 462)
- **joint degree:** Kinesiology, BS and Public Health, MPH (p. 465)
- **joint degree:** Kinesiology, BS and Epidemiology, MPH (p. 463)
- **joint degree:** Interdisciplinary Health Sciences, BS & Epidemiology, MPH (p. 458)

Graduate Programs:

- **degree:** Kinesiology, MS (http://catalog.illinois.edu/graduate/ms_kines/)
- **degree:** Kinesiology, PhD (http://catalog.illinois.edu/graduate/graduate-majors/kinesiology/#doctoratestext)
- **degree:** Community Health, MS (http://catalog.illinois.edu/graduate/graduate-majors/community-health/ms-comm-health/)
- **degree:** Rehabilitation, MS (http://catalog.illinois.edu/graduate/graduate-majors/community-health/ms-rehab/)
- **degree:** Public Health, MPH (http://catalog.illinois.edu/graduate/graduate-majors/community-health/master-pub-health/)
- **joint degree:** Community Health, BS and Public Health, MPH (p. 118)
- **joint degree:** Kinesiology, BS and Public Health, MPH (p. 465)

The Kinesiology Program is committed to the study and research of human movement in all its dimensions. Undergraduate study focuses on exercise stress, movement efficiency, and fitness; the social, cultural, and psychological aspects of participation in physical activity and sport; coordination, control and skill physical activity; physical growth, development, and body form throughout the lifespan; the effects of therapeutic techniques of kinesiology upon recovery from physical injury; and the instructional process of teaching/coaching of physical activity and sport.

The curriculum combines a comprehensive liberal arts and sciences education with in-depth study in a particular area of interest. The program of study provides knowledge and understanding essential for human movement and sport careers in either public or private agencies. The hours required for graduation include prescribed courses for all students as well as requirements determined by the various areas of emphasis selected by the student. Teaching and research emphasize hands-on learning through the use of technology and modern laboratory equipment. Graduates find employment in a variety of fields including teaching-related occupations, corporate fitness, coaching, and athletic training. Many students continue their education and become certified

K-12 physical education teachers, physical therapists, physicians, exercise physiologists, and sports psychologists.

for the Undergraduate Minor in Kinesiology

To declare the minor or ask questions about the requirements, please contact:
Alicia Richards, M.S.; alrich17@illinois.edu; 217-300-1058

Minimum required course work: Students must complete 12 hours of foundational courses and 9 hours within an area of specialization, including at least 6 hours of 300- and 400-level courses.
Minimum hours required for completion: 21 hours.

Foundational Courses

Code	Title	Hours
KIN 122	Physical Activity and Health	3
KIN 140	Social Sci of Human Movement	3
KIN 160	Introduction to Kinesiology	3
KIN 201	Physical Activity Research Methods	3
Total Hours		12

Specialization Areas (choose one) [1]:

Code	Title	Hours
Exercise Psychology & Health Behavior		
Required advanced level courses:		6
KIN 340	Social & Psychological Aspects of Physical Activity	
KIN 448	Exercise & Health Psychology	
Electives (choose at least 1):		3
KIN 247	Intro to Sport Psychology	
KIN 443	Psychophysiology in Ex & Sport	
KIN 447	Psych of Sport Performance	
KIN 474	Tech-Driven Health Intervention	
Exercise Physiology		
Required advanced level courses:		6
KIN 150	Bioscience of Human Movement	
KIN 352	Bioenergetics of Movement	
Electives (choose at least 1):		3
KIN 451	Skeletal Muscle Physiology	
KIN 452	Clin & Applied Ex Physiology	
KIN 453	Nutrition for Performance	
KIN 470	Exercise Endocrinology	
Teaching & Coaching Physical Activity		
Required advanced level courses:		6
KIN 361	Curriculum in Grades K-6	
KIN 362	Curriculum in Grades 7-12	
Electives (choose at least 1):		3
KIN 360	Adapted Physical Education	
KIN 363	Instructional Strategies in PE	
KIN 369	Coaching Strategies	
KIN 460	Technology & Pedagogical KINES	
Biomechanics		
Required advanced level courses:		6
KIN 355	Biomechanics of Human Movement	
KIN 457	Motor Learning & Control	
Electives (choose at least 1):		3
KIN 259	Motor Development and Control	
KIN 473	Skill Acquisition Strategies	
Cultural & Interpretive Studies		
Required advanced level courses:		6
KIN 249	Sport & Modern Society	
KIN 346	Case Study: Endless Summer	
Electives (choose at least 1):		3
KIN 401	Measure & Eval in Kinesiology	
KIN 442	Body, Culture & Society	
KIN 473	Skill Acquisition Strategies	

[1] *Students are allowed to enroll in courses outside their areas as needed based on advisor approval.*

Landscape Studies Minor - Undergrad

department website: https://landarch.illinois.edu/
department faculty: https://landarch.illinois.edu/faculty/
overview of college admissions & requirements: http://catalog.illinois.edu/schools/faa/academic-units/
college website: https://faa.illinois.edu/
email: ladept@illinois.edu

The Minor in Landscape Studies enables students to gain considerable knowledge of the ecological, social, cultural and historical factors that have shaped landscapes of the western and non-western world. Students interested in integrative studies of the natural, cultural and built environment, and those concerned with landscape as context for art and design, will develop a comprehensive theoretical framework for work in their major field of study.

Minimum required major and supporting course work: A minimum of 17 credit hours from the following three categories is required for completion of the minor. A minimum of 6 hours of 300 or 400-level coursework that is distinct from your major is required.

Code	Title	Hours
Studies of the Professions Engaged in Landscape Inquiry		
LA 101	Introduction to Landscape Arch	2
Studies of the Professions Engaged in Landscape Inquiry		
Select a minimum of 6 hours from the following:		6
LA 212	Water and Society	
LA 250	Environmental Site Analysis	
LA 270	Behavioral Factors in Design	
LA 370	Environmental Sustainability	
Study of Historical and Cultural Landscapes		
Select a minimum of 9 hours from the following:		9
LA 218	S Asian Cultural Landscapes	
LA 220	Exploring African Cities	
LA 221	History of the Prison	
LA 222	Islamic Gardens & Architecture	
LA 242	Nature and American Culture	
LA 314	History of World Landscapes	

LA 315	History of Modern Landscape Architecture
LA 390	Independent Study I
LA 427	Amer Vernacular Cultural Land
LA 470	Social/Cultural Design Issues

Students are permitted to substitute one Landscape Architecture course from the 'Study of Historical and Cultural Landscapes' category for one of the courses in 'Study of the Professions Engaged in Landscape Inquiry' category upon the approval of the Academic Affairs Coordinator in the Department of Landscape Architecture.

Admission to the minor

University of Illinois students with a minimum GPA of 2.0 and completion of the campus Composition I and Quantitative Reasoning I requirements are eligible for admission. Applicants from other institutions must have a minimum GPA of 2.5. Students must declare their intentions and be admitted to the program by the Academic Affairs Coordinator in the Department of Landscape Architecture (ladept@illinois.edu).

Prerequisites

Students must comply with any prerequisite requirements of courses to be taken under this program.

Advising

Advising of students in the minor will be conducted by the Academic Affairs Coordinator in the Department of Landscape Architecture.

Certification of Successful Completion

Completion of the Minor in Landscape Studies will be certified by the student's home college office.

Latin American Studies, Interdisciplinary Minor

for the Interdisciplinary Minor in Latin American Studies

center website: http://www.clacs.illinois.edu/academics/undergrad/und_major.aspx
center faculty: Latin American Studies Faculty (http://www.clacs.illinois.edu/about/people/faculty.aspx)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: clacs@illinois.edu

The Center for Latin American and Caribbean Studies offers an interdisciplinary minor for students majoring in another discipline. The minor in Latin American Studies consists of a total of 21 credit hours selected from offerings by the Center and various departments. This program must be approved by the Associate Director.

The minor is for those students who wish to concentrate their work in a specific discipline yet maintain a Latin American focus in their coursework. For students completing a major sponsored by the College of Liberal Arts and Sciences, the department or unit sponsoring the student's major must approve the minor.

Code	Title	Hours
Two courses in a Latin American language (Spanish, Portuguese, Quechua or other Native American language indigenous to Middle or South America) beyond the level specified by the LAS language requirement, or the equivalent as demonstrated by special examination. At the end of their language study, all students are urged to take an oral proficiency test based on ACTFL guidelines.		5-6
Courses drawn from the Latin American Studies curriculum. The curriculum normally consists of courses with 50 percent or more Latin American content and is defined according to a list maintained and regularly updated by the Center for Latin American and Caribbean Studies. Courses include:		15-16
LAST 170	Introduction to Latin America	
No more than 6 hours chosen from a single department		
Six hours of 300- to 400-level course offerings		
No more than 6 hours of literature		
Total Hours		21

Latina/Latino Studies Minor

for the Minor in Latina/Latino Studies

department website: https://lls.illinois.edu/
department faculty: Latina/Latino Faculty (https://lls.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: lls-studies@illinois.edu **or** aprodrig@illinois.edu

The Department of Latina/Latino Studies offers a campus-wide minor that provides students with the opportunity to critically explore various facets of U.S. Latina/o social, political, and cultural life. Students will also more generally gain a deeper understanding of race, ethnicity, and diversity in the United States. The Department of Latina/Latino Studies must approve a student's minor course plan.

Code	Title	Hours
LLS 100	Intro Latina/Latino Studies	3
Thematic Areas		
Students must take one course in each of the following three areas. A list of courses is maintained in the Department's office.		
A. Literature, Media, and Culture		3
B. Race, Gender, and Sexuality		3
C. History, Politics, and Society		3
2 elective courses selected from the list of all LLS and cross-listed LLS classes		6
Total Hours		18

Leadership Studies Minor

for the Minor in Leadership Studies

program website: Agricultural Leadership & Science Education Program (https://aged.illinois.edu/)
department faculty: Faculty (https://aged.illinois.edu/directory/)
minor email: jsmist@illinois.edu
overview of leadership minor admissions & requirements: Leadership Minor Website (https://aged.illinois.edu/leadership-minor/)
college website: C (https://aces.illinois.edu/)ollege of Agricultural, Consumer and Environmental Sciences (https://aces.illinois.edu/)

The minor in Leadership Studies provides instruction in leadership theories and their applications and is open to all undergraduate students who have a minimum 2.0 GPA. The minor requires a total of seventeen or eighteen semester hours: nine hours of required foundation courses, five to six hours of elective context courses, and three hours in a capstone course.

Students should bring the Statement of Intent to Pursue a Campus-Approved Minor form (http://provost.illinois.edu/educational-innovation/advising-resources/pursuing-undergraduate-minor/) to ACES Academic Programs, 128 Mumford Hall.

Code	Title	Hours
Requirements		
LEAD 260	Foundations of Leadership	3
LEAD 380	Leadership in Groups and Teams	3
PSYC 245	Industrial Org Psych	3
LEAD 480	Collaborative Leadership	3 or 4
Two(2) electives from:		**5-6**
ACE 231	Food and Agribusiness Mgt	
ACE 291	Ag Policy & Leadership	
ACES 298	International Experience (Leadership Experience to Rome)	
AFAS 331	Leading People and Effective Communication I	
AFAS 332	Leading People and Effective Communication II	
AGCM 430	Comm in Env Social Movements	
LEAD 230	Leadership Communications	
LEAD 340	Leadership Ethics & Society: Addressing Contemporary Challenges	
LEAD 460	Critical Approaches to Leadership Practice	
AHS 365	Civic Engagement in Wellness	
ANSC 471	ANSC Leaders & Entrepreneurs	
BADM 310	Mgmt and Organizational Beh	
BADM 311	Leading Individuals and Teams	
BADM 314	Leading Negotiations	
CMN 321	Strategies of Persuasion	
ENG 315	Learning in Community	
ENG 598	Special Topics (Applied Project Management)	
IHLT 230	Leadership in Health	
JOUR 250	Journalism Ethics & Diversity	
KIN 369	Coaching Strategies	
MILS 341	Leadership and Management	
MILS 342	Officership	
NS 303	Leadership and Management	
NS 308	Leadership and Ethics	
PHIL 436	Phil of Law and of the State	
PS 304	The US Presidency	
PSYC 455	Organizational Psych	
RST 200	Leadership in Recreation, Sport and Tourism	
SE 361	Emotional Intelligence Skills	
SOCW 321	Social Entre & Social Change	

Legal Studies Minor

for the Undergraduate Minor in Legal Studies

dean of the college: Vikram David Amar
director of undergrad studies: Jennifer Pahre
admission information: https://law.illinois.edu/academics/degree-programs/legal-studies-minor/

college website: https://law.illinois.edu
college faculty: Law Faculty (https://law.illinois.edu/faculty-research/faculty-profiles/)
college address: 244 Law Building, 504 East Pennsylvania Avenue, Champaign, IL 61820
phone: (217) 333-0931
email: law-undergrad@illinois.edu

The Legal Studies minor, administered by the College of Law, is designed to provide students with a better understanding of how the law operates in a variety of contexts and develop critical thinking skills. The minor requires 18 hours of credit, with nine hours of core courses taught by College of Law professors and affiliated faculty, and an additional nine hours in one of three tracks: 1) Law & Politics; 2) Law & Cultures; or 3) Law & Economics of Food Security and Sustainability.
6 credit hours must be in 300- or 400- level courses. Other qualifying 300- or 400- level courses may be approved in consultation with the minor advisor. Students must have completed 30 credit hours prior to application, have Academic Good Standing status, and have a cumulative 3.25 GPA or higher.
Prospective Legal Studies Minors must apply for acceptance into the program. For more information, please contact lawundergrad@illinois.edu for general instructions on how to apply for the minor.

Code	Title	Hours
Core Course work (at least 9 hours)		**9**
LAW 201	Basic Constitutional Law & Individual Rights	
LAW 301	Introduction to Law	
LAW 302	Transitional Justice	
LAW 303	Living the Law	
LAW 304	Introduction to Legal Research	
LAW 305	Art and Cultural Property Law	
EPS/AAS/AFRO/LLS 310	Race and Cultural Diversity	
SOC 479	Law and Society	
PS 323	Law and Representation	

Students will select one of the following tracks:

Code	Title	Hours
Law & Politics Track		**9**
choose at least 9 hours from the following:		
PS 301	The US Constitution I	
PS 302	The US Constitution II	
PS 305	The US Supreme Court	
PS 306	Judicial Politics	
PS 322	Law and Public Policy	
PS 386	International Law	
Law & Cultures Track		**9**
choose at least 9 hours from the following:		
AAS 370/ LLS 372	Immigration, Law, and Rights	
LLS/AIS/ AFRO/AAS/ GWS 343	Criminalization and Punishment	
LLS 473	Immigration, Health & Society	
AFRO 378/ HIST 389	Race and Revolutions	
GLBL 220	Governance	
GLBL 260	Global Human Rights	
PS/AAS/ AFRO/LLS 201	US Racial & Ethnic Politics	
GWS/SOC 201	Race, Gender & Power	
Law & Economics of Food Security Track		**9**
choose at least 9 hours from the following:		
ACE 210	Environmental Economics	
ACE 251	The World Food Economy	
ACE 255	Economics of Food and Environmental Justice	
ACE 306	Food Law	
ACE 310	Natural Resource Economics	
ACE 321	Principles of Public Policy	
ACE 403	Agricultural Law	
ACE 406	Environmental Law	
ACE 410	Energy Economics	
ACE 411	Environment and Development	
ACE 456	Agr and Food Policies	

6 credit hours must be in 300- or 400- level courses. Other qualifying 300- or 400- level courses may be approved in consultation with the minor advisor.

LGBT/Queer Studies Minor

for the Minor in LGBT/Queer Studies

department website: https://www.gws.illinois.edu/
department faculty: Gender & Women's Studies Faculty (https://gws.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: gws@illinois.edu

The LGBT/Queer Studies minor provides students the opportunity to explore how various political, social, and cultural definitions of sexual identities and their expression have been constructed and challenged in different places and points in time. Attention is given to queer politics, and interactions with nation, race, ethnicity, and gender. A minor in LGBT/Queer Studies provides complementary tools for many majors in the humanities, arts and sciences.

The Department of Gender and Women's Studies must approve a student's minor course plan. Students must register their minor with the Gender and Women's Studies advisor.

Code	Title	Hours
GWS 202	Sexualities	3
or GWS 255	Queer Lives, Queer Politics	
GWS 370	Queer Theory	3
Additional Coursework- Select three of the following: [1]		9
GWS 325	Lesbian/Queer Media Cultures	
GWS 385	Transnational Sexualities	
GWS 387	History of Sexuality in U.S.	
GWS 459	Gender, Sex, & Postcoloniality	
GWS 467	Locating Queer Culture	
GWS 470	Transgender Studies	
GWS 478	Sex, Power and Politics	
Area electives at any level. For a list of approved courses contact the GWS Department office or the GWS advisor.		3
Total Hours		18

[1] *Topics courses (*GWS 395*,* GWS 495*) may count up to 3 hours toward additional coursework with consent of the GWS advisor.* GWS 390 *or* GWS 490 *may count up to 3 hours toward additional coursework with consent of the GWS advisor.*

At least 6 hours of advanced coursework must be distinct from credit earned for the student's major or another minor.

Students may choose to major in Gender & Women's Studies and Minor in LGBT/Queer Studies, but classes may not count towards both.

Linguistics Minor

for the Minor in Linguistics

department website: https://linguistics.illinois.edu/
department faculty: Linguistics Faculty (https://linguistics.illinois.edu/directory/faculty/)
advising: Linguistics advising (https://linguistics.illinois.edu/academics/undergraduate-program/undergraduate-advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/

The Linguistics Minor is designed for students who seek a basic familiarity with the field and is especially suited for students with majors in foreign language and other language-related fields such as anthropology, computer science, English, psychology, communication, and for anyone interested in the nature of language.

Code	Title	Hours
LING 100	Intro to Language Science	3
Select two of the following:		6
LING 301	Elements of Syntax	
LING 302	Elements of Phonology	
LING 307	Elmnts Semantics & Pragmatics	
Nine additional hours of linguistics courses, including at least six hours chosen from the following:		9
LING 301	Elements of Syntax (if not chosen for the second requirement above)	
LING 302	Elements of Phonology (if not chosen for the second requirement above)	
LING 307	Elmnts Semantics & Pragmatics (if not chosen for the second requirement above)	
LING 210	Language History	
LING 225	Language, Mind, and Brain	
LING 250	American Voices: Linguistic Diversity in the US	
LING 400	Intro to Linguistic Structure	
LING 401	Intro to General Phonetics	
LING 406	Introduction to Computational Linguistics	

Materials Science & Engineering Minor

for the Minor in Materials Science & Engineering

department website: https://matse.illinois.edu/
department faculty: https://matse.illinois.edu/people/faculty (https://matse.illinois.edu/people/faculty/)
overview of college admissions & requirements: The Grainger College of Engineering (https://grainger.illinois.edu/admissions/)
college website: https://grainger.illinois.edu/

Materials are the basis for all engineering and also are the basis for much of the research in various areas of science. The Minor in Materials Science and Engineering is designed to give students in other areas of engineering and science both a broad view of all materials as well as several courses in a particular area of materials, knowledge that will be of value whether the student pursues a career in industry, government, or academia.

The courses, listed below, have been selected to give an undergraduate student both a strong background in all types of materials as well as more detailed knowledge of a particular area of materials (e.g., ceramics, metals, polymers, electronic materials or biomaterials).

Minor Requirements:

Code	Title	Hours
Core Course Work		
MSE 280	Engineering Materials	3
MSE 401	Thermodynamics of Materials (Other thermodynamics courses may be substituted upon petition.)	3
One additional course chosen from an approved list below:		3
MSE 304	Electronic Properties of Matls	
MSE 402	Kinetic Processes in Materials	
MSE 403	Synthesis of Materials	
MSE 405	Microstructure Determination	
MSE 406	Thermal-Mech Behavior of Matls	
Nine additional hours in advanced courses selected from:		9
MSE 404	Laboratory Studies in Materials Science and Engineering	1.5
MSE 420	Ceramic Materials & Properties	3
MSE 421	Ceramic Processing	3 or 4
MSE 422	Electrical Ceramics	3
MSE 440	Mechanical Behavior of Metals	3
MSE 441	Metals Processing	3
MSE 443	Design of Engineering Alloys	3
MSE 445	Corrosion of Metals	3 or 4
MSE 450	Polymer Science & Engineering	3 or 4
MSE 453	Plastics Engineering	3
MSE 454		3
MSE 455	Macromolecular Solids	3
MSE 456	Mechanics of Composites	3
MSE 457	Polymer Chemistry	3 or 4
MSE 458	Polymer Physics	3 or 4
MSE 460	Electronic Materials I	3
MSE 461	Electronic Materials II	3
MSE 466	Materials in Electrochem Syst	3
MSE 470	Design and Use of Biomaterials	3
MSE 473	Biomolecular Materials Science	3
MSE 474	Biomaterials and Nanomedicine	3
MSE 480	Surfaces and Colloids	3 or 4
MSE 481	Electron Microscopy	3 or 4
MSE 484	Composite Materials	3 or 4
MSE 485	Atomic Scale Simulations	3 or 4
MSE 487	Materials for Nanotechnology	3 or 4
MSE 488	Optical Materials	3 or 4
MSE 489	Matl Select for Sustainability	3 or 4
ECE 444	IC Device Theory & Fabrication	4

For more information regarding the Materials Science and Engineering minor, visit the Materials Science and Engineering minor Web site (https://matse.illinois.edu/academics/undergraduate-programs/matse-minor/), contact the MatSE Department Office (201 MSEB, 217-333-1441, matse@illinois.edu), or visit the Office of the Associate Dean for Undergraduate Programs, 206 Engineering Hall.

Mathematics Minor

for the Minor in Mathematics

department website: https://www.math.illinois.edu/
department faculty: Mathematics Faculty (https://math.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: mathadvising@illinois.edu

Students must complete MATH 241, and at least one 400-level MATH course for admission into the minor. The Mathematics minor is designed to prepare students majoring in some other discipline with a background in mathematics that is both broad and deep. Students interested in pursuing the minor should have completed the calculus sequence through MATH 241, and one additional Math course at the 400-level demonstrating a strong record of success in college-level mathematics courses. Given the cumulative character of mathematics preparation, students earning grades of C or below in previous mathematics courses are advised not to pursue the minor.

Code	Title	Hours
MATH 241	Calculus III	4
Completed in one of two ways:		15
MATH 347	Fundamental Mathematics (and four courses chosen from at least two of the following lists of courses)	
OR		
five courses chosen from at least two of the following lists of courses.		
Algebra		
ASRM 406	Linear Algebra with Financial Applications (formerly MATH 410)	
MATH 415	Applied Linear Algebra	
MATH 416	Abstract Linear Algebra	
MATH 417	Intro to Abstract Algebra	
MATH 418	Intro to Abstract Algebra II	
MATH 427	Honors Abstract Algebra	
MATH 453	Number Theory	
Discrete Mathematics		
MATH 412	Graph Theory	
MATH 413	Intro to Combinatorics	
MATH 414	Mathematical Logic	
MATH 482	Linear Programming	
Analysis		
MATH 284	Intro Differential Systems	
MATH 285	Intro Differential Equations	
MATH 286	Intro to Differential Eq Plus	
MATH 424	Honors Real Analysis	
MATH 425	Honors Advanced Analysis	
MATH 441	Differential Equations	
MATH 442	Intro Partial Diff Equations	
MATH 444	Elementary Real Analysis	
MATH 446	Applied Complex Variables	
MATH 447	Real Variables	
MATH 448	Complex Variables	
CS 450	Numerical Analysis	
MATH 484	Nonlinear Programming	
MATH 487	Advanced Engineering Math	
MATH 489	Dynamics & Differential Eqns	
Geometry		
MATH 402	Non Euclidean Geometry	
MATH 403	Euclidean Geometry	
MATH 423	Differential Geometry	
MATH 428	Honors Topics in Mathematics	
MATH 432	Set Theory and Topology	
MATH 481	Vector and Tensor Analysis	
Probability and Statistics		
MATH 461	Probability Theory	
STAT 400	Statistics and Probability I	
STAT 410	Statistics and Probability II [1]	
or STAT 420	Methods of Applied Statistics	
Total Hours		19

[1] *Students may use* STAT 410 *or* STAT 420*, but not both toward the minor.*

Media Minor

for the Minor in Media

department website: https://media.illinois.edu/media-minor (https://media.illinois.edu/media-minor/)
overview of college admissions & requirements: College of Media (p. 1198)
college website: https://media.illinois.edu/

The Minor in Media offers students breadth and depth in the study of media in the 21st century. Students take one introductory course in each of three disciplines in the College of Media (Advertising, Journalism, and Media & Cinema Studies), for a total of 9 hours. Completion of the minor requires an additional 9 hours of advanced (300- and 400-level) courses coming from at least two different departments within the College of Media. Thematic areas have been designed to help students pursuing the Media Minor choose classes that align with student interest and career goals. Themes are suggestions and students are not required to choose a theme to complete the Media Minor.
Students pursuing a major in the College of Media are not eligible for a minor in Media.

Programs in the College of Media

Undergraduate Programs:
- **major:** Advertising, BS (p. 14)
- **major:** Computer Science & Advertising, BS (p. 129)
- **major:** Journalism, BS (p. 250)
- **major:** Media & Cinema Studies, BS (p. 301)
- **minors:** Cinema Studies (p. 484) | Critical Film Production (p. 489) | Journalism (p. 506) | Media (p. 513) | Public Relations (p. 519)

Graduate Programs:
- **degree:** Advertising, MS (p. 549)
- **degree:** Journalism, BS-MJ (p. 460)
- **degree:** Journalism, MS (p. 828)
- **degree:** Strategic Brand Communication, MS (p. 1030)
- **degree:** Communications & Media, PhD (p. 672)
- **minor:** Cinema Studies (p. 1128)

for the Minor in Media

To complete the Media Minor students will take one introductory course in each of three disciplines in the College of Media (Advertising, Journalism, and Media & Cinema Studies), for a total of 9 hours. Completion of the minor requires an additional 9 hours of advanced (300

and 400 level) courses. The advanced courses must be from at least two departments within the College of Media. Prerequisite courses will be enforced for advanced-level courses. Students may choose to follow a thematic area, but are not required to do so. Please see the College of Media website for thematic areas and related courses.

Students pursuing a major in the College of Media are not eligible to pursue a minor in Media.

Code	Title	Hours
100- or 200-level Advertising Course		3
100- or 200-level Journalism Course		3
100- or 200-level Media and Cinema Studies Course		3
Additional 300- or 400-level Courses - Must be from at least two different College of Media departments		9
Total Hours		**18**

Molecular and Cellular Biology Minor

for the Minor in Molecular & Cellular Biology

school website: https://mcb.illinois.edu/undergrad/
school faculty: School Faculty (https://mcb.illinois.edu/people/)
advising: MCB advising (https://mcb.illinois.edu/undergrad/advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: undergrad@mcb.illinois.edu

The minor, administered by the School of Molecular and Cellular Biology, is designed to provide students with an understanding of foundational principles of physiology, cellular and developmental biology, microbiology, molecular genetics and biochemistry. A minor in Molecular and Cellular Biology will prepare students for training in medicine and other health sciences, graduate studies in related disciplines, as well as for employment opportunities in pharmaceutical and biotechnology industries.

Students must contact an MCB advisor (https://mcb.illinois.edu/undergrad/advising/) for acceptance into the minor. MCB 150 (http://catalog.illinois.edu/search/?P=MCB%20150) must be completed or in progress before acceptance into the minor.

Code	Title	Hours
MCB 244	Human Anatomy & Physiology I	3
or MCB 246	Human Anatomy & Physiology II	
MCB 250	Molecular Genetics	3
MCB 251	Exp Techniqs in Molecular Biol	2
MCB 252	Cells, Tissues & Development	3
MCB 253	Exp Techniqs in Cellular Biol	2
MCB 354	Biochem & Phys Basis of Life	3
or MCB 450	Introductory Biochemistry	
Choose one additional 3-5 credit hour course from the approved list of 300- and 400-level courses for MCB majors.		3-5
Total Hours		19-21

Music Minor

for the Minor in Music

department website: https://music.illinois.edu
department faculty: Music Faculty (https://music.illinois.edu/people/)
college catalog page: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/

The School of Music offers non-music majors an exposure to music through courses in musicology and ethnomusicology, music theory, music composition, music technology, jazz history and studies, and performance studies (through applied lessons and ensemble). The Music Minor is intended for student musicians with previously established, fundamental musical experiences - individuals who wish to expand upon already obtained musical skills and related study - and is not intended to be an introduction to music.

Admission to the Music Minor

Prospective Music Minors must apply for acceptance into the program. For more information, please see https://my.faa.illinois.edu/gradstat/login.asp, or contact the Music Admissions Office (musicadmissions@illinois.edu)(in Music Building Room 2018) for general instructions on how to apply for the minor.

Course Requirements

The Music Minor requires the successful completion of 21 semester hours of courses in music according to the following distribution:

1. Six to eight (6-8) credit hours in music core coursework, including either four (4) credits in Music Theory and Practice I and II (MUS 101 and MUS 102) or six (6) credits in Rudiments of Music Theory I and II (MUS 103 and MUS 104), plus two (2) credits in Introduction to Art Music (MUS 110);
2. At least six credit hours must derive from upper division or advanced music courses. This includes MUS 313 and MUS 314 (which also serve as General Education courses), or any other MUS 300-or 400-level music course with instructor approval;
3. Additional music elective credit hours may include private lessons (applied lessons) pending successful completion of an audition with the appropriate music professor and availability of teaching staff;
4. Up to three (3) credit hours of ensembles may be used for electives and can be selected from MUS 250, MUS 252-MUS 257, MUS 260-MUS 272;
5. Topics offered under MUS 199 or MUS 499 must be approved for credit toward by the music minor advisor.

Code	Title	Hours
Music Theory		
MUS 101 & MUS 102	Music Theory and Practice I and Music Theory and Practice II [1]	4
or		
MUS 103 & MUS 104	Rudiments of Music Theory I and Rudiments of Music Theory II [1]	6
Musicology		
MUS 110	Introd Art Mus: Intl Perspect	2
Upper Division Music Courses		

Music courses at the 300-400 level. [2, 3, 4]	6
Music Electives	
Music electives to be taken from theory, aural skills, musicology, jazz history, applied lessons, music technology, conducting, composition, ensembles, etc. [5, 6, 7]	7-9
Note: Up to three (3) ensemble credits will apply toward the Music Minor. Approved ensembles include MUS 250, MUS 252-MUS 257, and MUS 260-MUS 272.	
Total Hours	**21**

1 *MUS 101 and MUS 102 are two (2) credits each. MUS 103 and MUS 104 are three (3) credits each. You cannot mix and match courses: MUS 101 and 102 are paired together; MUS 103 and 104 are paired together.*

2 *300-level courses open to Music Minors include MUS 313-314, MUS 317, MUS 339, and MUS 360-369.*

3 *MUS 400 and MUS 408 will be open only to Music Minors who have taken and passed MUS 201 and MUS 202.*

4 *Courses in the MUS 410-421 series will be open only to Music Minors who have taken and passed either MUS 313 or MUS 314; courses will be selected in consultation with the Music Minor advisor in accordance with their interests. Music Minors must obtain instructor permission to register for any course in the 410-421 series.*

5 *This includes both MUS 462-463 (Jazz Listening Seminar I and II) and MUS 464-465 (Jazz History I and II).*

6 *Students must audition, be accepted into a studio, and pay a nominal fee for applied lessons.*

7 *Topics offered under* MUS 199 *or* MUS 499 *must be approved for credit toward by the music minor advisor.*

Musical Theatre Minor for Performing Artists

for the degree of Minor in Musical Theatre in Performing Arts

department website: https://www.music.illinois.edu/
department faculty: https://www.music.illinois.edu/people (https://www.music.illinois.edu/people/)
overview of college admissions & requirements: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/
email: musicadmissions@illinois.edu

The Musical Theatre Minor is intended for students in the performing arts who are majoring in either dance or the acting concentration of the theatre major in the College of Fine and Applied Arts. These are individuals who wish to expand upon their performance skills in a related study, which has an emphasis in Musical Theatre.

This minor is not intended for students outside the College of Fine and Applied Arts.

Prerequisites for the Minor in Musical Theatre:

1. MUS 103, Rudiments of Music Theory I
2. MUS 222, Singing in Musical Theatre
3. THEA 170, Fundamentals of Acting (dance majors only)
4. DANC 101, Modern Dance I (acting majors only)
5. DANC 107, Ballet I (acting majors only)

Admission Requirements

1. Applicants must be dance or acting majors who have completed at least 30 credit hours prior to the January application period to become eligible for admission review.
2. Applicants must complete all prerequisite courses prior to the January application period to become eligible for admission review and must have Academic Good Standing status (2.0 cumulative GPA or higher), plus have a cumulative 2.5 GPA or higher in prerequisite courses.
3. Formal application is made through the School of Music Admissions Office in the Music Building. Email: musicadmissions@illinois.edu.
4. Applications are reviewed in February, and successful applicants are invited to audition for the Lyric Theatre faculty. Final decision of all applicants is made by the end of March.
5. Only those students officially admitted into the Musical Theatre Minor Program by the School of Music may earn the Musical Theatre Minor.

Course Requirements

The Musical Theatre Minor requires the successful completion of 21 semester hours for Dance majors and 22 semester hours for Acting concentration in Theatre majors according to the following distribution.

for the degree of Minor in Musical Theater in Performing Arts

Musical Theatre Minor Requirements - *Dance Majors*

Code	Title	Hours
Prerequisite Courses for Dance Majors		
MUS 103	Rudiments of Music Theory I	3
MUS 222	Singing in Musical Theatre	1
THEA 170	Fundamentals of Acting I	3
Required Courses for Dance Majors		
MUS 107	Musicianship I	2
MUS 181	(two semesters)	4
MUS 422	Musical Theatre Repertoire (two semesters)	4
MUS 472	Senior Project Showcase (two semesters)	2
DANC 209	Lyric Theatre Dance	2
Total Hours		21

Musical Theatre Minor Requirements - *Acting Concentration in Theatre Majors*

Code	Title	Hours
Prerequisite Courses for Acting Concentration in Theatre Majors		
MUS 103	Rudiments of Music Theory I	3
MUS 222	Singing in Musical Theatre	1
DANC 101	Modern Dance I	2
DANC 107	Ballet I	2
Required Courses for Acting Concentration in Theatre Majors		
MUS 107	Musicianship I	2
MUS 181	(two semesters)	4
MUS 422	Musical Theatre Repertoire (two semesters)	4
MUS 472	Senior Project Showcase (two semesters)	2

DANC 209	Lyric Theatre Dance	2
Total Hours		22

Natural Resource Conservation Minor

for the Minor in Natural Resource Conservation

The Natural Resource Conservation minor offers an integrated approach to managing natural resources from a sustainability perspective. This minor addresses the diverse biological, physical, social, economic, and political aspects of natural resources and stewardship. Ultimately, this curriculum offers students interested in the conservation of natural resources a challenging and rewarding experience while simultaneously preparing them for future careers requiring a fundamental and strong background in the management and conservation of natural resources.A minimum of 18 hours are required for this minor, of which at least 6 credit hours must be 400-level. Courses taken to fulfill the minor may not be counted toward the major in Natural Resources and Environmental Sciences.

Code	Title	Hours
Required Courses for a Minor in Natural Resource Conservation		
NRES 102	Introduction to NRES	3
or NRES 100	Fundamentals of Env Sci	
NRES 287	Environment and Society	3
or NRES 219	Applied Ecology	
General Electives		
Minimum of 12 credit hours, at least 6 of which much be 400-level, selected from:		12
NRES 108	Env Sc & Nat Resource Careers	
NRES 201	Introductory Soils	
ACE/NRES 210	Environmental Economics	
NRES 219	Applied Ecology	
or NRES 287	Environment and Society	
ACE/NRES 310	Natural Resource Economics	
NRES 302	Dendrology	
NRES 325	Natural Resource Policy Mgmt	
NRES 340	Environ Social Sci Res Meth	
NRES 348	Fish and Wildlife Ecology	
NRES 351	Introduction to Environmental Chemistry	
NRES 362	Ecology of Invasive Species	
NRES 402	Ecohydrology and Water Management	
NRES 407	Wildlife Population Ecology	
NRES 409	Fishery Ecol and Conservation	
NRES 415	Native Plant ID and Floristics	
NRES 418	Wetland Ecology & Management	
NRES 419	Env and Plant Ecosystems	
NRES 420	Restoration Ecology	
NRES 421	Quantitative Methods in NRES	
NRES 423	Politics of International Conservation and Development	
NRES 424	US Environ, Justic & Policy	
NRES 427	Modeling Natural Resources	
NRES 428	Valuing Nature	
NRES 429	Aquatic Ecosystem Conservation	
NRES 438	Soil Nutrient Cycling	
NRES 439	Env and Sustainable Dev	
NRES 454	GIS in Natural Resource Mgmt	
NRES 455	Adv GIS for Nat Res Planning	
NRES 465	Landscape Ecology	
NRES 471	Pedology	
NRES 472	Environmental Psychology	
NRES 474	Soil and Water Conservation	
NRES 475	Environmental Microbiology	
NRES 485	Stream Ecosystem Management	
NRES 487	Soil Chemistry	
NRES 488	Soil Fertility and Fertilizers	
Total Hours		18

Nutrition Minor

for the Minor in Nutrition

department website: https://fshn.illinois.edu
department faculty: https://fshn.illinois.edu/directory/faculty/
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college website: https://aces.illinois.edu/

The minor in Nutrition is designed to broaden the student's knowledge of the biological sciences, with a particular emphasis on the interdisciplinary nature of nutrition. A minor in nutrition would benefit those who intend to pursue careers in the food, health, and fitness industries, or those planning to enter medicine, dentistry, nursing, and other health professions such as physician's assistant, physical or occupational therapy, nutrition research, and nutrition communication.

Code	Title	Hours
Required Courses for Minor in Nutrition		
FSHN 220	Principles of Nutrition	4
FSHN 420	Nutritional Aspects of Disease	3
FSHN 426	Biochemical Nutrition I	3
FSHN 427	Biochemical Nutrition II	3
Select two of the following:		**6**
ANSC 420	Ruminant Nutrition	
FSHN 322	Nutrition and the Life Cycle	
FSHN 421	Pediatric Clinical Nutrition	
FSHN 428	Community Nutrition	
FSHN 429	Nutrition Assessment & Therapy	
Total Hours		19

Philosophy Minor

for the Minor in Philosophy

department website: http://www.philosophy.illinois.edu/
department faculty: Philosophy Faculty (https://philosophy.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: phildept@illinois.edu

Code	Title	Hours
PHIL 203	Ancient Philosophy	4
PHIL 206	Early Modern Philosophy	4
Two advanced level courses in philosophy at the 300- or 400-level		6
PHIL 103	Logic and Reasoning QR II	3
or PHIL 202	Symbolic Logic	
One additional course in philosophy at any level (100- to 400-)		3
Total Hours		20

Physics Minor

for the Minor in Physics

College: https://grainger.illinois.edu/
webpage: Physics Minor (https://physics.illinois.edu/admissions/undergraduates/minor-in-physics.html)

Physics and technology go hand in hand, with physics providing the foundation for a broad range of technical fields. This minor is intended to encourage you to expand your understanding of physics beyond the introductory level, to deepen your understanding of fundamental principles, and to enhance your ability to keep abreast of an ever-changing technological world. Depending on your choice of 300- and 400-level physics courses, a total of 21-25 hours is required.

Code	Title	Hours
PHYS 211	University Physics: Mechanics	4
PHYS 212	University Physics: Elec & Mag	4
PHYS 213	Univ Physics: Thermal Physics	2
or PHYS 214	Univ Physics: Quantum Physics	
PHYS 225	Relativity & Math Applications	2
PHYS 325	Classical Mechanics I	3
Any two PHYS courses at the 300 or 400 level except PHYS 419 and PHYS 420		6-10
Total Hours		21-25

For more information regarding the Physics minor, visit the Physics minor website (https://physics.illinois.edu/admissions/undergraduates/minor-in-physics.html), (http://physics.illinois.edu/undergrad/minor.asp) contact the Physics Undergraduate Programs Office (233 Loomis Laboratory of Physics, 217-333-4361, undergrad@physics.illinois.edu), or visit the Office of the Associate Dean for Undergraduate Programs, 206 Engineering Hall.

Political & Civic Leadership Minor

for the Minor in Political and Civic Leadership

department website: https://www.pol.illinois.edu
department faculty: Political Science Faculty (https://pol.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: pol@illinois.edu

The Minor in Political and Civic Leadership is for students who are not political science majors. Minors must be admitted to the Civic Leadership Program and meet all of its requirements (17 hours). At least three courses (nine hours) must be at the advanced level.

Code	Title	Hours
PS 100	Intro to Political Science	3
PS 101	Intro to US Gov & Pol	
GLBL 100	Intro to Global Studies	
GLBL 220	Governance	
An intermediate (200 level) or advanced (300 level) course in public policy [1]		3
A course examining the construction and consequences of social identity relating to race, religion, ethnicity, or gender		3
A course exploring different perspectives on a just, ordered, and moral society		3
PS 491 or approved internship course in another department		3
At least two sections of PS 191 designated as pertaining to the Civic Leadership Program. A list of such sections is available in the Undergraduate Studies Office of the Department of Political Science.		2
Total Hours		17

[1] *Choose from a list maintained by the Department of Political Science.*

Political Science Minor

for the Minor in Political Science

department website: https://www.pol.illinois.edu
department faculty: Political Science Faculty (https://pol.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: pol@illinois.edu

A minor in political science is designed for students who want to improve their ability to deal intelligently and critically with issues and ideas about government and politics. The minor introduces students to courses involving important theoretical and applied questions about the role of citizens, associations, and states in the application of political power. Students will be exposed to advanced courses that build on relevant introductory courses.

Code	Title	Hours
PS 100	Intro to Political Science	3
Select two additional 100- or 200-level Political Science courses		6

Select three 300- or 400-level Political Science courses from courses offered on the Urbana-Champaign campus	9
Total Hours	18

Polymer Science & Engineering Minor

for the Minor in Polymer Science & Engineering

webpage: Polymer Science and Engineering Minor (https://matse.illinois.edu/academics/undergraduate-programs/polymer-science-and-engineering-minor/)
Administered by Materials Science and Engineering (https://matse.illinois.edu/)

Polymer science and engineering is a broad, interdisciplinary field that brings together various aspects of chemistry, physics, and engineering for the understanding, development, and application of the materials science of polymers. Many of the existing engineering programs provide a good foundation for work in polymer science and engineering. However, the undergraduate student needs additional courses specifically dealing with the science and engineering of large molecules. With such a background, the student should be able to progress rapidly in industry or at the graduate level. In addition to those students specifically desiring a career in polymers, this minor also can be valuable to students interested in the development, design, and application of materials in general.

The courses listed below have been selected specifically to give an undergraduate student a strong background in polymer science and engineering. A minimum of eight courses is required, including 3 Core courses, one course each in thermodynamics, mechanical properties, and chemistry and two additional polymer-related courses, as listed below. Several of these the student would normally take to satisfy the requirements of the basic degree. The student should consult the Department of Materials Science and Engineering when formulating a plan of course work.The following courses are required. Credit hours will exceed 25 if a Thermodynamics course-pair option is chosen.

Code	Title	Hours
Core Course Work		
MSE 450	Polymer Science & Engineering	3-4
or CHBE 456	Polymer Science & Engineering	
MSE 452		3
MSE 453	Plastics Engineering	3
Thermodynamics - Choose one of the following:		3-8
CHBE 321	Thermodynamics	
CHEM 442	Physical Chemistry I	
CHEM 444	Physical Chemistry II	
ME 200	Thermodynamics	
MSE 401	Thermodynamics of Materials	
PHYS 427	Thermal & Statistical Physics	
TAM 251	Introductory Solid Mechanics (Mechanical Properties)	3
CHEM 236	Fundamental Organic Chem I (Chemistry)	4
Polymer Related - Choose at least two of the following:		6
CHEM 436	Fundamental Organic Chem II	
CHEM 437	Organic Chemistry Lab	
ME 450		
MSE 455	Macromolecular Solids	
MSE 457	Polymer Chemistry	
MSE 458	Polymer Physics	
MSE 480	Surfaces and Colloids	
FSHN 469	Package Engineering	
TAM 427		

For more information, visit the Polymer Science and Engineering minor website (https://matse.illinois.edu/academics/undergraduate-programs/polymer-science-and-engineering-minor/), contact the MatSE Department Office (201 MSEB, (217)-333-1441, matse@illinois.edu), or visit the Office of the Associate Dean for Undergraduate Programs, 206 Engineering Hall.

Portuguese Minor

for the Minor in Portuguese

department website: http://www.spanport.illinois.edu/
department faculty: Spanish & Portuguese Faculty (https://spanport.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: span-port@illinois.edu

Code	Title	Hours
PORT 401	Intensive Intermediate Portuguese	4
PORT 402	Advanced Grammar	3
Select at least 9 hours from the following list:		9
PORT 403	Readings in Portuguese	
PORT 404	Studies in Luso-Brazilian Culture (may be repeated)	
PORT 406	Brazilian Film	
PORT 410	Topics in Brazilian Literature	
Total Hours		16

Psychology Minor

for the Minor in Psychology

department website: http://www.psychology.illinois.edu/
department faculty: Psychology Faculty (https://psychology.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: psych-advising@illinois.edu

The minor in psychology should be tailored to each student's individual needs. The Psychology minor is suitable for students who intend to pursue careers in a wide variety of fields including business, medicine, law, political science, and education. Students should work with their major advisor to determine the Psychology courses that best fit their interests and career goals.

Code	Title	Hours
PSYC 100	Intro Psych [1]	3-4
PSYC 235	Intro to Statistics (or equivalent) [2]	3

Biological/Cognitive Psychology Course		**3**
Select one from the following:		
PSYC 204	Intro to Brain and Cognition	
PSYC 210	Behavioral Neuroscience	
PSYC 220	Images of Mind	
PSYC 224	Cognitive Psych	
PSYC 230	Perception & Sensory Processes	
PSYC 248	Learning and Memory	
Clinical/Developmental/Social Psychology Course		**3**
Select one from the following:		
PSYC 201	Intro to Social Psych	
PSYC 216	Child Psych	
PSYC 238	Psychopathology and Problems in Living	
PSYC 239	Community Psych	
PSYC 245	Industrial Org Psych	
PSYC 250	Psych of Personality	
Select two 300- or 400- level Psychology courses		6
Total Hours		18-19

The Psychology Minor requires 18 hours of Psychology courses. PSYC 290, PSYC 340, PSYC 341, PSYC 398, PSYC 492, PSYC 494, PSYC 495, PSYC 498, and PSYC 499 credit hours cannot be counted toward the minor requirement.

[1] Students who transfer credit from another institution only receive 3 credits for PSYC 100.

[2] Current equivalent courses include: STAT 100, ECON 202, EPSY 480, PSYC 301, and SOC 485. Contact the Psychology Advising Office to consult on other equivalents. Students who do not take PSYC 235 or PSYC 301 to satisfy their statistics requirement will need to take an additional Psychology course to meet the minimum of 18 hours of Psychology courses.

Public Relations Minor

for the Minor in Public Relations

department website: https://media.illinois.edu/advertising/degrees-programs/pr-minor (https://media.illinois.edu/advertising/degrees-programs/pr-minor/)
department faculty: Advertising Faculty (https://media.illinois.edu/advertising/faculty/), Journalism Faculty (https://media.illinois.edu/journalism/faculty/)
overview of college admissions & requirements: College of Media (p. 1198)
college website: https://media.illinois.edu/

The Public Relations (PR) minor is designed to provide undergraduate students with a foundational understanding of how public relations practitioners manage relationships between organizations and their stakeholders and manage the reputations of those organizations. Courses within the PR minor will help students develop skills in writing, research, strategic planning, relationship management, and crisis communication that can be applied in business, nonprofit, or government contexts.

Students who plan to pursue careers in public relations, advertising, journalism, communications, marketing, or other related fields will find that the PR minor serves as a valuable complement to the courses in their major. Students from other majors who wish to have a better understanding of the role public relations plays in organizations and who wish to sharpen skills in writing, persuasion, strategic planning, and public communication will also benefit from the minor. The minor requires a minimum of 18 credit hours. Students majoring in Advertising or Journalism must complete at least six hours of advanced course work for the minor distinct from credits earned for their major.

Programs in Advertising

Undergraduate Programs:
major: Advertising, BS (http://catalog.illinois.edu/schools/media/academic-units/advertising/#undergraduatetext)
major: Computer Science & Advertising, BS (http://catalog.illinois.edu/undergraduate/media/departments/advertising/csadv/)
minor: Media (p. 513) | Public Relations (p. 519)
Graduate Programs:
degree: Advertising, MS (p. 549)
degree: Strategic Brand Communication, MS (p. 1030)

for the Minor in Public Relations

Code	Title	Hours
Foundations of public relations		**9**
Courses all students must complete:		
JOUR 200	Introduction to Journalism	
ADV 310	Intro to Public Relations	
ADV 410	Public Relations Strategies	
Writing for public relations and media		**3-4**
Students must select one course from:		
ADV 350	Writing for Public Relations	
JOUR 210	Newsgathering Across Platforms	
CMN 220	Communicating Public Policy	
Advanced topics in public relations		**6**
Students must select two courses from:		
ADV 393	Advertising and Society	
ADV 490	Advanced Special Topics in Advertising [1]	
ADV 494	Persuasion Consumer Response	
JOUR 360	Working with the Press	
JOUR 453	Crisis Communications	
JOUR 460	Special Topics [1]	
CMN 321	Strategies of Persuasion	
CMN 377	Propaganda and Modern Society	
CMN 464	Health Communication Campaigns	
Total Hours		18-19

[1] Will be announced in course description as "Eligible for PR minor."

Recreation, Sport & Tourism Minor

for the Minor in Recreation, Sport & Tourism

department website: http://rst.illinois.edu/
department faculty: Recreation, Sport, & Tourism Faculty (http://rst.illinois.edu/faculty/)
college catalog page: Applied Health Sciences (http://catalog.illinois.edu/schools/ahs/academic-units/)
college website: http://ahs.illinois.edu/
minor contact: Kim Shinew at shinew@illinois.edu

This minor is directed towards students who have an interest in working in the sports, recreation and/or tourism industries, or students who feel knowledge in these areas will help them succeed in their careers.

The course requirements for the minor are 19-21 hours. This includes three foundational courses (9 hours) that all students are required to take followed by 10-12 credit hours from a list of approved electives. The foundational courses will enable students to acquire knowledge about the broad range of the field and introduce them to the different areas of the industry. At least 6 hours will be advanced (300 or 400 level course), meeting the requirement for all minors. The elective courses will allow students to gain expertise in a particular area of the field, or develop a deeper knowledge base of the field and industry.

for the Minor in Recreation, Sport & Tourism

Minimum required course work: Students must complete 9 hours of foundational courses and 10-12 hours from approved electives, including at least six hours of advanced (300-level or 400-level courses) and six hours of coursework must be distinct from credit earned for the student's major or another minor.
Minimum hours required for completion: 19 hours.

Code	Title	Hours
Foundational Courses		**9**
RST 100	Recreation, Sport, and Tourism in Modern Society	3
RST 210	Management in Recreation, Sport and Tourism	3
One of the following:		3
RST 120	Parks, Recreation, and Environments	
RST 130	Foundations of Sport Mgt	
RST 150	Foundations of Tourism	
RST Electives		**4 to 6**
RST 120	Parks, Recreation, and Environments	
RST 130	Foundations of Sport Mgt	
RST 150	Foundations of Tourism	
RST 180	Professional Applications	
RST 185	Professional Field Experiences	
RST 200	Leadership in Recreation, Sport and Tourism	
RST 205	Issues in Intercollegiate Athletics: The Big Ten Conference	
RST 216	Technology in Recreation, Sport and Tourism	
RST 230	Diversity in Recreation, Sport, and Tourism	
RST 240	Financial Resource Management in Recreation, Sport and Tourism	
RST 242	Nature and American Culture	
RST 255	Ethical Issues in Recreation, Sport and Tourism	
RST 260	Disability in Recreation, Sport and Tourism	
RST 270	Sport and Sustainability	
Six (6) hours from the following:		**6**
RST 301	Sport Brand Management	
RST 316	Human Development and Recreation, Sport and Tourism	
RST 317	Designing Parks and Recreation Experiences	
RST 325	Marketing in Recreation, Sport and Tourism	
RST 340	Facility Management in Recreation, Sport and Tourism	
RST 350	Tourism and Culture	
RST 354	Legal Aspects of Sport	
RST 360	Communication in Recreation, Sport & Tourism	
Total Hours:		**19 to 21**

Religion Minor

for the Minor in Religion

department website: https://www.religion.illinois.edu/
department faculty: Religion Faculty (https://www.religion.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: religion@illinois.edu

The Minor in Religion is designed to give students the opportunity either to gain a broad knowledge of a number of religious traditions or to emphasize one field in the academic study of Religion. Completion of the minor requires 6 courses selected by the student in consultation with the director of undergraduate studies.

Code	Title	Hours
Six REL courses, at least 6 hours at the 300- or 400-level, no more than 6 hours at the 100-level		18
Total Hours		18

Russian Language & Literature Minor

for the Minor in Russian Language & Literature

department website: http://www.slavic.illinois.edu
department faculty: Slavic Faculty (http://www.slavic.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: slavic@illinois.edu

A minor in Russian language and literature may be useful and enriching for students in many disciplines, from economics and political science through comparative literature and theatre to engineering and mathematics. The 18- to 20-hour program listed below provides considerable flexibility within a general structure. Additional information

may be obtained from the undergraduate adviser in the Department of Slavic Languages and Literatures.

6 hours must be advanced (300- or 400-) level courses.

Code	Title	Hours
Introduction to Slavic culture. Select from:		3
RUSS 115	Intro to Russian Culture	
RUSS 261	Intro Russian-Jewish Culture	
SLAV 117	Russ & E Euro Science Fiction	
SLAV 120	Russian & E Euro Folktales	
Intermediate Russian Language:		6-8
RUSS 201	Second-Year Russian I	
RUSS 202	Second-Year Russian II (or equivalent)	
Russian literature and culture: Three 200-, 300- or 400-level courses from the list maintained by the undergraduate advisor, including at least one at the 300- or 400-level. Advanced Russian language (RUSS 301, 302, 305, or equivalent) can substitute for one course in this requirement.		9
Total Hours		18-20

Russian, East European, & Eurasian Studies Minor

for the Interdisciplinary Minor in Russian, East European, & Eurasian Studies

center website: https://reeec.illinois.edu/
center faculty: Russian, East European, & Eurasian Studies (https://reeec.illinois.edu/people/groups/faculty/) Faculty (https://reeec.illinois.edu/people/groups/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: reec@illinois.edu

The interdisciplinary minor in Russian, East European, and Eurasian studies allows students in diverse fields to complement their programs with a study of Russia, Eastern Europe, and Eurasia. Programs of study can be tailored to the needs and interests of individual students, in consultation with the undergraduate advisor.

Code	Title	Hours
The equivalent of three semesters of college-level language study in Russian or another language of Eastern Europe or Eurasia. This stipulation may be satisfied through partial fulfillment of the LAS two-year language requirement if a regionally appropriate language is chosen for that purpose. If a non-REEE language is selected to meet the LAS requirement, then the three semesters of REEE language study specified here must be taken in addition to those completed to satisfy the LAS requirement. Only those hours earned in the second and third semester of language study are calculated into the degree, as the first semester represents a prerequisite for the other two.		6-8
Courses on Russia, Eastern Europe, or Eurasia from at least three different academic units. (Literature courses are acceptable for this requirement; language courses are not.) No more than 6 hours may be counted from any one unit; 6 hours must be at the 300- or 400-level.		15
Total Hours [2]		**21**

[1] *The Center maintains a list of applicable courses.*

[2] *No more than 9 hours may be taken at the 100-level.*

Scandinavian Studies Minor

for the Minor in Scandinavian Studies

department website: https://www.germanic.illinois.edu
department faculty: Germanic Languages & Literatures Faculty (https://germanic.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: germanic@illinois.edu

The Minor in Scandinavian Studies offers students exposure to the study of a Scandinavian language and broad knowledge of Scandinavian culture, literature, film, art, and history. Prerequisite: SCAN 101 or the equivalent.

Code	Title	Hours
SCAN 102	Beginning Scandinavian II	0-4
Any of the following, with at least 6 credits at the 300- or 400-level		18-22
SCAN 103	Intermediate Scandinavian I	
SCAN 104	Intermediate Scandinavian II	
SCAN 215	Madness, Myth, and Murder	
SCAN 225	Vikings to Volvos: Scandinavia	
SCAN 251	Viking Mythology	
SCAN 252	Viking Sagas in Translation	
SCAN 305	Old Norse - Icelandic I	
SCAN 306	Old Norse - Icelandic II	
SCAN 376	Children and Youth Literature	
SCAN 463	Modern Scandinavian Drama	
SCAN 470	Scandinavian Politics and Society	
SCAN 472	Kierkegaard and the Self	
SCAN 490	Green Screen: Film and Nature	
SCAN 492	Scandinavian Cinema	
SCAN 494	Topics in Scan Languages	
SCAN 496	Special Topics in Scan Studies	

Science & Technology in Society Minor

for the Minor in Science & Technology in Society

overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/

The Interdisciplinary Minor in Science and Technology in Society requires students to integrate and synthesize a wide variety of materials. Students will enrich their experiences in diverse disciplines with a substantive engagement with science studies. Required courses in the minor emphasize critical and creative thinking and many courses require substantial writing and research. This minor is administered by the LAS Student Academic Affairs Office.

All courses must be selected in consultation with the adviser from the list of courses approved for the minor. No more than 3 hours of course work may be 100-level. Students must maintain a 3.0 GPA in course work in the minor.

Code	Title	Hours
Select one of the following:		3
HIST 490	Honors Independent Study	
PHIL 390	Individual Study	
SOC 390	Individual Study	
300- and 400-level courses		6
History course selected in consultation with adviser		3
Philosophy course selected in consultation with adviser		3
Sociology course selected in consultation with adviser		3
Select a course from the approved list in consultation with adviser		3
Total Hours		21

Recommended courses to fulfill the requirements of the minor

Code	Title	Hours
History		
HIST 265	Science in Western Culture	3
HIST 367	History of Western Medicine	3
HIST 498	Research and Writing Seminar (when appropriate)	3
HIST 475	Formation of US Public Health	3
Philosophy		
PHIL 214	Biomedical Ethics	3
PHIL 270	Philosophy of Science	3
PHYS/PHIL 419	Space, Time, and Matter-ACP	3
PHIL 439	Philosophy of Mathematics	3
PHIL 471	Contemporary Phil of Science	3
PHIL 477	Philosophy of Psychology	3
Sociology		
SOC 350	Technology and Society	3
CHLH 456	Organization of Health Care	2 to 4
SOC 496	Advanced Topics in Sociology (when appropriate)	3
Other		
GWS 490	Individual Study (when appropriate)	2-4

Slavic Language, Literature, & Culture Minor

for the Minor in Slavic Language, Literature & Culture

department website: http://www.slavic.illinois.edu
department faculty: Slavic Faculty (http://www.slavic.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: slavic@illinois.edu

A minor in Slavic language, literature, and culture may be useful and enriching for students in many disciplines, from economics and political science through comparative literature and theatre to engineering and mathematics. The 18- to 20-hour program listed below provides considerable flexibility within a general structure.In completing the requirements for the minor, students may choose to pursue study of a particular Slavic language and culture, or may combine study of a single language with other courses that treat the region more broadly. For example, a student could specialize in Polish by taking POL 201, POL 202, POL 301 for the language and POL 115, POL 245, and HIST 467 for the literature and culture requirements. Please consult the Undergraduate Advisor to choose coursework.

Code	Title	Hours
Introduction to Slavic culture. Select from:		3
BCS 115	South Slavic Cultures	
POL 115	Intro to Polish Culture	
REES 200	Intro to Russia and Eurasia	
REES 201	Introduction to Eastern Europe	
RUSS 261	Intro Russian-Jewish Culture	
SLAV 117	Russ & E Euro Science Fiction	
SLAV 120	Russian & E Euro Folktales	
UKR 113	Ukrainian Culture	
Intermediate Slavic Language:		6-8
BCS 201 & BCS 202	Second Year Bosnian-Croatian-Serbian I and Second Year Bosnian-Croatian-Serbian II	
CZCH 201 & CZCH 202	Second-year Czech I and Second-year Czech II	
POL 201 & POL 202	Second Yr Polish I and Second Yr Polish II	
UKR 201 & UKR 202	Second-Year Ukrainan I and Second-Year Ukrainian II	
Slavic Literature and Culture: Three 200-, 300- or 400-level courses from the list maintained by the undergraduate advisor, including at least one at the 300- or 400-level. Advanced Slavic language (the 301 or 302 level of the language of specialization, or equivalent) can substitute for one course in this requirement. Also, one course at the same level in another department, chosen in consultation with the advisor, that treats the history, culture, and society of the region can count toward this requirement.		9
Total Hours		18-20

6 hours must be advanced (300- or 400-) level courses.

Social Work Minor

for the Minor in Social Work

school office: 1010 W. Nevada St., Urbana, IL 61801
director of BSW Program: Carol Wilson-Smith
email: undergradsocialwork@illinois.edu (undergradsocialwork@illinois.edu)
phone: (217) 244-5246
school website: https://socialwork.illinois.edu/
school faculty: School of Social Work Faculty (https://socialwork.illinois.edu/directory/)
overview of school admissions & requirements: School of Social Work (https://socialwork.illinois.edu/academics/undergraduate-programs/)

The Social Work Minor is designed for students interested in combining a primary academic area with social welfare and professional social work content. It emphasizes synthesis and application of social work theories, policies and research in the development of comprehensive solutions to major social problems.E-mail: undergradsocialwork@illinois.edu

Code	Title	Hours
Minor required courses:		**12**
SOCW 200	Introduction to Social Work	
SOCW 300	Diversity: Identities & Issues	
SOCW 410	Social Welfare Pol and Svcs	
SOCW 451	HBSE I: Human Development	
Choose Two:		**6**
SOCW 240	Death & Dying	
SOCW 297	Asian Families in America	
SOCW 310	UG Research Assistance	
SOCW 315	Social Work Services for Older Adults	
SOCW 321	Social Entre & Social Change	
SOCW 330	International Perspectives	
SOCW 360	Social Work and the Military	
SOCW 370	Social Work and Disability Studies	
SOCW 380	Current Topics in Social Work	
SOCW 412	Hispanics in the U.S.	
SOCW 416	Child Welfare Issues & Trends	
SOCW 418	Independent Study	
SOCW 420	Subst Use in Social Context	
SOCW 436	Intl SW & Development	
SOCW 455	Social Work with Women	
SOCW 475	Undergraduate Research Abroad	
SOCW 480	UG Research Project	
Total Hours		18

Sociology Minor

for the Minor in Sociology

department website: https://sociology.illinois.edu/
department faculty: Sociology Faculty (https://sociology.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: soc@illinois.edu

A minor in sociology requires that students learn the basic theoretical and methodological approaches in sociology. Students must also learn about the substance of sociology in some depth and are thus required to take at least two sociology courses at an advanced level and a total of at least 18 hours of sociology courses. The course work must include the requirements listed below.

Code	Title	Hours
SOC 100	Introduction to Sociology	4
SOC 200	Introduction to Sociological Theory	3
SOC 280	Intro to Social Statistics [1]	4
At least two Sociology courses at the 300- or 400-level		6
Elective Sociology hours as needed to fill the 18 hour requirement		3-6
Total Hours		18

[1] *If a statistics course is taken outside the Department of Sociology to fulfill this requirement, that course does not count toward the 18 hours of Sociology courses.*

South Asian Studies Interdisciplinary Minor

for the Interdisciplinary Minor in South Asian Studies

center website: http://www.csames.illinois.edu/
center faculty: Center for South Asian & Middle Eastern Studies Faculty (http://www.csames.illinois.edu/people/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: csames@illinois.edu

The Center for South Asian and Middle Eastern Studies (http://www.csames.illinois.edu/) offers an Interdisciplinary Minor in South Asian Studies. The minor is especially suited for students interested in a program of studies with focus on South Asia, as a complement to their disciplinary study. The structure of the minor provides students a great amount of flexibility; possible areas of emphasis include language and literature, as well as history and social sciences.A minimum grade-point average of 2.75 in South Asian Studies courses is required for completion of the minor. The 18-20 hours of courses selected by students for the South Asian Studies Minor should form a coherent program of study and must meet the approval of an advisor in the Center for South Asian and Middle Eastern Studies. The program must include at least 6 hours of 300- or 400-level courses. A student's plan of courses for the minor must be approved by the program.

Code	Title	Hours
Fourth-semester course work in an area-relevant language. A course that meets this requirement and is currently offered on a regular basis is HNDI 404 (5 hours). The requirement may also be met by comparable courses in these and other South Asian and South Asia-related languages, taught at UIUC or at other universities, through online courses (where available), and through a proficiency examination.		3-5
HIST/ANTH 130	History of South Asia	3
Courses on South Asian history, language, literature, culture, and society from the following list: [1]		12

ANTH 499	Topics in Anthropology (appropriate sections)
ASST 398	Colloquium in Asian Studies (appropriate sections)
CWL 189	Literatures of the Islamic World (appropriate sections)
or CWL 190	Modern Asian and African Literatures
ECON 450	Development Economics (appropriate sections)
HNDI 405 & HNDI 406	Advanced Hindi I and Advanced Hindi II
HNDI 408	Intro to South Asian Lit
HIST 430	India from Colony to Nation
LA/ASST 218	S Asian Cultural Landscapes
PS/ASST 346	Gov & Pol of South Asia
REL 104	Asian Mythology
REL 213	
REL 260	Mystics and Saints in Islam
REL 286	Introduction to Hinduism
REL 494	Topics in Religious Thought
REL 403	Women in Muslim Societies
REL 408	Islam & Politics in Mid. East
Total Hours	18-20

[1] *Other area-relevant courses may be substituted as they are offered, with approval of the advisor. These include courses in languages other than Hindi and independent study courses with South Asia teaching faculty and with appropriate topics, such as the following* ANTH 390, HIST 490, LING 290, PS 490, REL 390, SOC 390. *Students wanting to take such independent study courses need to get permission from the instructor; not more than two independent study courses may be taken to meet the degree requirements.*

For a list of approved courses, visit CSAMES Course Archive (http://www.csames.illinois.edu/program/courses/archive/all/).

Spanish Minor

for the Minor in Spanish

department website: https://spanport.illinois.edu/
department faculty: Spanish & Portuguese Faculty (https://spanport.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: span-port@lists.illinois.edu

Code	Title	Hours
Minimum 18 hours of Spanish Courses		
SPAN 228	Spanish Composition	3
2 to 3 additional SPAN courses at the 200-level [1]		6-9
2 to 3 SPAN courses at the 300- or 400-level		6-9
Total Hours		18

[1] With permission of the advisor, students will be able to take one SPAN course at the 200-level or higher that is taught in a language other than Spanish. Or, one 200-level SPAN course can be substituted with a language course in CATL, BASQ, PORT or LAST (Quechua), from among the following options: BASQ 401, BASQ 402; CATL 401, CATL 402, PORT 401, PORT 402; and LAST 445. This course does not count for advanced hours and does not substitute for SPAN 228.

Spatial & Quantitative Methods in Natural Resources & Environmental Sciences Minor

for the Minor in Spatial and Quantitative Methods in Natural Resources and Environmental Sciences

The Spatial and Quantitative Methods in Natural Resources and Environmental Sciences minor is ideal for students in NRES and allied fields seeking preparation for careers requiring sills in geographic information systems, statistics, research design, and/or mathematical modeling. This minor is open to students in all majors and is especially relevant for those pursuing a major related to natural resource and environmental issues who want to distinguish themselves with more advanced analytical skills. In order to be eligible to declare this minor, a student must have successfully completed:
1. MATH 220, 221 or 234
2. ACE 261, CPSC 241, ECON 202, PSYC 235, SOC 280 or STAT 100
The minor requires the completion of an additional 18 hours of coursework selected from the following list. Students must earn credit for at least three hours in each of the three categories. At least six hours of 400-level courses must be distinct from any credit earned for the student's major, concentration, and any other minor.

Code	Title	Hours
Required Courses for a Minor in Spatial and Quantitative Methods in Natural Resources and Environmental Sciences		
Statistics & Research Design		
Select one of the following:		3-4
NRES 340	Environ Social Sci Res Meth	
NRES 421	Quantitative Methods in NRES	
CPSC 440	Applied Statistical Methods I	
NRES 445	Statistical Methods	
SOC 485	Intermediate Social Statistics	
STAT 200	Statistical Analysis	
Mathematical Modeling		
Select one of the following:		3-4
NRES 401	Watershed Hydrology	
NRES 402	Ecohydrology and Water Management	
NRES 403	Watersheds and Water Quality	
NRES 422	Earth Systems Modeling	
NRES 427	Modeling Natural Resources	
ANSC 448	Math Modeling in Life Sciences	
GEOG 468	Biological Modeling	
Spatial Analysis		
Select one of the following:		3-5
CPSC 444	Introduction to Spatial Analytics	

NRES 454	GIS in Natural Resource Mgmt	
NRES 455	Adv GIS for Nat Res Planning	
NRES 465	Landscape Ecology	
GEOG 460	Aerial Photo Analysis	
GEOG 476	Applied GIS to Environ Studies	
GEOG 478	Techniques of Remote Sensing	
GEOG 479	Advanced Topics in GIS	
GEOG 489	Programming for GIS	
Minimum hours required for the minor		**18**

Speech & Hearing Science Minor

for the Speech & Hearing Science Minor

department website: http://shs.illinois.edu/
department faculty: https://ahs.illinois.edu/shs-directory (https://ahs.illinois.edu/shs-directory/)
college catalog page: http://catalog.illinois.edu/schools/ahs/academic-units/
college website: http://www.ahs.illinois.edu/

The undergraduate Speech and Hearing Science Minor is designed for students who seek a basic familiarity with the physical, behavioral, biological, and social aspects of human communication. The minor is tailored to each student's individual needs, thus accommodating students from different disciplines across the campus. There are no prerequisites for this minor. For more information contact Kathi Ritten, Academic Advisor, at ritten@illinois.edu.

Minimum required major and supporting course work: Students must meet the following course requirements for a total of 17-19 hours.

Code	Title	Hours
SHS 170	Intro Hum Comm Sys & Disorders	3
Select two of the following:		6-7
SHS 222	Language & Culture of Deaf Communities	
SHS 240	Intro Sound & Hearing Science	
SHS 300	Anat & Physiol Spch Mechanism	
SHS 320	Development of Spoken Language	
SHS 352	Hearing Health and Society	
Eight (8) to nine (9) additional hours of speech and hearing science courses chosen from the following list, with at least six (6) credit hours at the 300-400 level.		8-9
SHS 120	Child, Comm, & Lang Ability	
SHS 200	General Phonetics	
SHS 271	Communication and Aging	
SHS 280	Communication Neuroscience	
SHS 301	General Speech Science	
SHS 333	Children with Neurodevelopmental Disorders Across Communication Contexts	
SHS 375	Comm Partners & Health	
SHS 380	Comm Competence and Disorders	
SHS 389	Neuroplasticity and Communication	
SHS 427	Language and the Brain	
SHS 450	Intro Audiol & Hear Disorders	
SHS 451	Aural Rehab Children to Adults	
SHS 473	Augmentative & Alt Comm	

Statistics Minor

for the Minor in Statistics

department website: https://stat.illinois.edu/
department faculty: Statistics Faculty (https://stat.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: stat-office@illinois.edu

The minor, administered by the Department of Statistics, is designed to provide students with an understanding of the concepts of statistical inference and a familiarity with the methods of applied statistical analysis. A minor in statistics will assist students with their major field of study to better prepare them for a career in their chosen field. It will also prepare students to for graduate studies in statistics or in one of many areas where data analysis plays an important role. Interested students should contact the Statistics undergraduate advisor for admission into the minor. Students should have completed the calculus sequence through MATH 241 before entering the minor. Students must choose from either the Applied or Mathematical Statistics Track.

Applied Statistics Track

Code	Title	Hours
Select one of the following:		2-3
MATH 125	Elementary Linear Algebra	
MATH 225	Introductory Matrix Theory	
MATH 415	Applied Linear Algebra	
Select one of the following:		3-4
ACE 261	Applied Statistical Methods	
CPSC 241	Intro to Applied Statistics	
ECON 202	Economic Statistics I	
EPSY 280	Elements of Statistics	
PSYC 235	Intro to Statistics	
STAT 100	Statistics	
SOC 280	Intro to Social Statistics	
STAT 200	Statistical Analysis	3
or STAT 212	Biostatistics	
STAT 400	Statistics and Probability I [1]	4
STAT 420	Methods of Applied Statistics	3
Choose one 300- or 400-level course from the list maintained by the department. Please see the Statistics advisor for a current list.		3-4
Total Hours		18-21

Mathematical Statistics Track Minor

Code	Title	Hours
MATH 415	Applied Linear Algebra	3-4
STAT 200	Statistical Analysis	3
or STAT 212	Biostatistics	
STAT 400	Statistics and Probability I [1]	4

STAT 410	Statistics and Probability II	3
or ECE 313	Probability with Engrg Applic	
Choose two 300- or 400-level courses from the list maintained by the department. Please see the Statistics advisor for a current list.		6
Total Hours		19-20

[1] Students who have completed STAT 408 and STAT 409 will not need to take STAT 400.

Study of the Islamic World, Interdisciplinary Minor

for the Interdisciplinary Minor in Study of the Islamic World

center website: http://www.csames.illinois.edu/
center faculty: Center for South Asian & Middle Eastern Studies Faculty (http://www.csames.illinois.edu/people/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: csames@illinois.edu

An interdisciplinary minor in the Study of the Islamic World is offered by the Center for South Asian and Middle Eastern Studies. It is designed for students interested in developing an expertise in one or more parts of the Islamic world or in Islamic culture generally, as a complement to their disciplinary major. Completion of the minor requires 19 credit hours in applicable courses with a minimum grade-point average of 2.75. For a list of approved courses, visit CSAMES Course Archive (http://www.csames.illinois.edu/program/courses/archive/all/).

Code	Title	Hours
Completion of a fourth semester course in an Islamic language (e.g. Arabic, Turkish, Swahili, Wolof). Select courses from the approved course list.		4
Select one of the following:		3
HIST 135	History of Islamic Middle East	
SAME 152	The New Middle East	
REL 214	Introduction to Islam	
or REL 213		
Additional courses chosen from the approved course list. The courses must come from at least two disciplines. At least six hours must be at the 300- or 400-level.		12
Total Hours		19

Sub-Saharan African Languages Minor

for the Minor in Sub-Saharan African Languages

department website: https://linguistics.illinois.edu/
department faculty: Linguistics Faculty (https://linguistics.illinois.edu/directory/faculty/)
advising: Linguistics advising (https://linguistics.illinois.edu/academics/undergraduate-program/undergraduate-advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/

The minor in Sub-Saharan African Languagesis designed for students who are interested in developing proficiency in any one of the languages for which there is faculty expertise, and to develop their understanding of the region, as a complement to their disciplinary major. Available African Languages include: Bamana, Lingala, Swahili, Wolof and Zulu. Completion of the minor requires at least 18 hours.

Code	Title	Hours
Language		6
Advanced African Language courses beyond the second year courses chosen in consultation with the minor advisor. Only one African Language can be chosen to fulfill this requirement.		
African Linguistics		6
3 hours: Introductory course chosen from the following:		
LING 100	Intro to Language Science	
LING 400	Intro to Linguistic Structure	
3 hours: 300 or 400-level course chosen from the following:		
LING 412	Lang in African Culture & Soc	
LING 420		
A similar course at the 300- or 400-level approved by the advisor		
African Studies		6
Courses must be selected in consultation with the advisor.		
One course chosen from the list of approved introductory courses; and		
One course chosen from the list of approved courses at the 300 or 400-level.		
Note that many courses on the list require a prerequisite such as AFST 222 or HIST 110.		
Total Hours		18

Sustainability, Energy, and Environment Minor

for the Minor in Sustainability, Energy, and Environment

Institute for Sustainability, Energy, and Environment
Eric Green, Instructor/Advisor
department office: 1101 W. Peabody, Suite 350 (NSRC), MC-635 | Urbana, IL 61801
email: see-fellows@illinois.edu
phone: 217.333.4178
fax: 217.244.2006
institute website: http://sustainability.illinois.edu/education/sustainability-minor/

Why is true sustainability so hard to achieve? Behind every environmentally friendly practice is a web of consequences, trade-offs, feedbacks, and barriers — and this undergraduate minor administered by the Institute for Sustainability, Energy, and Environment (iSEE) will help you develop a systems-level perspective of the economic, environmental and social dimensions of sustainability to help you navigate them.

The Sustainability, Energy, and Environment Fellows Program (SEE FP) is a campuswide undergraduate minor that prepares students for pursuing careers in the corporate sector, nonprofit organizations, government agencies and environmental advocacy groups.

To find out more about the minor and the enrollment process, email Eric Green, iSEE Instructor/Advisor, at see-fellows@illinois.edu.

for the Undergraduate Minor in Sustainability, Energy, and Environment

The Sustainability, Energy, and Environment Fellows Program (SEE FP) is a campuswide undergraduate minor that prepares students for pursuing careers in the corporate sector, nonprofit organizations, government agencies and environmental advocacy groups.To find out more about the minor and the enrollment process, email Eric Green, iSEE Instructor/Advisor, at see-fellows@illinois.edu.

Code	Title	Hours
ENVS 301	Tools for Sustainability	3
ENVS 492	Sustainability, Energy and Environment Capstone	4
Introduction to Sustainability: choose one of the following [1]		**3**
ESE 200	Earth Systems	
NRES 287	Environment and Society	
Economic/Policy/Social Dimensions: Choose one of the following		**3-4**
ACE 210	Environmental Economics	
UP 460	Transportation/Land Use Policy	
PS 225	Environmental Politics & Policy	
NRES 425	Natural Resources Law & Policy	
NRES 426	Renewable Energy Policy	
NRES 472	Environmental Psychology	
ESE 311	Environmental Issues Today	
LA 370	Environmental Sustainability	
ESE 482	Challenges of Sustainability	
Environmental/Natural Systems: Choose one of the following		**3-4**
CEE 330	Environmental Engineering	
IB 440	Plants and Global Change	
UP 405	Watershed Ecology and Planning	
NRES 219	Applied Ecology	
NRES 348	Fish and Wildlife Ecology	
NRES 429	Aquatic Ecosystem Conservation	
ESE 320	Water Planet, Water Crisis	
ESE 445	Earth Resources Sustainability	
ENSU 310	Renewable & Alternative Energy	
Total Hours		16-18

Teacher Education Minor in English as a Second Language

for the Teacher Education Minor in English as a Second Language

department website: https://linguistics.illinois.edu/
department faculty: Linguistics Faculty (https://linguistics.illinois.edu/directory/faculty/)
advising: Linguistics advising (https://linguistics.illinois.edu/academics/undergraduate-program/undergraduate-advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/

For those in another teacher education curriculum who want to prepare themselves to gain an ESL approval on their teacher's certificate related to their major field. Teacher education minors are available only to students seeking to add additional teaching fields to their teaching majors.

Students are advised that additional course work is necessary to teach middle grades six through eight. Consult the certification officer at 505 East Green suite 203 for additional information.

Code	Title	Hours
Select one of the following:		2
EIL 214	TESL in the Elementary School	
EIL 215	TESL in the Secondary School	
EIL 422	Engl Grammar for ESL Teachers	3
EIL 411	Intro to TESL Methodology	3
Select one of the following:		3
EIL 456	Lang and Social Interaction I	
CI 446	Culture in the Classroom	
EIL 460	Principles of Language Testing	3
EIL 488	Phonology for Second Language Teachers	3
LING 489	Theoretical Foundations of SLA	3
LING 100	Intro to Language Science	3
Total Hours		23

Teacher Education Minor in Mathematics, Grades 9-12

for the Teacher Education Minor in Mathematics, Grades 9-12

department website: https://www.math.illinois.edu/
department faculty: Mathematics Faculty (https://math.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: mathadvising@illinois.edu

For students in teacher education curricula other than mathematics who wish to be qualified to teach mathematics at the high school level.

Code	Title	Hours
To obtain an endorsement to teach mathematics in grades 9-12, students must also pass the Illinois Certification Testing System Test in Mathematics. Information and practice exams are available at www.icts.nesinc.com (http://www.icts.nesinc.com).		
MATH 220	Calculus	5
MATH 231	Calculus II (or equivalent)	3
MATH 241	Calculus III	4
Methods courses in the teaching of mathematics		3
CI 434	Teaching Secondary Mathematics	
A course covering topics in non-Euclidean geometry		3
MATH 402	Non Euclidean Geometry	
or MATH 403	Euclidean Geometry	
At least 7 hours of work from at least two of the following areas:		7
Computer Science (one course only)		
CS 101	Intro Computing: Engrg & Sci	
CS 105	Intro Computing: Non-Tech	
Linear Algebra		
MATH 125	Elementary Linear Algebra	
MATH 225	Introductory Matrix Theory	
MATH 415	Applied Linear Algebra	
MATH 416	Abstract Linear Algebra	
Modern Algebra		
MATH 413	Intro to Combinatorics	
MATH 417	Intro to Abstract Algebra	
MATH 453	Number Theory	
Applied Mathematics		
MATH 347	Fundamental Mathematics	
or MATH 348	Fundamental Mathematics-ACP	
MATH 285	Intro Differential Equations	
MATH 441	Differential Equations	
MATH 444	Elementary Real Analysis	
MATH 446	Applied Complex Variables	
Probability-Statistics		
STAT 400/ MATH 463	Statistics and Probability I	
History of Calculus		
MATH 406	History of Calculus	

Teacher Education Minor in Secondary School Teaching

for the Teacher Education Minor in Secondary School Teaching

college of education
director of teacher education: Lisa Monda-Amaya
secondary education adviser: Amanda Heinsman
department office: 110 Education Building
1310 South Sixth Street
Champaign, IL 61820
phone: (217) 333-2800
college of liberal arts & sciences
executive assistant dean: Bob Steltman
department office: 2002 Lincoln Hall
702 South Wright Street
Urbana, IL 61801
overview of college admissions & requirements:
admissions information: secedadvising@education.illinois.edu
college websites: https://education.illinois.edu/ **&** https://las.illinois.edu/

This minor is a component of the teaching option within the following Science and Letters majors: Biology (http://catalog.illinois.edu/undergraduate/las/biology-teacher-education-bslas/), Chemistry (p. 88), English (http://catalog.illinois.edu/undergraduate/las/academic-units/english/english-teaching-concentration/), Geology (http://catalog.illinois.edu/undergraduate/las/academic-units/geology/earth-science-teaching-concentration/), History (p. 225), Mathematics (p. 292), and Physics (p. 349). Enrollment is limited to candidates in these options. Students are admitted into the College of Liberal Arts and Sciences (http://www.las.illinois.edu/students/programs/majors/)' major of interest and apply to enter the minor in their sophomore year.

Requirements for the Teacher Education in Secondary School Teaching Minor

Code	Title	Hours
Professional Education Required Courses		
EDUC 201	Identity and Difference in Education [1]	3
EDUC 202	Social Justice, School and Society [1]	3
CI 401	Introductory Teaching in a Diverse Society	3
CI 403	Teaching a Diverse High School Student Population	3
CI 404	Teaching and Assessing Secondary School Students	3
CI 473	Disciplinary Literacy	3
EPSY 201	Educational Psychology [1, 2]	3
EPSY 485	Assessing Student Performance	3
SPED 405	General Educator's Role in Special Education	3
EDPR 442	Educational Practice in Secondary Education	12
Total Hours		39-40

[1] EDUC 201, EDUC 202 and EPSY 201 can be completed at any time during the degree and are not pre-requisites to apply for the minor.

[2] PSYC 100 is a pre-requisite for EPSY 201.

Technical Systems Management Minor

for the Minor in Technical Systems Management

department website: https://abe.illinois.edu/
department faculty: https://abe.illinois.edu/directory/faculty (https://abe.illinois.edu/directory/faculty/)
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college website: https://aces.illinois.edu/

Admissions Prerequisites: This minor has prerequisites of a minimum of 60 hours with a 2.5 GPA; completion of MATH 234 **or equivalent;** PHYS 101 **or equivalent;** CHEM 102 **and** CHEM 103 **or equivalent; and** PHYS 102 **or** CHEM 104 **and** CHEM 105 **or equivalent.**

Code	Title	Hours
TSM 100	Technical Systems in Agr	3
Fifteen Hours, at least six of which must be at the 400 level, selected from:		15
TSM 232	Materials and Construction Sys	
TSM 233	Metallurgy & Welding Process	
TSM 234	Wiring, Motors and Control Sys	
TSM 262	Off-Road Equipment Management	
TSM 352	Land and Water Mgt Systems	
TSM 363	Fluid Power Systems	
TSM 371	Residential Housing Design	
TSM 372	Environ Control & HVAC Systems	
TSM 381	Grain Drying & Storage Systems	
TSM 435	Elec Computer Ctrl Sys	
TSM 464	Engine and Tractor Power	
TSM 465	Chemical Applications Systems	
TSM 496	Independent Study	
Total Hours		18

Technology & Management Minor

for the Minor in Technology & Management

program website: Hoeft Technology & Management Program (https://techmgmt.illinois.edu/)
overview of college admissions & requirements: Gies Catalog (p. 1202) **and** The Grainger College of Engineering Catalog (p. 1205)
college website: https://giesbusiness.illinois.edu/ **and** https://grainger.illinois.edu/
program office: 2019I Business Instructional Facility, 515 E. Gregory, Champaign, IL 61820
phone: (217) 244-5752
email: tech-mgmt@illinois.edu

Successful management of technology-driven businesses today requires that employees work effectively in interdisciplinary teams. Team-based project management requires that each member of the team contribute not only in his or her own area of expertise, but in other aspects of the project as well. The better equipped a new employee is to reach this level of competency quickly, the more valuable will be his or her contributions. Moreover, an employee having such competency will be better prepared to assume positions of increased responsibility and challenge.

The Hoeft Technology & Management Program offers a minor in Technology & Management to undergraduate students in Gies College of Business and The Grainger College of Engineering. Students in the Colleges of ACES and LAS may also be eligible based on their major. The minor is designed to prepare students for success in a wide variety of careers. Today, more than ever, employers have high expectations of undergraduate hires. The T&M Program provides a comprehensive experience to ready graduates for early career success.

Students in the minor are able to acquire a thorough foundation in their major course of study and a comprehensive understanding of the fundamental elements of a cross-discipline education. The course of study leading to a minor in Technology & Management is comprised of the following:

Code	Title	Hours
Required Courses Taken by Engineering Students Only (in order taken)		
BADM 365	New Product Marketing	3
ACCY 200	Fundamentals of Accounting	3
Required Course Taken by Engineering Students Only (taken at any time)		
FIN 221	Corporate Finance	3
Required Courses Taken by Business Students Only (in order taken)		
MSE 101	Materials in Today's World	3
ECE 317	ECE Technology & Management	3
TAM 201	Mechanics for Technol & Mgmt	3
Required Courses Taken by Engineering and Business Students Together (in order taken)		
TMGT 367	Mgmt of Innov and Technology	3
TMGT 366	Product Design and Development	3
TMGT 460	Business Process Modeling	3
TMGT 461	Tech, Eng, & Mgt Final Project	2

Throughout the minor, emphasis is placed on an interdisciplinary team approach to the development of comprehensive solutions to real-world problems. In many cases, the problems are provided by industry sponsors who, along with business and engineering faculty advisors, provide assistance and guidance to student teams.

The T&M Program is sponsored by leading companies in a variety of industries. These companies provide strategic guidance, access to senior executives, real-world business problems, and internship and full-time employment opportunities. As of Spring 2021, T&M corporate affiliates include Abbott, Anheuser-Busch, Boeing, bp, Caterpillar, John Deere, Motorola Solutions, Synchrony, and T-Mobile.

In addition to formal courses, the T&M Program offers a comprehensive set of co-curricular activities to develop skills and provide valuable experiences to students. These include leadership development, career development, and professional development workshops (for example, professional branding and etiquette, improvisation training, and negotiation training), an international immersion experience, and an international business plan competition.

The Hoeft Technology & Management Program aims to prepare graduates for successful careers in a variety of functions and roles. T&M students have pursued careers in a wide range of industries and fields.

Students who wish to pursue this minor must apply for admission to The Hoeft Technology & Management Program during winter break of their sophomore year. Enrollment in the minor is limited and admission is competitive. Applications are reviewed by the program staff, academic directors, current students in the program, and alumni of the program. Offers of admission are based on the student's personal and professional goals, academic record, extracurricular involvement, teamwork experience, leadership potential, and commitment to making the T&M Program's courses and co-curricular offerings a high priority.

Theatre Minor

for the Minor in Theatre

department website: https://theatre.illinois.edu
department faculty: https://theatre.illinois.edu/people/meet-our-faculty/
college catalog page: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/

The Minor in Theatre offers students a comprehensive overview of the study of theatre. The purpose is to expose undergraduate students to the field by reinforcing the integrated nature of theatre as a scholarly and aesthetic pursuit. Students are required to take a core of required courses totaling ten hours and a minimum of six hours of electives in two general areas: History/Criticism and Production/Performance with at least one course from each area.

Contact the Department of Theatre for admission information.

Code	Title	Hours
Required Courses		**10**
THEA 100	Practicum I	1
THEA 101	Introduction to Theatre Arts	3
THEA 208	21st Century Dramaturgy	3
Select one of the following courses to fulfill the theatre history requirement:		3
THEA 304	Global Theatre Performance	
THEA 364	Topics in Theatre History	
Elective Courses		**6**
At least one course must be 300 level or higher. The following courses are traditionally open to non-majors and students pursuing a Minor in Theatre. Please refer to the university course time table in terms of when and how often these courses are offered. All prerequisites for the courses apply.		
Select one course from History/Criticism:		
THEA 110	Broadway Musicals	
THEA 210	Introduction to Greek and Roman Theater	
THEA 211	Introduction to Playwriting	
THEA 218	Intro to Social Issues Theatre	
THEA 260	Intro Asian American Theatre	
THEA 263	Intro African American Theat	
THEA 304	Global Theatre Performance [1]	
THEA 323	The Comic Imagination	
THEA 362	Chekhov	
THEA 364	Topics in Theatre History [1]	
THEA 410	Dramaturgs Workshop	
THEA 411	Playwrights' Workshop	
THEA 417	Leading Post-Perform Dialog	
THEA 418	Devising Social Issues Theatre (can count as Prod/Perf OR History/Crit)	
THEA 463	American Theatre History I	
THEA 464	American Theatre History II	
THEA 467	Contemporary Theatrical Forms	
THEA 483	Modern Scandinavian Drama	
Select one course from Production/Performance:		
THEA 100	Practicum I	
THEA 126	Stagecraft	
THEA 153	Introduction to Theatre Sound	
THEA 170	Fundamentals of Acting I	
THEA 175	Fundamentals of Acting II (non-major section)	
THEA 220	Survey of Theatrical Design	
THEA 222	Introduction to Scenic Design	
THEA 231	Intro to Lighting Design	
THEA 270	Relationships in Acting I (non-major section)	
THEA 407	Production Management	
THEA 418	Devising Social Issues Theatre (can count as Prod/Perf OR History/Crit)	
THEA 433	Business of Entertainment Design	
THEA 452	Principles of Arts Management	
THEA 456	Properties Design	
Total		**16**

[1] Courses may not count toward both the Theatre History requirement and the Theatre Elective requirements for the minor.

Turkish Studies Minor

for the Minor in Turkish Studies

department website: https://linguistics.illinois.edu/
department faculty: Linguistics Faculty (https://linguistics.illinois.edu/directory/faculty/)
advising: Linguistics advising (https://linguistics.illinois.edu/academics/undergraduate-program/undergraduate-advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/

Code	Title	Hours
Language Requirement [1]		**6**
TURK 405	Advanced Turkish I	
TURK 406	Advanced Turkish II	
Turkish Language & Culture		**3**
TURK 270	Language and Culture in Turkey	
Additional Courses related to Turkey/Ottoman Empire		**9**
Chosen from the following list or from other applicable courses in consultation with the minor advisor:		
ANTH 402	Transnational Islam, Europe-US	

ANTH 488	Modern Europe	
EURO 415	Europe and the Mediterranean	
HIST 135	History of Islamic Middle East	
HIST 335	Middle East 1566-1914	
HIST 337	Middle East Since World War I	
HIST 356	The Modern Balkans through Literature and Film	
HIST 396	Special Topics (when focused on Turkey)	
HIST 439	The Ottoman Empire	
HIST 466	The Balkans	
FR 418	Language & Minorities in Europe	
MUS 418	Regional Studies in Musicology (when focused on Turkey)	
PS 152	The New Middle East	
PS 347	Gov & Pol of Middle East	
REL 213 or REL 214	Introduction to Islam	
REL 223	The Qur'an (Koran)	
REL 403	Women in Muslim Societies	
REL 408	Islam & Politics in Mid. East	
REL 480	Islamic Law	
REL 482	Muslim-Christian Interactions	
REES 201	Introduction to Eastern Europe	
SOC 483	Middle Eastern Societies & Cultures	
Study Abroad course(s) relevant to Turkey (maximum of 3 hours; must be approved by the advisor)		
TURK 490	Special Topics in Turkish	
Total Hours		**18**

[1] *Students who test out of the advanced language requirement (405-406) must take six additional hours of advanced (300- or 400-level) coursework from the list of Turkey/Ottoman Empire electives.*

Urban Studies & Planning Minor

for the minor in Urban Studies & Planning

department website: https://urban.illinois.edu
department faculty: https://urban.illinois.edu/people/faculty-directory/core-faculty (https://urban.illinois.edu/people/meet-our-faculty/)
college catalog page: Fine & Applied Arts (http://catalog.illinois.edu/faa/)
college website: https://faa.illinois.edu/

For admission criteria and process, see www.urban.illinois.edu (http://www.urban.illinois.edu/) or contact the BAUSP Director, Alice Novak, at novak2@illinois.edu.

Minimum required major and supporting course work: Admission criteria: 2.75 GPA, as space is available.

Code	Title	Hours
UP 101	Introduction to City Planning	3
UP 203	Cities: Planning & Urban Life (prerequisite: UP 101)	3
or UP 204	Chicago: Planning & Urban Life	
Elective courses offered by DURP. At least six (6) hours of coursework must be advanced courses (300- or 400-level) and distinct from credit earned for the student's major or another minor.		14
Total Hours		20

World Literature Minor

for the Minor in World Literature

program website: https://complit.illinois.edu/
program faculty: Comparative & World Literature Faculty (https://complit.illinois.edu/faculty/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: complit@illinois.edu (comlit@illinois.edu)

This minor is sponsored by the Program in Comparative and World Literature. Students must choose from either the Europe and the Americas Track or the Asia and Africa Track.

Europe and the Americas Track

Code	Title	Hours
CWL 241	Early Masterpieces of Western Culture	3
CWL 242	Modern Masterpieces of Western Culture	3
CWL 201	Comparative Lit Studies	3
CWL 202	Literature and Ideas	3
Select two of the following:		6
CWL 395	Special Topics Comp Lit I	
CWL 441	Themes in Narrative	
CWL 461	Lit Genres and Forms	
CWL 471	International Lit Relations	
CWL 496	Special Topics in Comp Lit II	
Other advanced courses approved by the undergraduate comparative literature adviser.		
Total Hours		18

Asia and Africa Track

Code	Title	Hours
CWL 189	Literatures of the Islamic World	3
CWL 190	Modern Asian and African Literatures	3
CWL 201	Comparative Lit Studies	3
CWL 202	Literature and Ideas	3
Select two of the following:		6
CWL 395	Special Topics Comp Lit I	
CWL 441	Themes in Narrative	
CWL 461	Lit Genres and Forms	
CWL 471	International Lit Relations	
CWL 496	Special Topics in Comp Lit II	

Other advanced courses approved by the undergraduate Comparative Literature adviser.	
Total Hours	18

PREPROFESSIONAL PROGRAMS

Dentistry (p. 533)
Law (p. 533)
Medicine (p. 533)
Nursing (p. 533)
Occupational Therapy (p. 533)
Optometry (p. 533)
Pharmacy (p. 533)
Physical Therapy (p. 533)
Physician Assistant (p. 534)
Veterinary Medicine (p. 534)

Dentistry

Students in any major can pursue a career in dentistry. For information regarding pre-dental coursework and preparation visit https://www.careercenter.illinois.edu/dentistry-preparation-and-requirements (https://www.careercenter.illinois.edu/dentistry-preparation-and-requirements/).

Health Professions advising is part of The Career Center (https://www.careercenter.illinois.edu/) at the University of Illinois at Urbana-Champaign. All information on Health Professions advising is available on their website (https://www.careercenter.illinois.edu/instructable/pre-health-illinois/).

Law

http://prelaw.illinois.edu/

All information on Pre-Law Advising Services (PLAS) is available on their website (http://prelaw.illinois.edu/).

Medicine

Students in any major can pursue a career in medicine. For information regarding pre-medicine coursework and preparation visit https://www.careercenter.illinois.edu/health-profession/medicine (https://www.careercenter.illinois.edu/health-profession/medicine/).

For information regarding the Carle Illinois College of Medicine visit https://medicine.illinois.edu/. (https://medicine.illinois.edu/)

Health Professions advising is part of The Career Center (https://www.careercenter.illinois.edu/) at the University of Illinois at Urbana-Champaign. All information on Health Professions advising is available on their website (https://www.careercenter.illinois.edu/instructable/pre-health-illinois/).

Nursing

The University of Illinois-Chicago College of Nursing offers a Bachelor of Science in Nursing (BSN) degree on the Urbana Regional Campus. Information on this program is available at http://www.nursing.uic.edu/bachelor-science-nursing (http://www.nursing.uic.edu/bachelor-science-nursing/).

Students in any major can pursue a career in Nursing. For information regarding coursework and preparation visit https://www.careercenter.illinois.edu/nursing-preparation-and-requirements (https://www.careercenter.illinois.edu/nursing-preparation-and-requirements/).

Health Professions advising is part of The Career Center (https://www.careercenter.illinois.edu/) at the University of Illinois at Urbana-Champaign. All information on Health Professions advising is available on their website (https://www.careercenter.illinois.edu/instructable/pre-health-illinois/).

Occupational Therapy

Students in any major can pursue a career in Occupational Therapy. For information regarding pre-OT coursework and preparation visit https://www.careercenter.illinois.edu/health-profession/occupational-therapy. (https://www.careercenter.illinois.edu/health-profession/occupational-therapy/)

Health Professions advising is part of The Career Center (https://www.careercenter.illinois.edu/) at the University of Illinois at Urbana-Champaign. All information on Health Professions advising is available on their website (https://www.careercenter.illinois.edu/instructable/pre-health-illinois/).

Optometry

Students in any major can pursue a career in optometry. For information regarding pre-optometry coursework and preparation visit https://www.careercenter.illinois.edu/health-profession/optometry. (https://www.careercenter.illinois.edu/health-profession/optometry/)

Health Professions advising is part of The Career Center (https://www.careercenter.illinois.edu/) at the University of Illinois at Urbana-Champaign. All information on Health Professions advising is available on their website (https://www.careercenter.illinois.edu/instructable/pre-health-illinois/).

Pharmacy

Students in any major can pursue a career in pharmacy. For information regarding coursework and preparation visit https://www.careercenter.illinois.edu/health-profession/pharmacy (https://www.careercenter.illinois.edu/health-profession/pharmacy/)

Health Professions advising is part of The Career Center (https://www.careercenter.illinois.edu/) at the University of Illinois at Urbana-Champaign. All information on Health Professions advising is available on their website (https://www.careercenter.illinois.edu/instructable/pre-health-illinois/).

Physical Therapy

Students in any major can pursue a career in physical therapy. For information regarding pre-PT coursework and preparation visit https://www.careercenter.illinois.edu/health-profession/physical-therapy. (https://www.careercenter.illinois.edu/health-profession/physical-therapy/)

Health Professions advising is part of The Career Center (https://www.careercenter.illinois.edu/) at the University of Illinois at Urbana-Champaign. All information on Health Professions advising is available on their website (https://www.careercenter.illinois.edu/instructable/pre-health-illinois/).

Physician Assistant

Students in any major can pursue a career as a physician assistant. For information regarding pre-PA coursework and preparation visit https://www.careercenter.illinois.edu/health-profession/physician-assistant. (https://www.careercenter.illinois.edu/health-profession/physician-assistant/)

Health Professions advising is part of The Career Center (https://www.careercenter.illinois.edu/) at the University of Illinois at Urbana-Champaign. All information on Health Professions advising is available on their website (https://www.careercenter.illinois.edu/instructable/pre-health-illinois/).

Veterinary Medicine

Students in any major can pursue a career in veterinary medicine. For information regarding pre-vet coursework and preparation visit https://www.careercenter.illinois.edu/health-profession/veterinary-medicine. (https://www.careercenter.illinois.edu/health-profession/veterinary-medicine/)

Information regarding the University of Illinois College of Veterinary Medicine visit https://vetmed.illinois.edu/education/doctor-veterinary-medicine-degree/admissions/minimum-academic-standards-admission/. (https://vetmed.illinois.edu/education/doctor-veterinary-medicine-degree/admissions/minimum-academic-standards-admission/)

Health Professions advising is part of The Career Center (https://www.careercenter.illinois.edu/) at the University of Illinois at Urbana-Champaign. All information on Health Professions advising is available on their website (https://www.careercenter.illinois.edu/instructable/pre-health-illinois/).

Teacher Education

Nancy Latham, Executive Director
1310 S. 6th Street, Room 130
Champaign, IL 61820

PH: 217-333-2804
http://cote.illinois.edu

The Council on Teacher Education formulates, modifies, implements, and monitors compliance with policies related to the education of future educators. The Council also facilitates communication and promotes collaboration among all participants involved in the preparation and continuing professional development of educators. The Council is the designated unit responsible for the coordination of teacher, school support personnel, and administrator education curricula at the Urbana campus and serves as the liaison between the campus and state educator licensure and program approval authorities.

Six colleges and two schools of the University of Illinois at Urbana-Champaign offer degree programs in teacher, school support personnel, and administrator education: the Colleges of Agricultural, Consumer and Environmental Sciences; Applied Health Sciences; Education; Fine and Applied Arts; Liberal Arts and Sciences; and the Graduate College in addition to the School of Information Sciences and the School of Social Work. The list of educator preparation curricula can be found at the end of this section.

Candidates may consult their educator preparation advisers or the Council for additional information about academic regulations and other policies affecting educator preparation. Consult the Executive Director of the Council for information about the Grievance Policy and Procedures for Students Enrolled in Educator Preparation Programs under the purview of the Council on Teacher Education.

Licensure requirements are subject to change without notice as a result of new mandates from the Illinois State Board of Education (ISBE) or the Illinois General Assembly.

Requirements

Admissions

Applicants to educator preparation programs must meet the admission requirements of the colleges and departments offering the chosen curricula.

Applicants are advised that certain felony convictions, enumerated in Articles 10-21.9 and 21B-80 of the School Code of Illinois (http://www.ilga.gov/legislation/ilcs/ilcs3.asp?ActID=1005&ChapAct=105%C2%A0ILCS&160;5/&ChapterID=17&ChapterName=SCHOOLS&ActName=School+Code.), prohibit licensure or employment in public schools. Questions pertaining to this matter should be addressed to the Council.

Continuation in an Educator Preparation Program

To be eligible for continuation in an educator preparation program, candidates must satisfy all requirements of the applicable Transition Points which includes maintaining a University of Illinois at Urbana-Champaign and overall grade point averages of 2.5 (A = 4.0) or higher. In addition, candidates must meet the content area and professional education grade-point requirements specific to their programs. The full text of the three Transition Point Plans is available on the Council website (https://cte-s.education.illinois.edu/dotnet/webpages/webpage.aspx/webpage/?page_level=2.3). The Council on Teacher Education reviews each candidate's academic progress after the fall and spring semesters. Candidates who do not meet the criteria of the appropriate Transition Point will receive a warning letter from the Council advising them that their continuation in the program, entry into student teaching, and receiving a recommendation for licensure from the University are at risk. Candidates will be directed to their college deans for more information. Candidates may be dropped from licensure programs by the Council if they fail to meet the criteria of the appropriate Transition Point after receiving an initial warning letter.

Teaching effectiveness is influenced not only by academic proficiency, but also by the dispositions and professional behaviors of the candidate. Therefore, faculty members take these characteristics into account as they evaluate candidates' progress in the program. Teaching effectiveness can also be influenced by the candidate's health. For this reason, the University provides counseling and medical services for all students. A candidate wishing additional information about these services may call/visit the Council office or contact their advisor or program coordinator.

Because it is essential that counseling and medical services be offered as soon as the need becomes apparent, educator preparation advisers and faculty members are asked to recommend for assistance or examination any candidate about whom they feel concern. A candidate who is recommended for assistance or examination will receive a written request to make an appointment to discuss the situation. It is a requirement of the Council on Teacher Education that a candidate who receives such a request must respond. Failure to do so will jeopardize the candidate's continuation in their educator preparation program. During the appointment, the candidate will be informed of the counseling (http://www.counselingcenter.illinois.edu/) and medical services (http://www.mckinley.illinois.edu/) available at the University. The candidate's use of these services is usually optional. In exceptional cases, however, the Council may require a candidate to satisfactorily complete a mental health or physical examination with one of the campus services. Candidates who wish to continue in teacher education must comply with such referrals.

Student Teaching

State law mandates candidates pass the appropriate content area test prior to student teaching. Students who have not passed the appropriate content area test will not be permitted to student teach. Student teaching application forms are available in the college clinical experiences office that houses each program. (Candidates may obtain referrals to the appropriate office by contacting the Council.) A candidate seeking placement in student teaching should contact the appropriate program's clinical experiences office no later than October 1 of the academic year preceding the desired placement to determine departmental deadlines and meeting dates. Departments may set earlier deadlines. Candidates who apply after their departments' deadlines cannot be guaranteed a student teaching assignment during the next academic year. A candidate who will not be on campus during the fall semester, but who expects to enroll in educational practice (student teaching) during the next school year, should secure an application form from his or her program's clinical experiences office before leaving campus. A candidate who has submitted an application will receive a student teaching assignment pending verification that he or she has completed all requirements of the appropriate Transition Point Plan.

Only those candidates officially registered in teacher education curricula are eligible for student teaching placements. The Council reserves the

right to deny student teaching placement to candidates who have not met all requirements of the appropriate Transition Point Plan. Candidates may also be denied a student teaching placement for health reasons.

Candidates in teacher education should anticipate and plan for student teaching assignments. For most candidates, additional expense will be incurred during the semester in which student teaching is scheduled. Candidates cannot be guaranteed assignments in local schools. Student teaching is a full-time commitment on the part of teacher candidates. Teacher candidates should not plan to take additional coursework outside their program during student teaching, nor should they plan to be employed. School districts have the right to not accept a candidate and therefore, the Council cannot guarantee each candidate a placement. However, each program will exhaust every effort to seek a placement for each candidate.

Candidates are expected to complete all field experiences, including student teaching, at the University of Illinois at Urbana-Champaign. A candidate who wishes to complete student teaching through another university, yet receive a University of Illinois at Urbana-Champaign degree and recommendation for licensure, must secure the prior approval of his or her adviser, clinical experiences program coordinator, college, and the Council on Teacher Education via petition. The petition must be supported by verification from the other university that it will accept the candidate as a student teacher and will comply with all Council on Teacher Education requirements. Approvals of such arrangements are rare, and candidates should expect to incur additional costs. Consult the Council for additional information.

Teacher Licensure

A candidate who completes all of the coursework and other requirements in a program approved for purposes of licensure by the Illinois State Board of Education is entitled to receive the recommendation of the University for the appropriate license and endorsement(s), provided the candidate has met all of the requirements of the appropriate Transition Point Plan and has passed all licensure tests and assessments required by the State of Illinois. In addition, all professional education and content-area coursework that forms part of an application for licensure, endorsement, or approval must have been passed with a grade no lower than C- or equivalent in order to be counted towards fulfillment of the applicable requirements.

In some instances, a candidate may be denied a recommendation for licensure but be granted a degree by his or her college. A candidate who believes that the recommendation for licensure has been withheld unjustly may seek redress through the grievance policy established by the Council on Teacher Education.

General Education (https://my.illinois.edu/uPortal/render.userLayoutRootNode.uP?&uP_sparam=activeTabTag&activeTabTag=Academics&uP_fname=illinois ssdt-courseinformationsuite&pltp_action=genedCatView)

Candidates for licensure are required to complete coursework that includes the theoretical and practical understanding generally expected of a liberally educated person. General education includes developing knowledge related to the arts, communications, history, literature, mathematics, philosophy, sciences, and the social studies from multicultural and global perspectives. This requirement is satisfied by the University of Illinois general education pattern incorporated into all undergraduate teacher education programs.

Licensure Tests

All candidates for licensure as teachers, school administrators, and school support personnel must pass tests mandated by the Illinois State Board of Education as a condition for licensure. Illinois law requires that applicants to all educator preparation programs pass a test in their major area. All candidates in programs leading to teaching must also pass a teacher performance assessment (edTPA). Candidates for Learning Behavior Specialist I licensure must pass a third test: Special Education General Curriculum.

Time Limit on Licensure

Because licensure requirements are subject to change at any time as a result of new mandates from the Illinois State Board of Education and the Illinois General Assembly, the University is unable to guarantee a recommendation for licensure to anyone who does not apply for licensure immediately upon completion of licensure requirements. A candidate completing an approved program is strongly encouraged to apply for licensure during his or her last term on campus and claim said license on the Educator Licensure Information System (ELIS) once it has been entitled. Applications for licensure are available on the candidate's student portal or in the Council office. Failure to claim a license through the ELIS once it has been entitled could result in additional requirements should candidate seek to claim license at a later date.

Background Investigation of Applicants for Field Placement and Employment

State law mandates that all candidates for public school licensure in programs under the purview of the Council on Teacher Education complete a criminal background check and checks of the Statewide Sex Offender Database and Statewide Child Murderer and Violent Offender Against Youth Database before they may be placed in schools. Candidates are responsible for all fees connected with this procedure.

This means each educator preparation candidate in an Illinois school district is required to authorize the school district to initiate a criminal background check which will include a request for fingerprints. A school district may host an educator preparation candidate only after a background check has been initiated and may not knowingly host an educator preparation candidate who has been convicted of a felony or of attempting to commit certain offenses enumerated in The School Code of Illinois. This criminal background check is in addition to any background check you may have completed for the University of Illinois at Urbana-Champaign.

Final decisions regarding the placement of candidates in schools are made in agreement between the relevant department/college/program and the school/district.

The criminal background check is typically conducted prior to any field experiences in the schools and before student teaching or internship.

Curricula

A candidate seeking licensure must complete the requirements of both his or her chosen curriculum, Council on Teacher Education requirements, and all additional State mandated requirements. Teacher education, school support personnel, and administrator curricula and the colleges and departments that offer them are listed below. All curricula have been approved by the Illinois State Board of Education.

Candidates are advised that licensure requirements may be altered at any time by the Illinois State Board of Education or the legislature. In such

cases, candidates may be compelled to satisfy the new requirements to qualify for the University's recommendation for licensure.

College of Agriculture, Consumer and Environmental Sciences (http://catalog.illinois.edu/undergraduate/aces/)

- Agricultural Education

College of Applied Health Sciences (http://catalog.illinois.edu/undergraduate/ahs/)

- Physical Education

College of Education (http://catalog.illinois.edu/undergraduate/education/)

- Early Childhood Education, Birth - Grade 2 (Includes Early Childhood Special Education Approval)
- Elementary Education, Grades 1-6
- Learning Behavior Specialist I
- Middle Grades Education, Grades 5-8
  - (Options include English Language Arts, Math, Social Science, Science)
- Teacher Education Minor in Secondary School Teaching

College of Fine and Applied Arts (http://catalog.illinois.edu/undergraduate/faa/)

- Music Education
- Visual Arts Education

College of Liberal Arts and Sciences (http://catalog.illinois.edu/undergraduate/las/)

- English Language Arts
- Foreign Language: French
- Foreign Language: German
- Foreign Language: Latin
- Foreign Language: Spanish
- Mathematics
- Science: Biology
- Science: Chemistry
- Science: Earth and Space Science
- Science: Physics
- Social Science: History

Graduate College

Graduate-level licensure programs are offered in the areas listed below. For additional information, contact the Council on Teacher Education or departmental office indicated.

Agricultural Education

- College of Agricultural, Consumer and Environmental Sciences, Office of Academic Programs

Director of Special Education

- Department of Special Education

Early Childhood Education

- Department of Curriculum and Instruction

Elementary Education

- Department of Curriculum and Instruction

Foreign Language: German

- Department of Germanic Languages and Literatures

Foreign Language: Latin

- Department of Classics

Foreign Language: Spanish

- Department of Spanish, Italian, and Portuguese

Learning Behavior Specialist I

- Department of Special Education

Learning Behavior Specialist II (Multiple Disabilities)

- Department of Special Education

Library Information Specialist

- School of Information Sciences

Music Education

- School of Music

Principal

- Department of Education Policy, Organization and Leadership

School Social Worker

- School of Social Work

Secondary Education (English Language Arts, Mathematics, Sciences, Social Science: History) [1]

- Department of Curriculum and Instruction

Speech-Language Pathologist: Non-teaching

- Department of Speech and Hearing Science

Superintendent

- Department of Education Policy, Organization and Leadership

Teacher Leader

- Department of Education Policy, Organization and Leadership

Visual Arts

- School of Art and Design

[1] This minor is a required component of the teaching option within the following Science and Letters majors in the College of Liberal Arts and Sciences: biology, chemistry, English, geology, history, mathematics, physics, and Engineering physics.

Teacher Education Minors

- English as a second language
- Mathematics: Grades 9-12

Candidates should be aware that the state recognizes teaching fields that are not listed above. Candidates may obtain subsequent teaching endorsements for any fields for which they satisfy the state minimum requirements. Contact the Council on Teacher Education for additional information regarding the endorsement fields available and

the qualifications for each. Endorsement requirements (https://cte-s.education.illinois.edu/dotnet/webpages/webpage.aspx/webpage/?page_level=4.1.4) are also listed on the Council on Teacher Education Web site. (http://cote.illinois.edu/) Further questions may be directed to the Council on Teacher Education.

GRADUATE PROGRAMS INDEX

Degree Programs (emphasis)	School/College	Graduate
Accountancy	BUS	MAS (p. 542), MSA (p. 544), PhD (p. 547), CONC (Tax) (p. 1149), CONC (Accy) (p. 1073), CONC (Data) (p. 1091), Minor (p. 1122)
Accountancy Analytics	BUS	CONC (p. 546)
Accountancy Data Analytics	BUS	CERT (p. 1114)
Acting	FAA	CONC (p. 1052)
Actuarial Science	LAS	MS (p. 548), CONC (p. 868)
Advanced Analytics	ENGR	CONC (p. 1074)
Advertising	MDIA	MS (p. 549)
Aerospace Engineering	ENGR	MS (p. 550), PhD (p. 553)
Aerospace Systems Engineering	ENGR	CONC (p. 745)
African American Studies	LAS	CONC (p. 1075), Minor (p. 1122)
African Studies	LAS	MA (p. 556), Minor (p. 1123)
Agricultural & Applied Economics	ACES	MAAE (p. 558), MS (p. 559), PhD (p. 560)
Agricultural & Biological Engineering	ENGR	MS (p. 562), PhD (p. 564)
Agricultural Education	ACES	MS (p. 566)
Agricultural Leadership, Education, & Communications	ACES	MS (http://catalog.illinois.edu/graduate/aces/agricultural-leadership-education-communications-ms/)
Agricultural Production	ACES	PSM (p. 567)
American Indian & Indigenous Studies	LAS	Minor (p. 1124)
Analytics	LAS	CONC (p. 1028)
Animal Sciences	ACES	MANSC (p. 568), MS (p. 569), PhD (p. 570), CONC (p. 625)
Anthropology	LAS	MA (p. 571), PhD (p. 572)
Applied Mathematics	LAS	MS (p. 575)
Applied Statistics	LAS	CONC (p. 1029)
Architectural Studies	FAA	MS (p. 577)
Architecture	FAA	MARCH (p. 579), PhD (p. 583), CONC (p. 579)
Art & Design	FAA	MFA (p. 585)
Art Education	FAA	EdM (p. 597), MA (p. 598), PhD (p. 599)
Art History	LAS FAA	MA (p. 601), PhD (p. 602), Minor (p. 1125)
Asian American Studies	LAS	Minor (p. 1126)
Astrochemistry	LAS	CONC (p. 1076)
Astronomy	LAS	MS (p. 604), PhD (p. 606)
Atmospheric Sciences	LAS	MS (p. 608), PhD (p. 610)
Audiology	AHS	AuD (p. 611)
Autonomy & Robotics	ENGR	CONC (p. 747)
Balkan Studies	LAS	Minor (p. 1127)
Biochemistry	LAS	MS (p. 613), PhD (p. 614)
Bioengineering	ENGR	MENG (p. 616), MS (p. 621), PhD (p. 623), CONC (p. 626)
Bioinformatics	Provost	MS (p. 625)
Bioinstrumentation	ENGR	CONC (p. 617)
Biological Sciences, Teaching of	LAS	MS (p. 1038)
Biology	LAS	MS (p. 633), PhD (p. 634)
Biomechanics	ENGR	CONC (p. 1085)
Biomedical Image Computing	ENGR	MS (p. 636)
Biophysics & Quantitative Biology	LAS	MS (p. 638), PhD (p. 640)
Bioprocessing & Bioenergy	ACES	PSM (p. 641)
Building Performance	FAA	CONC (http://catalog.illinois.edu/graduate/faa/architecture-march/building-performance/)
Business Administration	BUS	iMBA (p. 642), ExecMBA (p. 644), CONC (p. 1086)
Business Analytics	BUS	MS (p. 649)
Business Data Analytics	BUS	CONC (p. 1086)
Cancer Nanotechnology	ENG	CONC (p. 1088)
Cell & Developmental Biology	LAS	MS (p. 651), PhD (p. 652)
Chemical & Biomolecular Engineering	ENGR, LAS	CONC (p. 628)
Chemical Engineering	ENGR, LAS	MS (p. 653), PhD (p. 654)
Chemical Physics	LAS	PhD (p. 655)
Chemistry	LAS	MA (p. 657), MS (p. 658), PhD (p. 659)
Chemistry Teaching	LAS	MS (p. 1039)
Choral Music	FAA	CONC (p. 916), CONC (p. 895)
Cinema Studies	MDIA	Minor (p. 1128)
Civic Leadership	LAS	CONC (p. 971)
Civil Engineering	ENGR	MS (p. 660), PhD (p. 662)
Classical Philology	LAS	PhD (p. 664)
Classics	LAS	MA (p. 666)
College Teaching	EDUC	Minor (p. 1129)
Communication	LAS	MA (p. 670), PhD (p. 671)
Communications & Media	MDIA	PhD (p. 672)
Community Health	AHS	MS (p. 674), PhD (p. 675)
Comparative Biomedical Sciences	VMED	MS (p. 1062), PhD (p. 1063)
Comparative Literature	LAS	MA (p. 676), PhD (p. 677)
Computational Genomics	ENGR	CONC (p. 618)
Computational Science & Engineering	ENGR	CONC (p. 1089)
Computer Science	ENGR	MS (p. 681), MCS (p. 679), PhD (p. 682), CONC (p. 629)
Corporate Governance & International Business	BUS	Minor (p. 1130), CONC (p. 1090)
Corporate Law, Commercial Law, & Trade	LAW	CONC (p. 840)
Crafts	FAA	CONC (p. 586)
Creative Writing	LAS	MFA (p. 684)
Criminal Law	LAW	CONC (p. 841)
Crop Sciences	ACES	MS (p. 686), PhD (p. 687), CONC (p. 631)
Curriculum & Instruction	EDUC	EdM (p. 693), MA (p. 695), MS (p. 697), CAS (p. 689), EdD (p. 691), PhD (p. 699)
Dance	FAA	MFA (p. 701), Minor (p. 1131)
Data Analytics in Finance	BUS	CONC (p. 1092)
Design & Technology	FAA	CONC (p. 1052)
Design for Responsible Innovation	FAA	CONC (p. 587)
Developmental Psychopathology	LAS	CONC (p. 982)
Digital Marketing	BUS	CERT (p. 1115), CONC (p. 1094)
Diversity & Equity in Education	EDU	CONC (p. 1094)
Early Childhood Education	EDUC	EdM (p. 703)
East Asian Languages & Cultures	LAS	MA (p. 705), PhD (p. 707)
Ecology & Conservation Biology	LAS	MS (p. 709), PhD (p. 709)

Ecology, Ethology & Evolution	LAS	CONC (p. 633), CONC (p. 635)
Ecology, Evolution & Conservation Biology	LAS	MS (p. 709), PhD (p. 710)
Economics	LAS	MS (p. 713), PhD (p. 715)
Education Policy, Organization & Leadership	EDUC	EdM (p. 718), MA (p. 720), EdD (p. 722), PhD (p. 723), CAS (p. 716)
Educational Administration & Leadership	EDUC	CONC (p. 1095)
Educational Psychology	EDUC	EdM (p. 725), MA (p. 728), MS (p. 731), PhD (p. 734)
Electrical & Computer Engineering	ENGR	MENG (p. 737), MS (p. 738), PhD (p. 740)
Elementary Education	EDUC	EdM (p. 742)
Energy Systems	ENGR	CONC (p. 749)
Engineering	ENGR	MENG (p. 745)
English	LAS	MA (p. 751), PhD (p. 753), CONC (p. 996)
English as a Second Language	LAS	MA (p. 1040)
Entomology	LAS	MS (p. 755), PhD (p. 756)
Entrepreneurship & Innovation	ENGR	CONC (http://catalog.illinois.edu/graduate/engineering/concentration/entrepreneurship-innovation/)
Entrepreneurship & Strategic Innovation	BUS	CONC (p. 1096), CERT (p. 1116)
Environmental Engineering in Civil Engineering	ENGR	MS (p. 757), PhD (p. 759)
European Union Studies	LAS	MA (p. 762), Minor (p. 1132)
Finance	BUS	MS (p. 763), PhD (p. 764), Minor (p. 1133), CONC (p. 1096)
Financial Engineering	BUS, ENGR	MS (p. 765)
Financial Management	BUS	CERT (p. 1117)
Financial Reporting & Assurance	BUS	CONC (p. 543)
Food Science	ACES	CONC (p. 768), CONC (p. 776)
Food Science & Human Nutrition	ACES	MS (p. 766), PSM (p. 773), PhD (p. 775)
French	LAS	MA (p. 781), PhD (p. 783)
Gender & Women's Studies	LAS	Minor (p. 1134)
Gender Relations in International Development	SOCW	Minor (p. 1135)
General Bioengineering	ENGR	CONC (p. 620)
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Greek	LAS	CONC (p. 667)
Health & Wellbeing	FAA	CONC (http://catalog.illinois.edu/graduate/faa/architecture-march/health-wellbeing/)
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Health Communication	LAS	MS (p. 799)
Health Technology	AHS	MS (p. 801)
Heritage Studies	FAA	Minor (p. 1136)
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Human Development & Family Studies	ACES	MS (p. 805), PhD (p. 807)
Human Nutrition	ACES	CONC (p. 770), CONC (p. 779)
Human Resource Development	EDUC	CONC (p. 1099)
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Instrumental Conducting (Band)	FAA	CONC (p. 918)
Instrumental Conducting (Orch)	FAA	CONC (p. 921), CONC (p. 897)
Instrumental Conducting (Wind Band)	FAA	CONC (p. 900)
Intellectual Property & Technology Law	LAS	CONC (p. 843)
International & Comparative Law	LAS	CONC (p. 844)
Italian	LAS	MA (p. 824), PhD (p. 826)
Jazz Performance	FAA	CONC (p. 923), CONC (p. 903)
Journalism	MDIA	MJ (p. 460), MS (p. 828)
Justice, Democracy, & Legal Rights	LAW	CONC (p. 845)
Kinesiology	AHS	MS (p. 829), PhD (p. 830)
Labor & Employment Relations	LER	MHRIR (p. 809), PhD (p. 812)
Landscape Architecture	FAA	MLA (p. 832), PhD (p. 833)
Latin	LAS	CONC (p. 668)
Latin American & Caribbean Studies	LAS	Minor (p. 1137)
Latin American Studies	LAS	MA (p. 835)
Latin, Teaching of	LAS	MA (p. 1042)
Latina/Latino Studies	LAS	Minor (p. 1139)
Law	LAW	LLM (p. 839), MSL (p. 849), JSD (p. 837)
Learning Design & Leadership	EDUC	CONC (p. 1101)
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Linguistics	LAS	MA (p. 854), MATESL (p. 1040), PhD (p. 855)
Livestock Systems Health	VMED	MVS (p. 857)
Management	BUS	MS (p. 858)
Managerial Economics & Business Analysis	BUS	CERT (p. 1119)
Materials Engineering	ENGR	MENG (p. 860)
Materials Science & Engineering	ENGR	MS (p. 861), PhD (p. 863)
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Mathematics Teaching	LAS	MS (p. 1043)
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Mental Health Counseling	EDUC	MS (p. 875)
Metals	FAA	CONC (p. 591)

Microbiology	LAS	MS (p. 877), PhD (p. 878)
Molecular & Cellular Biology	LAS	MS (p. 880)
Molecular & Integrative Physiology	LAS	MS (p. 881), PhD (p. 883)
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Music	FAA	MMus (p. 914), AD (p. 890), AMusD (p. 893), PhD (p. 941)
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Music Education	FAA	MME (p. 885), PhD (p. 888)
Music Theory	FAA	CONC (p. 928)
Musicology	FAA	PhD (p. 941), CONC (p. 931)
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Nuclear, Plasma & Radiological Engineering	ENGR	MS (p. 949), PhD (p. 951)
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Nutritional Sciences	ACES	MS (p. 954), PhD (p. 956)
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Performance & Literature (Music)	FAA	CONC (p. 933), CONC (p. 909)
Pharmaceutical Engineering	ENGR	CONC (p. 1103)
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Plant Biotechnology	ACES	PSM (p. 967)
Plasma Engineering	ENGR	CONC (p. 748)
Political Science	LAS	MA (p. 968), PhD (p. 969)
Portuguese	LAS	MA (p. 972), PhD (p. 973)
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Psychology	LAS	MS (p. 976), MS (p. 977), PhD (p. 980)
Public Health	AHS	MPH (p. 983)
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Recreation, Sport & Tourism	AHS	MS (p. 984), PhD (p. 986)
Regional Planning	FAA	PhD (p. 987)
Regulation, Sustainability, & Compliance	LAW	CONC (p. 846)
Rehabilitation	AHS	MS (p. 989)
Religion	LAS	MA (p. 990), Minor (p. 1142)
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Russian, East European & Eurasian Studies	LAS	MA (p. 991), Minor (p. 1142)
Science Teaching	LAS	CONC (p. 997)
Sculpture	FAA	CONC (p. 595)
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Secondary Education	EDUC	EdM (p. 994)
Slavic Languages & Literatures	LAS	MA (p. 999), PhD (p. 1001)
Social Science: History Teaching	LAS	CONC (p. 999)
Social Sciences & Education Policy	EDUC	CONC (p. 1108)
Social Work	SOCW	MSW (p. 1003), CONC (p. 1004), CONC (p. 1006), PhD (p. 1007)
Sociology	LAS	MA (p. 1009), PhD (p. 1009)
South Asian & Middle Eastern Studies	LAS	MA (p. 1011)
Spanish	LAS	MA (p. 1012), PhD (p. 1016)
Spanish Linguistics	LAS	CONC (p. 1013)
Spanish Literatures & Cultures	LAS	CONC (p. 1015)
Special Education	EDUC	EdM (p. 1018), MS (p. 1020), PhD (p. 1022)
Speech & Hearing Science	AHS	MA (p. 1023), AuD (p. 611), PhD (p. 1025)
Statistics	LAS	MS (p. 1027), PhD (p. 1029), Minor (p. 1144)
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Strategic Leadership Management	BUS	CERT (p. 1120)
Structures	FAA	CONC (p. 579)
Supply Chain Management	BUS	CONC (p. 1109), Minor (p. 1144)
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Sustainable Urban Design	FAA	MSUD (p. 1031)
Sustainable Urban Management	FAA	MS (p. 1032)
Systems & Entrepreneurial Engineering	ENGR	MS (p. 1034), PhD (p. 1035)
Taxation	BUS	MS (p. 1037), CONC (p. 1110)
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Technology Management	BUS	MS (p. 1048), CONC (p. 859)
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Theoretical & Applied Mechanics	ENGR	MS (p. 1054), PhD (p. 1057)
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Urbanism	FAA	CONC (http://catalog.illinois.edu/graduate/faa/architecture-march/urbanism/)
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Veterinary Medical Science - Pathobiology	VMED	MS (p. 1065), PhD (p. 1066)
Veterinary Medical Sciences - Veterinary Clinical Medicine	VMED	MS (p. 1068), PhD (p. 1062)
Vocal Coaching & Accompanying	FAA	CONC (p. 938), CONC (p. 911)
Weather And Climate Risk & Analysis	LAS	MS (http://catalog.illinois.edu/graduate/las/weather-climate-risk-analytics-ms/)
Writing Studies	LAS	CONC (p. 1111)

Legend:

College/School

ACES	College of Agricultural, Consumer and Environmental Sciences
AHS	College of Applied Health Sciences
BUS	Gies College of Business
CIMED	Carle Illinois College of Medicine

EDUC	College of Education
ENGR	College of Engineering
FAA	College of Fine and Applied Arts
GRAD	Graduate College
LAS	College of Liberal Arts and Sciences
LAW	College of Law
LER	School of Labor and Employment Relations
IS	School of Information Science
MDIA	College of Media
SOCW	School of Social Work
VETMED	College of Veterinary Medicine

Programs

AD	Artist Diploma
AMusD	Doctor of Musical Arts
AuD	Doctor of Audiology
CAS	Certificate of Advanced Study
CONC	Concentration
DVM	Doctor of Veterinary Medicine
EdD	Doctor of Education
EdM	Master of Education
JSD	Doctor of the Science of Law
LLM	Master of Laws
MA	Master of Arts
MANSC	Master of Animal Science
MARCH	Master of Architecture
MAS	Master of Accountacy Science
MBA	Master of Business Administration
MCS	Master of Computer Science
MD	Doctor of Medicine
MENG	Master of Engineering
MFA	Master of Fine Arts
MHRIR	Master of Human Resources and Industrial Relations
Minor	Minor
MJ	Master of Journalism
MLA	Master of Landscape Architecture
MMus	Master of Music
MME	Master of Music Education
MPH	Master of Public Health
MS	Master of Science
MSL	Master of Science in Law
MSW	Master of Social Work
MSUD	Master of Sustainable Urban Design
MUP	Master of Urban Planning
PSM	Professional Science Masters Concentration
PhD	Doctor of Philosophy

Accountancy, MAS

for the degree of Master of Accounting Science

chair of department: Theo Sougiannis
director of graduate studies: Nerissa Brown
associate director of graduate studies: Ashley Lamb
department website: https://giesbusiness.illinois.edu/accountancy (https://giesbusiness.illinois.edu/accountancy/)
program website: https://giesbusiness.illinois.edu/mas (https://giesbusiness.illinois.edu/mas/)
college website: https://giesbusiness.illinois.edu/ (https://business.illinois.edu/)
overview of graduate college admissions & requirements: Graduate Admissions (https://grad.illinois.edu/admissions/apply/)
overview of college admissions & requirements: Gies Catalog (http://catalog.illinois.edu/schools/gies-business/academic-units/)
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phone: (217) 333-0857
email: accy@illinois.edu

The M.A.S. program is a one-year program for students who have completed or are pursuing a Bachelor of Science in Accountancy from an accredited U.S. institution. Each student will select either a Taxation or Financial Reporting & Assurance Option as a primary focus. Each Option (listed below) includes room for graduate electives. By design, the program emphasizes the emerging trend of data analytics in the practice of accounting, with a standard course plan that leads to a graduate concentration in data analytics in accountancy (http://catalog.illinois.edu/graduate/graduate-majors/accountancy/data-analytics-conc/) to fulfill the graduate electives. Students have the choice of remaining in the standard course plan or selecting from among the following alternative graduate concentrations to fulfill the graduate elective requirement: corporate governance and international business (p. 1090), finance (p. 1096), financial reporting & assurance (p. 543), information technology & control (p. 1100), real estate (http://catalog.illinois.edu/graduate/graduate-majors/finance/graduate_concentration_in_real_estate/), taxation (http://catalog.illinois.edu/graduate/bus/concentration/accy/taxation/), and supply chain management (http://catalog.illinois.edu/graduate/graduate-majors/bus-admin-ms/graduate_concentration_in_supply_chain_mgmt/). Students who wish to deviate from the standard course plan, but do not wish to pursue a listed graduate concentration, may petition to take other graduate courses of interest subject to approval of an Accountancy Advisor. Admission to a concentration requires application to the Department no later than February 1 for fall admission. Admission to some concentrations may be competitive.

Graduate Degree Programs in Accountancy

Accountancy, MAS (p. 542)
with optional concentrations:
Business & Public Policy (p. 1087) | Corporate Governance & International Business (p. 1090) | Data Analytics in Accountancy (p. 1091) | Finance (http://catalog.illinois.edu/graduate/bus/concentration/finance/finance/) | Financial Reporting & Assurance (p. 543) | Information Technology & Control (p. 1100) | Real Estate (p. 1105) | Supply Chain Management (p. 1109) | Taxation (p. 1110)
Accountancy, MS (p. 544) **(on campus & online)**
on campus concentrations:
Business & Public Policy (p. 1087) | Corporate Governance & International Business (p. 1090) | Data Analytics in Accountancy (p. 1091) | Finance (p. 1096) | Information Technology & Control (p. 1100) | Supply Chain Management (p. 1109) | Taxation (p. 1110)
online concentrations:
Accountancy Analytics (p. 546)
Accountancy, PhD (p. 547)
Minor:
Accountancy (p. 1122)

Admission

All applicants to the Master of Accounting Science program should refer to MAS program (https://giesbusiness.illinois.edu/mas/admissions/).

for the degree of Master of Accounting Science in Accountancy

For additional details and requirements refer to the department's program information online (https://business.illinois.edu/mas/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
Choose one (1) from:		**4**
ACCY 410	Advanced Financial Reporting	
ACCY 451	Advanced Income Tax Problems	
Choose one (1) Accounting elective from this list:		**4**
ACCY 510	Financial Reporting Standards	
ACCY 512	Data Analytics for Management Accounting	
ACCY 515	Auditing & Assurance Standards	
ACCY 517	Financial Statement Analysis and Valuation	
ACCY 518	Financial Statement Fraud	
ACCY 550	Multistate Taxation	
ACCY 554	International Taxation	
ACCY 570	Data Analytics Foundations for Accountancy	
ACCY 571	Statistical Analyses for Accountancy	
ACCY 574	Risk Management and Innovation	
ACCY 575	Data Analytics Applications in Accountancy	
ACCY 592	Introduction to Accounting Research	
Choose one (1) of these two (2) concentrations:		**12**
Taxation		
Financial Reporting & Assurance		
Choose one (1) additional concentration from this list:		**12**
Corporate Governance & International Business		
Data Analytics in Accountancy		
Financial Reporting & Assurance		
Finance		
Information Technology & Control		
Real Estate		
Supply Chain Management		
Taxation		
Total Hours		32

Other Requirements

Requirement	Description
Other requirements may overlap	
The prescribed courses may only be used to satisfy the requirements of one concentration.	
All 32 graduate hours must be completed at the University of Illinois at Urbana-Champaign.	
Minimum GPA:	3.0

[1] ACCY 451 and ACCY 410 are currently offered for differential credit (3 hours undergraduate or 4 hours graduate credit). Students in the Taxation concentration that complete both of these courses during the undergraduate timeframe will take ACCY 510, ACCY 517, or an approved elective. Students in the Financial Reporting & Assurance concentration that complete both ACCY 451 and ACCY 410 for 3 hours of undergraduate credit would either take ACCY 518 or ACCY 574, or an approved elective. All graduate electives must be approved by an Accountancy Advisor.

Accountancy: Financial Reporting & Assurance, MAS

for the degree of Master of Accounting Science, Financial Reporting & Assurance concentration

chair of department: Theodore Sougiannis
director of graduate studies: Nerissa Brown
associate director of graduate studies: Ashley Lamb
department website: https://giesbusiness.illinois.edu/accountancy (https://giesbusiness.illinois.edu/accountancy/)
program website: https://giesbusiness.illinois.edu/accountancy/programs/msa/
college website: https://giesbusiness.illinois.edu/ (https://business.illinois.edu/)
overview of graduate college admissions & requirements: Graduate Admissions (https://grad.illinois.edu/admissions/apply/)
overview of college admissions & requirements: Gies Catalog (http://catalog.illinois.edu/schools/gies-business/academic-units/)
department office: 360 Wohlers Hall, 1206 South Sixth, Champaign, IL 61820
phone: (217) 333-0857
email: accy@illinois.edu

The MAS program is a one-year program for students who have completed or are pursuing a Bachelor of Science in Accountancy from an accredited U.S. institution. The Concentration in Financial Reporting & Assurance is one of the core concentrations available within the MAS program.

Graduate Degree Programs in Accountancy

Accountancy, MAS (p. 542)
with optional concentrations:
Business & Public Policy (p. 1087) | Corporate Governance & International Business (p. 1090) | Data Analytics in Accountancy (p. 1091) | Finance (http://catalog.illinois.edu/graduate/bus/concentration/finance/finance/) | Financial Reporting & Assurance (p. 543) | Information Technology & Control (p. 1100) | Real Estate (p. 1105) | Supply Chain Management (p. 1109) | Taxation (p. 1110)
Accountancy, MS (p. 544) **(on campus & online)**
on campus concentrations:
Business & Public Policy (p. 1087) | Corporate Governance & International Business (p. 1090) | Data Analytics in Accountancy (p. 1091) | Finance (p. 1096) | Information Technology & Control (p. 1100) | Supply Chain Management (p. 1109) | Taxation (p. 1110)
online concentrations:
Accountancy Analytics (p. 546)
Accountancy, PhD (p. 547)
Minor:
Accountancy (p. 1122)

for the degree of Master of Accounting Science in Accountancy, Financial Reporting & Assurance concentration

Code	Title	Hours
ACCY 510	Financial Reporting Standards	4
ACCY 515	Auditing & Assurance Standards	4
ACCY 517	Financial Statement Analysis and Valuation	4
Total Hours		12

Other Requirements

Requirement	Description
Course substitutions may be approved by the Department of Accoutancy.	
Other requirements may overlap.	

Learning Outcomes: Accountancy, MAS

Learning Outcomes for the degree of Master of Accounting Science

Learning Objective 1: Advanced accounting competency

Students will build on their undergraduate knowledge of accounting by adding advanced knowledge of more complex accounting transactions. Students also will gain the ability to derive decision-relevant information from financial statements to make more strategic use of accounting information for decision-making.

Learning Objective 2: Advanced Professional Research Skills

Students will be able to identify, interpret and apply the authoritative literature related to their areas of specialization to address accounting questions characterized by uncertainty and ambiguity.

Learning Objective 3: Attitude-related Professional Preparation

Students will develop an understanding for and appreciation of an accountant's professional responsibility, and will become aware of society's expectations.

Accountancy, MS

for the degree of Master of Science in Accountancy (on campus & online)

chair of department: Michael Donohoe
director of graduate studies: Rachel Schwartz (MSA); Oktay Urcan (iMSA)
college website: https://giesbusiness.illinois.edu/ (https://business.illinois.edu/)
department website: https://giesbusiness.illinois.edu/accountancy (https://giesbusiness.illinois.edu/accountancy/)
MSA website: https://giesbusiness.illinois.edu/msa (https://giesbusiness.illinois.edu/msa/)
iMSA website: https://onlinemsa.illinois.edu/
overview of graduate college admissions & requirements: Graduate Admissions (https://grad.illinois.edu/admissions/apply/)
overview of college admissions & requirements: Gies Catalog (http://catalog.illinois.edu/schools/gies-business/academic-units/)
department office: 360 Wohlers Hall, 1206 South Sixth, Champaign, IL 61820
phone: (217) 333-0857
email: accy@illinois.edu

The Master of Science in Accountancy can be completed either on campus or online.

The University of Illinois at Urbana-Champaign has consistently ranked among the top accountancy schools in the United States. The Public Accounting Report and Accounting Degree Review have rated the Illinois

graduate accounting program as one of the top accountancy masters programs in the United States.

The MS in Accountancy (MSA) program (https://giesbusiness.illinois.edu/msa/) is a one year (STEM Designated) accounting degree. Our students include those with limited prior accounting education as well as students with an undergraduate degree in accounting. The MSA core curriculum applies to all of our students. However, for those students who have previously taken significantly equivalent courses to any of those in our core curriculum, we will work with our students to find a suitable replacement to recognize the sufficiency of their prior accounting education.

The online Master of Science in Accountancy (https://onlinemsa.illinois.edu/) (iMSA) is a fully online program that can be completed in 18 to 36 months. The highly-engaging delivery format and our world-renowned faculty provide students with a hands-on and practice-oriented learning experience. The iMSA is designed for those already working in the accounting field looking to refresh their skill set and for those who intend to use the degree to enter the field for the first time. A mirror of the on-campus Master of Science in Accountancy (MSA) curriculum, the online MSA (iMSA) uses a flexible program format. It allows students to balance academic life with other obligations.

The MSA program (https://giesbusiness.illinois.edu/msa/) begins in June each year with Summer Session II.

The iMSA program (https://onlinemsa.illinois.edu) begins in August and in January each year.

Graduate Degree Programs in Accountancy

Accountancy, MAS (p. 542)
with optional concentrations:
Business & Public Policy (p. 1087) | Corporate Governance & International Business (p. 1090) | Data Analytics in Accountancy (p. 1091) | Finance (http://catalog.illinois.edu/graduate/bus/concentration/finance/finance/) | Financial Reporting & Assurance (p. 543) | Information Technology & Control (p. 1100) | Real Estate (p. 1105) | Supply Chain Management (p. 1109) | Taxation (p. 1110)
Accountancy, MS (p. 544) **(on campus & online)**
on campus concentrations:
Business & Public Policy (p. 1087) | Corporate Governance & International Business (p. 1090) | Data Analytics in Accountancy (p. 1091) | Finance (p. 1096) | Information Technology & Control (p. 1100) | Supply Chain Management (p. 1109) | Taxation (p. 1110)
online concentrations:
Accountancy Analytics (p. 546)
Accountancy, PhD (p. 547)
Minor:
Accountancy (p. 1122)
Certificate:
Accounting Data Analytics, CERT (p. 1114)

Admission

All applicants to the Master of Science in Accountancy program should refer to the MSA program (https://giesbusiness.illinois.edu/msa/admissions/) or the iMSA program (https://onlinemsa.illinois.edu/overview/) for the online program.

for the degree of Master of Science in Accountancy (on campus & online)

For additional details and requirements refer to the department's program information online (https://giesbusiness.illinois.edu/accountancy/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

This degree program can be completed either on campus or online; the requirements are listed below:

Code	Title	Hours
ACCY 501	Accounting Analysis I	4
ACCY 502	Accounting Analysis II	4
ACCY 503	Managerial Accounting	4
ACCY 504	Auditing	4
ACCY 505	Federal Taxation	4
or substitute graduate accountancy courses approved by a program advisor		
Graduate electives with at least 4 hours credit in a non-accountancy graduate course		12
Total Hours		32

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall: 20 (of the total 32 required)	
Students shall earn at least 24 of the 32 total graduate hours while enrolled in the Graduate College at Urbana-Champaign.	
Electives shall form a coherent program of study approved by a program advisor.	
Minimum MSA program coursework cumulative GPA, both by semester and program overall	3.0
Minimum MSA accountancy coursework cumulative GPA, both by semester and program overall	3.0

An optional CPA Review course (ACCY 398) is available. The credit hours for the CPA Review Course do not count towards the 32 credit hours required to graduate.

International students with TOEFL scores below 613 (paper-based), 257 (computer-based), or 103 (internet-based), or IELTS score below 7.0, are required to take the English Placement Test (EPT) when they arrive on campus. After taking the EPT, most students are required to take a Business English course sequence. For these students, completion of the ESL course sequence is **mandatory** but does not count towards the 32 hour degree requirement.

Accountancy: Accountancy Analytics, MS

for the degree of Master of Science in Accountancy, Accountancy Analytics concentration (online)

chair of department: Theo Sougiannis
director of graduate studies: Rachel Schwartz (MSA); Gary Hecht (iMSA)
college website: https://giesbusiness.illinois.edu/ (https://business.illinois.edu/)
department website: https://giesbusiness.illinois.edu/accountancy (https://giesbusiness.illinois.edu/accountancy/)
MSA website: https://giesbusiness.illinois.edu/msa (https://giesbusiness.illinois.edu/msa/)
iMSA website: https://onlinemsa.illinois.edu/
overview of graduate college admissions & requirements: Graduate Admissions (https://grad.illinois.edu/admissions/apply/)
overview of college admissions & requirements: Gies Catalog (http://catalog.illinois.edu/schools/gies-business/academic-units/)
department office: 360 Wohlers Hall, 1206 South Sixth, Champaign, IL 61820
phone: (217) 333-0857
email: accy@illinois.edu

The Accountancy Analytics concentration can be completed online.

The Accountancy Analytics Concentration is designed to develop leaders who understand (1) how to apply data analytics in a variety of accounting and business contexts, (2) critically solve business problems using data-intensive business and accounting information, and (3) synthesize and effectively communicate data-intensive information, findings, and conclusions to other environment-constituents, including supervisors, peers and subordinates, clients, and regulatory agencies. This concentration will not only provide a strong foundational knowledge of data analytics, but also provide students multiple opportunities to apply this knowledge via experiential learning opportunities.

Graduate Degree Programs in Accountancy

Accountancy, MAS (p. 542)
with optional concentrations:
Business & Public Policy (p. 1087) | Corporate Governance & International Business (p. 1090) | Data Analytics in Accountancy (p. 1091) | Finance (p. 763) | Financial Reporting & Assurance (p. 543) | Information Technology & Control (p. 1100) | Real Estate (p. 1105) | Supply Chain Management (p. 1109) | Taxation (p. 1110)
Accountancy, MS (p. 544) **(on campus & online)**
on campus concentrations:
Business & Public Policy (p. 1087) | Corporate Governance & International Business (p. 1090) | Data Analytics in Accountancy (p. 1091) | Finance (p. 1096) | Information Technology & Control (p. 1100) | Supply Chain Management (p. 1109) | Taxation (p. 1110)
online concentrations:
Accountancy Analytics (p. 546)
Accountancy, PhD (p. 547)
Minor:
Accountancy (p. 1122)

Accountancy Analytics (p. 546)
Data Analytics in Accountancy (p. 1091)
Financial Reporting & Assurance (p. 543)
Taxation (p. 1110)

Admission

All applicants to the Master of Science in Accountancy program should refer to the MSA program (https://giesbusiness.illinois.edu/msa/admissions/) or the iMSA program (https://onlinemsa.illinois.edu/overview/) for the online program.

for the degree of Master of Science in Accountancy, Accountancy Analytics concentration (online)

Code	Title	Hours
ACCY 569	Data Driven Decisions in Accounting	2
ACCY 576	Data Preparation for Accounting	2
Select eight (8) hours from the following:		**8**
ACCY 577	Machine Learning for Accounting	
ACCY 578	Accounting Analytics Applications	
MBA 563	Data Toolkit: Business Data Modeling & Predictive Analytics	
MBA 564	Data Analytics Applications in Business	
MBA 565	Infonomics	
Total Hours		12

Learning Outcomes: Accountancy, MS

Learning Outcomes for the degree of Master of Science in Accountancy (on-campus & online)

Learning Objective #1: Discipline-based competency

One goal of the MSA degree is to impart competency in traditional accountancy topics (financial reporting, cost accounting, federal income tax, and auditing), with an expectation of performance at a level higher than undergraduates. Besides providing a technical foundation for career success, a secondary goal of this learning objective is to prepare students to pass the AICPA Uniform CPA examination.

Learning Objective #2: Social and Communication Skills

Students should be able to communicate with others regarding technical accounting topics.

Learning Objective #3: Teamwork

Students should demonstrate the ability to collaborate as an effective team member in varying roles in a diverse group in and in diverse tasks.

Accountancy, PhD

for the degree of Doctor of Philosophy in Accountancy

chair of department: Theo Sougiannis
director of graduate studies: Nerissa Brown
director of admissions committee: Kacie Jones
department website: https://giesbusiness.illinois.edu/accountancy/programs/msa/
college website: https://giesbusiness.illinois.edu/ (https://business.illinois.edu/)
overview of graduate college admissions & requirements: Graduate Admissions (https://grad.illinois.edu/admissions/apply/)
overview of college admissions & requirements: Gies Catalog (http://catalog.illinois.edu/schools/gies-business/academic-units/)
department office: 360 Wohlers Hall, 1206 South Sixth, Champaign, IL 61820
phone: (217) 333-0857
email: accy@illinois.edu

The student's doctoral program is determined in consultation with a faculty advisory committee. The student's evolving plans for the doctoral thesis serve as a guide in planning the program. Program coursework is comprised of two general categories: core studies and advanced studies within an area of specialization (i.e., a supporting field). The latter coursework is tailored to facilitate the student's dissertation.

In addition, candidates must pass a written accountancy core examination and both oral preliminary and oral final examinations on the doctoral thesis. In the accountancy core examination, candidates must demonstrate a thorough knowledge of research methods and accounting theory; a general acquaintance with the subject matter of the variety addressed within accountancy doctoral core studies; and proficiency in the required areas of economic theory, quantitative methods, behavioral science and financial economics.

Graduate Degree Programs in Accountancy

Accountancy, MAS (p. 542)
with optional concentrations:
Business & Public Policy (p. 1087) | Corporate Governance & International Business (p. 1090) | Data Analytics in Accountancy (p. 1091) | Finance (p. 763) | Financial Reporting & Assurance (p. 543) | Information Technology & Control (p. 1100) | Real Estate (p. 1105) | Supply Chain Management (p. 1109) | Taxation (p. 1110)
Accountancy, MS (p. 544) **(on campus & online)**
on campus concentrations:
Business & Public Policy (p. 1087) | Corporate Governance & International Business (p. 1090) | Data Analytics in Accountancy (p. 1091) | Finance (p. 1096) | Information Technology & Control (p. 1100) | Supply Chain Management (p. 1109) | Taxation (p. 1110)
online concentrations:
Accountancy Analytics (p. 546)
Accountancy, PhD (p. 547)
Minor:
Accountancy (p. 1122)

Admission

All applicants to the Accountancy doctoral program should refer to the PhD program (https://giesbusiness.illinois.edu/graduate-hub/doctoral/accountancy/).

for the degree of Doctor of Philosophy in Accountancy

For additional details and requirements refer to the department's program information online (https://business.illinois.edu/accountancy/programs/phd/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
Graduate study, at least 16 hours of which are in a supporting field (e.g., economics, finance, psychology).		24
A two-course introduction to mathematical statistics and probability theory		8
Accountancy core doctoral seminars:		16
ACCY 592	Introduction to Accounting Research	
ACCY 585	Constructs in Atg Research	
ACCY 593	Special Research Problems (section B)	
ACCY 593	Special Research Problems (section C)	
ACCY 593	Special Research Problems (section S)	4
ACCY 594	Doctoral Research Seminar (in area of specialization)	4
Microeconomics at the graduate level (ECON 500), and another economics course at the graduate level from an approved listing		8
ACCY 599	Thesis Research	32
Total Hours		96

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum Hours Required Within the Unit:	56
Minimum 500-level Hours Required Overall:	60
Students must present a research paper at the Accountancy Research Forum in the beginning of their third year.	
Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the accountancy Ph.D. program.	
Masters Degree Required for Admission to PhD?	No
Qualifying Exam Required (Accountacy Core Examination)	Yes
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

Learning Outcomes: Accountancy, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Accountancy

Learning Objective #1: Interdisciplinary knowledge, skills and attitudes

Students should possess sufficient knowledge of the economics and other behavioral science theories that are the roots of the accountancy discipline, knowledge of relevant accountancy research literatures, knowledge of the institutional features that characterize the production and utilization of accounting information, and knowledge of design and analysis methods necessary to conduct research in accountancy.

Learning Objective #2: Functioning as a competent researcher

Students should be able to design and conduct a research study in an accountancy related area and to write and present a research paper based on this study to the accountancy faculty. Students should demonstrate accomplishment of this goal in a research study other than their dissertation.

Learning Objective #3: Functioning as a competent educator at the undergraduate level

Students should possess the knowledge, skills and attitudes necessary to teach an undergraduate course based on a common course syllabus developed by a faculty team. These knowledge, skills and attitudes include planning and delivering a class lecture, planning and supervising class activities, and planning and performing assessments of student learning.

Actuarial Science, MS

for the Master of Science in Actuarial Science

department chair: Vera Hur
director of graduate studies: Yuliy Baryshnikov
overview of admissions & requirements:
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: http://www.math.illinois.edu
program website: https://math.illinois.edu/admissions/graduate-program-mathematics-admissions#MS-ActSci (https://math.illinois.edu/admissions/graduate-program-mathematics-admissions/#MS-ActSci)
department faculty: https://math.illinois.edu/research/faculty-research/actuarial-science (https://math.illinois.edu/research/faculty-research/actuarial-science/)
college website: https://las.illinois.edu/
department office: 273 Altgeld Hall, 1409 West Green Street, Urbana, IL 61801
phone: (217) 333-5749
email: math-grad@illinois.edu

The Master of Science in Actuarial Science prepares students with quantitative undergraduate degrees for actuarial professional careers. The program offers a unique blend of coursework for both professional training and advanced techniques and opportunities for experiential learning.

Graduate Degree Programs in Mathematics

Actuarial Science, MS (p. 548)
Applied Mathematics, MS (p. 575)
Mathematics, MS (p. 866)
Mathematics, PhD (p. 867)
optional concentrations:
Actuarial Science & Risk Analytics (p. 868)
Computational Science and Engineering (p. 1089)
Teaching of Mathematics, MS (p. 1043)

for the Master of Science in Actuarial Science

For additional details and requirements refer to the department's Guide to Graduate Studies (https://files.webservices.illinois.edu/7917/GraduateGuide18-19.pdf) and the Graduate College Handbook (https://grad.illinois.edu/gradhandbook/).

Non-Thesis Option

Code	Title	Hours
Two courses chosen from the following:		8
ASRM 510	Financial Mathematics	
ASRM 561	Loss Data Analytics & Credibility	
ASRM 569	Extreme Value Theory and Catastrophe Modeling	
ASRM 575	Life Insurance and Pension Mathematics	
MATH 563	Risk Modeling and Analysis	

Electives chosen in consultation with the faculty advisors. These electives may include additional courses from the list above.	24
Total Hours	32

Other Requirements

Requirement	Description
MATH 405, MATH 406, MATH 415, MATH 444, and MATH 499 cannot be counted toward this graduate degree.	
Minimum hours required within ASRM:	20
Minimum GPA:	3.0
Minimum 500-level hours required overall:	12

Thesis Option

Code	Title	Hours
Two courses chosen from the following:		8
ASRM 510	Financial Mathematics	
ASRM 561	Loss Data Analytics & Credibility	
ASRM 569	Extreme Value Theory and Catastrophe Modeling	
ASRM 575	Life Insurance and Pension Mathematics	
MATH 563	Risk Modeling and Analysis	
Electives chosen in consultation with the faculty advisors. These electives may include additional courses from the list above.		20
Thesis Research (min/max applied toward degree)		4
Total Hours		32

Other Requirements

Requirement	Description
MATH 405, MATH 406, MATH 415, MATH 444, and MATH 499 cannot be counted toward this graduate degree.	
Minimum hours required within ASRM:	20
Minimum GPA:	3.0
Minimum 500-level hours required overall:	12

Learning Outcomes: Actuarial Science, MS

Learning outcomes for the Master of Science in Actuarial Science

1. Acquire a broad foundation of actuarial knowledge.
2. Develop actuarial modeling skills.
3. Beable to utilize actuarial knowledge to address various technical problems arising from a variety of areas of actuarial practice.

Advertising, MS

for the degree of Master of Science in Advertising

head of department: Mike Yao
director of graduate studies: Chang Dae Ham
email: addept@illinois.edu
department website: https://media.illinois.edu/advertising (https://media.illinois.edu/advertising/)
department faculty: https://media.illinois.edu/advertising/faculty (https://media.illinois.edu/advertising/faculty/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://media.illinois.edu/
department office: 119 Gregory Hall, 810 S. Wright Street, Urbana, IL 61801
phone: (217) 333-1602

Programs in Advertising

Undergraduate Programs:

major: Advertising, BS (http://catalog.illinois.edu/schools/media/academic-units/advertising/#undergraduatetext)
major: Computer Science & Advertising, BS (http://catalog.illinois.edu/undergraduate/media/departments/advertising/csadv/)
minors: Media (p. 513) | Public Relations (p. 519)

Graduate Programs:

degree: Advertising, MS (p. 549)
degree: Strategic Brand Communication, MS (p. 1030)

Advertising education was founded at the University of Illinois in 1946, when Charles H. Sandage, the "father of advertising", arrived on campus. His vision of educating the future of the industry was grounded in theoretical and foundational courses emphasizing the "why of advertising" - not just the "how."

Our courses provide the theoretical, research, and strategic decision-making skills essential for any career in advertising or advanced degree program. Our program allows for flexibility of specialized interest through electives within and outside the department.

Admission

Students are required to complete 36 hours towards the degree, including a professional project or thesis requirement. Full-time status requires 12 hours per semester, making it possible to complete the degree in three semesters. Admission is only granted for fall semester.

for the degree of Master of Science in Advertising

Thesis Option

Code	Title	Hours
ADV 550	Foundations of Advertising	3
ADV 580	Advertising Theory	3
ADV 581	Quanti Research Methods in Adv	3
ADV 582	Qualitative Rsrch in Advert	3
ADV 587	Graduate Seminar I	3
ADV 588	Graduate Seminar II	3

Graduate-level electives (at least 1 course from College/Department and 1 course from outside the College)		12
ADV 599	Thesis Research (min/max applied toward degree)	6
Total Hours		36

Other Requirements [1]

Requirement	Description
Other requirements may overlap.	
Thesis option must have faculty approval.	
Minimum hours required within the unit:	24
Minimum number of 500-lvel hours required overall in the program:	24
Additional background courses that do not count toward graduation may be required, as determined by the advisor.	
Minimum GPA:	2.75

[1] *For additional details and requirements for all degrees, please refer to the department's Graduate Degree Requirements at the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Non-Thesis Option

Code	Title	Hours
ADV 550	Foundations of Advertising	3
ADV 580	Advertising Theory	3
ADV 581	Quanti Research Methods in Adv	3
ADV 582	Qualitative Rsrch in Advert	3
ADV 587	Graduate Seminar I	3
ADV 588	Graduate Seminar II	3
Graduate-level electives (at least 1 course from College/Department and 1 course from outside the College)		12
ADV 598	Professional Project (must have faculty approval)	6
Total Hours		36

Other Requirements [1]

Requirement	Description
Other requirements may overlap.	
Minimum hours required within the unit:	24
Minimum number of 500-level hours required overall in the program:	24
Additional background courses that do not count toward graduation may be required, as determined by the advisor.	
Minimum GPA:	2.75

[1] *For additional details and requirements for all degrees, please refer to the department's Graduate Degree Requirements at the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Advertising, MS

Learning Outcomes for the degree of Master of Science in Advertising

1. Intellectual reasoning and knowledge
   a. MS graduates will develop an understanding of the “why of advertising” not just the “how”.
   b. MS graduates will demonstrate critical thinking skills, making the intellectual connection between quantitative and qualitative tools, theories and context to properly and effectively solve problems and make decisions related to the fast-changing media and advertising industries.
2. Creative inquiry and discovery
   a. MS graduates will have a strategic understanding of advertising and be able to take into account the relationships between this discipline and other related disciplines.
   b. MS graduates will assess the interdependent, fast-changing, and diverse world of media and advertising.
   c. MS graduates will demonstrate proficiency in analyzing and interpreting research data that is fundamental to innovative problem solving and strategic thinking.
3. Effective leadership and community engagement
   a. MS graduates will utilize interpersonal and group leadership skills (through taking classes with the same cohort every semester and group projects) to be highly effective advertising managers and leaders; demonstrating curiosity, visionary and strategic thinking, teamwork, and knowledge transfer skills.
4. Social awareness and cultural understanding
   a. MS graduates will demonstrate ethical reasoning skills, generate new knowledge, and strengthen professional development.
   b. MS graduates will demonstrate a strong work ethic to foster individual and professional integrity and mutual respect.
   c. MS graduates will be able to think critically and creatively and to apply theory to practice in an atmosphere of inquiry and dynamic exchange with faculty and their peers.
   d. MS graduates will have opportunities for learning outside the classroom.
5. Global consciousness
   a. MS graduates will have opportunity to learn about the fast-changing international and global advertising industry.
6. Professional development
   a. MS graduate students will have the opportunity at least twice per semester to meet with advertising professionals to discuss career goals (i.e., presentations, workshops and collaborations)

Aerospace Engineering, MS

for the degree of Master of Science in Aerospace Engineering (on campus & non-thesis online)

department head: Jonathan B. Freund (https://aerospace.illinois.edu/directory/profile/jbfreund/)
director of graduate studies: Daniel J Bodony (bodony@illinois.edu)
overview of admissions & requirements: https://aerospace.illinois.edu/admissions/graduate (https://aerospace.illinois.edu/admissions/graduate/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://aerospace.illinois.edu/
program website: https://aerospace.illinois.edu/academics/graduate/ms-degree-program (https://aerospace.illinois.edu/academics/graduate/ms-degree-program/)
department faculty: https://aerospace.illinois.edu/directory/faculty (https://ae.illinois.edu/directory/faculty/)
college website: https://grainger.illinois.edu/
contact: Staci McDannel (tank@illinois.edu)
address: 306 Talbot Laboratory, 104 S Wright St, Urbana, IL 61801
phone: (217) 333-3674
email: ae-grad@illinois.edu

The Department of Aerospace Engineering offers both MS with thesis (https://aerospace.illinois.edu/academics/graduate/ms-degree-program/ms-degree-thesis/) and MS non-thesis (https://ae.illinois.edu/academics/graduate/ms-degree-program/ms-degree-non-thesis-campus/) programs. Students in the MS with thesis program are required to have a research advisor and applicants are encouraged to contact department faculty (https://aerospace.illinois.edu/directory/faculty/) in their areas of interest to inquire about possible research and funding opportunities.

Interested students may specialize in computational science and engineering via the Computational Science & Engineering (p. 1089) optional graduate concentration.

Admission Requirements

The Department of Aerospace Engineering accepts applications for admission to the MS with thesis and MS non-thesis graduate programs per the following deadlines:

Fall Admission
For MS with thesis admission and full consideration for funding opportunities: January 1
For MS non-thesis admission: July 1

Spring Admission
For MS with thesis admission and full consideration for funding opportunities: October 1
For MS non-thesis admission: December 1

Typically, the prerequisite for graduate study is the equivalent of the BS in Aerospace Engineering (https://aerospace.illinois.edu/academics/undergraduate/); however, graduates of curricula leading to degrees in other fields of engineering, the physical sciences, or mathematics may also be admitted to advanced study. A minimum grade point average of 3.00 (A = 4.00) for the last two years of undergraduate study is required. However, having a GPA higher than the minimum is no guarantee of admission. Scores on the Graduate Record Examination (GRE) (http://ets.org/) general test are required of all applicants. There are no minimum GRE score requirements.

Applicants to the Aerospace Engineering graduate program are asked to complete a supplemental form that will capture additional information about their specific interests. Applicants receive an email after submitting the online application which contains the link to the supplemental form. Applicants may select up to three areas from the following list:

•additive manufacturing	•aeroacoustics	•aerodynamics	•aeroelasticity	•aerospace materials
•aerospace structures	•aerospace systems design and simulation	•applied aerodynamics	•astrodynamics	•autonomous vehicles
•combustion and propulsion	•composite materials	•computational fluid dynamics	•computational mechanics	•controls, dynamical systems and estimation
•experimental fluid mechanics	•flow control	•fracture mechanics and fatigue	•GPS	•hypersonics
•information technology	•laser and optical diagnostics	•nanomechanics and micromechanics	•nanosatellites	•plasma physics
•robotics	•space environment and space mission design	•space systems	•structural mechanics/structural dynamics design	•unmanned aerial vehicles

All applicants whose native language is not English are required to submit the results of the TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) as evidence of meeting the English proficiency requirements for full admission status (http://grad.illinois.edu/admissions/instructions/04c/). Under certain circumstances applicants may be exempt (https://grad.illinois.edu/admissions/instructions/04c/) from the TOEFL/IELTS requirement.

Applicants who are non-native speakers of English and who wish to be considered for teaching assistantships must provide evidence (https://grad.illinois.edu/admissions/taengprof.htm) of spoken English language proficiency. Specifically, they must score 24 or higher on the SPEAK portion of the TOEFL exam and 8 or higher on the speaking sub-section of the IELTS.

For full information on admission requirements and how to apply, see the department's graduate programs Web site (https://aerospace.illinois.edu/academics/graduate/).

Financial Aid

Students in the MS non-thesis program are not eligible for funding from the department. Financial aid for graduate students in thesis graduate programs is available in the form of fellowships (https://grad.illinois.edu/fellowships/about/), as well as teaching and research assistantships (https://grad.illinois.edu/assistantships/). Exceptionally qualified MS with thesis candidates will be considered for support upon application.

All applicants, regardless of US citizenship, whose native language is not English and who wish to be considered for teaching assistantships must demonstrate spoken English language proficiency (http://www.grad.illinois.edu/admissions/taengprof.htm) by achieving a minimum score of 24 on the speaking subsection of the TOEFL iBT or 8 on the speaking subsection of the IELTS. For students who are unable to take the TOEFL or IELTS, a minimum score of 4CP is required on the EPI

test (http://cte.illinois.edu/testing/oral_eng/epi_overview.html), offered on campus. All new teaching assistants are required to participate in the Graduate Academy for College Teaching (https://citl.illinois.edu/citl-101/teaching-learning/grad-academy-for-college-teaching/) conducted prior to the start of the semester.

Graduate Teaching Experience

MS students are not required to hold a teaching assistantship.

Department Research

Research activities in the Department of Aerospace Engineering encompass a wide range of problem areas in aerospace engineering and related engineering disciplines as described on the department's research area Web site (https://aerospace.illinois.edu/research/).

There are several nationally-renowned interdisciplinary centers in The Grainger College of Engineering where Aerospace Engineering faculty members engage in research along with many other campus faculty members. A list of these, along with links to full descriptions, appears at the department's interdisciplinary centers Web site (https://aerospace.illinois.edu/research/interdisciplinary-centers/). Among these are the Beckman Institute for Advanced Science and Technology, Center for Cryogenic High-Efficiency Electrical Technologies for Advanced Science and Technology, Center for Exascale-enabled Scramjet Design (CEESD), Center for Hypersonics and Entry Systems Studies (CHESS), Center for UAS Propulsion (CUP), Coordinated Science Lab (CSL), Micro and Nanotechnology Laboratory, Information Trust Institute (ITI), and the National Center for Supercomputing Applications (NCSA).

Members of the Aerospace Engineering Department have access to a wide range of excellent research facilities. These laboratories support a wide range of activity and are described at the department's research facilities Web site (https://aerospace.illinois.edu/research/research-facilities/).

Other Graduate Programs in the Department of Aerospace Engineering

degrees:

Aerospace Engineering, PhD (p. 553)
optional concentrations:
Computational Science & Engineering (p. 1089)
Aerospace Engineering, Direct PhD (https://aerospace.illinois.edu/academics/graduate/phd-program/phd-student-status-and-requirements/direct-phd/)
optional concentrations:
Computational Science & Engineering (p. 1089)
Aerospace Systems Engineering (p. 745)
available for:
Engineering, MENG (p. 745)

The Department of Aerospace Engineering (AE) offers graduate programs leading to the degrees of Master of Science and Doctor of Philosophy in Aerospace Engineering and a Master of Engineering in Engineering degree with a concentration in Aerospace Systems Engineering.

Opportunity also exists for specializing in energy and sustainability engineering via the

Energy and Sustainability Engineering (EaSE) Graduate Certificate Option (http://ease.illinois.edu/)

for the degree of Master of Science in Aerospace Engineering (on campus & non-thesis online)

The MS in Aerospace Engineering is also offered online. The degree requirements are the same as for the on-campus MS non-thesis program and the degree awarded to online students is the same degree awarded to resident students. Online students have five years to complete the program.

Online students should develop a course program plan in consultation with their advisor. Suggested program tracks (https://aerospace.illinois.edu/academics/graduate/suggested-program-tracks/) are provided for each of the three main technical divisions in the department:

1. Aerodynamics, Fluid Mechanics, Combustion and Propulsion (AFMCP);
2. Astrodynamics, Controls and Dynamical Systems (ACDS); and
3. Structural Mechanics and Materials (SMM).

For additional details and requirements, refer to the department's Website *(*http://aerospace.illinois.edu/*) and the* Graduate College Handbook *(*https://grad.illinois.edu/gradhandbook/*).*

Thesis Option

Code	Title	Hours
AE 599	Thesis Research (min-max applied toward the degree)	8
AE 590	Seminar (registration of 0 hours every term while in residence)	0
Aerospace Engineering breadth requirement (https://aerospace.illinois.edu/academics/graduate/breadth-and-mathematics-requirements/)		6-8
One mathematics course from an approved list (https://aerospace.illinois.edu/academics/graduate/breadth-and-mathematics-requirements/)		3-4
Elective courses chosen in consultation with an advisor (subject to Other Requirements and Conditions below)		12-15
Total Hours		32

Other Requirements and Conditions [1]

Requirement	Description
Other Requirements and Conditions may overlap	
	A minimum of 16 hours of AE course work at the 400-level and above. (May include up to 8 hours of AE 599.)
	A minimum of 12 500-level credit hours overall applied toward the degree, with 8 hours being AE courses. (May include up to 4 hours of AE 599.)
	No hours of AE 597 (or other independent study) may be applied in this option.

	Attendance at all Aerospace Engineering AE 590 seminars each semester while on campus.
Minimum GPA:	3.0
	A departmental petition is required to change from the thesis to the non-thesis option.

[1] *For additional details and requirements refer to the department's* Website *(*http://aerospace.illinois.edu/*) and the* Graduate College Handbook *(*http://grad.illinois.edu/gradhandbook/*).*

Non-Thesis Option

Code	Title	Hours
AE 590	Seminar (registration for 0 hours every term while in residence)	
Aerospace Engineering breadth requirement (https://aerospace.illinois.edu/academics/graduate/breadth-and-mathematics-requirements/breadth-and-mathematics-requirements/)		9-12
One mathematics course from an approved list (https://aerospace.illinois.edu/academics/graduate/breadth-and-mathematics-requirements/)		3-4
Elective courses chosen in consultation with an advisor (subject to Other Requirements and Conditions below)		16-20
Total Hours		32

Other Requirements and Conditions [1]

Requirement	Description
Other Requirements and Conditions may overlap	
	A minimum of 16 hours of AE course work at the 400-level and above.
	A minimum of 12 500-level credit hours overall applied toward the degree, with 8 hours being AE courses.
	A maximum of 4 hours of AE 597 (or other independent study) may be applied toward the elective course work requirement.
	Attendance at all Aerospace Engineering AE 590 seminars each semester while on campus.
Minimum GPA:	3.0
	Generally, students holding a research assistantship will not be allowed in the non-thesis option.
	A departmental petition is required to change from the thesis to the non-thesis option and vice-versa.

[1] *For additional details and requirements refer to the department's* Website *(*https://aerospace.illinois.edu/*) and the* Graduate College Handbook *(*http://grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Aerospace Engineering, MS

Learning Outcomes for the degree of Master of Science in Aerospace Engineering (on-campus & non-thesis online)

1. An ability to utilize and apply advanced mathematical, computational, design and/or experimental skills
2. An ability to identify, formulate and solve advanced problems in aerospace engineering
3. Effectively communicate technical ideas through reports, presentations, or other media at the high level associated with graduate education
4. Depth of knowledge in one or more sub-disciplines associated with aerospace engineering and their research or technical area of interest.
5. Knowledgeable about contemporary research in aerospace engineering and related disciplines6. Knowledgeable about ethical standards of conducting research, analyzing data and disseminating information as part of the engineering profession
6. An ability to conduct research, analyze results, report findings, and draw conclusions that result in original contributions to knowledge in aerospace engineering and/or related fields (Not a requirement for M.S. Non-thesis students)
7. Effectively train and/or teach others in a classroom, laboratory, seminar, or other setting to disseminate knowledge in the aerospace engineering discipline. (Not a requirement for M.S. students)

Aerospace Engineering, PhD

for the degree of Doctor of Philosophy in Aerospace Engineering

department head: Jonathan B. Freund (jbfreund@illinois.edu)
director of graduate studies: Daniel J Bodony (bodony@illinois.edu)
overview of admissions & requirements: https://aerospace.illinois.edu/admissions/graduate (https://aerospace.illinois.edu/admissions/graduate/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://aerospace.illinois.edu/
program website: https://aerospace.illinois.edu/academics/graduate/phd-program (https://aerospace.illinois.edu/academics/graduate/phd-program/)
department faculty: https://aerospace.illinois.edu/directory/faculty (https://ae.illinois.edu/directory/faculty/)
college website: https://grainger.illinois.edu/
contact: Staci McDannel (tank@illinois.edu)
address: 306 Talbot Laboratory, 104 S Wright St, Urbana, IL 61801
phone: (217) 333-3674
email: ae-grad@illinois.edu

The Department of Aerospace Engineering offers a traditional doctoral program and a direct doctoral program (https://aerospace.illinois.edu/academics/graduate/phd-program/phd-student-status-and-requirements/direct-phd/). Students in either programs are required to have a research advisor and applicants are encouraged to contact department faculty (https://aerospace.illinois.edu/directory/faculty/)

in their areas of interest to inquire about possible research and funding opportunities.

Opportunity exists for specializing in computational science and engineering via the Computational Science & Engineering (p. 1089) optional graduate concentration.

Admission Requirements

The Department of Aerospace Engineering accepts applications for admission to both the traditional doctoral program and the direct doctoral program per the following deadlines:

Fall Admission

For admission and full consideration for funding opportunities: January 1

Spring Admission

For admission and full consideration for funding opportunities: October 1

Typically, the prerequisite for graduate study is the equivalent of the BS in Aerospace Engineering (https://aerospace.illinois.edu/academics/undergraduate/); however, graduates of curricula leading to degrees in other fields of engineering, the physical sciences, or mathematics may also be admitted to advanced study. A minimum grade point average of 3.00 (A = 4.00) for the last two years of undergraduate study is required. However, having a GPA higher than the minimum is no guarantee of admission. Scores on the Graduate Record Examination (GRE) (http://ets.org/) general test are required of all applicants. There are no GRE minimum score requirements.

Applicants to the Aerospace Engineering graduate program are asked to complete a supplemental form that will capture additional information about their specific interests. Applicants receive an email after submitting the online application which contains the link to the supplemental form. Applicants may select up to three areas from the following list:

•additive manufacturing	•aeroacoustics	•aerodynamics	•aeroelasticity	•aerospace materials
•aerospace structures	•aerospace systems design and simulation	•applied aerodynamics	•astrodynamics	•autonomous vehicles
•combustion and propulsion	•composite materials	•computational fluid mechanics	•computational mechanics	•controls, dynamical systems and estimation
•experimental fluid mechanics	•flow control	•fracture mechanics and fatigue	•GPS	•hypersonics
•information technology	•laser and optical diagnostics	•nanomechanics and micromechanics	•nanosatellites	•plasma physics
•robotics	•space environment and space mission design	•space systems	•structural mechanics/structural dynamics design	•unmanned aerial vehicles

All applicants whose native language is not English are required to submit the results of the TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) as evidence of meeting the English proficiency requirements for full admission status (http://grad.illinois.edu/admissions/instructions/04c/). Under certain circumstances applicants may be exempt (https://grad.illinois.edu/admissions/instructions/04c/) from the TOEFL/IELTS requirement.

Applicants who are non-native speakers of English and who wish to be considered for teaching assistantships must provide evidence (https://grad.illinois.edu/admissions/taengprof.htm) of spoken English language proficiency. Specifically, they must score 24 or higher on the SPEAK portion of the TOEFL exam and 8 or higher on the speaking sub-section of the IELTS.

For full information on admission requirements and how to apply, see the department's graduate programs Web site (https://aerospace.illinois.edu/academics/graduate/).

Financial Aid

Financial aid for graduate students in thesis graduate programs is available in the form of fellowships (https://grad.illinois.edu/fellowships/about/), as well as teaching and research assistantships (https://grad.illinois.edu/assistantships/). Starting in Fall 2020, Grainger Engineering PhD students in their first five years of enrollment who meet the minimum eligibility requirements (https://grainger.illinois.edu/academics/graduate/phd-funding-guarantee/) are guaranteed a funded appointment for fall and spring that includes a full tuition waiver, a partial fee waiver, and a stipend. Exceptionally qualified candidates are considered for fellowship financial support upon application.

All applicants, regardless of US citizenship, whose native language is not English and who wish to be considered for teaching assistantships must demonstrate spoken English language proficiency (http://www.grad.illinois.edu/admissions/taengprof.htm) by achieving a minimum score of 24 on the speaking subsection of the TOEFL iBT or 8 on the speaking subsection of the IELTS. For students who are unable to take the TOEFL or IELTS, a minimum score of 4CP is required on the EPI test (http://cte.illinois.edu/testing/oral_eng/epi_overview.html), offered on campus. All new teaching assistants are required to participate in the Graduate Academy for College Teaching (https://citl.illinois.edu/citl-101/teaching-learning/grad-academy-for-college-teaching/) conducted prior to the start of the semester.

Graduate Teaching Experience

PhD students are required to hold a 25% teaching assistantship for at least one semester in order to meet the requirements for the Department of Aerospace Engineering doctoral program. Information about teaching assistantships can be found on the department's teaching assistantships Web site (https://aerospace.illinois.edu/academics/graduate/funding-fees-and-fellowships/teaching-assistantships/).

Department Research

Research activities in the Department of Aerospace Engineering encompass a wide range of problem areas in aerospace engineering and related engineering disciplines as described on the department's research area Web site (https://aerospace.illinois.edu/research/).

There are several nationally-renowned interdisciplinary centers in The Grainger College of Engineering where Aerospace Engineering faculty members engage in research along with many other campus faculty members. A list of these, along with links to full descriptions, appears at the department's interdisciplinary centers Web site (https://aerospace.illinois.edu/research/interdisciplinary-centers/). Among these are the Beckman Institute for Advanced Science and Technology,

Center for Cryogenic High Efficiency Electrical Technologies for Aircraft (CHEETA), Center for Exascale-enabled Scramjet Design (CEESD), Center for Hypersonics and Entry Systems Studies (CHESS), Center for UAS Propulsion (CUP), Coordinated Science Laborabtory (CSL), Micro and Nanotechnology Laboratory, Information Trust Institute (ITI), and the National Center for Supercomputing Applications (NCSA).

Members of the Aerospace Engineering Department have access to a wide range of excellent research facilities. These laboratories support a wide range of activity and are described at the department's research facilities Web site (https://aerospace.illinois.edu/research/research-facilities/).

Other Graduate Programs in the Department of Aerospace Engineering

degrees:

Aerospace Engineering, MS (p. 550)
optional concentrations:
Computational Science & Engineering (p. 1089)
Aerospace Systems Engineering (p. 745)
available for:
Engineering, MENG (p. 745)

The Department of Aerospace Engineering (AE) offers graduate programs leading to the degrees of Master of Science and Doctor of Philosophy in Aerospace Engineering and a Master of Engineering in Engineering degree with a concentration in Aerospace Systems Engineering. The AE graduate program provides students with a strong background in engineering and applied science while placing emphasis on aircraft and spaceflight engineering.

Opportunity also exists for specializing in energy and sustainability engineering via the

Energy and Sustainability Engineering (EaSE) Graduate Certificate Option (http://ease.illinois.edu/)

for the degree of Doctor of Philosophy in Aerospace Engineering

For additional details and requirements, refer to the department's Website (http://aerospace.illinois.edu/) and the Graduate College Handbook (https://grad.illinois.edu/gradhandbook/).

Entering with an approved M.S. Degree

Code	Title	Hours
AE 599	Thesis Research (min-max applied toward degree)	40
AE 590	Seminar (continuous registration through the 4th semester after the qualifying exam for 0 hours)	0
One advanced 500-level mathematics course from an approved list .		3-4
Elective courses -- chosen in consultation with advisor (subject to Other Requirements and Conditions below).		20-21
Total Hours		64

Other Requirements and Conditions

Requirement	Description
Minimum GPA:	3.0
A minimum of 8 hours of AE course credit overall at the 500-level, byond the master's degree.	
A minimum of 16 credit hours overall at the 500 level, byond the master's degree, including the 8 hours of 500-level AE courses.	
A maximum of 4 hours of AE 597 (or other independent study) may be applied toward the elective coursework requirement.	
A 25% or more teaching assistantship for at least one semester.	
Qualifying exam[1]	Yes
Preliminary exam	Yes
Final exam or dissertation defense	Yes
Dissertation deposit	Yes

Entering with an approved B.S. degree

Code	Title	Hours
AE 599	Thesis Research (min-max applied toward degree)	48
Coursework:		48
24 Hours of 500-level coursework, including 12 hours of 500-level AE coursework		
7-8 hours of Math (4 of the 7-8 taken must be at the 500-level and count toward the 24 hour requirement)		
20-21 hours of 400/500 elective AE coursework per advisor approval		
AE 590	Seminar (continuous registration through the 4th semester after the qualifying exam for 0 hours)	0
Total Hours		96

Other Requirements and Conditions

Requirement	Description
Minimum GPA:	3.0
A maximum of 4 hours of AE 597 (or other independent study) may be applied toward the elective course work requirement.	
A 25% or more teaching assistantship for at least one semester.	
Qualifying exam[1]	Yes
Preliminary exam	Yes
Final exam or dissertation defense	Yes
Dissertation deposit	Yes

[1] *Qualifying Exam information*

Learning Outcomes: Aerospace Engineering, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Aerospace Engineering

1. An ability to utilize and apply advanced mathematical, computational, design and/or experimental skills
2. An ability to identify, formulate and solve advanced problems in aerospace engineering
3. Effectively communicate technical ideas through reports, presentations, or other media at the high level associated with graduate education
4. Depth of knowledge in one or more sub-disciplines associated with aerospace engineering and their research or technical area of interest.
5. Knowledgeable about contemporary research in aerospace engineering and related disciplines6. Knowledgeable about ethical standards of conducting research, analyzing data and disseminating information as part of the engineering profession
6. An ability to conduct research, analyze results, report findings, and draw conclusions that result in original contributions to knowledge in aerospace engineering and/or related fields (Not a requirement for M.S. Non-thesis students)
7. Effectively train and/or teach others in a classroom, laboratory, seminar, or other setting to disseminate knowledge in the aerospace engineering discipline. (Not a requirement for M.S. students)

African Studies, MA

for the Master of Arts in African Studies

director: Teresa Barnes
overview of admissions & requirements: http://(http://www.afrst.illinois.edu/academics/grad/apply/)www.afrst.illinois.edu/academics/grad/apply/ (http://www.afrst.illinois.edu/academics/grad/apply/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department website: http://www.afrst.illinois.edu/academics/grad/
department faculty:
department office: 210 International Studies Building, 910 South Fifth Street, Champaign, IL 61820
phone: (217) 333-6335
fax: (217) 244-2429
email: african@illinois.edu

The Center for African Studies administers a two-year program of area studies courses and intensive African language instruction leading to a Master of Arts degree designed to give students an interdisciplinary perspective on the study of Africa. The program provides both language and area training for three constituencies of students: those seeking to match area expertise with professional training; those proceeding to disciplinary-based doctoral work; and those for whom the degree would stand on its own. For more information about the Center's graduate programs, please visit: http://www.afrst.illinois.edu/academics/grad/.

Graduate Degree Programs in African Studies

African Studies, MA (p. 556)
African Studies Graduate Minor (p. 1123)
Joint Degree Program:
African Studies, MA and Library and Information Science, MS (p. 1149)

Admissions

The Center for African Studies admits students in the fall term only. Applicants to the Masters degree in African Studies should hold at least a Bachelor's degree from an accredited college or university in the United States or from a recognized institution of higher education abroad. All graduate college admission requirements also apply. The Center does not require the Graduate Record Examination (GRE) scores, but it is highly recommended for students applying for the Foreign Language and Area Studies (FLAS) fellowship. Successful applicants should have a grade point average of at least 3.0 (4.0=A) calculated for the last 60 semester hours of undergraduate course work. International applicants or applicants whose native language is not English must have a minimum TOEFL score of 550 on the paper-based test (PBT) -- 213 on the computer-based test (CBT) or 79 on the internet-based test (IBT). For information about the application process and to access both domestic and international student applications, start here: https://grad.illinois.edu/admissions/apply/.

For more information about the Center's admission requirements and procedures, and deadlines please visit www.afrst.illinois.edu/academics/grad/apply/ (http://www.afrst.illinois.edu/academics/grad/apply/).

Students interested in the graduate minor in African Studies must be in good standing in a graduate program, have permission from the major program, and demonstrate an interest in African Studies. For more information, contact Dr. Maimouna Barro (barro@illinois.edu).

Faculty Research

The Center for African Studies' has both core and affiliate faculty represented in over 34 units across campus encompassing various disciplines in the humanities and social sciences, as well as in professional schools. The faculty is the backbone of the Center and constitutes the most critical element of the graduate experience. They excel in teaching at all levels and have a strong commitment to innovative research. Both Center faculty and teaching assistants have received numerous college and campus teaching awards.
For more information about the Center faculty, please visit: http://www.afrst.illinois.edu/people/faculty/

Facilities and Resources

Established since 1970, the Center for African Studies is one the largest and most dynamic African National resource Centers in the country. The Center promotes excellence in research and teaching on Africa in all disciplines. The Center also exists to increase and disseminate knowledge about Africa to the larger community through various outreach activities to colleges, schools, community groups and businesses. At a time when the university of Illinois is expanding its international dimension, the Center for African Studies is dedicated to promoting a vibrant African Studies program and to fostering an understanding of Africa and African peoples through research, teaching and various Africa-related programs and events. The Center organizes a wide range of activities including conferences, lectures, film festivals, art exhibits, language institutes, workshops, and symposia. In addition, the

Center regularly hosts visitors from the United States and abroad, namely Africa, and is strongly committed to developing linkages with individuals and institutions based in the African continent.

In 2012, the University of Illinois Library reorganized its international and area studies units into one large International and Area Studies Library (IASL) in an excellent renovated space. This new unit includes the African Studies library and other world areas library collections. The University Library has supported a full-time African Studies Bibliographer since 1969, and has provided the necessary acquisitions, cataloging, and processing staff since then.

The African Studies collection include over 354,000 items in all formats, with more than 300,000 in printed volumes and in English and French and a smaller number in Portuguese, German and other European languages. The Library adds about 900 items written in African languages each year. About 16,000 volumes written in Arabic deal with topics related to Africa, and more than 7000 are in Amharic, Bamana, Hausa, Lingala, Swahili, Tigrinya, Wolof, and Zulu. There are roughly 2,900 serials and 46,000 maps, of which 2849 have been digitized, as well as 12,000 microforms, and more than 800 audio-visual materials. The collection covers all African countries and includes materials in about 80 African languages. Priority countries for collecting include: Burkina Faso, Côte d'Ivoire, Democratic Republic of the Congo, Egypt, Eritrea, Ethiopia, Gambia, Kenya, Morocco, Mozambique, Nigeria, Senegal, South Sudan, South Africa, Tanzania, Tunisia, Zambia, and Zimbabwe. The collection is interdisciplinary and concentrated mainly in the humanities, social sciences, human rights and law, and agriculture. Our large collection of primary source materials, covering all of Africa, includes 120,000 pages of Arabic manuscripts and thousands of United States, United Kingdom, and African government documents. The Africana film collection is one of the finest in the US, and our African film database provides access to more than 800 films from or about Africa. UI's rich museum collections include the Krannert Art Museum and the Spurlock Museum and hold over 10,000 African artifacts. The museums present interesting exhibits and host African performances. Teacher kits on various African topics are also provided by the Krannert Art Museum.

The African studies bibliographer runs the Africana library and teaches IS 530, one of the Center's core courses and plays a key role in the Center's graduate program. For further information about the Africana library, please visit: http://www.library.illinois.edu/ias/africana/

Financial Aid

Students must apply and be admitted according to the set deadlines to be considered for assistantships and fellowships. The Center evaluates and ranks entering students on the basis of academic promise. This ranking becomes part of the basis for financial aid decisions. Funding is generally awarded to cover the fall and spring semesters and occasionally on a semester-by-semester basis. Multiple years of funding cannot be guaranteed, but the Center considers it a priority to fund students and see them through the program. Continued funding is based on academic (in the case of Foreign Language and Area Studies Fellowships) and job performance (in the case of assistantships), the availability of positions, and the Center's budget in a given year or US Department of Education Title VI funding cycle.

Students are encouraged to check the Graduate College's website (http://www.grad.uiuc.edu/) for funding opportunities--whether they are fellowships or assistantships: https://grad.illinois.edu/

For information about available awards and application deadlines, visit: http://www.afrst.illinois.edu/academics/grants/.

for the Master of Arts in African Studies

For additional details and requirements refer to the department's Graduate Programs and the Graduate College Handbook.

Thesis Option

Code	Title	Hours
IS 451	Bibliography of Africa	4
AFST 515	Practicum in African Studies (recommended)	0 or 2
AFST 522	Development of African Studies	4
Elective area studies courses, drawn from at least three different academic units		12-18
Independent Study (Optional; 4 max applied toward degree)		0-4
Language Requirement: Must study or demonstrate proficiency in a language indigenous to Africa at the advanced (third-year) level, but these hours cannot count toward the degree requirements.		0
AFST 599	Thesis Research (8 hours max applied toward degree)	8
Total Hours		**34**

Other Requirements

Requirement
Other requirements may overlap
Minimum 500-level Hours Required Overall: 16
Minimum GPA: 3.25

Non-Thesis Option

Code	Title	Hours
IS 451	Bibliography of Africa	4
AFST 515	Practicum in African Studies (recommended)	0 or 2
AFST 522	Development of African Studies	4
Elective area studies courses, drawn from at least three different academic units		20-26
Independent Study (Optional; 4 max applied toward degree)		0-4
Language Requirement: Must study or demonstrate proficiency in a language indigenous to Africa at the advanced (third-year) level, but these hours cannot count toward the degree requirements.		0
Total Hours		**34**

Other Requirements

Requirement
Other requirements may overlap
Minimum 500-level Hours Required Overall: 16
Minimum GPA: 3.25

Learning Outcomes: African Studies, MA

Learning Outcomes for the Master of Arts in African Studies

1. Strong interdisciplinary knowledge of African area studies, of Africa and its cultures and societies in a broader international and global context
   a. Students should have a good understanding of the various historical, cultural, social, economic and political conditions that shaped the development of the continent
   b. Students should be able to place their knowledge of Africa and African studies in a broader world context and from a multidisciplinary perspective.
2. Proficiency in African language and a solid knowledge of research methodologies
   a. Students should develop appropriate expertise in a region or country in African, acquire proficiency in a language of a particular region/country and equip themselves with a good understanding of the appropriate research tools to study that region/country.
3. Although international experience is not a requirement for the MA program, experience through study abroad is an integral part of the graduate experience, especially when fellowship opportunities for African language study do exist. Students should demonstrate commitment to conduct fieldwork whenever opportunities for study abroad are available.
4. Students should be able to demonstrate strong research skills. Completion of an MA thesis by the end of the second year is a good indication that they have acquired good research skills. However, participation in conferences will also be a good assessment of students' ability to conduct research.
5. Students should be able to make a practical contribution to the center and to African Studies through participation in internships. The Center for African Studies has strong partnerships with organizations and institutions of higher education based on the African continent and can help students identify international internship programs. In case a student is not able to do an internship by the time they graduate, an alternative option would be for them to complete our practicum course (AFST 515). Students enrolled in this course will complete independent projects and will be able to demonstrate their knowledge and practice their skills in real-world settings.

Agricultural & Applied Economics, MAAE

for the Master of Agricultural and Applied Economics in Agricultural and Applied Economics

Department Head: Sean Fox
Director of Graduate Studies: Nick Paulson
Director of Graduate Recruiting and Admissions: Madhu Khanna
Address: 326 Mumford Hall, MC-710, 1301 West Gregory Drive, Urbana, IL 61801
Phone: (217) 333-1810
Fax: (217) 333-5538
email: ace-grad@illinois.edu

MAAE Program Overview

The MAAE degree is a course-based (non-thesis) program that provides students with training in economic theory along with the quantitative skills needed to pursue careers as analysts and managers in industry, government, and related organizations. Available course offerings cover a broad range of potential specialization areas within agricultural and applied economics to suit student interests. Course plans for specialization must be approved by the student's academic advisor and the Director of Graduate Studies. In addition to coursework, the MAAE program includes a required internship component.

Admission

Graduate College requirements apply, including a 3.0 (A = 4.0) GPA for the last two years of undergraduate coursework and any graduate work completed. International applicants whose native language is not English must have a Test of English as a Foreign Language (TOEFL iBT) score of at least 88 (230 computer-based and 570 paper-based) or an International English Language Testing System (IELTS) academic examination overall score of at least 6.5 with a minimum sub-section score of 6 in each of the four modules (speaking, listening, writing, and reading). Graduate Record Examination (GRE) general test scores are suggested, but not required for MAAE applicants. Applicants should be able to demonstrate a strong background in mathematics, microeconomics, and statistics.

Financial Aid

MAAE students are not eligible for graduate assistantships. Limited scholarship funds may be available for outstanding applicants.

Graduate Degree Programs in Agricultural and Applied Economics

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for the Master of Agricultural and Applied Economics in Agricultural and Applied Economics

Students must earn a 3.0 (A = 4.0) GPA for a minimum of 32 graduate hours of credit.

Code	Title	Hours
Microeconomic Theory		
ACE 500	Applied Economic Theory	4
Quantitative Methods		
ACE 562	Applied Regression Models I	2
ACE 564	Applied Regression Models II	2
At least 4 additional hours in approved quantitative methods course(s)		4
Field Specialization		
12 hours of approved graduate field courses		12
(Must include at least 8 hours in ACE, and 8 hours at the 500 level)		
Professional/Research Internship		
ACE 592	Special Topics	2
or ACE 591	Independent Study	
Graduate Electives		**6**
Total		**32**

Other Requirements

Requirement	Description
Other Requirements may overlap	
A minimum of 20 hours of credit within the unit at the 500 level, not including ACE 566.	
A minimum of 20 hours at the 500-level overall.	
Minimum program GPA	3.0

Agricultural & Applied Economics, MS

for the Master of Science in Agricultural and Applied Economics

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Fax: (217) 333-5538
email: ace-grad@illinois.edu

Program Overview

The ACE M.S. program offers considerable flexibility. Students using the degree as a foundation for a doctorate emphasize economic theory and analytical research tools. Students seeking the terminal master's degree focus their study on the concepts and analytical techniques used by analysts and managers in industries, governments, and other organizations.

Admission

Graduate College requirements apply, including a 3.0 (A = 4.0) GPA for the last two years of undergraduate coursework and any graduate work completed. International applicants whose native language is not English are required to follow the Graduate College's Minimum Requirements for Admission. Graduate Record Examination (GRE) general test scores are required for all M.S. program applicants. Applicants to the Ph.D. program are required to provide a sample of their academic writing; a writing sample is optional for M.S. applicants. Students having an inadequate background in theory or quantitative methods will be asked to take additional coursework to prepare for graduate study. Students may commence study in either semester, but initial enrollment in fall semester is preferable.

Student Thesis and Dissertation Research

Our students' research uses economics to address important social and economic challenges. Thesis and dissertation topics include designing policies for environmental protection and resource management, evaluating international efforts to reduce poverty and hunger, and enhancing the performance of commodity and speculative markets.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program and is strongly recommended for those intending to pursue an academic career.

Financial Aid

Graduate fellowships, assistantships, and tuition and fee waivers are awarded on a competitive basis.

Fellowships. The department offers fellowships from internal resources and by nominating students for college and campus fellowships. These fellowships, often combined with assistantship support, provide monetary stipends and, in most cases, exemptions from tuition and some student fees. Recipients must register for the equivalent of at least 12 hours of graduate credit in each semester and four hours in an eight-week summer session. Fellowship holders are encouraged to involve themselves with research and teaching in the department.

Assistantships. Research and teaching assistantships provide an opportunity for graduate students to work with faculty. Most research assistantships are funded by grants and contracts involving the analysis of contemporary issues. Most assistantships carry waivers of tuition and some fees.

Tuition and Fee Waivers. Waivers may be awarded. In most cases they are awarded to students with fellowship support from certain external programs.

Graduate Degree Programs in Agricultural and Applied Economics

Agricultural and Applied Economics, MAAE (p. 558)
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Agricultural and Applied Economics, PhD (p. 560)
for the Master of Science in Agricultural and Applied Economics

Students must earn a 3.0 (A = 4.0) GPA for a minimum of 32 graduate hours of credit. M.S. students entering the ACE graduate program will be admitted only to the Thesis Option. For the Thesis Option, a thesis is prepared under the supervision of a faculty advisory committee. The thesis is defended in a formal oral examination, which usually coincides with an open departmental seminar, administered by the thesis committee. The Non-Thesis Option requires advanced coursework in lieu of a thesis. The Non-Thesis Option is available only to students already enrolled in the Thesis Option of the ACE M.S. program or in the ACE Ph.D. program. Application for admission to the Non-Thesis Option is by petition to the Department after at least two semesters of graduate coursework have been completed.

For additional details and requirements refer to the department's Graduate Program information for the Master's degree (http://ace.illinois.edu/grad/masters/) and the Graduate College Handbook (http://www.grad.uiuc.edu/gradhandbook/).

Thesis Option

Code	Title	Hours
Select one of the following:		4
ACE 500	Applied Economic Theory	
ACE 592	Special Topics (Microeconomics)	
ECON 500	Microeconomics	
6 hours in quantitative and research methods from departmental list (these do not count toward the 500 level course requirement)		6
Electives		14

ACE 599	Thesis Research	8
Total Hours		**32**

Other requirements

Requirement
Other requirements may overlap
Only 2 hours of ACE 566 may count towards the degree
Minimum Hours Required Within the Unit: 8 at the 500 level, not including ACE 566, 599 or independent study
Minimum 500-level Hours Required Overall: 12
Minimum GPA: 3.0

Non-Thesis Option

Code	Title	Hours
24 hours selected from the ACE doctoral core sequence, including at least 12 hours in applied economic theory and 8 hours in quantitative methods		24
Electives		8
Total Hours		32

Other Requirements

Requirement
Other requirements may overlap
Only 2 hours of ACE 566 may count towards the degree
Minimum Hours Required Within the Unit: 20 at the 500 level, not including ACE 566, 599 or independent study
Minimum 500-level Hours Required Overall: 20
Minimum GPA: 3.0

Learning Outcomes: Agricultural and Applied Economics, MS

Learning Outcomes for the Master of Science in Agricultural and Applied Economics

1. Develop a knowledge base in, and demonstrate an understanding of how to use, microeconomic concepts to set up and analyze economic problems.
2. Identify, summarize, interpret, and critique relevant scholarly literature.
3. Demonstrate the ability to identify important research problems and formulate well-defined research objectives (e.g., testable hypotheses).
4. Identify and use appropriate quantitative methods to accomplish research objectives.
5. Effectively use written and verbal communication skills to present economic concepts and analyses.
6. Understand features of agriculture and natural resources (e.g., inherent risk, institutions, unique government policies, and cultural importance of food) that make them unique for applications of economic principles.
7. Practice highest levels of professional conduct (e.g., in professional activities take responsibility, be accountable, show integrity, have strong ethics, and respect diversity).

Agricultural & Applied Economics, PhD

for the Doctor of Philosophy in Agricultural and Applied Economics

Department Head: Sean Fox
Director of Graduate Studies: Nick Paulson
Director of Graduate Recruiting and Admissions: Madhu Khanna
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Phone: (217) 333-1810
Fax:(217) 333-5538
email: ace-grad@illinois.edu

PhD Program Overview

The Doctor of Philosophy is a research-oriented degree that prepares successful candidates for positions in higher education, governmental agencies, nongovernmental organizations, and the research and management functions of the private sector. In consultation with a faculty advisor, students develop an area of specialization to fit their career aspirations. Typical areas of specialization include:

- agricultural finance
- environmental and natural resource economics
- family and consumer economics
- farm and agribusiness management
- international and policy economics
- price analysis and agricultural marketing
- regional economics and public policy

Students pursue coursework in theory, quantitative methods, and their area of specialization; pass a written core exam, a second-year research paper requirement, an oral preliminary examination which includes the formal proposal for dissertation research; and complete and defend a dissertation. The core courses cover the theory and quantitative methods upon which advanced research, teaching, and service in ACE are based. The specialty courses build on the knowledge gained in the core courses and provide an understanding of the application of economic theory and the tools of economic analysis. Students are encouraged to complete substantial coursework in other departments, such as economics, finance, and business administration.

Admission

Graduate College requirements apply, including a 3.0 (A = 4.0) GPA for the last two years of undergraduate coursework and any graduate work completed. International applicants whose native language is not English are required to follow the Graduate College's Minimum Requirements for Admission. Graduate Record Examination (GRE) general test scores are required for all applicants. Applicants to the Ph.D. program are required to provide a sample of their academic writing. Students having an inadequate background in theory or quantitative methods will be asked to take additional coursework to prepare for graduate study. Students may commence study in either semester, but initial enrollment in fall semester is preferable. An applicant with a master's degree in an appropriate discipline will be considered for the Ph.D. degree. Applicants with a baccalaureate degree can apply directly to the PhD program, but will need to demonstrate sufficient preparation to be admitted.

Student Thesis and Dissertation Research

Our students' research uses economics to address important social and economic challenges. Thesis and dissertation topics include designing policies for environmental protection and resource management, evaluating international efforts to reduce poverty and hunger, and enhancing the performance of commodity and speculative markets.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program and is strongly recommended for those intending to pursue an academic career.

Financial Aid

Graduate fellowships, assistantships, and tuition and fee waivers are awarded on a competitive basis.

Fellowships. The department offers fellowships from internal resources and by nominating students for college and campus fellowships. These fellowships, often combined with assistantship support, provide monetary stipends and, in most cases, exemptions from tuition and some student fees. Recipients must register for the equivalent of at least 12 hours of graduate credit in each semester and four hours in an eight-week summer session. Fellowship holders are encouraged to involve themselves with research and teaching in the department.

Assistantships. Research and teaching assistantships provide an opportunity for graduate students to work with faculty. Most research assistantships are funded by grants and contracts involving the analysis of contemporary issues. Most assistantships carry waivers of tuition and some fees.

Tuition and Fee Waivers. Waivers may be awarded. In most cases they are awarded to students with fellowship support from certain external programs.

Graduate Degree Programs in Agricultural and Applied Economics

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for the Doctor of Philosophy in Agricultural and Applied Economics

A 3.0 (A = 4.0) GPA is required in all courses completed in the program.

For additional details and requirements refer to the department's Graduate Program information for the Ph.D. degree (http://ace.illinois.edu/graduate/phd-requirements/) and the Graduate College Handbook (http://www.grad.uiuc.edu/gradhandbook/).

Entering with approved B.S./B.A. degree

Code	Title	Hours
Core Courses		24-28
4 hours (minimum) of quantitative methods beyond the courses specified in the core		4
16 hours at the 500 level to define two fields of expertise. At least 8 of those 16 hours must be in ACE		16
ACE 561	Adv Res and Scholarly Comm	4
ACE 599	Thesis Research (max applied toward degree) [1]	48
Total Hours		96

Entering with approved M.S./M.A. Degree

Code	Title	Hours
Core courses		24-28
4 hours (minimum) of quantitative methods beyond the courses specified in the core		4
16 hours at the 500 level to define two fields of expertise. At least 8 of those 16 hours must be in ACE		16
ACE 561	Adv Res and Scholarly Comm (Advanced Research and Scholarly Communication)	4
ACE 599	Thesis Research (max applied toward degree) [1]	32
Total Hours		64

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum Hours Required Within the Unit at the 500-Level:	16 excluding indep study, 599 and core courses
A written paper in the form of a journal article approved by the research paper committee and presented at a department conference.	
Written Core Exam Required	Yes
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

[1] *If students enter the program with a bachelor's degree only, a maximum of 48 thesis hours may be applied toward the total. If students enter the program with a master of science degree, a maximum of 32 thesis hours may be applied toward the total.*

Learning Outcomes: Agricultural and Applied Economics, PhD

Learning Outcomes for the Doctor of Philosophy in Agricultural and Applied Economics

1. Develop a knowledge base in, and demonstrate an understanding of how to use, microeconomic concepts to set up and analyze economic problems and implications.
2. Identify, summarize, interpret, and critique relevant scholarly literature.
3. Demonstrate the ability to identify important research problems and formulate well-defined research objectives (e.g., testable hypotheses).
4. Identify and use appropriate quantitative methods to accomplish research objectives.

5. Effectively use written and verbal communication skills to present economic concepts and analyses.
6. Understand features of agriculture and natural resources (e.g., inherent risk, institutions, unique government policies, and cultural importance of food) that make them unique for applications of economic principles.
7. Practice highest levels of professional conduct (e.g., in professional activities take responsibility, be accountable, show integrity, have strong ethics, and respect diversity).

Agricultural & Biological Engineering, MS

for the degree of Master of Science in Agricultural & Biological Engineering

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department head: Ronaldo G Maghirang (ronaldom@illinois.edu)
director of graduate studies: Xinlei Wang (xwang2@illinois.edu)
overview of admissions & requirements: https://abe.illinois.edu/apply#graduate (https://abe.illinois.edu/apply/#graduate)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://abe.illinois.edu/
program website: https://abe.illinois.edu/graduate (https://abe.illinois.edu/graduate/)
department faculty: https://abe.illinois.edu/directory/faculty (https://abe.illinois.edu/directory/faculty/)
college websites: https://grainger.illinois.edu/ **and** https://aces.illinois.edu/
contact: Heather Crump (hcrump@illinois.edu)
address: 338 Agricultural Engineering Sciences Bldg, 1304 W Pennsylvania Ave, Urbana, IL 61801
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email: abe@illinois.edu

Opportunity exists for specializing in computational science and engineering via the Computational Science & Engineering (p. 1089) optional graduate concentration.

Admission Requirements

Admission requirements include completion of an undergraduate program equivalent to the Agricultural and Biological Engineering (ABE) curriculum with at least a 3.0 grade point average (A = 4.0) for the last two years of undergraduate course work. Applicants must submit Graduate Record Examination (GRE) scores.

All applicants whose native language is not English must submit a minimum TOEFL (http://www.toefl.org/) score of 88 (iBT), 230 (CBT) or 570 (PBT); or minimum International English Language Testing System (IELTS) (http://www.ielts.org/) academic exam scores of 6.5 overall. Applicants may be exempt from the TOEFL if certain criteria (http://grad.illinois.edu/admissions/instructions/04c/) are met. For those taking the TOEFL or IELTS, full admission status (http://grad.illinois.edu/admissions/instructions/04c/) is granted for scores greater than 102 (TOEFL iBT), 253 (TOEFL CBT), 610 (TOEFL PBT), or 7.0 (IELTS). Limited status (http://grad.illinois.edu/admissions/instructions/04c/) is granted for lesser scores and requires enrollment in English as a Second Language (ESL) courses (http://linguistics.illinois.edu/students/esl/guidelines/) based on an ESL Placement Test (EPT) taken upon arrival to campus.

Financial Aid

Fellowships, supported by University, College of Agricultural, Consumer and Environmental Sciences, and College of Engineering funds, are available on a competitive basis. A limited number of assistantships, providing both teaching and research experience, are often available on a half-time basis.

All applicants, regardless of US citizenship, whose native language is not English and who wish to be considered for teaching assistantships must demonstrate spoken English language proficiency (http://grad.illinois.edu/admissions/taengprof.htm) by achieving a minimum score of 24 on the speaking subsection of the TOEFL iBT or 8 on the speaking subsection of the IELTS. For students who are unable to take the iBT or IELTS, a minimum score of 4CP is required on the EPI test (http://cte.illinois.edu/testing/oral_eng/epi_overview.html), offered on campus. All new teaching assistants are required to participate in the Graduate Academy for College Teaching (https://citl.illinois.edu/citl-101/teaching-learning/grad-academy-for-college-teaching/) conducted prior to the start of the semester.

Department Research

Current research interests of the faculty include off-road equipment engineering (robotics and machinery automation, remote sensing and precision agriculture, machinery management systems, pesticide application technology, engines and biofuels); soil and water resources (hydrology, erosion and sediment transport, water management, wetlands, and water quality); bioenvironmental engineering (building environment and energy conservation, air quality, renewable energy, biomass to bioenergy conversion, structural analysis and facility design, building materials evaluation, environmental control and ergonomic design for plant, animal, and human housing systems and facilities); food and bioprocess engineering (engineering properties of foods, physical properties of biological products, grain drying, grain quality evaluation, dry-grind corn processing, wet and dry milling, modified bioprocesses for improved co-products, fuel and chemicals, fermentation, and transport phenomenon in biological materials); or electronic and electrical systems (biosensors and controls, energy systems, machine vision, near-infrared spectroscopy applications, bionanotechnology, microfabricated devices, bioconjugation techniques, transcriptional control, modeling life support systems, and multiscale biological processes). For more details, visit the department's research Web site. (https://abe.illinois.edu/research/areas/)

Other Graduate Programs in the Department of Agricultural & Biological Engineering

degrees:

Agricultural & Biological Engineering, PhD (p. 564)
optional concentration:
Computational Science & Engineering (p. 1089)
Technical Systems Management, MS (p. 1045)
Technical Systems Management, MS - Professional Science Master's (p. 1047)

The Department of Agricultural & Biological Engineering offers a graduate degree program which is at the forefront of the application of engineering principles to solve problems of agricultural production, utilization, environmental control, and biological systems and to improve the quality of life. Students may concentrate study in one of the faculty

research interest areas listed below. Supporting course work includes: mathematics; computer science; statistics; engineering mechanics; chemical, civil, electrical, and mechanical engineering; animal science; crop sciences; food science; and other appropriate fields.

Opportunity also exists for specializing in energy and sustainability engineering via the

Energy and Sustainability Engineering (EaSE) Graduate Certificate Option (http://ease.illinois.edu/)

for the degree of Master of Science in Agricultural & Biological Engineering

For additional details and requirements refer to the department's Graduate Handbook *(*http://abe.illinois.edu/graduate/handbook/*) and the* Graduate College Handbook *(*http://grad.illinois.edu/gradhandbook/*).*

Thesis Option

Code	Title	Hours
ABE 599	Thesis Research	8
ABE 594	Graduate Seminar (Registration of 0 hours required every term while in residence)	0
ABE 501	Graduate Research I	1
One MATH course beyond differential equations from an approved list (http://abe.illinois.edu/graduate-students/abe-graduate-student-course-requirements/)		3-4
One course in statistical design and analysis from an approved list (http://abe.illinois.edu/graduate-students/abe-graduate-student-course-requirements/)		3-5
One course in instrumentation and measurement from an approved list (http://abe.illinois.edu/graduate-students/abe-graduate-student-course-requirements/)		3-5
One 500-level course (taken for at least 3 credit hours) in an area of specialization – chosen in consultation with advisor		3-5
Elective courses – chosen in consultation with advisor (subject to Other Requirements and Conditions below)		4-11
Total Hours		**32**

Other Requirements and Conditions

Requirement	Description
Other Requirements and Conditions may overlap	
	A maximum of 4 hours of ABE 597 (or other independent study) may be applied toward the elective course work requirement.
	A minimum of 12 500-level credit hours applied toward the degree.
Minimum GPA	3.0

Non-Thesis Option

Code	Title	Hours
ABE 594	Graduate Seminar (Registration of 0 hours required for every term while in residence)	0
One MATH course beyond differential equations from an approved list (http://abe.illinois.edu/graduate-students/abe-graduate-student-course-requirements/)		3-4
One course in statistical design and analysis from an approved list (http://abe.illinois.edu/graduate-students/abe-graduate-student-course-requirements/)		3-5
One course in instrumentation and measurement from an approved list (3-5 hours) (http://abe.illinois.edu/graduate-students/abe-graduate-student-course-requirements/)		3-5
One 500-level course (taken for at least 3 credit hours) in an area of specialization – chosen in consultation with advisor		3-5
Elective courses – chosen in consultation with advisor (subject to Other Requirements and Conditions below)		15-24
Total Hours		36

Other Requirements and Conditions

Requirement	Description
Other Requirements and Conditions may overlap	
	A maximum of 4 hours of ABE 597 (or other independent study) may be applied toward the elective course work requirement.
	A minimum of 12 500-level credit hours applied toward the degree.
	The non-thesis option is only allowed with departmental approval at or before initiation of graduate study, and a final report is required.
Minimum GPA:	3.0

Learning Outcomes: Agricultural & Biological Engineering, MS

Learning Outcomes for the degree of Master of Science in Agricultural & Biological Engineering

Student learning outcomes are based on educational outcomes suggested by the Accreditation Board for Engineering and Technology (ABET) and the objectives of the program:

1. An ability to apply knowledge of mathematics, science, and engineering;
2. An ability to design and conduct experiments, as well as to analyze and interpret data;
3. An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability;
4. An ability to function in multidisciplinary teams;
5. An ability to identify, formulate, and solve engineering problems;
6. An understanding of professional and ethical responsibility;
7. An ability to communicate effectively;
8. The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context;
9. A recognition of the need for and an ability to engage in life-long learning;
10. A knowledge of contemporary issues;

11. An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice;
12. Conduct independent research with expertise in research design, methods, and analysis;
13. Function effectively in leadership roles in their professional careers and activities in professional societies.

Agricultural & Biological Engineering, PhD

for the degree of Doctor of Philosophy in Agricultural & Biological Engineering

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overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://abe.illinois.edu/
program website: https://abe.illinois.edu/graduate (https://abe.illinois.edu/graduate/)
department faculty: https://abe.illinois.edu/directory/faculty (https://abe.illinois.edu/directory/faculty/)
college websites: https://grainger.illinois.edu/ **and** https://aces.illinois.edu/
contact: Heather Crump (hcrump@illinois.edu)
address: 338 Agricultural Engineering Sciences Bldg, 1304 W Pennsylvania Ave, Urbana, IL 61801
phone: (217) 333-3570
email: abe@illinois.edu

Opportunity exists for specializing in computational science and engineering via the Computational Science & Engineering (p. 1089) optional graduate concentration.

Admission Requirements

Admission to the PhD program is limited to individuals who have demonstrated exceptional ability through outstanding performance in obtaining an MS degree and/or through a high degree of technical and professional accomplishment. Candidates must also satisfy entrance requirements for the MS degree program.

All applicants whose native language is not English must submit a minimum TOEFL (http://www.toefl.org/) score of 88 (iBT), 230 (CBT) or 570 (PBT); or minimum International English Language Testing System (IELTS) (http://www.ielts.org/) academic exam scores of 6.5 overall. Applicants may be exempt from the TOEFL if certain criteria (http://grad.illinois.edu/admissions/instructions/04c/) are met. For those taking the TOEFL or IELTS, full admission status (http://grad.illinois.edu/admissions/instructions/04c/) is granted for scores greater than 102 (TOEFL iBT), 253 (TOEFL CBT), 610 (TOEFL PBT), or 7.0 (IELTS). Limited status (http://grad.illinois.edu/admissions/instructions/04c/) is granted for lesser scores and requires enrollment in English as a Second Language (ESL) courses (http://linguistics.illinois.edu/students/esl/guidelines/) based on an ESL Placement Test (EPT) taken upon arrival to campus.

Financial Aid

Fellowships, supported by University, College of Agricultural, Consumer and Environmental Sciences, and The Grainger College of Engineering funds, are available on a competitive basis. A limited number of assistantships, providing both teaching and research experience, are often available on a half-time basis. Starting in Fall 2020, Grainger Engineering PhD students in their first five years of enrollment who meet the minimum eligibility requirements (https://grainger.illinois.edu/academics/graduate/phd-funding-guarantee/) are guaranteed a funded appointment for fall and spring that includes a full tuition waiver, a partial fee waiver, and a stipend.

All applicants, regardless of US citizenship, whose native language is not English and who wish to be considered for teaching assistantships must demonstrate spoken English language proficiency (http://grad.illinois.edu/admissions/taengprof.htm) by achieving a minimum score of 24 on the speaking subsection of the TOEFL iBT or 8 on the speaking subsection of the IELTS. For students who are unable to take the iBT or IELTS, a minimum score of 4CP is required on the EPI test (http://cte.illinois.edu/testing/oral_eng/epi_overview.html), offered on campus. All new teaching assistants are required to participate in the Graduate Academy for College Teaching (https://citl.illinois.edu/citl-101/teaching-learning/grad-academy-for-college-teaching/) conducted prior to the start of the semester.

Graduate Teaching Experience

Experience in teaching is considered a vital part of the graduate program and is required as part of the academic work of all PhD candidates in this program. For details of expectations, see the department's Graduate Handbook (https://abe.illinois.edu/graduate/handbook/).

Department Research

Current research interests of the faculty include off-road equipment engineering (robotics and machinery automation, remote sensing and precision agriculture, machinery management systems, pesticide application technology, engines and biofuels); soil and water resources (hydrology, erosion and sediment transport, water management, wetlands, and water quality); bioenvironmental engineering (building environment and energy conservation, air quality, renewable energy, biomass to bioenergy conversion, structural analysis and facility design, building materials evaluation, environmental control and ergonomic design for plant, animal, and human housing systems and facilities); food and bioprocess engineering (engineering properties of foods, physical properties of biological products, grain drying, grain quality evaluation, dry-grind corn processing, wet and dry milling, modified bioprocesses for improved co-products, fuel and chemicals, fermentation, and transport phenomenon in biological materials); or electronic and electrical systems (biosensors and controls, energy systems, machine vision, near-infrared spectroscopy applications, bionanotechnology, microfabricated devices, bioconjugation techniques, transcriptional control, modeling life support systems, and multiscale biological processes). For more details, visit the department's research Web site. (https://abe.illinois.edu/research/areas/)

Other Graduate Programs in the Department of Agricultural & Biological Engineering

degrees:

Agricultural & Biological Engineering, MS (p. 562)
optional concentration:
Computational Science & Engineering (p. 1089)
Technical Systems Management, MS (p. 1045)
Technical Systems Management, MS - Professional Science Master's (p. 1047)

The Department of Agricultural & Biological Engineering offers a graduate degree program which is at the forefront of the application of engineering principles to solve problems of agricultural production, utilization, environmental control, and biological systems and to improve the quality of life. Students may concentrate study in one of the faculty research interest areas listed below. Supporting course work includes: mathematics; computer science; statistics; engineering mechanics; chemical, civil, electrical, and mechanical engineering; animal science; crop sciences; food science; and other appropriate fields.

Opportunity also exists for specializing in energy and sustainability engineering via the

Energy and Sustainability Engineering (EaSE) Graduate Certificate Option (http://ease.illinois.edu/)

for the degree of Doctor of Philosophy in Agricultural & Biological Engineering

For additional details and requirements for all degrees, please refer to the program's Graduate Degree Requirements *(*https://abe.illinois.edu/graduate/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Code	Title	Hours
ABE 501	Graduate Research I	1
ABE 594	Graduate Seminar (minimum 6 semesters)	0
At least one MATH course beyond differential equations from an approved list (http://abe.illinois.edu/graduate/handbook/)		3-4
At least one course in statistical design and analysis from an approved list (http://abe.illinois.edu/graduate/handbook/)		3-5
At least one course in instrumentation and measurement from an approved list (http://abe.illinois.edu/graduate/handbook/)		3-5
In addition to above 3 courses in math, stats, and instrumentation, the student is required to take two more courses from any of the three areas (math, stats, or instrumentation) above		6-10
Two 500-level courses (taken for at least 3 credit hours) in an area of specialization – chosen in consultation with advisor		6-10
Elective courses – chosen in consultation with advisor (subject to Other Requirements and Conditions below)		21-34
ABE 599	Thesis Research	40
Total Hours		96

Other Requirements and Conditions (may overlap)

Requirement	Description
Two 500-level courses must be formal coursework, not seminar courses, special topics or independent study.	
A maximum of 6 hours of ABE 597 (or other independent study) may be applied toward the elective course work requirement.	
Teaching experience determined in consultation with advisor with guidance provided by the department's Graduate Handbook.	
The minimum program GPA is 3.0.	
Ph.D. exam and dissertation requirements:	
Qualifying requirements review in the 2nd year: It is required to complete all courses in math, stats, and instrumentation by the 3rd semester with a 3.25 or higher GPA.	
Preliminary exam	
Final Exam or dissertation defense	
Dissertation deposit	

Learning Outcomes: Agricultural & Biological Engineering, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Agricultural & Biological Engineering

Student learning outcomes are based on educational outcomes suggested by the Accreditation Board for Engineering and Technology (ABET) and the objectives of the program:

1. An ability to apply knowledge of mathematics, science, and engineering;
2. An ability to design and conduct experiments, as well as to analyze and interpret data;
3. An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability;
4. An ability to function in multidisciplinary teams;
5. An ability to identify, formulate, and solve engineering problems;
6. An understanding of professional and ethical responsibility;
7. An ability to communicate effectively;
8. The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context;
9. A recognition of the need for and an ability to engage in life-long learning;
10. A knowledge of contemporary issues;
11. An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice;
12. Conduct independent research with expertise in research design, methods, and analysis;
13. Function effectively in leadership roles in their professional careers and activities in professional societies.

14. For Ph.D. graduates entering academia, function effectively as instructors with presentation skills, e.g., teaching skills (in addition to 1-13)

Agricultural Education, MS

for the degree of Master of Science in Agricultural Education (on campus & online)

graduate program coordinator: David Rosch
department website: https://alec.illinois.edu/graduate/ms-degree (https://alec.illinois.edu/graduate/ms-degree/)
college website: https://aces.illinois.edu/
overview of graduate college admissions & requirements: Graduate Admissions (https://grad.illinois.edu/admissions/apply/)
overview of college admissions & requirements: https://alec.illinois.edu/graduate/admissions (https://alec.illinois.edu/graduate/admissions/)
department office: 174 Bevier Hall, 905 South Goodwin Avenue, Urbana, IL 61801
phone: (217) 333-3165
email: aces-aged@illinois.edu

Graduate Degree Programs in Agricultural Education

Graduate Major:

Agricultural Education, MS (on campus & online) (p. 566)

The M.S. in Agricultural Education is a professional degree for training classroom-based educators and community and organizational developers to address issues as they pertain to teaching and learning in and about the agricultural, life, and environmental sciences. Students are typically interested in either furthering their career in Extension, agricultural classrooms in secondary education, professional organizations in training and supervisory roles, or community development.

Through the on-campus program, we also work with students interested in gaining licensure for teaching agriculture in Illinois public schools for grades 9-12. Agricultural Education can be pursued as an online degree. Please refer to http://aged.illinois.edu/grad/online-MS (http://aged.illinois.edu/grad/online-MS/) for more information.

Admission

We are looking for highly motivated students with strong academic records. Students with backgrounds in agriculture, education, behavioral or social sciences are especially encouraged to apply. The minimum undergraduate grade-point average for admission is 3.0 (A = 4.0). Applicants for the online/off-campus program are not required to take the Graduate Record Examination (GRE). International applicants from non-English-speaking countries must have official TOEFL scores of at least 575 (written version) or 233 (computer-based version) to be eligible for admission. To receive full consideration for admission (and financial aid opportunities if you are applying for the full-time, on-campus program), please apply by February 15 for possible admission the following fall semester or September 15 for possible admission to the following spring semester.

Each applicant's undergraduate transcript will be evaluated for completion of general education courses required for certification by the Illinois State Board of Education. Students with deficiencies may be admitted with the stipulation that these be met before completion of the master's program.

Financial Aid

We are committed to funding as many of full-time on-campus students who are making timely progress as possible. The duration and amount of our commitment varies. Funding may include fellowships, research assistantships, and/or teaching assistantships. These opportunities typically include stipends and tuition waivers. In some cases, fees are also waived. All applicants are automatically considered for all department funding opportunities; there is no separate application process. Federal and state financial aid is completely separate from the support provided by our department. For information regarding federal and state financial aid, please refer to www.osfa.illinois.edu/ (http://www.osfa.illinois.edu/).

for the degree of Master of Science in Agricultural Education (on campus & online)

Thesis Option

Code	Title	Hours
Agricultural Education Foundations [1]		
AGED 400		3
AGED 420	Curr Design & Instruction	3
Instructional Methods & Design		
AGED 430	Youth Development Programs	4
or AGED 490	Adult Learning Principles	
Educational Research		
AGED 545		4
Agricultural Education electives		3-4
Electives in agriculture or education [2]		10-11
Thesis Research – AGED 599 (min-max applied toward the degree) [3]		4-8
Total Hours		32

Other Requirements [4]

Requirement
Other requirements may overlap
Minimum 500-level Hours Required Overall: 12, 8 must be in the unit
Minimum GPA: 2.75

1. *Requirement may be waived if taken as an undergraduate at UIUC. If waived, student may substitute this credit requirement with an agricultural education or technical subject matter elective.*
2. *Students may take up to four credit hours in agricultural education to fulfill the technical subject matter course requirements. This is only recommended for students completing a thesis (AGED 599 credits) or for students who desire to take an agriculture content course for teachers (i.e.* AGED 500*).*
3. *The applied research option requires the completion of a thesis, and the program development and online options require the completion of a project in the area of agricultural education, broadly defined, and submission of a research/professional paper.*
4. *For additional details and requirements refer to the department's* Graduate Program Information *(*http://aged.illinois.edu/grad/reqs/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Non -Thesis Option

Code	Title	Hours
Agricultural Education Foundations [1]		
AGED 400		3
AGED 420	Curr Design & Instruction	3
Instructional Methods & Design		
AGED 430	Youth Development Programs	4
or AGED 490	Adult Learning Principles	
Educational Research		
AGED 545		4
Agricultural Education electives		3-4
Electives in agriculture or education [2]		10-11
Independent Study Hours Required–AGED 549 [3]		4
Total Hours		32

Other Requirements [4]

Requirement
Other requirements may overlap
Minimum 500-level Hours Required Overall: 12, 8 must be in the unit
Minimum GPA: 2.75

1 *Requirement may be waived if taken as an undergraduate at UIUC. If waived, student may substitute this credit requirement with an agricultural education or technical subject matter elective.*

2 *Students may take up to four credit hours in agricultural education to fulfill the technical subject matter course requirements. This is only recommended for students completing a thesis (AGED 599 credits) or for students who desire to take an agriculture content course for teachers (i.e.* AGED 500 *).*

3 *The applied research option requires the completion of a thesis, and the program development and online options require the completion of a project in the area of agricultural education, broadly defined, and submission of a research/professional paper.*

4 *For additional details and requirements refer to the department's* Graduate Program Information *(*http://aged.illinois.edu/grad/reqs/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Agricultural Education, MS

Learning Outcomes for the degree of Master of Science in Agricultural Education (on campus & online)

1. Apply theories of leadership and learning to plan curriculum and deliver effective educational experiences in diverse instructional settings.
2. Apply prior learning from past post-secondary experiences to deliver effective educational experiences in diverse instructional settings.
3. Assess the human capital needs of a group, organization, or community and formulate a solution to an identified need.
4. Create a plan of research inquiry or curriculum development that articulates the human capital challenges within a particular agricultural sector(e.g. education, industry, non-profit, governance)

Agricultural Production, MS - Professional Science Master's

for the Master of Science in Agricultural Production, Professional Science Master's Concentration

graduate program coordinator: Robert Knox
correspondence and admissions: Carolyn Thomas
department website:
college website: https://aces.illinois.edu/
overview of graduate college admissions & requirements: Graduate Admissions (https://grad.illinois.edu/admissions/apply/)
overview of college admissions & requirements:
department office: 110 Animal Sciences Lab, 1207 W. Gregory Dr., Urbana, IL 61801
phone: (217) 333-1044
college email: a (aces-aged@illinois.edu)cdthoma2@illinois.edu
illinois psm email: psmdegree@illinois.edu

Graduate Degree Programs in Agricultural Production

Agricultural Production, MS -- Professional Science Master's (p. 567)

The College of Agricultural, Consumer and Environmental Sciences (ACES) offers graduate work leading to the Master of Science degree with a Major in Agricultural Production and Concentration in Professional Science Master's (PSM). Fields of specialization within this interdisciplinary program include Food Animal Production, Crop Production, and Sustainable Production Systems. In addition to the rigorous scientific training in the area of agricultural production, instruction is provided in applied business knowledge and skills. This program is designed for those who seek careers in a science-based setting with significant managerial and leadership responsibilities.

Admission

Candidates for admission to the M.S. and Ph.D. programs must have a bachelor's degree from an accredited institution equivalent to those from the University of Illinois at Urbana-Champaign. A grade point average of 3.0 or higher (A = 4.0) for the last 60 hours of undergraduate work and for any graduate study is required for admission. Graduate Record Examination (GRE) scores are required of all applicants and the minimum acceptable Test of English as a Foreign Language (TOEFL) score is 590 on the paper-based test, 243 on the computer-based test, or 79 on the internet-based test. Applications are only accepted for the fall semester. Transfer credit may not be applied.

Financial Aid

Illinois PSM students may not hold assistantships or other tuition and fee waiver-generating appointments; statutory waivers and tuition scholarships are accepted.

for the Master of Science in Agricultural Production, Professional Science Master's Concentration

Code	Title	Hours
Business courses prescribed by the Illinois PSM program		**10**
PSM 501	PSM Industry Seminar I	0
PSM 502	PSM Industry Seminar II	0

PSM 503	PSM Industry Seminar III	0
PSM 555	PSM Internship	0

Code	Title	Hours
32 hours of coursework required from departmental approved list in any ONE of the three specialty areas (Food Animal Production, Crop Production, Sustainable Production Systems), with a minimum of 8-hours required at the 500-level		32
Total Hours		**42**

Other Requirements [1]

Requirement
Other requirements may overlap
The PSM Concentration is required.
Minimum 500-level Hours Required Overall: 12
Minimum GPA: 2.75

[1] *For additional details and requirements for all degrees, please refer to the program's* Graduate Degree Requirements *(*http://www.psm.illinois.edu/prospectivestudents/programs/agripro.html*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Agricultural Production, PSM

Learning Outcomes for the Master of Science in Agricultural Production, Professional Science Master's Concentration

1. Advanced science knowledge: minimum of 32 hours at 400-500 level
2. Communication skills: written, oral, & poster creation & presentation
3. Internship completion: combination of science & business
4. Business knowledge: minimum of 10 hours at 400-500 level

Animal Sciences, MANSC

for the Master of Animal Sciences in Animal Sciences (on campus & online)

department head: Rodney Johnson
graduate program coordinator: Sandra Rodriguez-Zas
department website: https://ansc.illinois.edu
department faculty: https://ansc.illinois.edu/directory/faculty/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://aces.illinois.edu/
department office: 110 Animal Sciences Laboratory, 1207 West Gregory Drive, Urbana, IL 61801
phone: (217) 333-3131
email: ansci-gradprog@illinois.edu

Graduate Degree Programs in Animal Sciences

Graduate Majors:
Animal Sciences, MANSC (p. 568)
Animal Sciences, MS (p. 569)
Animal Sciences, PhD (p. 570)
Graduate Concentrations:
Bioinformatics: Animal Sciences, MS (p. 625)

Research, Teaching, and Extension Areas

The Department of Animal Sciences offers graduate work leading to the Master of Animal Sciences. Fields of specialization include:

• animal breeding & genetics	• animal behavior	• biochemistry	• nutrition
• systems of animal management & production	• physiology of lactation	• environmental physiology	• meat science & muscle biology
• physiology of reproduction	• immunobiology	• microbiology	

Beef and dairy cattle, horses, poultry, sheep, swine, and a variety of companion and laboratory animals are available for study. Experience in teaching, extension, or outreach is encouraged as part of the academic work.

Admission

Candidates for admission to the MANSC program must have a bachelor's degree from an accredited institution equivalent to those from the University of Illinois at Urbana-Champaign. A grade point average of 3.0 or higher (A = 4.0) for the last two years of undergraduate work and for any graduate study is required for admission. Students are encouraged to submit Graduate Record Examination (GRE) scores prior to admission for fellowship consideration and are required to submit GRE scores by the first semester in the graduate program. English proficiency requirements for admission follow Graduate College requirements. Application materials include baccalaureate degree transcripts, resume, personal statement, Graduate Record Examination (GRE) general test scores, and three letters of recommendation. Admission emphasis is placed on a student's interest and ability in research, teaching, or extension as demonstrated by previous work and letters of recommendation. Admission is possible for fall, spring, and summer semesters.

for the Master of Animal Sciences in Animal Sciences

For additional details and requirements refer to the department's Graduate Handbook *(*http://ansci.illinois.edu/grads/degree-requirements/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Code	Title	Hours
ANSC 590	Animal Sciences Seminar [1]	2
or ANSC 591	Grad Bioinformatics Seminar	
ANSC 440	Applied Statistical Methods I [1]	3 - 4
or ANSC 445	Statistical Methods	
or ANSC 448	Math Modeling in Life Sciences	
or ANSC 449	Biological Modeling	

Elective 400- or 500-level ANSC courses	(excludes ANSC 590, ANSC 591, ANSC 593) [2]	18 to 19
ANSC 593	Res Studies in Animal Sciences [3]	8
Total Hours		**32**

Other Requirements

Requirement
Other Requirements and conditions may overlap
Minimum Hours Overall Required Within the Unit: 12
Minimum 500-level Hours Required Overall: 12
Minimum GPA: 3.0

[1] Equivalent course requires departmental approval

[2] In consultation with their Animal Sciences faculty advisor, students will select courses that support the individual research studies project and strengthen career opportunities.

[3] The individual research studies project or internship experience and a written report will fulfill the ANSC 593 (Research Studies in Animal Sciences) capstone project requirement. The project or internship and the written product will be supervised by the Animal Sciences faculty mentor and provide evidence that the student can understand and apply the scientific method, interpret scientific information; and effectively communicate scientific information in a field of animal sciences.

Learning Outcomes: Animal Sciences, MANSC

Learning Outcomes for the Master of Animal Sciences in Animal Sciences

The recipient of a Master of Animal Sciences in Animal Sciences will demonstrate:

1. Graduate-level understanding of essential concepts and approaches in the area of animal science specialization. The essential concepts will enable the graduate to strengthen the application to a D.V.M or Ph.D. degree, advance throughout the employment ranks, or secure a mid-management position in industry or federal agencies.
2. Capacity to execute a supervised independent studies project including: a) understanding of the scientific method, research objectives, materials and methods, basic data analysis, and appreciation of the findings; and b)effectively assist on the implementation of essential research activities.
3. Ability to effectively communicate essential disciplinary knowledge and independent studies findings in written format.
4. Aptitude to advocate for interdisciplinary research and education efforts to improve food security, food safety, animal and human health and wellbeing or environmental stewardship.

Animal Sciences, MS

for the Master of Science in Animal Sciences

department head: Rodney Johnson
graduate program coordinator: Sandra Rodriguez-Zas
department website: https://ansc.illinois.edu
department faculty: https://ansc.illinois.edu/directory/faculty/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://aces.illinois.edu/
department office: 110 Animal Sciences Laboratory, 1207 West Gregory Drive, Urbana, IL 61801
phone: (217) 333-3131
email: ansci-gradprog@illinois.edu

Graduate Degree Programs in Animal Sciences

Graduate Majors:

Animal Sciences, MANSC (p. 568)
Animal Sciences, MS (p. 569)
Animal Sciences, PhD (p. 570)

Graduate Concentrations:

Bioinformatics: Animal Sciences, MS (p. 625)

Research Areas

The Department of Animal Sciences offers graduate work leading to the Master of Animal Sciences degrees Fields of specialization include:

- **animal breeding and genetics**
- **animal behavior**
- **biochemistry**
- **environmental physiology**
- **immunobiology**
- **meat science and muscle biology**
- **microbiology**
- **nutrition**
- **systems of animal management and production**
- **physiology of lactation**
- **physiology of reproduction**

Beef and dairy cattle, horses, poultry, sheep, swine, and a variety of companion and laboratory animals are available for study. Experience in teaching, extension, or outreach is encouraged as part of the academic work.

Admission

Candidates for admission to the M.S. program must have a bachelor's degree from an accredited institution equivalent to those from the University of Illinois at Urbana-Champaign. A grade point average of 3.0 or higher (A = 4.0) for the last two years of undergraduate work and for any graduate study is required for admission. Students are encouraged to submit Graduate Record Examination (GRE) scores prior to admission for fellowship consideration and are required to submit GRE scores by the first semester in the graduate program. English proficiency requirements for admission follow Graduate College requirements. Application materials include baccalaureate degree transcripts, resume, personal statement, Graduate Record Examination (GRE) general test scores, and three letters of recommendation. Admission emphasis is placed on a student's interest and ability in research as demonstrated by previous work and letters of recommendation. Admission is possible for spring and summer semesters.

for the Master of Science in Animal Sciences

Code	Title	Hours
Lecture and laboratory classes (400- and at least 2 hours of 500-level courses; excludes ANSC 590 and ANSC 599)		22
Graduate seminar (ANSC 590) enrollment is required every semester (max 2 hours can be applied to the degree)		2
ANSC 599	Thesis Research (min/max applied toward degree)	8
Total Hours		32

Other Requirements [1]

Requirement
Other Requirements and conditions may overlap
Minimum Hours Overall Required Within the Unit: 8
Minimum 500-level Hours Required Overall: 12
A comprehensive oral examination concerning the thesis and other areas of animal agriculture are required.
Thesis Deposit Required: Yes
Minimum GPA: 3.0

[1] *For additional details and requirements refer to the department's* Graduate Handbook *(*http://ansci.illinois.edu/grads/degree-requirements/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Animal Sciences, MS

Learning Outcomes for the Master of Science in Animal Sciences

The recipient of a Master of Science in Animal Sciences will demonstrate:

1. Graduate-level understanding of essential concepts and approaches in the area of animal science specialization. The essential concepts will enable the graduate to secure a mid-level management position in industry or federal agencies or pursue Ph.D. studies and to advance throughout the professional ranks.
2. Capacity to execute supervised thesis research including: a) understanding of the scientific method, research objectives, materials and methods, basic data analysis, and appreciation of the findings; and b) leadership on the implementation of essential research activities.
3. Ability to effectively communicate essential disciplinary knowledge and thesis research findings in oral and written formats.
4. Aptitude to advocate for interdisciplinary research and education efforts to improve food security, food safety, animal and human health and well being or environmental stewardship.

Animal Sciences, PhD

for the Doctor of Philosophy in Animal Sciences

department head: Rodney Johnson
graduate program coordinator: Sandra Rodriguez-Zas
department website: https://ansc.illinois.edu
department faculty: https://ansc.illinois.edu/directory/faculty/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://aces.illinois.edu/
department office: 110 Animal Sciences Laboratory, 1207 West Gregory Drive, Urbana, IL 61801
phone: (217) 333-3131
email: ansci-gradprog@illinois.edu

Graduate Degree Programs in Animal Sciences

Graduate Majors:

Animal Sciences, MANSC (p. 568)
Animal Sciences, MS (p. 569)
Animal Sciences, PhD (p. 570)

Graduate Concentrations:

Bioinformatics: Animal Sciences, MS (p. 625)

Research Areas

The Department of Animal Sciences offers graduate work leading to the Doctor of Philosophy degrees. Fields of specialization include:

- **animal breeding and genetics**
- **animal behavior**
- **biochemistry**
- **environmental physiology**
- **immunobiology**
- **meat science and muscle biology**
- **microbiology**
- **nutrition**
- **systems of animal management and production**
- **physiology of lactation**
- **physiology of reproduction**

Beef and dairy cattle, horses, poultry, sheep, swine, and a variety of companion and laboratory animals are available for study. Experience in teaching, extension, or outreach is encouraged as part of the academic work.

Admission

Candidates for admission to the Ph.D. program must have a bachelor's degree from an accredited institution equivalent to those from the University of Illinois at Urbana-Champaign. Entering with an approved Master's degree from an accredited institution is a requirement for some students. A grade point average of 3.0 or higher (A = 4.0) for the last two years of undergraduate work and for any graduate study is required for admission. Students are encouraged to submit Graduate Record Examination (GRE) scores prior to admission for fellowship consideration and are required to submit GRE scores by the first semester in the graduate program. English proficiency requirements for admission follow Graduate College requirements. Application materials include baccalaureate degree transcripts, resume, personal statement, Graduate Record Examination (GRE) general test scores, and three letters of recommendation. Admission emphasis is placed on a student's interest and ability in research as demonstrated by previous work and letters of recommendation. Admission is possible for fall, spring, and summer semesters.

for the Doctor of Philosophy in Animal Sciences

Animal Sciences, PhD

Entering with an approved Master's Degree

Students must pass preliminary and final examinations administered by committees appointed by the dean of the Graduate College.

Code	Title	Hours
Advanced lecture and laboratory courses (400- and 500-level courses; excludes ANSC 590 and ANSC 599)		20-28
Graduate seminar (ANSC 590) enrollment is required every semester (max 4 hours can be applied to the degree)		4
ANSC 599	Thesis Research (min/max applied toward degree)	32-40
Total Hours		64

Other Requirements [1]

Requirement	Description
Other requirements and conditions may overlap	
Masters Degree Required for Admission to PhD?	Masters level requirements must be met
Qualifying Exam Required:	No
Preliminary Exam Required:	Yes
Final Exam/Dissertation Defense Required:	Yes
Dissertation Deposit Required:	Yes
Minimum GPA:	3.0

Entering with an approved baccalaureate degree

Students must pass a qualifier examination and preliminary and final examinations administered by committees appointed by the dean of the Graduate College.

Students enrolled in this baccalaureate to Doctor of Philosophy program will not be granted automatically a Masters in Animal Sciences degree. Students enrolled in the baccalaureate to Doctor of Philosophy that wish to receive a Masters degree will be transferred to the Masters in Animal Sciences program and will be expected to fulfill the requirements to secure a Masters degree. Students that secure a Masters in Animal Sciences can be transferred to the Doctor of Philosophy program.

Code	Title	Hours
Advanced lecture and laboratory courses (400- and 500-level courses; excludes ANSC 590 and ANSC 599)		42-50
Graduate seminar (ANSC 590) enrollment is required every semester (max 4 hours can be applied to the degree)		6
ANSC 599	Thesis Research (min/max applied toward degree)	40-48
Total Hours		96

Other Requirements [1]

Requirement	Description
Other requirements and conditions may overlap	
Masters Degree Required for Admission to PhD?	No
Qualifying Exam Required:	Yes
Preliminary Exam Required:	Yes
Final Exam/Dissertation Defense Required:	Yes
Dissertation Deposit Required:	Yes
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the department's* Graduate Handbook *(*http://ansci.illinois.edu/grads/degree-requirements/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Animal Sciences, PhD

Learning Outcomes for the Doctor of Philosophy in Animal Sciences

The recipient of a Doctor of Philosophy in Animal Sciences will demonstrate:

1. Graduate-level understanding of advanced concepts and approaches in the area of animal science specialization. The advance concepts will enable the graduate to secure a leadership position in industry or federal agencies or a professor position in academia and to advance throughout the professional ranks.
2. Capacity to independently execute dissertation research including: a) ability to formulate hypothesis and research objectives, to use appropriate materials, methods and advanced data analysis approaches, and to evaluate the results; and b) leadership on the implementation of the scientific method and research activities, interpretation of findings, and identification of implications.
3. Ability to effectively communicate advanced disciplinary knowledge and dissertation research findings in oral and written formats.
4. Aptitude to lead interdisciplinary research and education efforts to improve food security, food safety, animal and human health and well being or environmental stewardship.

Anthropology, MA

for the Master of Arts in Anthropology

head of the department: Brenda Farnell
director of graduate studies: Kathryn Clancy
museum studies program coordinator: Susan Frankenberg
overview of admissions & requirements: http://www.anthro.illinois.edu
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department website: http://www.anthro.illinois.edu
department faculty: http://anthro.illinois.edu/faculty (http://anthro.illinois.edu/faculty/)
department office: 109 Davenport Hall, 607 South Mathews Avenue, Urbana, IL 61801
phone: (217) 333-3616

email: anthro@illinois.edu

The master's degree can be a first stage toward the doctorate or may be used by students wishing to apply knowledge of anthropology to a related field. Candidates must present a thesis or paper in lieu of a thesis acceptable to their advisers and another member of the graduate faculty within the department. We do not offer a terminal MA at this time and so this degree is typically only conferred to students already in our PhD program.

Graduate Degree Programs in Anthropology

Anthropology, MA (p. 571)
Anthropology, PhD (p. 572)
optional concentration: Second Language Acquisition and Teacher Education (p. 1106)

Museum Studies Graduate Minor (p. 1140)

Admission

We do not admit MA students at this time but offer the MA for those already-enrolled PhD students who wish to get an MA over the course of their studies.

for the Master of Arts in Anthropology

Thesis Option

Code	Title	Hours
ANTH 599	Thesis Research (min/max applied toward degree)	4
Total Hours		32

Other Requirements [1]

Requirement
Other requirements may overlap
Minimum Hours Required Within the Unit: 8 at the 500 level
Minimum Hours Required Within the Unit: 12
Minimum GPA: 3.0

[1] *For additional details and requirements refer to the department and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Non-Thesis Option

Code	Title	Hours
ANTH 590	Dissertation Readings (4 min)	4
Total Hours		32

Other Requirements [1]

Requirement
Other requirements may overlap
Minimum Hours Required Within the Unit: 8 at the 500 level
Minimum Hours Required Within the Unit: 12
Minimum GPA: 3.0

[1] *For additional details and requirements refer to the department and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Anthropology, MA

Learning Outcomes for the Master of Arts in Anthropology

1. **Skills for independent research**. Graduate students will acquire professional-level research and reasoning skills to identify important research problems and to subsequently design, execute, and clearly report the results of independent research programs.
2. **Subfield-specific expertise**. Our program encompasses the four fields of anthropology, while our core curriculum grounds the separate graduate trajectories. Graduate students should develop an in-depth understanding of the differences and similarities of people through a combination of technical skills, language abilities, and theoretical approaches relevant to their chosen expertise.
3. **Contributions to discipline.** Graduate students will develop their intellectual skills to contribute to the discipline through service, research, teaching, and publishing.
4. **Ethical and professional standards.** Graduate students will abide by accepted ethical standards of professional anthropological conduct.

Anthropology, PhD

for the Doctor of Philosophy in Anthropology

head of the department: Brenda Farnell
director of graduate studies: Kathryn Clancy
museum studies program coordinator: Susan Frankenberg
overview of admissions & requirements: http://www.anthro.illinois.edu
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department website: http://www.anthro.illinois.edu
department faculty: https://anthro.illinois.edu/directory/faculty (https://anthro.illinois.edu/directory/faculty/)
department office: 109 Davenport Hall, 607 South Mathews Avenue, Urbana, IL 61801
phone: (217) 333-3616

email: anthro@illinois.edu

The Department of Anthropology offers graduate programs leading to the Master of Arts and the Doctor of Philosophy degrees. We generally do not accept students for a terminal M.A.

Graduate Degree Programs in Anthropology

Anthropology, MA (p. 571)
Anthropology, PhD (p. 572)
optional concentration: Second Language Acquisition and Teacher Education (p. 1106)

Museum Studies Graduate Minor (p. 1140)

Admission

Students without the equivalent of the department's undergraduate concentration may be admitted to either degree program, but they may be required to make up any deficiencies in their anthropological backgrounds. In addition to the Graduate College admission requirements, students whose native language is not English are required to take the Test of English as a Foreign Language (TOEFL) (http://www.grad.illinois.edu/admissions/instructions/04c/), with minimum scores set by the Graduate College. Students are admitted for the fall term only.

Students wishing to pursue the minor in Museum Studies must be in good standing in the graduate program of an academic department, and must apply for acceptance into the minor. Admission to the minor is contingent upon approval of the student's home department and the Museum Studies Steering Committee. Students may apply to the minor during the first week of the fall and spring semesters in any academic year, and should contact the Museum Studies Program Coordinator for application instructions or more information.

Application to the PhD Program Guidance

Introduction

The University of Illinois Department of Anthropology welcomes application to their PhD program for fall 2021. We welcome applicants from all subdisciplines and well as students whose research interests cross sub-disciplinary boundaries and those who are well-matched to the strengths of our faculty. We especially encourage students from underrepresented minority groups to apply as part of our diversity, equity, and inclusion efforts.

This application process aims to give you the opportunity to show us your best scholarly selves. Please read the information below for guidance on both required and optional materials, designed to give you ways of sharing your thinking that play to your strengths.

A few quick tips to increase your chances for success, in this program and many others:

- Contact potential advisors in advance of submitting your application. A short conversation can reveal whether you have shared interests and mentoring styles. This also saves you work if your preferred faculty is not taking students this year.
- Consider applying to programs where there are at least two faculty with whom you would be excited to work. We often encourage co-advisors because we find that distributing mentoring leads to more varied and constructive advice for our students.
- See if you can talk to graduate students in the program, as well as in the research group or lab (if you are bio/arch) that you are interested in joining.

Application Materials

- Description of Interests
- Statement of Research Interests and Objectives
- Personal statement
- Writing Sample (optional)
- Online conversation (optional)

- 3 Letters of recommendation
- Transcript (GPA 3.0 or higher)
- CV/Resume
- TOEFL score (for non-native English speakers)

Guidance on application materials

DESCRIPTION OF INTERESTS: This part of the application allows you to indicate your topical and geographical areas of interest and identify the faculty members with whom you are interested in working. Please do not write an essay, but rather provide a bulleted list of your interests and the names of at least two faculty with whom you would like to work. **Please also indicate in this document if you choose to participate in the optional online conversation (see below).** We want you to end up in a program that is best for you, and this information helps us to make this determination.

STATEMENT OF RESEARCH INTERESTS AND OBJECTIVES: This is the single most important item in your application. This essay should be 1000-1500 words and give the admissions committee a clear idea of 1) why you want to pursue a career in anthropology; 2) what anthropological questions or problems interest you; 3) how you want to address these questions; and 4) why you want to pursue your graduate degree at the University of Illinois at Urbana-Champaign. Submit your Statement of Research Interests and Objectives electronically by uploading it with your online application.

PERSONAL STATEMENT: The Personal Statement is a brief essay (maximum of 500 words) on how your personal background and life experiences, including social, cultural, familial, educational, or other opportunities or challenges, motivated your decision to pursue a graduate degree at the University of Illinois at Urbana-Champaign. This is not an academic statement of research, but a discussion of the personal journey that has led to your decision to seek a graduate degree. This information will assist the Admissions Committee identify and nominate candidates for Graduate College Fellowships [see https://grad.illinois.edu/fellowship/competitions (https://grad.illinois.edu/

fellowship/competitions/)]. Submit your Personal Statement with your online application.

WRITING SAMPLE (optional): Your writing sample should provide the Admissions Committee and relevant faculty with a substantive piece of scholarly work and demonstrate your ability to write clearly and to make a cogent argument. Applicants may submit a short research paper, an excerpt from a thesis, a journal article, essay, etc. Please do not send more than 8000 words.

ONLINE CONVERSATION (optional): As an alternative to, or in addition to the optional writing sample, we invite applicants to schedule a fifteen minute call with members of the faculty in their subfield (biological, sociocultural/linguistic, archaeology). If you select this option you will receive a link with options for times between December 2-9, 2020.

Admissions process and timeline

Admission decisions are made collectively by faculty in each subdiscipline in consultation with the Graduate Admissions Committee. We receive many worthy applications, and every year find ourselves putting truly excellent students on our wait list. Often being on this list has more to do with the priority of a given faculty member in admitting students to their group than anything else. If you are waitlisted, know that this means we think you would be wonderful for the program and would very much like to have you join us. We admit students off the wait list every year.

Our graduate process takes place in two phases. A first selection is made by December 10th when each subdiscipline ranks their top choices. A final selection is made by December 17th by the Graduate Admissions Committee. We will notify you by Dec 21st if you have been admitted or waitlisted. While the official acceptance date is April 1st, we strongly encourage admitted students to formally accept or decline our invitation as soon as they reasonably can so that we can invite wait listed students into the program.

Degree Requirements

Each subfield (Archaeology, Biological Anthropology, and Sociocultural/Linguistic Anthropology) requires a specific set of courses for graduation. Achieving doctoral candidacy in all three subfields entails passing (a) language (and/or skill) exam(s), (b) passing a set of preliminary examinations, and (c) successfully submitting a predissertation paper, and/or a doctoral proposal, all to be defended in an oral examination. For specific details and requirements for admission to and navigation of the Ph.D. program, please refer to the Anthropology Department Graduate Programs Handbook (http://www.anthro.illinois.edu/programs/graduate/resources/AnthGradHandbook.pdf) and the University of Illinois Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, the Anthropology Department recognizes the importance of teaching experience as part of a graduate education. Most Anthropology graduate students will have the opportunity to work as teaching assistants, to learn to design their own classes, and possibly teach their own classes.

Faculty Research Interests and Facilities

Courses and individualized study provide broad coverage of sociocultural, linguistic, archaeological, and physical anthropology. The department provides special emphases in the analyses of state ideologies and cultural transformations; complex societies in transition; kinship and gender relations; politics, economics, and business studies; social movements and youth; border studies, criminalities, violence, and security; religion, race, and ethnicity; democracy, governance, and policing; social classification; performance and embodiment; food and environment; language and culture; discourse and narrative analysis; transnationalism and diasporas; human evolution; agricultural origins and development; landscape histories and heritage; hunter-gatherer adaptations; climate change and sustainability; diet and nutrition; paleoecology and paleobiology; evolutionary genetics; population genetics; peopling of the Americas; ancient DNA; biomechanics of locomotion; exercise and neurobiology; functional morphology; comparative and analytical osteology; forensics; demography; immunology; evolutionary medicine; microbe-host interaction; reproductive ecology; female reproductive physiology; conservation; and nonhuman primate evolution, morphology, behavior, and ecology. The department's research facilities include laboratories for archaeology, GIS and spatial computing, faunal analysis, casting, stable-isotope analysis, ethnography, ancient DNA, skeletal biology, locomotion and motion analysis, and endocrinology.

Departmental funds and a grant from the National Science Foundation, as well as from area studies centers, are available for graduate students' summer field research. An archaeology field school is held at various locations in Illinois and outside of the US (location varies from year to year). Graduate student programs are enriched by close departmental relationships with the various interdisciplinary units, including area studies centers on campus (African, East Asian and Pacific, European Union, Latin America and Caribbean, Russian and East European; South Asian and Middle Eastern Studies), the ethnic and gender studies units (the American Indian Studies Program and the departments of African-American Studies, Asian American Studies, Gender and Women's Studies, and Latina/Latino Studies), along with the Women and Gender in Global Perspectives Program, Spurlock Museum, the Museum of Natural History, Krannert Art Museum, the Institute for Genomic Biology, and the Program in Ancient Technologies and Archaeological Materials.

Agreements between the University and various governments and institutes facilitate research in many nations. Training is available in various languages (some with funding available), including Arabic, Bengali, Burmese, Chinese, Hausa, Hebrew, Hindi, Indonesian, Japanese, Korean, Portuguese, Quechua, Lingala, Russian, Shona, Swahili, Thai, and Urdu. Students have ready access to the extensive computer facilities of the University and to the department's facilities.

Financial Aid

University fellowships, Graduate College fellowships for under-represented minorities, and teaching and research assistantships provide variable levels of funding for most graduate students who do not hold external awards. Tuition and service fee waivers accompany most fellowships and assistantships. Foreign Language and Area Studies (FLAS) fellowships are available through various area centers. University of Illinois public archaeology programs, including the Illinois State Archaeological Survey and the Public Service Archaeology and Architecture Program, have provided support and research employment for graduate students in the past, as has the U.S. Army Construction Engineering Research Laboratory in Champaign.

for the Doctor of Philosophy in Anthropology

Code	Title	Hours
Master's degree or equivalent number of hours		32
Electives		32

Language Requirement: High proficiency in one, or reading ability in two, foreign languages is required. Statistics, computer modeling, or similar expertise, however, may be used in lieu of one foreign language.		
ANTH 599	Thesis Research (min/max applied toward degree)	0-32
Total Hours		96

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Masters Degree Required for Admission to PhD?	No
Qualifying Exam Required	No
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the department and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

for the Doctor of Philosophy in Anthropology

The preliminary examination consists of a pre-dissertation research paper, a proposal for doctoral research, and a written examination designed by the student's doctoral committee followed by a two-hour oral examination. The final examination is a defense of the doctoral thesis. Fieldwork is strongly recommended, although not required.

Code	Title	Hours
Master's degree or equivalent number of hours		32
Electives		32
Language Requirement: High proficiency in one, or reading ability in two, foreign languages is required. Statistics, computer modeling, or similar expertise, however, may be used in lieu of one foreign language.		
ANTH 599	Thesis Research (min/max applied toward degree)	0-32
Total Hours		96

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Masters Degree Required for Admission to PhD?	No
Qualifying Exam Required	No
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the department and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Anthropology, PhD

Learning Outcomes for the Doctor of Philosophy in Anthropology

1. **Skills for independent research**. Graduate students will acquire professional-level research and reasoning skills to identify important research problems and to subsequently design, execute, and clearly report the results of independent research programs.
2. **Subfield-specific expertise**. Our program encompasses the four fields of anthropology, while our core curriculum grounds the separate graduate trajectories. Graduate students should develop an in-depth understanding of the differences and similarities of people through a combination of technical skills, language abilities, and theoretical approaches relevant to their chosen expertise.
3. **Contributions to discipline.** Graduate students will develop their intellectual skills to contribute to the discipline through service, research, teaching, and publishing.
4. **Ethical and professional standards.** Graduate students will abide by accepted ethical standards of professional anthropological conduct.

Applied Mathematics, MS

for the Master of Science in Applied Mathematics

department chair: Vera Hur
director of graduate studies: Yuliy Baryshnikov
overview of admissions & requirements:
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: http://www.math.illinois.edu
program website: https://math.illinois.edu/admissions/graduate-program-mathematics-admissions#MS-AppliedMath (https://math.illinois.edu/admissions/graduate-program-mathematics-admissions/#MS-AppliedMath)
department faculty: https://math.illinois.edu/research/faculty-research (https://math.illinois.edu/research/faculty-research/) **and** https://math.illinois.edu/directory/faculty (https://math.illinois.edu/directory/faculty/)
college website: https://las.illinois.edu/
department office: 273 Altgeld Hall, 1409 West Green Street, Urbana, IL 61801
phone: (217) 333-5749
email: math-grad@illinois.edu

The MS in Applied Mathematics program is intended for students wishing to pursue a career in applied mathematics. It is also suitable as preparation for a PhD program in Applied Mathematics. It is rare for students to enter the PhD program at the University of Illinois after finishing this degree. Students may choose one of three tracks: Optimization and Algorithms, Applications to the Sciences, or Computational Science and Engineering. This degree program requires 32 credit hours and can normally be completed in 18 months. A master's

thesis is optional. Applications are accepted for Fall semester. Financial aid is generally not available.

Graduate Degree Programs in Mathematics

Actuarial Science, MS (p. 548)
Applied Mathematics, MS (p. 575)
Mathematics, MS (p. 866)
Mathematics, PhD (p. 867)
optional concentrations:
Actuarial Science & Risk Analytics (p. 868)
Computational Science and Engineering (p. 1089)
Teaching of Mathematics, MS (p. 1043)

for the Master of Science in Applied Mathematics

Students pursuing the M.S. in Applied Mathematics have the opportunity to customize the their studies the following ways:

- Through the Computational Science and Engineering Concentration. (p. 1089)
- By completing the coursework for the option in Optimization and Algorithms;
- By completing the coursework for the option in Applications to the Sciences;
- By completing the coursework for the option in Computational Science and Engineering.

For additional details and requirements refer to the Department of Mathematics Graduate Guide (https://files.webservices.illinois.edu/7917/GraduateGuide18-19.pdf) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Thesis Option

Code	Title	Hours
For all options:		
Coursework to total 32 hours in MATH or ASRM (in consultation with advisor).		
MATH 599	Thesis Research	4
Choose one of these three (3) options:		
Optimization and Algorithms Option		
Courses from at least three (3) of the following areas: Optimization, Control Theory and Coding Theory, Combinatorics and Graph Theory, Algorithms and Theory of Computation, Statistics (including core courses listed below)		20
Select four (4) of the following:		12-16
MATH 412	Graph Theory	
MATH 413	Intro to Combinatorics	
MATH/CS 450	Numerical Analysis	
MATH/CS 473	Algorithms	
ASRM 450/ STAT 420	Methods of Applied Statistics	
MATH 482	Linear Programming	
MATH 484	Nonlinear Programming	
Applications to the the Sciences Option		
Select three (3) of the following:		9-16
MATH 489	Dynamics & Differential Eqns	
MATH 550	Dynamical Systems I	
MATH 553	Partial Differential Equations	
MATH 558	Methods of Applied Mathematics	
Credit hours in a department other than Mathematics, providing substantive applications of differential equations and applied mathematics.		8
Computational Science and Engineering Option		
MATH 550	Dynamical Systems I	4
or MATH 553	Partial Differential Equations	
Choose one (1) advanced course in Algebra or Analysis:		3-4
MATH 418	Intro to Abstract Algebra II	
MATH 448	Complex Variables	
MATH 540	Real Analysis	
MATH 542	Complex Variables I	
12 hours from CSE courses (at least 4 in MATH, 4 not in MATH)		12
Total Hours		**32**

Other Requirements

Code	Title	Hours
MATH 405, MATH 406, MATH 415, MATH 444, and MATH 499 cannot be counted toward this graduate degree.		
Minimum hours required within the unit:		20
Minimum 500-level hours required overall:		12 (8 in Mathematics)
Minimum GPA:		3.0
Total Hours (graduate study)		**32**

Non-Thesis Option

Code	Title	Hours
For all options:		
Coursework to total 32 hours in MATH or ASRM (in consultation with advisor).		
Choose one of these three (3) options:		
Optimization and Algorithms Option		
Courses from at least three (3) of the following areas: Optimization, Control Theory and Coding Theory, Combinatorics and Graph Theory, Algorithms and Theory of Computation, Statistics (including core courses listed below)		20
Select four (4) of the following:		12-16
MATH 412	Graph Theory	
MATH 413	Intro to Combinatorics	
MATH/CS 450	Numerical Analysis	
MATH/CS 473	Algorithms	
ASRM 450/ STAT 420	Methods of Applied Statistics	
MATH 482	Linear Programming	
MATH 484	Nonlinear Programming	
Applications to the the Sciences Option		
Select three (3) of the following:		9-16
MATH 489	Dynamics & Differential Eqns	
MATH 550	Dynamical Systems I	
MATH 553	Partial Differential Equations	
MATH 558	Methods of Applied Mathematics	

Credit hours in a department other than Mathematics, providing substantive applications of differential equations and applied mathematics.		8
Computational Science and Engineering Option		
MATH 550	Dynamical Systems I	4
or MATH 553	Partial Differential Equations	
Choose one (1) advanced course in Algebra or Analysis:		3-4
MATH 418	Intro to Abstract Algebra II	
MATH 448	Complex Variables	
MATH 540	Real Analysis	
MATH 542	Complex Variables I	
12 hours from CSE courses (at least 4 in MATH, 4 not in MATH)		12
Total Hours		**32**

Other Requirements

Code	Title	Hours
MATH 405, MATH 406, MATH 415, MATH 444, and MATH 499 cannot be counted toward this graduate degree.		
Minimum hours required within the unit:		20
Minimum 500-level hours required overall:		12 (8 in Mathematics)
Minimum GPA:		3.0
Total Hours (graduate study)		**32**

Learning Outcomes: Applied Mathematics, MS

Learning outcomes for the Master of Science in Applied Mathematics

Optimization and Algorithms Track

1. Students will gain fundamental understanding in at least four of the seven core subjects of graph theory, combinatorics, numerical analysis, algorithms, applied statistics, linear programming, nonlinear programming.
2. Students will gain breadth of knowledge in at least three of the following areas: optimization, control theory and coding theory, combinatorics/graph theory, algorithms/theory of computation, statistics.
3. Students will gain experience in original research in applied mathematics, if desired. This goal applies to students on the thesis track of this program.

Applications to the Sciences Track

1. Students will gain depth of understanding of the theory of differential equations and dynamical systems.
2. Students will gain the ability to engage with theoretical mathematical thinking in areas relevant to the application of differential equations and dynamical systems to the sciences, at the graduate level.
3. Students will gain exposure to the application of mathematics in one or more of the sciences.
4. Students will gain experience in original research in applied mathematics, if desired. This goal applies to students on the thesis track of this program.

Computational Science and Engineering (CSE) Track

1. Students will gain a fundamental understanding of the theory of differential equations/dynamical systems.
2. Students will gain a fundamental understanding, at the graduate level, of at least one of the core subjects of abstract algebra, real analysis, complex analysis.
3. Students will gain an understanding of the use of computational techniques in the study of applied mathematics.
4. Students will gain experience in original research in applied mathematics, if desired. This goal applies to students on the thesis track of this program.

Architectural Studies, MS

for the Master of Science in Architectural Studies

Director of the School: Francisco Javier Rodríguez-Suárez
Director of graduate studies: Kevin Erickson
Overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
School website: http://arch.illinois.edu
Program website: https://arch.illinois.edu/degrees/ms-arch-studies (https://arch.illinois.edu/degrees/ms-arch-studies/)
Department faculty: department faculty link
College website: http://faa.illinois.edu
School office: 117 Temple Hoyne Buell Hall, 611 Taft Drive, Champaign, IL 61820
phone: (217) 333-7720
email: arch-grad@illinois.edu

Master of Science in Architectural Studies

The Master of Science in Architectural Studies program is a one-year course of study with a research focused curriculum developed by the student, in close consultation with the faculty advisor. The program is designed to allow students to develop further expertise in research of the built environment.

Students should have a clear and well-articulated area of research focus upon entry to the program. Prospective applicants are encouraged to contact potential faculty advisors prior to application.

While most students admitted to the program will hold a professional degree prior to admission, a professional degree is not required for admission. Applicants holding degrees from related fields are encouraged to apply. Students considering advanced work at the PhD level are encouraged to apply.

Candidates admitted with full status may complete the program in one year of full-time academic study.

Admission

The admission grade point average for full standing in the Graduate College and the school must be at least 3.0 (A = 4.0). For applicants who meet the other requirements but have an admission GPA under 3.0, admission with limited standing may be permitted if evidence of exceptional qualification is presented.

Applicants are selected for admission on the basis of undergraduate academic performance and profession-related experience. Application material is evaluated by faculty members. The faculty's

recommendations are based upon an appraisal of the admission grade point average determined from official transcripts, a portfolio or brochure of applicant's past work in architecture, a statement of objectives, three letters of recommendation, and relevant professional work experience.

Application forms for graduate admission and financial aid may be obtained from the Web site above. Application may be made on-line. Completed applications for the Masters or Doctoral programs must reach the Graduate Programs Office by January 15; students are admitted in the fall semester only. Graduate Record Examination (GRE) scores are required for Master of Science applicants.

All applicants whose native language is not English must submit Test of English as a Foreign Language (TOEFL) scores. A minimum score of 590 on the paper-based test or 243 on the computer-based test or 96 on the internet-based test is required. The University of Illinois also accepts IELTS (academic exam) score in lieu of TOEFL, with a minimum score of 6.5 and 6.5 in all sub-sections required.

Financial Aid

Financial aid for graduate students in architecture is available in the form of fellowships and assistantships (teaching, research, and graduate or resource). Qualified candidates are considered for financial support upon application and in subsequent years of study.

for the Master of Science in Architectural Studies

Master of Science in Architectural Studies

Admitted students must complete 32 hours of coursework for the degree. Candidates admitted with full status may complete the program in one year of full-time academic study.

For additional details and requirements refer to the department's p *(*http://www.arch.illinois.edu/degrees/master-architecture/*)*rogram page *(*http://www.arch.illinois.edu/degrees/ms-arch-studies/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

This degree program can be completed either with or without a thesis, the requirements are listed below:

Code	Title	Hours
Thesis Option:		
Architectural Electives from dept. list		0-16
Electives		16
ARCH 599	Thesis Research (min/max applied toward degree)	0-16
Thesis Option Total Hours:		**32**
Non-Thesis Option:		
Architectural Electives from dept. list		16
Electives		16
Non-Thesis Total Hours:		**32**

Other Requirements

Requirement	Description
Other requirements may overlap	
Candidates must spend at least two semesters and earn at least half of the required graduate hours in residence.	
Minimum 500-level Hours Required	12
Overall:	
Minimum GPA:	2.75

Learning Outcomes: Architectural Studies, MS

Learning Outcomes for the Master of Science in Architectural Studies

The school must provide evidence that its graduates have satisfied each criterion through required coursework. If credits are granted for courses taken at other institutions or online, evidence must be provided that the courses are comparable to those offered in the accredited degree program.

When students complete the MS degree program, they will be able to:

1. **Apply Specialized Knowledge**
   - Engage in the practice of architecture in its many forms.
   - Employ design processes to understand, conceive, and create the many facets of built environments.
   - Utilize the interplay of form and space to create compelling experiences in the built environment.
   - Address environmental, social, political, cultural, and economic challenges through the application of design inquiry.
   - Apply advanced documentation, research, analysis, and design techniques to create innovative design solutions to pressing global challenges.
2. **Apply Broad and Integrative Knowledge**
   - Solve complex problems through the use of advanced design techniques.
   - Communicate complex ideas and concepts through a mastery of graphic, verbal, physical, and digital means.
   - Integrate community voices, cultural perspectives, and participatory practices into design solutions.
   - Employ an understanding of the complex intersections between design and environmental, social, economic, political, and cultural phenomena in historical and contemporary contexts.
   - Use scholarly inquiry to answer questions in support of design solutions.
3. **Utilize Differentiated Modes of Thinking**
   - Understand, differentiate, and apply analytical, critical, and conceptual thinking to the design challenges of the twenty-first century.
   - Evaluate and apply theories of the built environment to understand their impacts on global ecology, human experience, and wellbeing.
   - Research and critically analyze historic and contemporary humanistic conditions related to the built environment in local, regional, and global geographies.
4. **Collaborate Successfully**

- Foster teamwork and consensus decision-making.
- Lead and steer complex processes to completion.
- Value and integrate interdisciplinarity as well as diverse disciplinary approaches in the realm of design,

5. **Contributing to Community, Civic, and Global Equity**

- Demonstrate the ability to make empathic and ethical decisions throughout the design process.
- Work toward a more inclusive profession that welcomes practitioners of all genders, abilities, races, ethnicities, and ages.
- Foreground social, environmental, and economic justice in the design of the environment to contribute to greater equity, diversity, and inclusion.

Architectural Studies: Structures, MS

for the degree of Master of Science in Architectural Studies Structures Concentration

Director of the School: Francisco Javier Rodríguez-Suárez
Director of graduate studies: Kevin Erickson
Overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
School website: http://arch.illinois.edu
College website: http://faa.illinois.edu
School office: 117 Temple Hoyne Buell Hall, 611 Taft Drive, Champaign, IL 61820
phone: (217) 333-7720
email: arch-grad@illinois.edu

The School of Architecture offers a Structures Concentration under its MS in AS degree program. Completion of this in-depth plan of study will result in recording of Structures as a Concentration on the student's transcript under the MS in AS degree. Students interested in participating in the Structures Concentration must be admitted to the School of Architecture's MS in AS degree program; register their intent to enter the Structures Concentration with the School's Graduate Office prior to completing their first semester in their degree program and complete 27 graduate credit hours of architectural structures courses from the required courses and 5 hours of electives (total 32 hours). Prerequisite subjects for the Structures Concentration include the following: calculus I and II; statics and dynamics; mechanics of materials; one course in structural steel design and one course in reinforced concrete design. Students without these prerequisites may enter the Structures Concentration upon completion of their prerequisite courses.

Admission

The admission grade point average for full standing in the Graduate College and the school must be at least 3.0 (A = 4.0). For applicants who meet the other requirements but have an admission GPA under 3.0, admission with limited standing may be permitted if evidence of exceptional qualification is presented.

Applicants are selected for admission on the basis of undergraduate academic performance and profession-related experience. Application material is evaluated by faculty members. The faculty's recommendations are based upon an appraisal of the admission grade point average determined from official transcripts, a portfolio or brochure of applicant's past work in architecture, a statement of objectives, three letters of recommendation, and relevant professional work experience.

Application forms for graduate admission and financial aid may be obtained from the Web site above. Application may be made on-line. Completed applications for the Masters or Doctoral programs must reach the Graduate Programs Office by January 15; students are admitted in the fall semester only. Graduate Record Examination (GRE) scores are not required for School of Architecture Masters Degree applicants; the GRE is required for all Doctor of Philosophy applicants.

All applicants whose native language is not English must submit Test of English as a Foreign Language (TOEFL) scores. A minimum score of 590 on the paper-based test or 243 on the computer-based test or 96 on the internet-based test is required. The University of Illinois also accepts IELTS (academic exam) score in lieu of TOEFL, with a minimum score of 6.5 and 6.5 in all sub-sections required.

Financial Aid

Financial aid for graduate students in architecture is available in the form of fellowships and assistantships (teaching, research, and graduate or resource). Qualified candidates are considered for financial support upon application and in subsequent years of study.

for the degree of Master of Science in Architectural Studies Structures Concentration

The School of Architecture offers a Structures Concentration under its MS in AS degree program. Completion of this in-depth plan of study will result in recording of Structures as a Concentration on the student's transcript under the MS in AS degree. Students interested in participating in the Structures Concentration must be admitted to the School of Architecture's MS in AS degree program; register their intent to enter the Structures Concentration with the School's Graduate Office prior to completing their first semester in their degree program and complete a total of 32 hours with 27 graduate credit hours of architectural structures courses from the required courses list below. Prerequisite subjects for the Structures Concentration include the following: calculus I and II; statics and dynamics; mechanics of materials; one course in structural steel design and one course in reinforced concrete design. Students without these prerequisites may enter the Structures Concentration upon completion of their prerequisite courses.

Code	Title	Hours
ARCH 550	Design of Steel and Reinforced Concrete Structures II	4
ARCH 551	Structural Analysis	4
ARCH 552	Soil Mech and Foundations	3
ARCH 553	Advanced Reinforced Concrete Design	3
ARCH 554	Adv Steel Design	3
ARCH 556	Advanced Structural Planning	4
ARCH 560	Advanced Structural Analysis	3
ARCH 595	Spec Prob Struct Theory & Des (Section EQ, Seismic Design)	2 to 4
Total Hours		27

Architecture, MARCH

for the degree of Master of Architecture in Architecture

Director of the School: Francisco Javier Rodríguez-Suárez
Director of graduate studies: Kevin Erickson
Overview of admissions & requirements:
Overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
School website: http://arch.illinois.edu
College website: http://faa.illinois.edu
School office: 117 Temple Hoyne Buell Hall, 611 Taft Drive, Champaign, IL 61820
phone: (217) 333-7720
email: arch-grad@illinois.edu

Students must choose a concentration for this degree.

Professional Master of Architecture Degree Programs

Architecture, MARCH (p. 579)
Concentrations:
2 Year Program (p. 581)
Building Performance (http://catalog.illinois.edu/graduate/faa/architecture-march/building-performance/)
Health & Wellbeing (http://catalog.illinois.edu/graduate/faa/architecture-march/health-wellbeing/)
Track 3 (p. 582)
Urbanism (http://catalog.illinois.edu/graduate/faa/architecture-march/urbanism/)
Joint Programs:
Architecture, MARCH & Architectural Studies, MS (p. 1150)
Architecture, MARCH & Civil Engineering, MS (p. 1150)
Architecture, MARCH & Computer Science, MCS (p. 1151)
Architecture, MARCH & Urban Planning, MUP (p. 1151)

The School of Architecture offers a graduate program, leading to a Master of Architecture degree:

The Master of Architecture program is for students holding a four-year Bachelor of Science in Architectural Studies (or similar degree in architecture). Students may be admitted to the Master of Architecture program with Limited Standing if the student holds a bachelor's degree (or higher) in any field other than architecture. Students interested in this track should refer to the Track 3 page for details.

The School of Architecture, together with the graduate programs of computer science, urban and regional planning, and civil and environmental engineering, offers graduate programs leading to the following joint degrees: Master of Architecture and Master of Computer Science, Master of Architecture and Master of Urban Planning, and Master of Architecture and Master of Science in Civil and Environmental Engineering (Construction Engineering and Management) (Structures).

Admission

The admission grade point average for full standing in the Graduate College and the school must be at least 3.0 (A = 4.0). For applicants who meet the other requirements but have an admission GPA under 3.0, admission with limited standing may be permitted if evidence of exceptional qualification is presented.

Applicants are selected for admission on the basis of undergraduate academic performance and profession-related experience. Application material is evaluated by faculty members. The faculty's recommendations are based upon an appraisal of the admission grade point average determined from official transcripts, a portfolio or brochure of applicant's past work in architecture, a statement of objectives, three letters of recommendation, and relevant professional work experience.

To apply go to https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/). Completed applications must reach the Graduate Programs Office by January 15; students are admitted in the fall semester only. Graduate Record Examination (GRE) scores are not required for School of Architecture Masters Degree applicants.

All applicants whose native language is not English must submit Test of English as a Foreign Language (TOEFL) scores. A minimum score of 590 on the paper-based test or 243 on the computer-based test or 96 on the internet-based test is required. The University of Illinois also accepts IELTS (academic exam) score in lieu of TOEFL, with a minimum score of 6.5 and 6.5 in all sub-sections required.

Financial Aid

Financial aid for graduate students in architecture is available in the form of fellowships and assistantships (teaching, research, and graduate or resource). Qualified candidates are considered for financial support upon application and in subsequent years of study.

Learning Outcomes: Architecture, MARCH

Learning Outcomes for the degree of Master of Architecture in Architecture

The MARCH is the School's accredited degree program and must demonstrate that each graduate possesses the knowledge and skills defined by the learning outcomes set out below. The knowledge and skills are the minimum for meeting the demands of an internship leading to registration for architectural practice.

The school must provide evidence that its graduates have satisfied each criterion through required coursework. If credits are granted for courses taken at other institutions or online, evidence must be provided that the courses are comparable to those offered in the accredited degree program.

When students complete the MARCH degree program, they will be able to:

1. **Apply Specialized Knowledge**
   - Engage in the practice of architecture in its many forms.
   - Employ design processes to understand, conceive, and create the many facets of built environments.
   - Utilize the interplay of form and space to create compelling experiences in the built environment.
   - Address environmental, social, political, cultural, and economic challenges through the application of design inquiry.
   - Apply advanced documentation, research, analysis, and design techniques to create innovative design solutions to pressing global challenges.
2. **Apply Broad and Integrative Knowledge**
   - Solve complex problems through the use of advanced design techniques.

- Communicate complex ideas and concepts through a mastery of graphic, verbal, physical, and digital means.
- Integrate community voices, cultural perspectives, and participatory practices into design solutions.
- Employ an understanding of the complex intersections between design and environmental, social, economic, political, and cultural phenomena in historical and contemporary contexts.
- Use scholarly inquiry to answer questions in support of design solutions.

3. Utilize Differentiated Modes of Thinking

- Understand, differentiate, and apply analytical, critical, and conceptual thinking to the design challenges of the twenty-first century.
- Evaluate and apply theories of the built environment to understand their impacts on global ecology, human experience, and wellbeing.
- Research and critically analyze historic and contemporary humanistic conditions related to the built environment in local, regional, and global geographies.

4. Collaborate Successfully

- Foster teamwork and consensus decision-making.
- Lead and steer complex processes to completion.
- Value and integrate interdisciplinarity as well as diverse disciplinary approaches in the realm of design,

5. Contributing to Community, Civic, and Global Equity

- Demonstrate the ability to make empathic and ethical decisions throughout the design process.
- Work toward a more inclusive profession that welcomes practitioners of all genders, abilities, races, ethnicities, and ages.
- Foreground social, environmental, and economic justice in the design of the environment to contribute to greater equity, diversity, and inclusion.

Architecture: 2 Year Program, MARCH

for the Master of Architecture in Architecture, 2 Year Program Concentration

Director of the School: Francisco Javier Rodríguez-Suárez
Director of graduate studies: Kevin Erickson
Overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
School website: http://arch.illinois.edu
College website: http://faa.illinois.edu
School office: 117 Temple Hoyne Buell Hall, 611 Taft Drive, Champaign, IL 61820
phone: (217) 333-7720
email: arch-grad@illinois.edu

2-year Professional Master of Architecture Degree

The two-year professional degree program is intended for students entering with a four-year baccalaureate in architectural studies. The program builds on the undergraduate foundations to develop the knowledge and skills required in today's Architecture profession. Students have the flexibility to pursue individual interests within this 2-year course of study with 16 elective hours of coursework and a variety of thematic studio options each semester. Students may elect to focus in any one of several areas aligned with research-oriented program areas, course offerings and faculty interest. The Master of Architecture degree is a professional degree accredited by the National Architectural Accreditation Board (NAAB) and has a STEM designation.

Candidates admitted with full status to the two-year professional degree program must complete at least 62 hours of graduate work. Candidates admitted with full status may complete the program in two years of full-time academic study.

The School of Architecture, together with the graduate programs of computer science, urban and regional planning, and civil and environmental engineering, offers graduate programs leading to the following joint degrees: Master of Architecture and Master of Computer Science, Master of Architecture and Master of Urban Planning, and Master of Architecture and Master of Science in Civil and Environmental Engineering (Construction Engineering and Management) (Structures).

Admission

The admission grade point average for full standing in the Graduate College and the school must be at least 3.0 (A = 4.0). For applicants who meet the other requirements but have an admission GPA under 3.0, admission with limited standing may be permitted if evidence of exceptional qualification is presented.

Applicants are selected for admission on the basis of undergraduate academic performance and profession-related experience. Application material is evaluated by faculty members. The faculty's recommendations are based upon an appraisal of the admission grade point average determined from official transcripts, a portfolio or brochure of applicant's past work in architecture, a statement of objectives, three letters of recommendation, and relevant professional work experience.

Application forms for graduate admission and financial aid may be obtained from the Web site above. Application may be made on-line. Completed applications for the Masters or Doctoral programs must reach the Graduate Programs Office by January 15; students are admitted in the fall semester only. Graduate Record Examination (GRE) scores are not required for School of Architecture Masters Degree applicants; the GRE is required for all Doctor of Philosophy applicants.

All applicants whose native language is not English must submit Test of English as a Foreign Language (TOEFL) scores. A minimum score of 590 on the paper-based test or 243 on the computer-based test or 96 on the internet-based test is required. The University of Illinois also accepts IELTS (academic exam) score in lieu of TOEFL, with a minimum score of 6.5 and 6.5 in all sub-sections required.

Financial Aid

Financial aid for graduate students in architecture is available in the form of fellowships and assistantships (teaching, research, and graduate or

resource). Qualified candidates are considered for financial support upon application and in subsequent years of study.

for the Master of Architecture in Architecture, 2 Year Program Concentration

The two-year professional degree program, intended for students entering with a four-year baccalaureate in architectural studies, emphasizes further study in architectural disciplines. Students may elect to concentrate in any one of several areas of specialization aligned with research-oriented program areas.

Candidates admitted with full or limited status to the two-year professional degree program must complete at least 62 hours of graduate work. Candidates admitted with full status may complete the program in two years of full-time academic study.

A list of programs and additional requirements can be found on the program's website (https://arch.illinois.edu/degrees/master-architecture-2/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
ARCH 501	Architectural Practice	3
ARCH 517	Modern Architectural History, 1850-Present	3
ARCH 536	Planning and Design of Structural Systems	4
ARCH 537	Environmental Control Systems II	4
ARCH 538	Econ Issues in Arch Develop	4
Three graduate design studios		18
ARCH 577	Theories of Architecture	4
ARCH 575	Integrative Architecture Design Studio	6
Electives (Architecture graduate seminars and other approved courses)		16
Total Hours		**62**

Other Requirements (may overlap)

Requirement	Description
Candidates must spend at least four semesters and earn at least half of the required graduate hours in residence	
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	2.75
Must earn a letter grade of C or better in all core courses.	

Architecture: Track 3, MARCH

Master of Architecture in Architecture, Track 3 Concentration

Director of the School: Francisco Javier Rodríguez-Suárez
Director of graduate studies: Kevin Erickson
Overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
School Website: http://arch.illinois.edu
Program Website: https://arch.illinois.edu/degrees/master-architecture-2
College Website: http://faa.illinois.edu
School Office: 117 Temple Hoyne Buell Hall, 611 Taft Drive, Champaign, IL 61820
Phone: (217) 333-7720
email: arch-grad@illinois.edu

Professional Master of Architecture Degree - Limited Standing

The School of Architecture offers an NAAB accredited professional MARCH 2+ (Track 3) degree program designed for students holding a bachelor's degree in a field other than architecture, or in architecture but not equivalent to a Bachelor of Science in Architecture. Students develop an individualized curriculum in consultation with their advisor resulting in a program that varies in length from two-and-a-half to three years. Upon completion of requisite background course work lasting between one semester and two years, students enrolled in the MARCH 2+ degree program follow the MARCH program of study. The MARCH 2+ (Track 3) program brings together students with diverse backgrounds to explore and grapple with the complexities of the environment and innovate through the design process.

To be eligible for admission to the MARCH 2+ degree program, the student must have by the term of enrollment:

1) Earned a four-year, baccalaureate degree

2) Completed one calculus class equivalent to U of I MATH 220, five semester hours

Joint Degrees

The School of Architecture, together with the graduate programs of computer science, urban and regional planning, and civil and environmental engineering, offers graduate programs leading to the following joint degrees: Master of Architecture and Master of Computer Science, Master of Architecture and Master of Urban Planning, and Master of Architecture and Master of Science in Civil and Environmental Engineering (Construction Engineering and Management) (Structures).

Admission

The admission grade point average for full standing in the Graduate College and the school must be at least 3.0 (A = 4.0). For applicants who meet the other requirements but have an admission GPA under 3.0, admission with limited standing may be permitted if evidence of exceptional qualification is presented.

Applicants are selected for admission on the basis of undergraduate academic performance and profession-related experience. Application material is evaluated by faculty members. The faculty's recommendations are based upon an appraisal of the admission grade point average determined from official transcripts, a portfolio or brochure of applicant's past work in architecture, a statement of objectives, three letters of recommendation, and relevant professional work experience.

Application forms for graduate admission and financial aid may be obtained from the Web site above. Application may be made on-line. Completed applications for the Masters or Doctoral programs must reach the Graduate Programs Office by January 15; students are admitted in the fall semester only. Graduate Record Examination (GRE) scores are not required for School of Architecture Masters Degree applicants; the GRE is required for all Doctor of Philosophy applicants.

All applicants whose native language is not English must submit Test of English as a Foreign Language (TOEFL) scores. A minimum score of 590 on the paper-based test or 243 on the computer-based test or 96 on the internet-based test is required. The University of Illinois also accepts IELTS (academic exam) score in lieu of TOEFL, with a minimum score of 6.5 and 6.5 in all sub-sections required.

Financial Aid

Financial aid for graduate students in architecture is available in the form of fellowships and assistantships (teaching, research, and graduate or resource). Qualified candidates are considered for financial support upon application and in subsequent years of study.

Master of Architecture in Architecture, Track 3 Concentration

Limited Standing

The School of Architecture offers an NAAB accredited professional MARCH 2+ (Track 3) degree program designed for students holding a bachelor's degree in a field other than architecture, or in architecture but not equivalent to a Bachelor of Science in Architecture. Students develop an individualized curriculum in consultation with their advisor resulting in a program that varies in length from two-and-a-half to three years. Upon completion of requisite background course work lasting between one semester and two years, students enrolled in the MARCH 2+ degree program follow the MARCH program of study. The MARCH 2+ (Track 3) program brings together students with diverse backgrounds to explore and grapple with the complexities of the environment and innovate through the design process.

To be eligible for admission to the MARCH 2+ degree program, the student must have by the term of enrollment:

1) Earned a four-year, baccalaureate degree

2) Completed one calculus class equivalent to U of I MATH 220, five semester hours

For additional details and requirements refer to the department's p *(*http://www.arch.illinois.edu/degrees/master-architecture/*)*rogram page *(*http://www.arch.illinois.edu/degrees/master-architecture-2/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

This degree program can be completed with or without a thesis, the requirements are listed below:

Code	Title	Hours
Thesis Option		
One course in architectural practice		
One core elective each from a select list of courses in architectural thought		
One core elective each from a select list of courses in professional practice		
Four studios including two semesters of comprehensive design		
One course in structural planning		
Students must also complete prerequisites, which are determined individually and do not count toward the required number of hours required		
ARCH 599	Thesis Research (min/max applied toward degree)	0
Thesis Option Total Hours		**54**
Non-Thesis Option		
One course in architectural practice		
One core elective each from a select list of courses in architectural thought		
One core elective each from a select list of courses in professional practice		
Four studios including two semesters of comprehensive design		
One course in structural planning		
Students must also complete prerequisites, which are determined individually and do not count toward the required number of hours required		
Non-Thesis Total Hours:		**54**

Other Requirements

Requirement	Description
Other requirements may overlap	
Candidates must spend at least four semesters and earn at least half of the required graduate hours in residence.	
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	2.75

Architecture, PhD

for the degree of Doctor of Philosophy in Architecture

Director of the School: Francisco Javier Rodríguez-Suárez
Director of graduate studies: Kevin Erickson
Overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
School website: http://arch.illinois.edu
College website: http://faa.illinois.edu
School office: 117 Temple Hoyne Buell Hall, 611 Taft Drive, Champaign, IL 61820
phone: (217) 333-7720
email: arch-grad@illinois.edu

This program offers advanced training for those students whose goal is a career of research and scholarship in academia, industry, or government. Four areas of focus are offered: History and Theory, Environment and Technology, Health and Wellbeing, and Urbanism. The program is administered jointly with the Department of Landscape Architecture.

Admission

The admission grade point average for full standing in the Graduate College and the school must be at least 3.0 (A = 4.0). For applicants

who meet the other requirements but have an admission GPA under 3.0, admission with limited standing may be permitted if evidence of exceptional qualification is presented.

The application process is highly selective. Potential applicants are encouraged to correspond with the chair of the Ph.D. program and or with prospective advisors. Applicants are selected for admission on the basis of academic performance and relevant experience. Application material is evaluated by the Ph.D. Committee and members of the faculty as necessary. Recommendations for admission are based upon an appraisal of prior academic work determined from official transcripts, the statement of research objectives, three letters of recommendation, and relevant professional work experience.

Application forms for graduate admission and financial aid may be obtained from the Web site above. Application may be made on-line. Completed applications for the Masters or Doctoral programs must reach the Graduate Programs Office by January 15; students are admitted in the fall semester only. Graduate Record Examination (GRE) scores are required for all applicants.

All applicants whose native language is not English must submit Test of English as a Foreign Language (TOEFL) scores. A minimum score of 590 on the paper-based test or 243 on the computer-based test or 96 on the internet-based test is required. The University of Illinois also accepts IELTS (academic exam) score in lieu of TOEFL, with a minimum score of 6.5 and 6.5 in all sub-sections required.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program.

Financial Aid

Financial aid for graduate students in architecture is available in the form of fellowships and assistantships (teaching, research, and graduate or resource). Qualified candidates are considered for financial support upon application and in subsequent years of study.

Degree Requirements

The requirements may vary slightly according to students' area of focus. Please consult the PhD Handbook *(*https://go.illinois.edu/PhDArchandPhDLArchHandbook/*)* for more explicit details.

Students are required to defend their dissertation; Policies on format of the doctoral examination can be found in the Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

for the degree of Doctor of Philosophy in Architecture

96-hour program for students entering with a Baccalaureate degree.

Code	Title	Hours
All students are required to enroll in the PhD colloquium during the fall of their first year of course work.		
ARCH 589	PhD Colloquium (twice)	2
Research Methods		4
Elective Coursework in Major Field		26
Language Requirement: Required for all students in the History/Theory option and for some Social and Cultural Factors students		
Elective Coursework		32
ARCH 599	Thesis Research	32
Total Hours		96

64 Hour program for students admitted with an approved MS/MA required to complete Stages II, and III.

Code	Title	Hours
All students are required to enroll in the PhD colloquium during the fall of their first year of course work.		
ARCH 589	PhD Colloquium (twice)	2
Research Methods (Unless Previously Approved)		4
Language Requirement: Required for all students in the History/Theory option and for some Social and Cultural Factors students		
Elective Coursework		26
ARCH 599	Thesis Research	32
Total Hours		64

80-96 Hour program for students admitted with maximum 16 hours approved from a prior M.ARCH

Code	Title	Hours
All students are required to enroll in the PhD colloquium during the fall of their first year of course work.		
ARCH 589	PhD Colloquium (twice)	2
Research Methods		4
Elective Coursework in Major Field		10-26
Language Requirement: Required for all students in the History/Theory option and for some Social and Cultural Factors students		
Elective Coursework		32
ARCH 599	Thesis Research	32
Total Hours		80-96

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall (not including 599):	24
Professional Degree Required for Admission to PhD?	No
Qualifying Exam Required	No
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

Language and statistics course requirements vary by focus area. To develop proficiency, students may be required to take more than one course. Specific requirements are determined on a case-by-case basis by the Chair of the Ph.D. Committee in consultation with the student's advisor.

[1] *For additional details and requirements refer to the* department's program page *(*http://www.arch.illinois.edu/degrees/phd-architecture/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Architecture, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Architecture

Theory & Knowledge

- Students will understand the major theoretical approaches in their architectural subdiscipline, and the assumptions inflected on research situated within any one approach.
- Students will develop mastery of the knowledge in a major architectural subdiscipline and substantial comprehension of knowledge in a minor field outside of architecture.
- Students can identify and describe key theories, concepts, and issues associated with the major theoretical approaches in their architectural subdiscipline.
- Students can combine theoretical approaches to explain phenomena they intend to study.
- Students can select the theoretical approach that is most applicable to a phenomenon and explain why they have selected that perspective

Research

- Students will be able to identify, interpret, and synthesize research and describe the gaps in research conducted by other scholars in a particular area of focus.
- Students will comprehend the primary quantitative and qualitative research methods employed in systematic study of the built environment.
- Students will be versed in research ethics pertinent to their architectural subdiscipline.
- Students will be design and carryout a major original research project that contributes new knowledge to the discipline.
- Students will be able to articulate to scholars outside the field the value of including architectural perspectives in interdisciplinary research.

Dissemination of Scholarship

- Students will understand the value and obligation for scholars to engage in all aspects of the peer-review process.
- Students informally share their work-in-progress with peers.
- Student can engage peer-review conference and journal venues where they disseminate their research.

Professional Development

- Students explore academic and professional post-graduation possibilities for applying their expertise in productive employment.
- Students understand the different types of academic institutions and the expectations of faculty and staff in these different institution settings.
- Students can design and deliver a lecture.
- Students can identify and describe different methods of academic instruction and explain their differential goals.

Art & Design, MFA

for the degree of Master of Fine Arts in Art and Design

school director: Alan Mette
associate director & director of graduate studies: Laurie Hogin
graduate studies advisors:
MA; PhD in Art History: David O'Brien (obrien1@illinois.edu)
MA; EdM; PhD in Art Education: Sarah Travis (stravis2@illinois.edu)
MFA in Studio: Deke Weaver (dekew@illinois.edu) **and** Conrad Bakker (cbakker@illinois.edu)
MFA in Photography: Luke Batten (lbatten@illinois.edu)
MFA in Industrial Design: David Weightman (diw@illinois.edu)
MFA in Graphic Design: Molly Briggs (mbriggs@illinois.edu) **and** Angelica Sibrian (asibrian@illinois.edu)
MFA in Design for Responsible Innovation: Molly Briggs (mbriggs@illinois.edu) **and** Angelica Sibrian (asibrian@illinois.edu)
MFA in Crafts: Billie Theide (theide@illinois.edu)
admissions: Ellen de Waard (edewaard@illinois.edu)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
school website: School of Art + Design (https://art.illinois.edu/)
school faculty: Art + Design Faculty (https://art.illinois.edu/index.php/people/faculty-staff/)
college website: College of Fine & Applied Arts (https://faa.illinois.edu/)
department office: 138 Art and Design Building, 408 East Peabody Drive, Champaign, IL 61820
phone: (217) 333-0642

The degree of Master of Fine Arts in Art and Design is designed to prepare qualified individuals for distinctive achievement in the professional area of their choice. Fields of concentration include Graphic Design, Design for Responsible Innovation, Industrial Design, Photography, Metal, Ceramics, and an interdisciplinary Studio which includes concentrations in Painting, Sculpture, and specialization in New Media. A minimum of 64 hours of graduate credit is required for the M.F.A. degree. Individual studio space and specialized resources essential to the acquisition of a high-quality professional education are available to students in all areas of study. The Graphic Design, Photography, Metal, Ceramics, and interdisciplinary Studio which includes Painting, Sculpture, and New Media programs require a graduation exhibition of creative work and a written thesis approved by a thesis committee for deposit in the School of Art and Design's graduate office.

The Industrial Design and Design for Responsible Innovation programs require a graduation exhibition, a written thesis approved by a thesis committee and a thesis deposit in the Graduate College Thesis Office. Admission for all programs is determined by a faculty review of a portfolio of the applicant's creative work, records of previous education and experience, letters of recommendation, and other significant achievements that may be viewed as predictors for success in the program.

Graduate Degree Programs in Art & Design

Art & Design, MFA (p. 585)
concentrations:
Crafts (p. 586), Design for Responsible Innovation (p. 587), Graphic Design (p. 588), Industrial Design (p. 590), Metals (p. 591), Painting (p. 592), Photography (p. 593), Printmaking (p. 594), Sculpture (p. 595)
specialization: New Media
Art Education, EdM (p. 597)
Art Education, MA (p. 598)
Art Education, PhD (p. 599)
Art History, MA (p. 601)
Art History, PhD (p. 602)
Art History Minor (p. 1125)

Admission

Applications are considered for Fall Semester admissions only. The Art History Program requires Graduate Record Examination (GRE) scores. International applicants or applicants who are not native English speakers must present a recent TOEFL score of at least 590 on the paper-based version, 250 score on the Computer-based exam, and a score of 96 on IBT exam. Applications are not currently being accepted for the concentration in Printmaking.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience for master and doctoral students.

Facilities and Resources

Resources for graduate students in art and design include the Krannert Art Museum's excellent permanent collections and changing exhibitions; the Ricker Library of Art and Architecture, one of the largest art and architecture libraries in the nation; the Krannert Center for the Performing Arts; School of Art and Design facilities, which include extensive computer laboratories, digital photography and video editing equipment, wireless networking, ink-printing facilities, ceramic, woodworking, and metal shops, rapid prototyping and laser cutting, black/white and color darkrooms, shooting studios, and a wide selection of production and presentation equipment via reservation and checkout facility. A variety of lectures, symposia, musical programs, dramatic productions, and other cultural events associated with a large and progressive university complement the Art and Design Facilities.

Financial Aid

Fellowships, assistantships, and tuition and service fee waivers are awarded each year on a competitive basis, with consideration given to the applicant's grade point average and, in the case of applicants for the M.F.A. programs, quality of creative work.

Art & Design: Crafts, MFA

for the degree of Master of Fine Arts in Art and Design Crafts Concentration

school director: Alan Mette
associate director & director of graduate studies: Laurie Hogin
graduate studies advisors:
MA; PhD in Art History: David O'Brien (obrien1@illinois.edu)
MA; EdM; PhD in Art Education: Sarah Travis (stravis2@illinois.edu)
MFA in Studio: Deke Weaver (dekew@illinois.edu) **and** Conrad Bakker (cbakker@illinois.edu)
MFA in Photography: Luke Batten (lbatten@illinois.edu)
MFA in Industrial Design: David Weightman (diw@illinois.edu)
MFA in Graphic Design: Molly Briggs (mbriggs@illinois.edu) **and** Angelica Sibrian (asibrian@illinois.edu)
MFA in Design for Responsible Innovation: Molly Briggs (mbriggs@illinois.edu) **and** Angelica Sibrian (asibrian@illinois.edu)
MFA in Crafts: Billie Theide (theide@illinois.edu)
admissions: Ellen de Waard (edewaard@illinois.edu)

overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
school website: School of Art + Design (https://art.illinois.edu/)
school faculty: Art + Design Faculty (https://art.illinois.edu/index.php/people/faculty-staff/)
college website: College of Fine & Applied Arts (https://faa.illinois.edu/)
department office: 138 Art and Design Building, 408 East Peabody Drive, Champaign, IL 61820
phone: (217) 333-0642

Graduate Degree Programs in Art & Design

Art & Design, MFA (p. 585)
concentrations:
Crafts (p. 586), Design for Responsible Innovation (p. 587), Graphic Design (p. 588), Industrial Design (p. 590), Metals (p. 591), Painting (p. 592), Photography (p. 593), Printmaking (p. 594), Sculpture (p. 595)
specialization: New Media
Art Education, EdM (p. 597)
Art Education, MA (p. 598)
Art Education, PhD (p. 599)
Art History, MA (p. 601)
Art History, PhD (p. 602)
Art History Minor (p. 1125)

Admission

Applications are considered for Fall Semester admissions only. The Art History Program requires Graduate Record Examination (GRE) scores. International applicants or applicants who are not native English speakers must present a recent TOEFL score of at least 590 on the paper-based version, 250 score on the Computer-based exam, and a score of 96 on IBT exam. Applications are not currently being accepted for the concentration in Printmaking.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience for master and doctoral students.

Facilities and Resources

Resources for graduate students in art and design include the Krannert Art Museum's excellent permanent collections and changing exhibitions; the Ricker Library of Art and Architecture, one of the largest art and architecture libraries in the nation; the Krannert Center for the Performing Arts; School of Art and Design facilities, which include extensive computer laboratories, digital photography and video editing equipment, wireless networking, ink-printing facilities, ceramic, woodworking, and metal shops, rapid prototyping and laser cutting, black/white and color darkrooms, shooting studios, and a wide selection of production and presentation equipment via reservation and checkout facility. A variety of lectures, symposia, musical programs, dramatic productions, and other cultural events associated with a large and progressive university complement the Art and Design Facilities.

Financial Aid

Fellowships, assistantships, and tuition and service fee waivers are awarded each year on a competitive basis, with consideration given to the applicant's grade point average and, in the case of applicants for the M.F.A. programs, quality of creative work.

for the degree of Master of Fine Arts in Art and Design Crafts Concentration

All Programs except Industrial Design

Code	Title	Hours
Research/Project Hours (min/max applied toward degree) (2 min):		2
Electives		62
Total Hours		64

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
A concentration is not required in the case of students in the New Media specialization.	
Seminar, enrollment varies by program	8 min
Minimum 500-level Hours Required Overall	12
Minimum GPA	2.75

Master of Fine Arts in Art and Design, concentration in Industrial Design (http://catalog.illinois.edu/graduate/graduate-majors/art-design/#concentrationstext)

Learning Outcomes: Crafts, MFA

Learning Outcomes for the degree of Master of Fine Arts in Art and Design Crafts Concentration

1. the ability to conceive of, design, problem solve, execute, analyze, and critique complex and conceptually challenging utilitarian and non-utilitarian objects;
2. the ability to employ and demonstrate complex technical competencies in the making of jewelry, hollowware, and objects using traditional and new approaches in a wide variety of materials;
3. the ability to demonstrate a thorough and comprehensive knowledge of historical and contemporary metalwork practice;
4. the ability to recognize and use complex and comprehensive jewelry design and metalworking terminology;
5. the ability to apply complex elements and principles of two and three-dimensional design to the making of jewelry, hollowware, and objects;
6. the ability to create complex original and conceptually challenging utilitarian and non-utilitarian objects;
7. the ability to apply complex critical thinking strategies when analyzing and writing about ideas and objects;
8. the ability to demonstrate a high level of perceptual awareness;
9. the ability to demonstrate a high level of confidence in and strategies toward individual creativity;
10. the ability to demonstrate a comprehensive knowledge of safe and effective lab process.

Art & Design: Design for Responsible Innovation, MFA

for the degree of Master of Fine Arts in Art and Design, Design for Responsible Innovation Concentration

school director: Alan Mette
associate director & director of graduate studies: Laurie Hogin
graduate studies advisors:
MA; PhD in Art History: David O'Brien (obrien1@illinois.edu)
MA; EdM; PhD in Art Education: Sarah Travis (stravis2@illinois.edu)
MFA in Studio: Deke Weaver (dekew@illinois.edu) **and** Conrad Bakker (cbakker@illinois.edu)
MFA in Photography: Luke Batten (lbatten@illinois.edu)
MFA in Industrial Design: David Weightman (diw@illinois.edu)
MFA in Graphic Design: Molly Briggs (mbriggs@illinois.edu) **and** Angelica Sibrian (asibrian@illinois.edu)
MFA in Design for Responsible Innovation: Molly Briggs (mbriggs@illinois.edu) **and** Angelica Sibrian (asibrian@illinois.edu)
MFA in Crafts: Billie Theide (theide@illinois.edu)
admissions: Ellen de Waard (edewaard@illinois.edu)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
school website: School of Art + Design (https://art.illinois.edu/)
school faculty: Art + Design Faculty (https://art.illinois.edu/index.php/people/faculty-staff/)
college website: College of Fine & Applied Arts (https://faa.illinois.edu/)
department office: 138 Art and Design Building, 408 East Peabody Drive, Champaign, IL 61820
phone: (217) 333-0642

The University of Illinois offers an MFA in Design for Responsible Innovation that focuses on interdisciplinary making for research and practice. This program prepares students to contribute to the field of design by entering into practice, academia, or both. Students can explore responsible futures through research in traditional print media and emergent technologies including, but not limited to, data visualization, digital interaction, information design, systems thinking, and visual narrative.
The degree offers these specialized tracks of study:

 # Sustainable and regenerative design
 # Urban sociology and critical race design
 # Visual and cultural studies
 # Student-proposed applied research in responsible innovation, social impact, and engagement

Graduate Degree Programs in Art & Design

Art & Design, MFA (p. 585)
concentrations:
Crafts (p. 586), Design for Responsible Innovation (p. 587), Graphic Design (p. 588), Industrial Design (p. 590), Metals (p. 591), Painting (p. 592), Photography (p. 593), Printmaking (p. 594), Sculpture (p. 595)
specialization: New Media
Art Education, EdM (p. 597)
Art Education, MA (p. 598)
Art Education, PhD (p. 599)
Art History, MA (p. 601)
Art History, PhD (p. 602)
Art History Minor (p. 1125)

Admission

Applications are considered for Fall Semester admissions only. The Art History Program requires Graduate Record Examination (GRE) scores. International applicants or applicants who are not native English speakers must present a recent TOEFL score of at least 590 on the paper-based version, 250 score on the Computer-based exam, and a score of 96 on IBT exam. Applications are not currently being accepted for the concentration in Printmaking.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience for master and doctoral students.

Facilities and Resources

Resources for graduate students in art and design include the Krannert Art Museum's excellent permanent collections and changing exhibitions; the Ricker Library of Art and Architecture, one of the largest art and architecture libraries in the nation; the Krannert Center for the Performing Arts; School of Art and Design facilities, which include extensive computer laboratories, digital photography and video editing equipment, wireless networking, ink-printing facilities, ceramic, woodworking, and metal shops, rapid prototyping and laser cutting, black/white and color darkrooms, shooting studios, and a wide selection of production and presentation equipment via reservation and checkout facility. A variety of lectures, symposia, musical programs, dramatic productions, and other cultural events associated with a large and progressive university complement the Art and Design Facilities.

Financial Aid

Fellowships, assistantships, and tuition and service fee waivers are awarded each year on a competitive basis, with consideration given to the applicant's grade point average and, in the case of applicants for the M.F.A. programs, quality of creative work.

for the degree of Master of Fine Arts in Art and Design Design for Responsible Innovation Concentration

Code	Title	Hours
ARTD 451	Ethics of a Designer in a Global Economy	4
ARTD 551	Design Research Impact	4
ARTD 570	Design Research Methodology	4
ARTD 595	MFA Design for Responsible Innovation Studio	16
ARTD 599	Thesis	8
Electives		16
Elective Courses in the College of Fine and Applied Arts		12
Total Hours		64

Other Requirements

Requirement	Description
Minimum 500-level Hours Required Overall	32
Minimum GPA	2.75

Art & Design: Graphic Design, MFA

for the degree of Master of Fine Arts in Art and Design Graphic Design Concentration

No Longer Accepting Applications Spring 2021 - see Design for Responsible Innovation (p. 587)

school director: Alan Mette
associate director & director of graduate studies: Laurie Hogin
graduate studies advisors:
MA; PhD in Art History: David O'Brien (obrien1@illinois.edu)
MA; EdM; PhD in Art Education: Sarah Travis (stravis2@illinois.edu)
MFA in Studio: Deke Weaver (dekew@illinois.edu) **and** Conrad Bakker (cbakker@illinois.edu)
MFA in Photography: Luke Batten (lbatten@illinois.edu)
MFA in Industrial Design: David Weightman (diw@illinois.edu)
MFA in Graphic Design: Molly Briggs (mbriggs@illinois.edu) **and** Angelica Sibrian (asibrian@illinois.edu)
MFA in Design for Responsible Innovation: Molly Briggs (mbriggs@illinois.edu) **and** Angelica Sibrian (asibrian@illinois.edu)
MFA in Crafts: Billie Theide (theide@illinois.edu)
admissions: Ellen de Waard (edewaard@illinois.edu)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
school website: School of Art + Design (https://art.illinois.edu/)
school faculty: Art + Design Faculty (https://art.illinois.edu/index.php/people/faculty-staff/)
college website: College of Fine & Applied Arts (https://faa.illinois.edu/)
department office: 138 Art and Design Building, 408 East Peabody Drive, Champaign, IL 61820
phone: (217) 333-0642

Graduate Degree Programs in Art & Design

Art & Design, MFA (p. 585)
concentrations:
Crafts (p. 586), Design for Responsible Innovation (p. 587), Graphic Design (p. 588), Industrial Design (p. 590), Metals (p. 591), Painting (p. 592), Photography (p. 593), Printmaking (p. 594), Sculpture (p. 595)
specialization: New Media
Art Education, EdM (p. 597)
Art Education, MA (p. 598)
Art Education, PhD (p. 599)
Art History, MA (p. 601)
Art History, PhD (p. 602)
Art History Minor (p. 1125)

Admission

Applications are considered for Fall Semester admissions only. The Art History Program requires Graduate Record Examination (GRE) scores. International applicants or applicants who are not native English speakers must present a recent TOEFL score of at least 590 on the paper-based version, 250 score on the Computer-based exam, and a score of 96 on IBT exam. Applications are not currently being accepted for the concentration in Printmaking.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience for master and doctoral students.

Facilities and Resources

Resources for graduate students in art and design include the Krannert Art Museum's excellent permanent collections and changing exhibitions; the Ricker Library of Art and Architecture, one of the largest art and architecture libraries in the nation; the Krannert Center for the Performing Arts; School of Art and Design facilities, which include extensive computer laboratories, digital photography and video editing equipment, wireless networking, ink-printing facilities, ceramic, woodworking, and metal shops, rapid prototyping and laser cutting, black/white and color darkrooms, shooting studios, and a wide selection of production and presentation equipment via reservation and checkout facility. A variety of lectures, symposia, musical programs, dramatic productions, and other cultural events associated with a large and progressive university complement the Art and Design Facilities.

Financial Aid

Fellowships, assistantships, and tuition and service fee waivers are awarded each year on a competitive basis, with consideration given to the applicant's grade point average and, in the case of applicants for the M.F.A. programs, quality of creative work.

for the degree of Master of Fine Arts in Art and Design Graphic Design Concentration

Code	Title	Hours
Research/Project Hours (min/max applied toward degree) (2 min):		2
Electives		62
Total Hours		64

Other Requirements

Requirement	Description
Other requirements may overlap	
A concentration is not required in the case of students in the New Media specialization.	
Seminar, enrollment varies by program	8 min
Minimum 500-level Hours Required Overall	12
Minimum GPA	2.75

Learning Outcomes: Graphic Design, MFA

Learning Outcomes for the degree of Master of Fine Arts in Art and Design Graphic Design Concentration

1. Demonstrate familiarity with the design research literature relevant to their topic
2. Create prototypes for research purposes
3. Explain the different epistemological modes of knowledge production
4. Select research methods appropriate to the thesis topic

Art & Design: Industrial Design, MFA

for the degree of Master of Fine Arts in Art and Design, Industrial Design Concentration

school director: Alan Mette
associate director & director of graduate studies: Laurie Hogin
graduate studies advisors:
MA; PhD in Art History: David O'Brien (obrien1@illinois.edu)
MA; EdM; PhD in Art Education: Sarah Travis (stravis2@illinois.edu)
MFA in Studio: Deke Weaver (dekew@illinois.edu) **and** Conrad Bakker (cbakker@illinois.edu)
MFA in Photography: Luke Batten (lbatten@illinois.edu)
MFA in Industrial Design: David Weightman (diw@illinois.edu)
MFA in Graphic Design: Molly Briggs (mbriggs@illinois.edu) **and** Angelica Sibrian (asibrian@illinois.edu)
MFA in Design for Responsible Innovation: Molly Briggs (mbriggs@illinois.edu) **and** Angelica Sibrian (asibrian@illinois.edu)
MFA in Crafts: Billie Theide (theide@illinois.edu)
admissions: Ellen de Waard (edewaard@illinois.edu)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
school website: School of Art + Design (https://art.illinois.edu/)
program website: program website link
school faculty: Art + Design Faculty (https://art.illinois.edu/index.php/people/faculty-staff/)
college website: College of Fine & Applied Arts (https://faa.illinois.edu/)
department office: 138 Art and Design Building, 408 East Peabody Drive, Champaign, IL 61820
phone: (217) 333-0642

Graduate Degree Programs in Art & Design

Art & Design, MFA (p. 585)
concentrations:
Crafts (p. 586), Design for Responsible Innovation (p. 587), Graphic Design (p. 588), Industrial Design (p. 590), Metals (p. 591), Painting (p. 592), Photography (p. 593), Printmaking (p. 594), Sculpture (p. 595)
specialization: New Media
Art Education, EdM (p. 597)
Art Education, MA (p. 598)
Art Education, PhD (p. 599)
Art History, MA (p. 601)
Art History, PhD (p. 602)
Art History Minor (p. 1125)

Admission

Applications are considered for Fall Semester admissions only. The Art History Program requires Graduate Record Examination (GRE) scores. International applicants or applicants who are not native English speakers must present a recent TOEFL score of at least 590 on the paper-based version, 250 score on the Computer-based exam, and a score of 96 on IBT exam. Applications are not currently being accepted for the concentration in Printmaking.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience for master and doctoral students.

Facilities and Resources

Resources for graduate students in art and design include the Krannert Art Museum's excellent permanent collections and changing exhibitions; the Ricker Library of Art and Architecture, one of the largest art and architecture libraries in the nation; the Krannert Center for the Performing Arts; School of Art and Design facilities, which include extensive computer laboratories, digital photography and video editing equipment, wireless networking, ink-printing facilities, ceramic, woodworking, and metal shops, rapid prototyping and laser cutting, black/white and color darkrooms, shooting studios, and a wide selection of production and presentation equipment via reservation and checkout facility. A variety of lectures, symposia, musical programs, dramatic productions, and other cultural events associated with a large and progressive university complement the Art and Design Facilities.

Financial Aid

Fellowships, assistantships, and tuition and service fee waivers are awarded each year on a competitive basis, with consideration given to the applicant's grade point average and, in the case of applicants for the M.F.A. programs, quality of creative work.

for the degree of Master of Fine Arts in Art and Design Industrial Design Concentration

For additional details and requirements refer to the department's graduate studies requirements and the Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Code	Title	Hours
Electives		62
ARTD 599	Thesis (min applied toward degree)	2
Total Hours		64

Other Requirements

Requirement	Description
Other requirements may overlap	
Seminar, enrollment varies by program	8 min
Minimum 500-level Hours Required Overall	12
Minimum GPA	2.75

Learning Outcomes: Industrial Design, MFA

Learning Outcomes for the degree of Master of Fine Arts in Art and Design Industrial Design Concentration

1. **Research and inquiry:** Use appropriate research and experimental methods to access existing data sources, to generate new data and as a basis for defining and solving design problems
2. **Creative synthesis:** Use design thinking and appropriate sketching, modeling, prototyping and making strategies to produce creative

design solutions which take account of the needs of users, audience, market, and producers as required.

3. **Production:** Select and use appropriate processes for design, production, and manufacture, with an understanding of the potential of new technologies and the demands of sustainability
4. **Contextualization:** To recognize the social responsibility of the profession and to understand the multiple contexts of design practice, including the historical, professional, cultural, theoretical, environmental and technological.
5. **Communication:** Demonstrate appropriate forms of communication during and on completion of the design process to elicit information, to explain, to debate and persuade, adapting to audience and situations as required
6. **Organization:** Plan and implement actions, identifying targets and organizing resources; utilize project management skills with an understanding of developing product timelines. To effectively collaborate with others, using team building and team working skills.
7. **Learning:** Carry out independent learning for academic study, lifelong learning, and professional development. To reflect and independently evaluate your own practice, with the aim of improvement
8. **Teaching:** Demonstrate the ability to employ relevant pedagogical methods for the preparation and delivery of content for college-level teaching in formal and informal situations with reflection on the teaching/learning paradigm.

Art & Design: Metals, MFA

for the degree of Master of Fine Arts in Art and Design Metals Concentration

school director: Alan Mette
associate director & director of graduate studies: Laurie Hogin
graduate studies advisors:

MA; PhD in Art History: David O'Brien (obrien1@illinois.edu)
MA; EdM; PhD in Art Education: Sarah Travis (stravis2@illinois.edu)
MFA in Studio: Deke Weaver (dekew@illinois.edu) **and** Conrad Bakker (cbakker@illinois.edu)
MFA in Photography: Luke Batten (lbatten@illinois.edu)
MFA in Industrial Design: David Weightman (diw@illinois.edu)
MFA in Graphic Design: Molly Briggs (mbriggs@illinois.edu) **and** Angelica Sibrian (asibrian@illinois.edu)
MFA in Design for Responsible Innovation: Molly Briggs (mbriggs@illinois.edu) **and** Angelica Sibrian (asibrian@illinois.edu)
MFA in Crafts: Billie Theide (theide@illinois.edu)

admissions: Ellen de Waard (edewaard@illinois.edu)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
school website: School of Art + Design (https://art.illinois.edu/)
school faculty: Art + Design Faculty (https://art.illinois.edu/index.php/people/faculty-staff/)
college website: College of Fine & Applied Arts (https://faa.illinois.edu/)
department office: 138 Art and Design Building, 408 East Peabody Drive, Champaign, IL 61820
phone: (217) 333-0642

Graduate Degree Programs in Art & Design

Art & Design, MFA (p. 585)
concentrations:
Crafts (p. 586), Design for Responsible Innovation (p. 587), Graphic Design (p. 588), Industrial Design (p. 590), Metals (p. 591), Painting (p. 592), Photography (p. 593), Printmaking (p. 594), Sculpture (p. 595)
specialization: New Media
Art Education, EdM (p. 597)
Art Education, MA (p. 598)
Art Education, PhD (p. 599)
Art History, MA (p. 601)
Art History, PhD (p. 602)
Art History Minor (p. 1125)

Admission

Applications are considered for Fall Semester admissions only. The Art History Program requires Graduate Record Examination (GRE) scores. International applicants or applicants who are not native English speakers must present a recent TOEFL score of at least 590 on the paper-based version, 250 score on the Computer-based exam, and a score of 96 on IBT exam. Applications are not currently being accepted for the concentration in Printmaking.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience for master and doctoral students.

Facilities and Resources

Resources for graduate students in art and design include the Krannert Art Museum's excellent permanent collections and changing exhibitions; the Ricker Library of Art and Architecture, one of the largest art and architecture libraries in the nation; the Krannert Center for the Performing Arts; School of Art and Design facilities, which include extensive computer laboratories, digital photography and video editing equipment, wireless networking, ink-printing facilities, ceramic, woodworking, and metal shops, rapid prototyping and laser cutting, black/white and color darkrooms, shooting studios, and a wide selection of production and presentation equipment via reservation and checkout facility. A variety of lectures, symposia, musical programs, dramatic productions, and other cultural events associated with a large and progressive university complement the Art and Design Facilities.

Financial Aid

Fellowships, assistantships, and tuition and service fee waivers are awarded each year on a competitive basis, with consideration given to the applicant's grade point average and, in the case of applicants for the M.F.A. programs, quality of creative work.

for the degree of Master of Fine Arts in Art and Design Metals Concentration

All Programs except Industrial Design

Code	Title	Hours
Research/Project Hours (min/max applied toward degree) (2 min):		2

Electives	62
Total Hours	64

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
A concentration is not required in the case of students in the New Media specialization.	
Seminar, enrollment varies by program	8 min
Minimum 500-level Hours Required Overall	12
Minimum GPA	2.75

Master of Fine Arts in Art and Design, concentration in Industrial Design (http://catalog.illinois.edu/graduate/graduate-majors/art-design/#concentrationstext)

Learning Outcomes: Metals, MFA

Learning Outcomes for the degree of Master of Fine Arts in Art and Design Metals Concentration

1. Demonstrate a practical and theoretical understanding of contemporary art and related practices.
2. Articulate studio and conceptual concerns orally and in writing that makes critical connections between individual works and practices and the larger contexts that inform them.
3. Produce and exhibit a comprehensive body of artwork that demonstrates conceptual rigor and appropriate technical skill.
4. Demonstrate the intention, motivation and skills required to pursue and sustain a career as an artist.
5. Acquire practical pedagogical and technical skills necessary for employment in the field.

Art & Design: Painting, MFA

for the degree of Master of Fine Arts in Art and Design Painting Concentration

school director: Alan Mette
associate director & director of graduate studies: Laurie Hogin
graduate studies advisors:
MA; PhD in Art History: David O'Brien (obrien1@illinois.edu)
MA; EdM; PhD in Art Education: Sarah Travis (stravis2@illinois.edu)
MFA in Studio: Deke Weaver (dekew@illinois.edu) **and** Conrad Bakker (cbakker@illinois.edu)
MFA in Photography: Luke Batten (lbatten@illinois.edu)
MFA in Industrial Design: David Weightman (diw@illinois.edu)
MFA in Graphic Design: Molly Briggs (mbriggs@illinois.edu) **and** Angelica Sibrian (asibrian@illinois.edu)
MFA in Design for Responsible Innovation: Molly Briggs (mbriggs@illinois.edu) **and** Angelica Sibrian (asibrian@illinois.edu)
MFA in Crafts: Billie Theide (theide@illinois.edu)
admissions: Ellen de Waard (edewaard@illinois.edu)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
school website: School of Art + Design (https://art.illinois.edu/)
school faculty: Art + Design Faculty (https://art.illinois.edu/index.php/people/faculty-staff/)
college website: College of Fine & Applied Arts (https://faa.illinois.edu/)
department office: 138 Art and Design Building, 408 East Peabody Drive, Champaign, IL 61820
phone: (217) 333-0642

Graduate Degree Programs in Art & Design

Art & Design, MFA (p. 585)
concentrations:
Crafts (p. 586), Design for Responsible Innovation (p. 587), Graphic Design (p. 588), Industrial Design (p. 590), Metals (p. 591), Painting (p. 592), Photography (p. 593), Printmaking (p. 594), Sculpture (p. 595)
specialization: New Media
Art Education, EdM (p. 597)
Art Education, MA (p. 598)
Art Education, PhD (p. 599)
Art History, MA (p. 601)
Art History, PhD (p. 602)
Art History Minor (p. 1125)

Admission

Applications are considered for Fall Semester admissions only. The Art History Program requires Graduate Record Examination (GRE) scores. International applicants or applicants who are not native English speakers must present a recent TOEFL score of at least 590 on the paper-based version, 250 score on the Computer-based exam, and a score of 96 on IBT exam. Applications are not currently being accepted for the concentration in Printmaking.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience for master and doctoral students.

Facilities and Resources

Resources for graduate students in art and design include the Krannert Art Museum's excellent permanent collections and changing exhibitions; the Ricker Library of Art and Architecture, one of the largest art and architecture libraries in the nation; the Krannert Center for the Performing Arts; School of Art and Design facilities, which include extensive computer laboratories, digital photography and video editing equipment, wireless networking, ink-printing facilities, ceramic, woodworking, and metal shops, rapid prototyping and laser cutting, black/white and color darkrooms, shooting studios, and a wide selection of production and presentation equipment via reservation and checkout facility. A variety of lectures, symposia, musical programs, dramatic productions, and other cultural events associated with a large and progressive university complement the Art and Design Facilities.

Financial Aid

Fellowships, assistantships, and tuition and service fee waivers are awarded each year on a competitive basis, with consideration given to the applicant's grade point average and, in the case of applicants for the M.F.A. programs, quality of creative work.

for the degree of Master of Fine Arts in Art and Design Painting Concentration

All Programs except Industrial Design

Code	Title	Hours
Research/Project Hours (min/max applied toward degree) (2 min):		2
Electives		62
Total Hours		64

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
A concentration is not required in the case of students in the New Media specialization.	
Seminar, enrollment varies by program	8 min
Minimum 500-level Hours Required Overall	12
Minimum GPA	2.75

Master of Fine Arts in Art and Design, concentration in Industrial Design (http://catalog.illinois.edu/graduate/graduate-majors/art-design/#concentrationstext)

Learning Outcomes: Painting, MFA

Learning Outcomes for the degree of Master of Fine Arts in Art and Design Painting Concentration

1. Demonstrate a practical and theoretical understanding of contemporary art and related practices.
2. Articulate studio and conceptual concerns orally and in writing that makes critical connections between individual works and practices and the larger contexts that inform them.
3. Produce and exhibit a comprehensive body of artwork that demonstrates conceptual rigor and appropriate technical skill.
4. Demonstrate the intention, motivation and skills required to pursue and sustain a career as an artist.
5. Acquire practical pedagogical and technical skills necessary for employment in the field.

Art & Design: Photography, MFA

for the degree of Master of Fine Arts in Art and Design Photography Concentration

school director: Alan Mette
associate director & director of graduate studies: Laurie Hogin
graduate studies advisors:
MA; PhD in Art History: David O'Brien (obrien1@illinois.edu)
MA; EdM; PhD in Art Education: Sarah Travis (stravis2@illinois.edu)
MFA in Studio: Deke Weaver (dekew@illinois.edu) **and** Conrad Bakker (cbakker@illinois.edu)
MFA in Photography: Luke Batten (lbatten@illinois.edu)
MFA in Industrial Design: David Weightman (diw@illinois.edu)
MFA in Graphic Design: Molly Briggs (mbriggs@illinois.edu) **and** Angelica Sibrian (asibrian@illinois.edu)
MFA in Design for Responsible Innovation: Molly Briggs (mbriggs@illinois.edu) **and** Angelica Sibrian (asibrian@illinois.edu)
MFA in Crafts: Billie Theide (theide@illinois.edu)
admissions: Ellen de Waard (edewaard@illinois.edu)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
school website: School of Art + Design (https://art.illinois.edu/)
school faculty: Art + Design Faculty (https://art.illinois.edu/index.php/people/faculty-staff/)
college website: College of Fine & Applied Arts (https://faa.illinois.edu/)
department office: 138 Art and Design Building, 408 East Peabody Drive, Champaign, IL 61820
phone: (217) 333-0642

Graduate Degree Programs in Art & Design

Art & Design, MFA (p. 585)
concentrations:
Crafts (p. 586), Design for Responsible Innovation (p. 587), Graphic Design (p. 588), Industrial Design (p. 590), Metals (p. 591), Painting (p. 592), Photography (p. 593), Printmaking (p. 594), Sculpture (p. 595)
specialization: New Media
Art Education, EdM (p. 597)
Art Education, MA (p. 598)
Art Education, PhD (p. 599)
Art History, MA (p. 601)
Art History, PhD (p. 602)
Art History Minor (p. 1125)

Admission

Applications are considered for Fall Semester admissions only. The Art History Program requires Graduate Record Examination (GRE)

scores. International applicants or applicants who are not native English speakers must present a recent TOEFL score of at least 590 on the paper-based version, 250 score on the Computer-based exam, and a score of 96 on IBT exam. Applications are not currently being accepted for the concentration in Printmaking.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience for master and doctoral students.

Facilities and Resources

Resources for graduate students in art and design include the Krannert Art Museum's excellent permanent collections and changing exhibitions; the Ricker Library of Art and Architecture, one of the largest art and architecture libraries in the nation; the Krannert Center for the Performing Arts; School of Art and Design facilities, which include extensive computer laboratories, digital photography and video editing equipment, wireless networking, ink-printing facilities, ceramic, woodworking, and metal shops, rapid prototyping and laser cutting, black/white and color darkrooms, shooting studios, and a wide selection of production and presentation equipment via reservation and checkout facility. A variety of lectures, symposia, musical programs, dramatic productions, and other cultural events associated with a large and progressive university complement the Art and Design Facilities.

Financial Aid

Fellowships, assistantships, and tuition and service fee waivers are awarded each year on a competitive basis, with consideration given to the applicant's grade point average and, in the case of applicants for the M.F.A. programs, quality of creative work.

for the degree of Master of Fine Arts in Art and Design Photography Concentration

All Programs except Industrial Design

Code	Title	Hours
Research/Project Hours (min/max applied toward degree) (2 min):		2
Electives		62
Total Hours		64

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
A concentration is not required in the case of students in the New Media specialization.	
Seminar, enrollment varies by program	8 min
Minimum 500-level Hours Required Overall	12
Minimum GPA	2.75

Master of Fine Arts in Art and Design, concentration in Industrial Design (http://catalog.illinois.edu/graduate/graduate-majors/art-design/#concentrationstext)

Learning Outcomes: Photography, MFA

Learning Outcomes for the degree of Master of Fine Arts in Art and Design Photography Concentration

1. Demonstrate a practical and theoretical understanding of contemporary art in the field of photography.
2. Articulate image making concerns orally and in writing that makes critical connections between individual works and practices and the larger contexts that inform them.
3. Produce and exhibit a comprehensive body of artwork that demonstrates conceptual rigor and appropriate technical skill.
4. Demonstrate the intention, motivation and skills required to pursue and sustain a career as an artist, professional photographer or art director.
5. Acquire practical pedagogical and technical skills necessary for employment in a creative field.

Art & Design: Printmaking, MFA

for the degree of Master of Fine Arts in Art and Design Printmaking Concentration

school director: Alan Mette
associate director & director of graduate studies: Laurie Hogin
graduate studies advisors:
MA; PhD in Art History: David O'Brien (obrien1@illinois.edu)
MA; EdM; PhD in Art Education: Sarah Travis (stravis2@illinois.edu)
MFA in Studio: Deke Weaver (dekew@illinois.edu) **and** Conrad Bakker (cbakker@illinois.edu)
MFA in Photography: Luke Batten (lbatten@illinois.edu)
MFA in Industrial Design: David Weightman (diw@illinois.edu)
MFA in Graphic Design: Molly Briggs (mbriggs@illinois.edu) **and** Angelica Sibrian (asibrian@illinois.edu)
MFA in Design for Responsible Innovation: Molly Briggs (mbriggs@illinois.edu) **and** Angelica Sibrian (asibrian@illinois.edu)
MFA in Crafts: Billie Theide (theide@illinois.edu)
admissions: Ellen de Waard (edewaard@illinois.edu)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
school website: School of Art + Design (https://art.illinois.edu/)
school faculty: Art + Design Faculty (https://art.illinois.edu/index.php/people/faculty-staff/)
college website: College of Fine & Applied Arts (https://faa.illinois.edu/)
department office: 138 Art and Design Building, 408 East Peabody Drive, Champaign, IL 61820
phone: (217) 333-0642

Graduate Degree Programs in Art & Design

Art & Design, MFA (p. 585)
concentrations:
Crafts (p. 586), Design for Responsible Innovation (p. 587), Graphic Design (p. 588), Industrial Design (p. 590), Metals (p. 591), Painting (p. 592), Photography (p. 593), Printmaking (p. 594), Sculpture (p. 595)
specialization: New Media
Art Education, EdM (p. 597)
Art Education, MA (p. 598)
Art Education, PhD (p. 599)
Art History, MA (p. 601)
Art History, PhD (p. 602)
Art History Minor (p. 1125)

Admission

Applications are considered for Fall Semester admissions only. The Art History Program requires Graduate Record Examination (GRE) scores. International applicants or applicants who are not native English speakers must present a recent TOEFL score of at least 590 on the paper-based version, 250 score on the Computer-based exam, and a score of 96 on IBT exam. Applications are not currently being accepted for the concentration in Printmaking.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience for master and doctoral students.

Facilities and Resources

Resources for graduate students in art and design include the Krannert Art Museum's excellent permanent collections and changing exhibitions; the Ricker Library of Art and Architecture, one of the largest art and architecture libraries in the nation; the Krannert Center for the Performing Arts; School of Art and Design facilities, which include extensive computer laboratories, digital photography and video editing equipment, wireless networking, ink-printing facilities, ceramic, woodworking, and metal shops, rapid prototyping and laser cutting, black/white and color darkrooms, shooting studios, and a wide selection of production and presentation equipment via reservation and checkout facility. A variety of lectures, symposia, musical programs, dramatic productions, and other cultural events associated with a large and progressive university complement the Art and Design Facilities.

Financial Aid

Fellowships, assistantships, and tuition and service fee waivers are awarded each year on a competitive basis, with consideration given to the applicant's grade point average and, in the case of applicants for the M.F.A. programs, quality of creative work.

for the degree of Master of Fine Arts in Art and Design Printmaking Concentration

All Programs except Industrial Design

Code	Title	Hours
Research/Project Hours (min/max applied toward degree) (2 min):		2
Electives		62
Total Hours		64

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
A concentration is not required in the case of students in the New Media specialization.	
Seminar, enrollment varies by program	8 min
Minimum 500-level Hours Required Overall	12
Minimum GPA	2.75

Master of Fine Arts in Art and Design, concentration in Industrial Design (http://catalog.illinois.edu/graduate/graduate-majors/art-design/#concentrationstext)

Learning Outcomes: Printmaking, MFA

Learning Outcomes for the degree of Master of Fine Arts in Art and Design Printmaking Concentration

1. Demonstrate a practical and theoretical understanding of contemporary art and related practices.
2. Articulate studio and conceptual concerns orally and in writing that makes critical connections between individual works and practices and the larger contexts that inform them.
3. Produce and exhibit a comprehensive body of artwork that demonstrates conceptual rigor and appropriate technical skill.
4. Demonstrate the intention, motivation and skills required to pursue and sustain a career as an artist.
5. Acquire practical pedagogical and technical skills necessary for employment in the field.

Art & Design: Sculpture, MFA

for the degree of Master of Fine Arts in Art and Design Sculpture Concentration

school director: Alan Mette
associate director & director of graduate studies: Laurie Hogin
graduate studies advisors:
MA; PhD in Art History: David O'Brien (obrien1@illinois.edu)
MA; EdM; PhD in Art Education: Sarah Travis (stravis2@illinois.edu)
MFA in Studio: Deke Weaver (dekew@illinois.edu) **and** Conrad Bakker (cbakker@illinois.edu)
MFA in Photography: Luke Batten (lbatten@illinois.edu)
MFA in Industrial Design: David Weightman (diw@illinois.edu)
MFA in Graphic Design: Molly Briggs (mbriggs@illinois.edu) **and** Angelica Sibrian (asibrian@illinois.edu)
MFA in Design for Responsible Innovation: Molly Briggs (mbriggs@illinois.edu) **and** Angelica Sibrian (asibrian@illinois.edu)
MFA in Crafts: Billie Theide (theide@illinois.edu)
admissions: Ellen de Waard (edewaard@illinois.edu)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
school website: School of Art + Design (https://art.illinois.edu/)
school faculty: Art + Design Faculty (https://art.illinois.edu/index.php/people/faculty-staff/)
college website: College of Fine & Applied Arts (https://faa.illinois.edu/)
department office: 138 Art and Design Building, 408 East Peabody Drive, Champaign, IL 61820
phone: (217) 333-0642

Graduate Degree Programs in Art & Design

Art & Design, MFA (p. 585)
concentrations:
Crafts (p. 586), Design for Responsible Innovation (p. 587), Graphic Design (p. 588), Industrial Design (p. 590), Metals (p. 591), Painting (p. 592), Photography (p. 593), Printmaking (p. 594), Sculpture (p. 595)
specialization: New Media
Art Education, EdM (p. 597)
Art Education, MA (p. 598)
Art Education, PhD (p. 599)
Art History, MA (p. 601)
Art History, PhD (p. 602)
Art History Minor (p. 1125)

Admission

Applications are considered for Fall Semester admissions only. The Art History Program requires Graduate Record Examination (GRE) scores. International applicants or applicants who are not native English speakers must present a recent TOEFL score of at least 590 on the paper-based version, 250 score on the Computer-based exam, and a score of 96 on IBT exam. Applications are not currently being accepted for the concentration in Printmaking.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience for master and doctoral students.

Facilities and Resources

Resources for graduate students in art and design include the Krannert Art Museum's excellent permanent collections and changing exhibitions; the Ricker Library of Art and Architecture, one of the largest art and architecture libraries in the nation; the Krannert Center for the Performing Arts; School of Art and Design facilities, which include extensive computer laboratories, digital photography and video editing equipment, wireless networking, ink-printing facilities, ceramic, woodworking, and metal shops, rapid prototyping and laser cutting, black/white and color darkrooms, shooting studios, and a wide selection of production and presentation equipment via reservation and checkout facility. A variety of lectures, symposia, musical programs, dramatic productions, and other cultural events associated with a large and progressive university complement the Art and Design Facilities.

Financial Aid

Fellowships, assistantships, and tuition and service fee waivers are awarded each year on a competitive basis, with consideration given to the applicant's grade point average and, in the case of applicants for the M.F.A. programs, quality of creative work.

for the degree of Master of Fine Arts in Art and Design Sculpture Concentration

All Programs except Industrial Design

Code	Title	Hours
Research/Project Hours (min/max applied toward degree) (2 min):		2
Electives		62
Total Hours		64

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
A concentration is not required in the case of students in the New Media specialization.	
Seminar, enrollment varies by program	8 min
Minimum 500-level Hours Required Overall	12
Minimum GPA	2.75

Master of Fine Arts in Art and Design, concentration in Industrial Design (http://catalog.illinois.edu/graduate/graduate-majors/art-design/#concentrationstext)

Learning Outcomes: Sculpture, MFA

Learning Outcomes for the degree of Master of Fine Arts in Art and Design Sculpture Concentration

1. Demonstrate a practical and theoretical understanding of contemporary art and related practices.
2. Articulate studio and conceptual concerns orally and in writing that makes critical connections between individual works and practices and the larger contexts that inform them.

3. Produce and exhibit a comprehensive body of artwork that demonstrates conceptual rigor and appropriate technical skill.
4. Demonstrate the intention, motivation and skills required to pursue and sustain a career as an artist.
5. Acquire practical pedagogical and technical skills necessary for employment in the field.

Art Education, EdM

for the degree of Master of Education in Art Education

school director: Alan Mette
associate director & director of graduate studies: Laurie Hogin
graduate studies advisors:
MA; PhD in Art History: David O'Brien (obrien1@illinois.edu)
MA; EdM; PhD in Art Education: Sarah Travis (stravis2@illinois.edu)
MFA in Studio: Deke Weaver (dekew@illinois.edu) **and** Conrad Bakker (cbakker@illinois.edu)
MFA in Photography: Luke Batten (lbatten@illinois.edu)
MFA in Industrial Design: David Weightman (diw@illinois.edu)
MFA in Graphic Design: Molly Briggs (mbriggs@illinois.edu) **and** Angelica Sibrian (asibrian@illinois.edu)
MFA in Design for Responsible Innovation: Molly Briggs (mbriggs@illinois.edu) **and** Angelica Sibrian (asibrian@illinois.edu)
MFA in Crafts: Billie Theide (theide@illinois.edu)
admissions: Ellen de Waard (edewaard@illinois.edu)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
school website: School of Art + Design (https://art.illinois.edu/)
school faculty: Art + Design Faculty (https://art.illinois.edu/index.php/people/faculty-staff/)
college website: College of Fine & Applied Arts (https://faa.illinois.edu/)
department office: 138 Art and Design Building, 408 East Peabody Drive, Champaign, IL 61820
phone: (217) 333-0642

The program of study leading to the degree of Master of Education (EdM) in Art Education is designed to provide advanced level study for students of two main kinds. It serves as professional development for art teachers and supervisors in the public schools and as preparation for those interested in a variety of careers, such as museum education, arts advocacy or community arts.

In addition to required courses in art education, students may choose electives in studio art, art education or art history, and any other graduate courses offered by the university that complement their studies or professional aspirations. Specific course selection is determined in consultation with the student's advisor. Students may simultaneously study for teaching certification but graduate credit is not usually granted for such study. A thesis is not required for the EdM degree.

Applicants for admission must hold a bachelor's degree in art education or a related field from an accredited institution. Admission is determined by a review of transcripts, letters of recommendation, resume, personal statement, and a writing sample.

Graduate Degree Programs in Art & Design

Art & Design, MFA (p. 585)
concentrations:
Crafts (p. 586), Design for Responsible Innovation (p. 587), Graphic Design (p. 588), Industrial Design (p. 590), Metals (p. 591), Painting (p. 592), Photography (p. 593), Printmaking (p. 594), Sculpture (p. 595)
specialization: New Media
Art Education, EdM (p. 597)
Art Education, MA (p. 598)
Art Education, PhD (p. 599)
Art History, MA (p. 601)
Art History, PhD (p. 602)
Art History Minor (p. 1125)

Admission

Applications are considered for Fall Semester admissions only. The Art History Program requires Graduate Record Examination (GRE) scores. International applicants or applicants who are not native English speakers must present a recent TOEFL score of at least 590 on the paper-based version, 250 score on the Computer-based exam, and a score of 96 on IBT exam. Applications are not currently being accepted for the concentration in Printmaking.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience for master and doctoral students.

Facilities and Resources

Resources for graduate students in art and design include the Krannert Art Museum's excellent permanent collections and changing exhibitions; the Ricker Library of Art and Architecture, one of the largest art and architecture libraries in the nation; the Krannert Center for the Performing Arts; School of Art and Design facilities, which include extensive computer laboratories, digital photography and video editing equipment, wireless networking, ink-printing facilities, ceramic, woodworking, and metal shops, rapid prototyping and laser cutting, black/white and color darkrooms, shooting studios, and a wide selection of production and presentation equipment via reservation and checkout facility. A variety of lectures, symposia, musical programs, dramatic productions, and other cultural events associated with a large and progressive university complement the Art and Design Facilities.

Financial Aid

Fellowships, assistantships, and tuition and service fee waivers are awarded each year on a competitive basis, with consideration given to the applicant's grade point average and, in the case of applicants for the M.F.A. programs, quality of creative work.

for the degree of Master of Education in Art Education

For additional details and requirements refer to the department's graduate studies requirements and the Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Code	Title	Hours
ARTE 501	Issues in Art Education	4
ARTE 502	Curriculum Development in Art	4
ARTE 505	Foundations of Art Education	4

ARTE 591	Independent Graduate Studies	1 to 2
Electives		18+
Total Hours		**32**

Other Requirements

Requirement	Description
Other requirements may overlap	
Candidates must spend at least two semesters or the equivalent in residence.	
Minimum 500-level Hours Required Overall:	12
Certification requirements, if needed	40-44
Minimum GPA:	2.75

Learning Outcomes: Art Education, EdM

Learning Outcomes for the degree of Master of Education in Art Education

The EdM program provides advanced-level study for art educators. The program's objectives are to enable participants to:

1. Become familiar with key debates and concepts in art education
2. Develop the capacity to reflect on and to analyze their own practices in art education
3. Gain a deeper insight of the role of art and visual culture in education and everyday life
4. Develop a critical understanding of both theoretical and practical perspectives on art education and general education
5. Develop the ability to contribute to informed development of policy and practice in arts education and general education

Art Education, MA

for the degree of Master of Arts in Art Education

school director: Alan Mette
associate director & director of graduate studies: Laurie Hogin
graduate studies advisors:
MA; PhD in Art History: David O'Brien (obrien1@illinois.edu)
MA; EdM; PhD in Art Education: Sarah Travis (stravis2@illinois.edu)
MFA in Studio: Deke Weaver (dekew@illinois.edu) **and** Conrad Bakker (cbakker@illinois.edu)
MFA in Photography: Luke Batten (lbatten@illinois.edu)
MFA in Industrial Design: David Weightman (diw@illinois.edu)
MFA in Graphic Design: Molly Briggs (mbriggs@illinois.edu) **and** Angelica Sibrian (asibrian@illinois.edu)
MFA in Design for Responsible Innovation: Molly Briggs (mbriggs@illinois.edu) **and** Angelica Sibrian (asibrian@illinois.edu)
MFA in Crafts: Billie Theide (theide@illinois.edu)
admissions: Ellen de Waard (edewaard@illinois.edu)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
school website: School of Art + Design (https://art.illinois.edu/)
school faculty: Art + Design Faculty (https://art.illinois.edu/index.php/people/faculty-staff/)
college website: College of Fine & Applied Arts (https://faa.illinois.edu/)
department office: 138 Art and Design Building, 408 East Peabody Drive, Champaign, IL 61820
phone: (217) 333-0642

The program of study leading to the degree of Master of Arts (MA) in Art Education is designed to provide advanced level professional study for students who are interested in research in art education. It can serve as preparation for a variety of careers, such as museum education, community arts, arts advocacy, arts policy formation; professional development for art teachers and supervisors in the public schools; and as preparation for the doctoral degree.

In addition to required courses in art education, students can choose electives from studio art, art education and art history, and any other graduate courses offered by the university that complement their studies or professional aspirations. Specific course selection is determined in consultation with the student's adviser. Students may simultaneously study for teaching certification but graduate credit is not usually granted for such study. A thesis is required for the MA degree.

Applicants for admission must hold a bachelor's degree in art education or a related field from an accredited institution. Admission is determined by a review of transcripts, letter of recommendation, resume, personal statement, and a writing sample.

Graduate Degree Programs in Art & Design

Art & Design, MFA (p. 585)
concentrations:
Crafts (p. 586), Design for Responsible Innovation (p. 587), Graphic Design (p. 588), Industrial Design (p. 590), Metals (p. 591), Painting (p. 592), Photography (p. 593), Printmaking (p. 594), Sculpture (p. 595)
specialization: New Media
Art Education, EdM (p. 597)
Art Education, MA (p. 598)
Art Education, PhD (p. 599)
Art History, MA (p. 601)
Art History, PhD (p. 602)
Art History Minor (p. 1125)

Admission

Applications are considered for Fall Semester admissions only. The Art History Program requires Graduate Record Examination (GRE) scores. International applicants or applicants who are not native English speakers must present a recent TOEFL score of at least 590 on the paper-based version, 250 score on the Computer-based exam, and a score of 96 on IBT exam. Applications are not currently being accepted for the concentration in Printmaking.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience for master and doctoral students.

Facilities and Resources

Resources for graduate students in art and design include the Krannert Art Museum's excellent permanent collections and changing exhibitions; the Ricker Library of Art and Architecture, one of the largest art and architecture libraries in the nation; the Krannert Center for the Performing Arts; School of Art and Design facilities, which include extensive computer laboratories, digital photography and video editing equipment, wireless networking, ink-printing facilities, ceramic, woodworking, and metal shops, rapid prototyping and laser cutting, black/white and color darkrooms, shooting studios, and a wide selection of production and presentation equipment via reservation and checkout facility. A variety of lectures, symposia, musical programs, dramatic productions, and other cultural events associated with a large and progressive university complement the Art and Design Facilities.

Financial Aid

Fellowships, assistantships, and tuition and service fee waivers are awarded each year on a competitive basis, with consideration given to the applicant's grade point average and, in the case of applicants for the M.F.A. programs, quality of creative work.

for the degree of Master of Arts in Art Education

For additional details and requirements refer to the department's graduate studies requirements and the Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Code	Title	Hours
ARTE 502	Curriculum Development in Art	4
ARTE 501	Issues in Art Education	4
or ARTE 505	Foundations of Art Education	
ARTE 593	Survey: Qualitative Methodologies	4
ARTE 591	Independent Graduate Studies	2
Electives		14+
Thesis Hours Required—ARTE 599		4
Total Hours		**32**

Other Requirements

Requirement	Description
Other requirements may overlap	
Candidates must spend at least two semesters or the equivalent in residence.	
Minimum 500-level Hours Required Overall:	12
Certification requirements, if needed:	40-44
Minimum GPA:	2.75

Learning Outcomes: Art Education, MA

Learning Outcomes for the degree of Master of Arts in Art Education

The MA program provides advanced-level study for art educators. The program's objectives are to enable participants to:

1. Become familiar with key debates and concepts in art education
2. Develop the capacity to reflect on and to analyze their own practices in art education
3. Gain a deeper insight of the role of art and visual culture in education and everyday life
4. Develop a critical understanding of both theoretical and practical perspectives on art education and general education
5. Develop the ability to contribute to informed development of policy and practice in arts education and general education
6. Preparation for a variety of careers, such as museum education, community arts, arts advocacy, arts policy formation
7. Professional development for art teachers and supervisors in the public schools
8. Preparation for future studies at the doctoral level

Art Education, PhD

for the degree of Doctor of Philosophy in Art Education

school director: Alan Mette
associate director & director of graduate studies: Laurie Hogin
graduate studies advisors:
MA; PhD in Art History: David O'Brien (obrien1@illinois.edu)
MA; EdM; PhD in Art Education: Sarah Travis (stravis2@illinois.edu)
MFA in Studio: Deke Weaver (dekew@illinois.edu) **and** Conrad Bakker (cbakker@illinois.edu)
MFA in Photography: Luke Batten (lbatten@illinois.edu)
MFA in Industrial Design: David Weightman (diw@illinois.edu)
MFA in Graphic Design: Molly Briggs (mbriggs@illinois.edu) **and** Angelica Sibrian (asibrian@illinois.edu)
MFA in Design for Responsible Innovation: Molly Briggs (mbriggs@illinois.edu) **and** Angelica Sibrian (asibrian@illinois.edu)
MFA in Crafts: Billie Theide (theide@illinois.edu)
admissions: Ellen de Waard (edewaard@illinois.edu)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
school website: School of Art + Design (https://art.illinois.edu/)
school faculty: Art + Design Faculty (https://art.illinois.edu/index.php/people/faculty-staff/)
college website: College of Fine & Applied Arts (https://faa.illinois.edu/)
department office: 138 Art and Design Building, 408 East Peabody Drive, Champaign, IL 61820
phone: (217) 333-0642

The PhD program in art education is designed for advanced graduate students who want to pursue scholarly study and research in art education. Doctoral level coursework includes studies in both art education and in relevant disciplines and departments within the university.

In addition to required courses in art education, students may choose electives in studio art, art education or art history, and any other graduate courses offered by the university that complement their studies or professional aspirations. Specific course selection is determined in consultation with the student's advisor. A dissertation is required for the PhD degree.

Applicants for admission must hold a master's degree in art education or a related field from an accredited institution. Admission is determined by review of transcripts, letters of recommendation, resume, personal statement, and a writing sample.

Graduate Degree Programs in Art & Design

Art & Design, MFA (p. 585)
concentrations:
Crafts (p. 586), Design for Responsible Innovation (p. 587), Graphic Design (p. 588), Industrial Design (p. 590), Metals (p. 591), Painting (p. 592), Photography (p. 593), Printmaking (p. 594), Sculpture (p. 595)
specialization: New Media
Art Education, EdM (p. 597)
Art Education, MA (p. 598)
Art Education, PhD (p. 599)
Art History, MA (p. 601)
Art History, PhD (p. 602)

Admission

Applications are considered for Fall Semester admissions only. The Art History Program requires Graduate Record Examination (GRE) scores. International applicants or applicants who are not native English speakers must present a recent TOEFL score of at least 590 on the paper-based version, 250 score on the Computer-based exam, and a score of 96 on IBT exam. Applications are not currently being accepted for the concentration in Printmaking.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience for master and doctoral students.

Facilities and Resources

Resources for graduate students in art and design include the Krannert Art Museum's excellent permanent collections and changing exhibitions; the Ricker Library of Art and Architecture, one of the largest art and architecture libraries in the nation; the Krannert Center for the Performing Arts; School of Art and Design facilities, which include extensive computer laboratories, digital photography and video editing equipment, wireless networking, ink-printing facilities, ceramic, woodworking, and metal shops, rapid prototyping and laser cutting, black/white and color darkrooms, shooting studios, and a wide selection of production and presentation equipment via reservation and checkout facility. A variety of lectures, symposia, musical programs, dramatic productions, and other cultural events associated with a large and progressive university complement the Art and Design Facilities.

Financial Aid

Fellowships, assistantships, and tuition and service fee waivers are awarded each year on a competitive basis, with consideration given to the applicant's grade point average and, in the case of applicants for the M.F.A. programs, quality of creative work.

for the degree of Doctor of Philosophy in Art Education

Code	Title	Hours
Course work Hours in residency on this campus		32
ARTE 599	Thesis Research (Thesis Research min/max applied toward degree)	32
Total Hours		64

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Masters Degree Required for Admission to PhD?	Yes
Qualifying Exam Required	Yes
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	2.75

[1] *For additional details and requirements refer to the department's graduate studies requirements and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Art Education, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Art Education

The PhD program provides advanced level study for art educators. The program's objectives are to enable participants to:

1. Become fluent with key debates and concepts in art education
2. Develop the capacity to reflect on and to critically analyze their own practices in art education
3. Develop a critical understanding of theoretical perspectives on art education and general education and challenge outdated theories
4. Develop the ability to contribute to scholarly development of policy and practice in arts education and general education
5. Develop a research agenda that benefits diverse communities and/or complex global problems
6. Prepare for scholarly conferences, scholarly publications, and academic positions

Art History, MA

for the degree of Master of Arts in Art History

school director: Alan Mette
associate director & director of graduate studies: Laurie Hogin
graduate studies advisors:
MA; PhD in Art History: David O'Brien (obrien1@illinois.edu)
MA; EdM; PhD in Art Education: Sarah Travis (stravis2@illinois.edu)
MFA in Studio: Deke Weaver (dekew@illinois.edu) **and** Conrad Bakker (cbakker@illinois.edu)
MFA in Photography: Luke Batten (lbatten@illinois.edu)
MFA in Industrial Design: David Weightman (diw@illinois.edu)
MFA in Graphic Design: Molly Briggs (mbriggs@illinois.edu) **and** Angelica Sibrian (asibrian@illinois.edu)
MFA in Design for Responsible Innovation: Molly Briggs (mbriggs@illinois.edu) **and** Angelica Sibrian (asibrian@illinois.edu)
MFA in Crafts: Billie Theide (theide@illinois.edu)
admissions: Ellen de Waard (edewaard@illinois.edu)
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school website: School of Art + Design (https://art.illinois.edu/)
school faculty: Art + Design Faculty (https://art.illinois.edu/index.php/people/faculty-staff/)
college website: College of Fine & Applied Arts (https://faa.illinois.edu/)
department office: 138 Art and Design Building, 408 East Peabody Drive, Champaign, IL 61820
phone: (217) 333-0642

This program provides basic preparation for teaching at the college level, background in the history of art for museum work, and preliminary study for the doctoral degree. In addition to the general requirements, the prerequisite for admission is ordinarily an undergraduate degree in art history or a strong preparation in related humanistic studies. Applicants with little background in art history but who have done exceptionally well as undergraduates in other disciplines will be seriously considered. A thesis or scholarly essay is required for completion of the degree.

Graduate Degree Programs in Art & Design

Art & Design, MFA (p. 585)
concentrations:
Crafts (p. 586), Design for Responsible Innovation (p. 587), Graphic Design (p. 588), Industrial Design (p. 590), Metals (p. 591), Painting (p. 592), Photography (p. 593), Printmaking (p. 594), Sculpture (p. 595)
specialization: New Media
Art Education, EdM (p. 597)
Art Education, MA (p. 598)
Art Education, PhD (p. 599)
Art History, MA (p. 601)
Art History, PhD (p. 602)
Art History Minor (p. 1125)

Admission

Applications are considered for Fall Semester admissions only. The Art History Program requires Graduate Record Examination (GRE) scores. International applicants or applicants who are not native English speakers must present a recent TOEFL score of at least 590 on the paper-

based version, 250 score on the Computer-based exam, and a score of 96 on IBT exam. Applications are not currently being accepted for the concentration in Printmaking.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience for master and doctoral students.

Facilities and Resources

Resources for graduate students in art and design include the Krannert Art Museum's excellent permanent collections and changing exhibitions; the Ricker Library of Art and Architecture, one of the largest art and architecture libraries in the nation; the Krannert Center for the Performing Arts; School of Art and Design facilities, which include extensive computer laboratories, digital photography and video editing equipment, wireless networking, ink-printing facilities, ceramic, woodworking, and metal shops, rapid prototyping and laser cutting, black/white and color darkrooms, shooting studios, and a wide selection of production and presentation equipment via reservation and checkout facility. A variety of lectures, symposia, musical programs, dramatic productions, and other cultural events associated with a large and progressive university complement the Art and Design Facilities.

Financial Aid

Fellowships, assistantships, and tuition and service fee waivers are awarded each year on a competitive basis, with consideration given to the applicant's grade point average and, in the case of applicants for the M.F.A. programs, quality of creative work.

for the degree of Master of Arts in Art History

Thesis Option

Code	Title	Hours
Graduate hours in the history of art and architecture, including 16 hours in art history graduate seminars		24
Language Requirement: Proficiency in a language outside of English and appropriate to the student's field of study must be demonstrated by the end of the first year of residence.		
ARTH 599	Thesis Research (min applied toward degree)	2
Total Hours		32

Other Requirements [1]

Requirement
Other requirements may overlap
Minimum 500-level Hours Required Overall: 12
Minimum GPA: 2.75

[1] *For additional details and requirements refer to the department's graduate studies requirements and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Non-Thesis Option

Code	Title	Hours
Graduate hours in the history of art and architecture, including 16 hours in art history graduate seminars		24
Language Requirement: Proficiency in a language outside of English and appropriate to the student's field of study must be demonstrated by the end of the first year of residence.		
Electives		8
Total Hours		32

Other Requirements

Requirement
Other requirements may overlap
Scholarly essay required
Minimum 500-level Hours Required Overall: 12
Minimum GPA: 2.75

[1] *For additional details and requirements refer to the department's graduate studies requirements and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Art History, MA

Learning Outcomes for the degree of Master of Arts in Art History

1. Students will be able to demonstrate familiarity with key artistic monuments and modes of art production from various global contexts.
2. Students will be able to analyze and interpret works of art and architecture situated in a variety of historical and social contexts, and in comparative perspective.
3. Students will be able to use visual and verbal primary sources, secondary sources, and core critical frameworks of art historical analysis to develop and articulate persuasive arguments about works of art and the cultures that produced them.
4. Students will be able to engage in art historical writing at the level of an emerging professional scholar. This involves the critical application of standard art historical methods and marshaling visual and textual evidence to support interpretive claims.

Art History, PhD

for the degree of Doctor of Philosophy in Art History

school director: Alan Mette
associate director & director of graduate studies: Laurie Hogin
graduate studies advisors:
MA; PhD in Art History: David O'Brien (obrien1@illinois.edu)
MA; EdM; PhD in Art Education: Sarah Travis (stravis2@illinois.edu)
MFA in Studio: Deke Weaver (dekew@illinois.edu) **and** Conrad Bakker (cbakker@illinois.edu)
MFA in Photography: Luke Batten (lbatten@illinois.edu)
MFA in Industrial Design: David Weightman (diw@illinois.edu)
MFA in Graphic Design: Molly Briggs (mbriggs@illinois.edu) **and** Angelica Sibrian (asibrian@illinois.edu)
MFA in Design for Responsible Innovation: Molly Briggs (mbriggs@illinois.edu) **and** Angelica Sibrian (asibrian@illinois.edu)
MFA in Crafts: Billie Theide (theide@illinois.edu)
admissions: Ellen de Waard (edewaard@illinois.edu)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
school website: School of Art + Design (https://art.illinois.edu/)
school faculty: Art + Design Faculty (https://art.illinois.edu/index.php/people/faculty-staff/)
college website: College of Fine & Applied Arts (https://faa.illinois.edu/)
department office: 138 Art and Design Building, 408 East Peabody Drive, Champaign, IL 61820
phone: (217) 333-0642

The program leading to the degree of Doctor of Philosophy in Art History is designed to prepare students for scholarship and for teaching at the college level. Applicants must have the Master of Arts in Art History. Students earning the master's degree at Illinois must write a thesis or research paper of superior quality in order to be admitted to the doctoral program. Students taking the master's degree elsewhere must satisfy the Graduate Committee on the History of Art and Architecture as to their preparation to undertake work on a doctoral level. Students usually elect to major and write a dissertation in one of various fields:

•Classical	•Medieval	•Renaissance	•History of Photography	•American
•Baroque	•Modern	•Contemporary	•African	•Asian or Latin American

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Graduate Degree Programs in Art & Design

Art & Design, MFA (p. 585)
concentrations:
Crafts (p. 586), Design for Responsible Innovation (p. 587), Graphic Design (p. 588), Industrial Design (p. 590), Metals (p. 591), Painting (p. 592), Photography (p. 593), Printmaking (p. 594), Sculpture (p. 595)
specialization: New Media
Art Education, EdM (p. 597)
Art Education, MA (p. 598)
Art Education, PhD (p. 599)
Art History, MA (p. 601)
Art History, PhD (p. 602)
Art History Minor (p. 1125)

Admission

Applications are considered for Fall Semester admissions only. The Art History Program requires Graduate Record Examination (GRE) scores. International applicants or applicants who are not native English speakers must present a recent TOEFL score of at least 590 on the paper-based version, 250 score on the Computer-based exam, and a score of 96 on IBT exam. Applications are not currently being accepted for the concentration in Printmaking.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience for master and doctoral students.

Facilities and Resources

Resources for graduate students in art and design include the Krannert Art Museum's excellent permanent collections and changing exhibitions; the Ricker Library of Art and Architecture, one of the largest art and architecture libraries in the nation; the Krannert Center for the Performing Arts; School of Art and Design facilities, which include extensive computer laboratories, digital photography and video editing equipment, wireless networking, ink-printing facilities, ceramic, woodworking, and metal shops, rapid prototyping and laser cutting, black/white and color darkrooms, shooting studios, and a wide selection of production and presentation equipment via reservation and checkout facility. A variety of lectures, symposia, musical programs, dramatic productions, and other cultural events associated with a large and progressive university complement the Art and Design Facilities.

Financial Aid

Fellowships, assistantships, and tuition and service fee waivers are awarded each year on a competitive basis, with consideration given to the applicant's grade point average and, in the case of applicants for the M.F.A. programs, quality of creative work.

for the degree of Doctor of Philosophy in Art History

Code	Title	Hours
Coursework Hours (in residency on this campus)		32
Language Requirement: An effective reading knowledge of two languages chosen with the approval of the student's academic adviser and the program chair is required. Language requirements must be met before the student has earned 32 hours of graduate credit beyond the requirements for the master's degree.		
ARTH 599	Thesis Research (min/max applied toward degree)	32
Total Hours		64

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Students also elect a minor in another field of art history in consultation with their major adviser and appropriate faculty.	
Masters Degree Required for Admission to PhD	Yes
Qualifying Exam Required	Yes
Preliminary Exam Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	2.75

[1] *For additional details and requirements refer to the department's graduate studies requirements and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Art History, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Art History

1. Students will be able to demonstrate familiarity with key artistic monuments and modes of art production from various global contexts.
2. Students will be able to analyze and interpret works of art and architecture situated in a variety of historical and social contexts, and in comparative perspective.
3. Students will be able to use visual and verbal primary sources, secondary sources, and core critical frameworks of art historical analysis to develop and articulate persuasive arguments about works of art and the cultures that produced them.
4. Students will be able to engage in art historical writing at the level of an emerging professional scholar. This involves the critical application of standard art historical methods and marshaling visual and textual evidence to support interpretive claims.

Astronomy, MS

for the degree of Master of Science in Astronomy

head of the department: Leslie Looney
director of graduate studies: Paul Ricker
overview of admissions & requirements: Astronomy Graduate Admissions (http://www.astro.illinois.edu/academics/graduate/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department website: https://astro.illinois.edu/
department faculty:
department office: 103 Astronomy Building, 1002 West Green Street, Urbana, IL 61801
phone: (217) 333-3090
email: astronomy@illinois.edu

The Department of Astronomy offers graduate programs leading to the Master of Science and Doctor of Philosophy degrees. The goal of the graduate program in astronomy is to provide broadly based training in modern astrophysics and astronomy for a small and carefully selected student body. Individually designed programs involving close contact with faculty members are encouraged, and an understanding of fundamental principles and techniques and their applications to research problems of current interest is emphasized. Students are expected to acquire a solid knowledge of modem physics as well as of general astronomy. A major objective is to maintain an exciting intellectual environment in which students can develop their scientific creativity and their enthusiasm for astronomy.

Graduate Degree Programs in Astronomy

Astronomy, MS (p. 604)
Astronomy, PhD (p. 606)
optional concentration: Astrochemistry (p. 1076)

Admission

Admission to the astronomy graduate program requires an outstanding record of accomplishment and clear evidence of considerable academic promise, as judged by test scores, resume (or c.v.), letters of recommendation, personal statement, and strong intellectual achievements. A bachelor's degree or its equivalent in astronomy, physics, chemistry, mathematics, or another related technical field from an accredited college or university in the U.S. or an approved institution of higher learning abroad is required for admission.

A minimum grade point average of 3.0 (A = 4.0) and satisfactory scores on the Graduate Record Examination (GRE) (verbal, quantitative, and advanced physics portions) are required for admission. Course preparation in intermediate and advanced undergraduate physics and astronomy are essential. Students are expected to make up deficiencies during the first graduate year.

All applicants whose native language is not English are required to submit the results of the TOEFL or IELTS as evidence of English proficiency, as required by Graduate College policy. More information on the English Proficiency Requirement can be found at the Graduate College Admissions Web site (http://www.grad.illinois.edu/admissions/instructions/04c/).

Admission decisions are normally made once a year in the spring. Applications for admission and financial assistance must be received by December 15. In rare circumstances, applicants may be admitted for the spring semester, in addition to the customary fall semester admissions.

See the Astronomy graduate admissions Web site (www.astro.illinois.edu/academics/graduate/) (http://www.astro.illinois.edu/academics/graduate/) for more information and application materials.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program.

Faculty Research Interests

Research activity in the Department of Astronomy includes observational and theoretical investigations of a wide array of astronomical objects:

- Early-universe cosmology (inflation, particle dark matter, cosmic nucleosynthesis)
- Large-scale structure of the universe (cosmic microwave background, galaxy clusters)
- Extragalactic systems (galaxy structure and evolution, interacting galaxies, active galaxies, jets, and quasars)
- Interstellar medium (multiple phases, molecular clouds, HII regions, bubbles and superbubbles, planetary nebulae, supernova remnants, magnetic fields, and galactic structure)
- Stars (formation, structure and evolution, atmospheres, nucleosynthesis, novae, supernovae, pulsars, and stellar statistics)
- Compact objects (black holes, neutron stars, white dwarfs)

Theoretical astrophysics is also a strong research interest many faculty members in the Department of Astronomy and the Department of Physics. Current activity centers on:

- Astrophysical fluid dynamics, magnetohydrodynamics and radiation hydrodynamics
- Physics of dense stellar matter
- Accretion phenomena
- High energy and relativistic astrophysics
- Cosmic inflation and structure formation
- Nuclear and particle processes in cosmology and astrophysics
- Black hole physics and astrophysics
- Gravitational lensing
- Gravitational wave phenomena

Facilities and Resources

- The Dark Energy Survey
- The Large Synoptic Survey Telescope
- The South Pole Telescope
- Astronomy students and faculty successfully compete for time on national facilities. These include ground-based telescopes of the National Radio Astronomy Observatory, such as the Atacama Large Millimeter Telescope and the Very Large Array, and the National Optical Astronomy Observatory telescopes. Illinois research involves many space-based telescopes, including the Hubble, Planck, Spitzer, Herschel, Chandra, and Fermi.
- A number of projects in the Department of Astronomy partner with the National Center for Supercomputing Applications (NCSA) at Illinois. This includes development and application of astrophysical simulations such as the FLASH package and general relativistic magnetohydrodynamic codes that provide insight into the nature of structure formation and the physics of black holes. Astronomy faculty also leverage NCSA's pioneering development of cyberinfrastructure environments to facilitate data transport for the Sloan Digital Sky Survey (SDSS), the Dark Energy Survey, the Square Kilometer Array, and the Large Synoptic Survey Telescope. Faculty from NCSA, and Astronomy and Physics Departments are also involved in the Center for Astrophysical Surveys (CAPS), applying novel algorithms to the rich large datasets from several major projects including the Sloan Digital Sky Survey (SDSS), the Dark Energy Survey (DES), the Young Supernova Experiment (YSE), the Laser Interferometric Gravitational Wave Observatory (LIGO), the Vera Rubin Observatory (VRO), and the South Pole Telescope (SPT).
- Illinois is the home of the Blue Waters National Petascale Computing Facility, one of the most powerful supercomputers in the world, and the most powerful on a university campus. A portion of Blue Waters time is dedicated to Illinois faculty, and Astronomy students and faculty use Blue Waters for their research.

Financial Aid

University fellowships are available and may be combined with part-time teaching assistantships. Most resident students are supported for their first two or three years by half-time teaching assistantships. The typical teaching assistant takes two or three graduate courses per semester and spends twenty hours per week handling quiz sections in elementary astronomy courses. Teaching assistantships are responsible positions, and the concomitant duties are considered to be a valuable part of the student's educational experience. Advanced students may compete for research assistantships offered by faculty members whose research is partially supported by federal grants.

for the degree of Master of Science in Astronomy

For additional details and requirements refer to the department's Graduate Programs (http://www.astro.illinois.edu/academics/graduate/programs/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Astronomy, MS

Code	Title	Hours
ASTR 501	Radiative Processes	4
ASTR 502	Astrophysical Dynamics	4
Additional formal coursework (excluding thesis research, non-thesis research, and independent study credit hours, e.g., ASTR 599, ASTR 590)		16
Research/Project/Independent Study Hours (e.g. ASTR 590; min/max applied toward degree): [1]		4-8
Based on Placement Exam results, students may be required to complete ASTR 404, ASTR 405, ASTR 406, and/or ASTR 414 during their first year. A maximum of 8 hours of these courses may be applied to the degree (Max. 8) [2]		8
Total Hours		32

Other Requirements

Requirement	Description
Other requirements may overlap	
Of the additional formal coursework, the minimum number of hours in the unit (excluding thesis research, non-thesis research, and independent study credit hours)	8
Of the additional formal coursework, the minimum number of 500-level hours (excluding thesis research, non-thesis research, and independent study credit hours)	4

1 **Research Project (minimum 4 hours)**
- The student will complete a research project with an Astronomy Department faculty member (i.e. ASTR 590). A paper reporting the results is required, which must be prepared in scientific journal style and approved by the faculty member.

2 **Demonstrated Proficiency in Astronomy**
(ASTR 404, ASTR 405, ASTR 406 and ASTR 414)
Students must show proficiency in the four courses by one of the following options:
- Pass the appropriate section of the placement exam (four sections aligned to the four courses), which is offered at the start of every Fall semester. A student can petition to take the exam once more the following year. The decision on petition approval by the graduate advisor will depend on the student's background and proficiency plan.
- Pass the course with a B grade or better.
- Students who have had an equivalent course at another institution (B grade or better) may petition for those courses to count as proficiency.

Learning Outcomes: Astronomy, MS

Learning Outcomes for the degree of Master of Science in Astronomy

LO1. Infer and characterize the physical mechanisms that govern the observable properties of the Universe and its constituents, including galaxies, stars, and planets, as well as the changes in those properties over time.

LO2. Understand how the observational, statistical, and computational methods of modern astronomy are used to generate the scientific knowledge referred to in LO1.

LO3. Plan and perform original research in astronomy and astrophysics.

LO4. Effectively communicate astronomy knowledge and research results in both oral and written form to a variety of audiences.LO5. Demonstrate the ability to formulate and write a research proposal.

Astronomy, PhD

for the degree of Doctor of Philosophy in Astronomy

head of the department: Leslie Looney
director of graduate studies: Paul Ricker
overview of admissions & requirements: Astronomy Graduate Admissions (http://www.astro.illinois.edu/academics/graduate/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department website: https://astro.illinois.edu/
department faculty:
department office: 103 Astronomy Building, 1002 West Green Street, Urbana, IL 61801
phone: (217) 333-3090
email: astronomy@illinois.edu

The Department of Astronomy offers graduate programs leading to the Master of Science and Doctor of Philosophy degrees. The goal of the graduate program in astronomy is to provide broadly based training in modern astrophysics and astronomy for a small and carefully selected student body. Individually designed programs involving close contact with faculty members are encouraged, and an understanding of fundamental principles and techniques and their applications to research problems of current interest is emphasized. Students are expected to acquire a solid knowledge of modem physics as well as of general astronomy. A major objective is to maintain an exciting intellectual environment in which students can develop their scientific creativity and their enthusiasm for astronomy.

Graduate Degree Programs in Astronomy

Astronomy, MS (p. 604)
Astronomy, PhD (p. 606)
optional concentration: Astrochemistry (p. 1076)

Admission

Admission to the astronomy graduate program requires an outstanding record of accomplishment and clear evidence of considerable academic promise, as judged by test scores, resume (or c.v.), letters of recommendation, personal statement, and strong intellectual achievements. A bachelor's degree or its equivalent in astronomy, physics, chemistry, mathematics, or another related technical field from an accredited college or university in the U.S. or an approved institution of higher learning abroad is required for admission.

A minimum grade point average of 3.0 (A = 4.0) and satisfactory scores on the Graduate Record Examination (GRE) (verbal, quantitative, and advanced physics portions) are required for admission. Course preparation in intermediate and advanced undergraduate physics and astronomy are essential. Students are expected to make up deficiencies during the first graduate year.

All applicants whose native language is not English are required to submit the results of the TOEFL or IELTS as evidence of English proficiency, as required by Graduate College policy. More information on the English Proficiency Requirement can be found at the Graduate College Admissions Web site (http://www.grad.illinois.edu/admissions/instructions/04c/).

Admission decisions are normally made once a year in the spring. Applications for admission and financial assistance must be received by December 15. In rare circumstances, applicants may be admitted for the spring semester, in addition to the customary fall semester admissions.

See the Astronomy graduate admissions Web site (www.astro.illinois.edu/academics/graduate/) (http://www.astro.illinois.edu/academics/graduate/) for more information and application materials.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program.

Faculty Research Interests

Research activity in the Department of Astronomy includes observational and theoretical investigations of a wide array of astronomical objects:

- Early-universe cosmology (inflation, particle dark matter, cosmic nucleosynthesis)
- Large-scale structure of the universe (cosmic microwave background, galaxy clusters)
- Extragalactic systems (galaxy structure and evolution, interacting galaxies, active galaxies, jets, and quasars)
- Interstellar medium (multiple phases, molecular clouds, HII regions, bubbles and superbubbles, planetary nebulae, supernova remnants, magnetic fields, and galactic structure)
- Stars (formation, structure and evolution, atmospheres, nucleosynthesis, novae, supernovae, pulsars, and stellar statistics)
- Compact objects (black holes, neutron stars, white dwarfs)

Theoretical astrophysics is also a strong research interest many faculty members in the Department of Astronomy and the Department of Physics. Current activity centers on:

- Astrophysical fluid dynamics, magnetohydrodynamics and radiation hydrodynamics
- Physics of dense stellar matter
- Accretion phenomena
- High energy and relativistic astrophysics
- Cosmic inflation and structure formation
- Nuclear and particle processes in cosmology and astrophysics
- Black hole physics and astrophysics
- Gravitational lensing
- Gravitational wave phenomena

Facilities and Resources

- The Dark Energy Survey
- The Large Synoptic Survey Telescope
- The South Pole Telescope
- Astronomy students and faculty successfully compete for time on national facilities. These include ground-based telescopes of the National Radio Astronomy Observatory, such as the Atacama Large Millimeter Telescope and the Very Large Array, and the National Optical Astronomy Observatory telescopes. Illinois research involves many space-based telescopes, including the Hubble, Planck, Spitzer, Herschel, Chandra, and Fermi.
- A number of projects in the Department of Astronomy partner with the National Center for Supercomputing Applications (NCSA) at Illinois. This includes development and application of astrophysical simulations such as the FLASH package and general relativistic magnetohydrodynamic codes that provide insight into the nature of structure formation and the physics of black holes. Astronomy faculty also leverage NCSA's pioneering development of cyberinfrastructure environments to facilitate data transport for the Sloan Digital Sky Survey (SDSS), the Dark Energy Survey, the Square Kilometer Array, and the Large Synoptic Survey Telescope. Faculty from NCSA, and Astronomy and Physics Departments are also involved in the Center for Astrophysical Surveys (CAPS), applying novel algorithms to the rich large datasets from several major projects including the Sloan Digital Sky Survey (SDSS), the Dark Energy Survey (DES), the Young Supernova Experiment (YSE), the Laser Interferometric Gravitational Wave Observatory (LIGO), the Vera Rubin Observatory (VRO), and the South Pole Telescope (SPT).
- Illinois is the home of the Blue Waters National Petascale Computing Facility, one of the most powerful supercomputers in the world, and the most powerful on a university campus. A portion of Blue Waters time is dedicated to Illinois faculty, and Astronomy students and faculty use Blue Waters for their research.

Financial Aid

University fellowships are available and may be combined with part-time teaching assistantships. Most resident students are supported for their first two or three years by half-time teaching assistantships. The typical teaching assistant takes two or three graduate courses per semester and spends twenty hours per week handling quiz sections in elementary astronomy courses. Teaching assistantships are responsible positions, and the concomitant duties are considered to be a valuable part of the student's educational experience. Advanced students may compete for research assistantships offered by faculty members whose research is partially supported by federal grants.

for the degree of Doctor of Philosophy in Astronomy

For additional details and requirements refer to the department's Graduate Programs (http://www.astro.illinois.edu/academics/graduate/programs/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Astronomy, PhD

Entering with approved M.A./M.S. degree

Code	Title	Hours
ASTR 501 & ASTR 502	Radiative Processes and Astrophysical Dynamics [1]	8
Based on Placement Exam results, students may be required to complete ASTR 404, ASTR 405, ASTR 406, and/or ASTR 414 during their first year. A maximum of 8 hours of these courses may be applied to the degree. [2]		8
Research/Project/Independent Study Hours (e.g. ASTR 590 min/max applied toward degree):		4-24
ASTR 599	Thesis Research (min/max applied toward degree)	32-52
Total Hours		64

Other Requirements

Requirement	Description
Other requirements may overlap	
Students may add a graduate concentration in Astrochemistry.	
Qualifying Exam Required	No
Preliminary Exam Required	Yes

Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

Entering with approved B.A./B.S. degree

Code	Title	Hours
ASTR 501 & ASTR 502	Radiative Processes and Astrophysical Dynamics	8
Additional formal coursework (excluding thesis research, non-thesis research and independent study credit hours, e.g., ASTR 599, ASTR 590) [3,4]		24
Based on Placement Exam results, students may be required to complete ASTR 404, ASTR 405, ASTR 406, and/or ASTR 414 during their first year. A maximum of 8 hours of these courses may be applied to the degree. [2]		8
Research/Project/Independent Study Hours (e.g. ASTR 590 min/max applied toward degree):		4-32
ASTR 599	Thesis Research (min/max applied toward degree)	32-60
Total Hours		96

Other Requirements

Requirement	Description
Other requirements may overlap	
Students may add a graduate concentration in Astrochemistry.	
First Summer Research Project (4 hours)	During the first summer in residence, each student will enroll in ASTR 590 (independent Study) and will complete a research project with an Astronomy Department faculty member. A paper reporting the results is required, which must be prepared in scientific journal style and approved by the faculty member.
Master's Degree Required Before Admission to PhD?	No
Qualifying Exam Required	No
Preliminary Exam Required	Ph.D. Preliminary Examination consists of a written preliminary paper on the Ph.D. research topic and an oral examination. It must be passed by the end of the third year of study.
Final Exam/Dissertation Defense Required	Completion of an original research project culminating in a dissertation thesis publishable in whole or in part is required. The final examination is a defense of the doctoral dissertation.
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

1 *Students entering with an approved M.A. or M.S. degree may proficiency out of* ASTR 501 and ASTR 502 with departmental approval. Other 500-level ASTR graduate courses must be taken in the unit for substitute credit hours

2 **Demonstrated Proficiency in Astronomy**
(ASTR 404, ASTR 405, ASTR 406 and ASTR 414)
Students must show proficiency in the four courses by one of the following options:
- Pass the appropriate section of the placement exam (four sections aligned to the four courses), which is offered at the start of every Fall semester. A student can petition to take the exam once more the following year. The decision on petition approval by the graduate advisor will depend on the student's background and proficiency plan.
- Pass the course with a B grade or better.
- Students who have had an equivalent course at another institution (B grade or better) may petition for those courses to count as proficiency.

3 Of the additional formal coursework, 8 is the minimum number of hours in the unit (excluding thesis research, non-thesis research, and independent study credit hours)

4 Of the additional formal coursework, 8 (with 4 in the unit) is the minimum number of 500-level hours (excluding thesis research, non-thesis research, and independent study credit hours)

Learning Outcomes: Astronomy, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Astronomy

LO1. Infer and characterize the physical mechanisms that govern the observable properties of the Universe and its constituents, including galaxies, stars, and planets, as well as the changes in those properties over time.

LO2. Understand how the observational, statistical, and computational methods of modern astronomy are used to generate the scientific knowledge referred to in LO1.

LO3. Plan and perform original research in astronomy and astrophysics.

LO4. Effectively communicate astronomy knowledge and research results in both oral and written form to a variety of audiences.LO5. Demonstrate the ability to formulate and write a research proposal.

Atmospheric Sciences, MS

for the Master of Science in Atmospheric Sciences

head of the department: Robert Trapp
director of graduate studies: Nicole Riemer
overview of admissions & requirements: https://atmos.illinois.edu/admissions/graduate-admissions-program (https://atmos.illinois.edu/admissions/graduate-admissions-program/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)

college website: https://las.illinois.edu/
department website: http://atmos.illinois.edu
department faculty: https://atmos.illinois.edu/directory/faculty (https://atmos.illinois.edu/directory/faculty/)
department office: 3072 Natural History Building, 1301 West Green Street, Urbana, IL 61801
phone: (217) 333-2046
email: atmos-sci@illinois.edu

Graduate Degree Programs in Atmospheric Sciences

Atmospheric Sciences, MS (p. 608)
Weather and Climate Risk and Analytics, MS (http://catalog.illinois.edu/graduate/las/weather-climate-risk-analytics-ms/) **(online)**
Atmospheric Sciences, PhD (p. 610)

Graduate programs leading to the Master of Science and Doctor of Philosophy degrees are offered. Opportunity also exists for specializing in computational science and engineering within the department's graduate programs via the Computational Science and Engineering (CSE) Option.

Admission

Applications for admission are encouraged from students with bachelor's degrees in atmospheric sciences, meteorology, physics, mathematics, computer science, geography, engineering, oceanography, and related fields. It is strongly recommended that students who intend to study for advanced degrees in atmospheric sciences know the fundamentals of classical physics and applied mathematics. Applicants whose native language is not English are required to take the English Placement Test if accepted. All applicants are required to submit three letters of reference.

Faculty Research Interests

The atmospheric science degree programs are designed for students interested in research and applications on a wide variety of atmospheric topics. Faculty areas of research include atmospheric chemistry and aerosols; climate modeling, processes, change, and assessments; cloud physics and radiative processes; convective-storm dynamics and modeling; extratropical cyclones and winter storms; precipitation and hydrometeorological processes; satellite and radar remote sensing; tropical meteorology and hurricanes; and weather and climate risk. This research is carried out in national field campaigns, in theoretical studies, and in numerical modeling efforts using a wide range of models.

Research Facilities

The Department maintains an extensive computing infrastructure, which is a vital component of all of its educational, research and outreach endeavors. A Departmental computer lab is available for hands-on class exercises. Computers and display projectors are provided in classroom areas, and wireless access exists throughout the buildings. The Department hosts a synoptic/GIS laboratory, a data visualization laboratory, and an instruments lab all within the Natural History Building. A high-capacity network connects these to various computing resources on campus as well as within the Department.

The cornerstone of the Department's research computing capabilities is the compute cluster *Keeling,* which currently is composed of several thousand CPU cores and TB of storage. *Keeling* allows for numerical simulation and analysis of atmospheric processes ranging from the formation of individual ice crystals to century long climate simulations over the globe and are used for storing, analyzing and visualizing the results. Our faculty research groups regularly take advantage of high-performance computing resources, including the Blue Waters Petascale computing facility, and the NCAR Supercomputing facility.

We receive and process a large quantity of real-time meteorological data and numerical forecasts from a variety of sources including NOAA, UCAR, peer institutions, and international vendors. These are analyzed and visualized with a variety of tools to aid in the understanding of current weather events and case studies of recent major events.

Finally, the Department has numerous capabilities for meteorological observations and measurement in teaching and research. This includes: a QuantAQ system, used to collect data on air quality; two iMET mobile sounding systems; a trailer-mounted, 915 MHz radar wind profiler, manufactured by Radiometrics; and SCAMP (System for Characterizing and Measuring Precipitation (SCAMP), which is designed to quantitatively characterize the vertical profile of precipitation particles, measure the particle size distributions and surface precipitation, and also document the scavenging of air particulates by the falling precipitation. SCAMP includes a Micro Rain Radar, an OTT Parsivel Optical Disdrometer, an MPS Particle Spectrometer, a Geonor T-200B Precipitation Gauge, a TSI Optical Particle Sizer, and a Lufft Ultrasonic Weather Station. All of these instruments can be mounted on a flatbed trailer, and transported by the Department's Ford Cargo Van.

Financial Aid

More information is available on the Department Website: https://atmos.illinois.edu/admissions/graduate/graduate-financial-aid (https://atmos.illinois.edu/admissions/graduate/graduate-financial-aid/)

for the Master of Science in Atmospheric Sciences

For additional details and requirements refer to the department's Graduate Programs (https://www.atmos.illinois.edu/) website and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Atmospheric Sciences, MS

Thesis Option

Code	Title	Hours
ATMS 500	Dynamic Meteorology	4
ATMS 504	Physical Meteorology	4
ATMS 505	Weather Systems	4
ATMS 507	Climate Dynamics	4
Additional Graduate-level courses in ATMS or approved courses in another discipline		8
ATMS 599	Thesis Research (min/max applied toward degree)	8
Total Hours		32

Other Requirements

Requirement	Description
Other requirements may overlap	
The student is required to write a thesis and give a seminar on his/her thesis research.	
Minimum GPA:	3.0

Non-Thesis Option

Code	Title	Hours
ATMS 500	Dynamic Meteorology	4
ATMS 504	Physical Meteorology	4
ATMS 505	Weather Systems	4
ATMS 507	Climate Dynamics	4
Additional Graduate-level courses in ATMS or approved courses in another discipline (excluding ATMS 599)		16
Total Hours		32

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum GPA:	3.0

Learning Outcomes: Atmospheric Sciences, MS

Learning Outcomes for the Master of Science in Atmospheric Sciences

1. All graduate students will have a fundamental understanding of the core theoretical underpinnings of atmospheric sciences.
2. All graduate students will have a high level of expertise in their chosen research field within the atmospheric and related sciences, and the ability to apply theoretical and technical skills to novel and long-standing problems relevant to society.
3. All graduate students will have the ability to formulate a research problem, demonstrate the value of its solution in advancing knowledge, and develop an approach towards solving that problem.
4. All graduate students will have ethically responsible and effective communication skills, written and verbal, at a professional scientific level.
5. All graduate students will have knowledge of the frontiers in atmospheric science research.

Atmospheric Sciences, PhD

for the Doctor of Philosophy in Atmospheric Sciences

head of the department: Robert Trapp
director of graduate studies: Nicole Riemer
overview of admissions & requirements: https://atmos.illinois.edu/admissions/graduate-admissions-program (https://atmos.illinois.edu/admissions/graduate-admissions-program/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department website: http://atmos.illinois.edu
department faculty: https://atmos.illinois.edu/directory/faculty (https://atmos.illinois.edu/directory/faculty/)
department office: 3072 Natural History Building, 1301 West Green Street, Urbana, IL 61801
phone: (217) 333-2046
email: atmos-sci@illinois.edu

Graduate Degree Programs in Atmospheric Sciences

Atmospheric Sciences, MS (p. 608)
Weather and Climate Risk and Analytics, MS (http://catalog.illinois.edu/graduate/las/weather-climate-risk-analytics-ms/) **(online)**
Atmospheric Sciences, PhD (p. 610)

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Admission

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The cornerstone of the Department's research computing capabilities is the compute cluster *Keeling,* which currently is composed of several thousand CPU cores and TB of storage. *Keeling* allows for numerical simulation and analysis of atmospheric processes ranging from the formation of individual ice crystals to century long climate simulations over the globe and are used for storing, analyzing and visualizing the results. Our faculty research groups regularly take advantage of high-performance computing resources, including the Blue Waters Petascale computing facility, and the NCAR Supercomputing facility.

We receive and process a large quantity of real-time meteorological data and numerical forecasts from a variety of sources including NOAA, UCAR, peer institutions, and international vendors. These are analyzed and visualized with a variety of tools to aid in the understanding of current weather events and case studies of recent major events.

Finally, the Department has numerous capabilities for meteorological observations and measurement in teaching and research. This includes: a QuantAQ system, used to collect data on air quality; two iMET mobile sounding systems; a trailer-mounted, 915 MHz radar wind profiler, manufactured by Radiometrics; and SCAMP (System for Characterizing and Measuring Precipitation (SCAMP), which is designed to quantitatively characterize the vertical profile of precipitation particles, measure the particle size distributions and surface precipitation, and also document the scavenging of air particulates by the falling precipitation. SCAMP includes a Micro Rain Radar, an OTT Parsivel Optical Disdrometer, an MPS Particle Spectrometer, a Geonor T-200B Precipitation Gauge, a TSI Optical Particle Sizer, and a Lufft Ultrasonic Weather Station. All of these instruments can be mounted on a flatbed trailer, and transported by the Department's Ford Cargo Van.

Financial Aid

More information is available on the Department Website: https://atmos.illinois.edu/admissions/graduate/graduate-financial-aid (https://atmos.illinois.edu/admissions/graduate/graduate-financial-aid/)

for the Doctor of Philosophy in Atmospheric Sciences

For additional details and requirements refer to the department's Graduate Programs (https://www.atmos.illinois.edu/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Atmospheric Sciences, PhD

Entering with approved B.S. (Direct to Ph.D.)

Code	Title	Hours
ATMS 500	Dynamic Meteorology	4
ATMS 504	Physical Meteorology	4
ATMS 505	Weather Systems	4
ATMS 507	Climate Dynamics	4
ATMS 599	Thesis Research	16
Additional approved graduate level courses (excluding ATMS 599)		32
Additional approved graduate level courses (including ATMS 599)		32
Total Hours		96

Entering with an approved M.S. degree

Code	Title	Hours
Stage I Equivalent (32 Hours) Satisfied by previous Masters degree (from either within the ATMS department or an approved MS from outside the ATMS department)		
ATMS 599	Thesis Research	16
Additional approved graduate level courses* (excluding ATMS 599)		24
Additional approved graduate level courses (including ATMS 599)		24
*If the previous MS degree was earned outside of the Atmospheric Sciences department, these courses must include ATMS 500, 504, 505, and 507 if equivalent courses were not taken as part of the student's M.S. degree. Equivalency will be determined by the department after review of the course syllabi.		
Total Hours		64

Other Requirements

Requirement	Description
Other requirements may overlap	
Qualifying Exam Required	No
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

Learning Outcomes: Atmospheric Sciences, PhD

Learning Outcomes for the Doctor of Philosophy in Atmospheric Sciences

1. All graduate students will have a fundamental understanding of the core theoretical underpinnings of atmospheric sciences.
2. All graduate students will have a high level of expertise in their chosen research field within the atmospheric and related sciences, and the ability to apply theoretical and technical skills to novel and long-standing problems relevant to society.
3. All graduate students will have the ability to formulate a research problem, demonstrate the value of its solution in advancing knowledge, and develop an approach towards solving that problem.
4. All graduate students will have ethically responsible and effective communication skills, written and verbal, at a professional scientific level.
5. All graduate students will have knowledge of the frontiers in atmospheric science research.

Audiology, AUD

for the degree of Doctor of Audiology in Audiology

department head: Pamela Hadley, Ph.D.
director of graduate studies: Raksha Mudar, Ph.D.
overview of admissions & requirements: https://ahs.illinois.edu/doctor-of-audiology (https://ahs.illinois.edu/doctor-of-audiology/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://ahs.illinois.edu/speech-&-hearing-science (https://ahs.illinois.edu/speech-&-hearing-science/)
program website: https://ahs.illinois.edu/doctor-of-audiology (https://ahs.illinois.edu/doctor-of-audiology/)
department faculty: https://ahs.illinois.edu/shs-directory (https://ahs.illinois.edu/shs-directory/)
college website: http://www.ahs.illinois.edu/
graduate support: Andrea Paceley (apaceley@illinois.edu)
department office: 901 South Sixth Street, Room 103, Champaign, IL 61820
phone: (217) 333-2230
email: shs@illinois.edu

Place Highlighted Text about specific program here if required.

Graduate Degree Programs in Speech & Hearing Science

Audiology, AuD (p. 611)
Speech & Hearing Science, MA (p. 1023)
Speech & Hearing Science, PhD (p. 1025)
optional concentration (PhD only):
Second Language Acquisition and Teacher Education (p. 1106)

Graduate Degree Programs

The department offers programs leading to the Master of Arts, Doctor of Audiology, and Doctor of Philosophy degrees, with specialization in various aspects of audiology and speech-language pathology.

The Department of Speech and Hearing Science offers graduate programs of study in speech-language pathology, audiology, and speech, language, and hearing science. The department prepares scientists and professionals who specialize in the study of perception and production of spoken, written, signed, and alternative communication and communication disorders, as well as dysphagia. Graduate degrees are offered at the master's and doctoral levels.

Admission

Although a B.A./B.S. in the field is not required for admission to the clinical M.A. or Au.D. programs, recommended background includes undergraduate credit in the following areas or their equivalents: phonetics, anatomy and physiology of the speech and hearing mechanism, hearing science, speech science, speech pathology, audiology, and aural rehabilitation. The M.A. and Au.D. programs begin in the fall only.

For more information about admissions, see: https://ahs.illinois.edu/doctor-of-audiology (https://ahs.illinois.edu/doctor-of-audiology/)

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program.

for the degree of Doctor of Audiology in Audiology

Minimum required major and supporting course work : Didactic coursework requires 77 hours.
Minimum hours required for graduation: 112 hours.
Minimum GPA: 3.0

Code	Title	Hours
Didactic Coursework:		
SHS 540	Psychoacoustics	4
SHS 541	Clinical Auditory Anat & Phys	4
SHS 550	Assess Audition & Aud Disorder	4
SHS 551	Electrophys Indices Audition	4 or 5
SHS 552	Diag Hear Impair Infants Child	4
SHS 553	Hearing Aids and Amplification	4
SHS 554	Advanced Audiological Assess	4
SHS 556	Sens Prosth Devices Hear Loss	4
SHS 558	Tinnitus	2
SHS 559	Hearing Conservation	2
SHS 560	Audiological Assessment Lab	2
SHS 561	Medical Audiology	4
SHS 563	Amplification Lab	2
SHS 564	Vestibular Assessment and Rehabilitation	4
SHS 570	Quant Reasoning Spch Hear Sci	2 or 4
SHS 572	Counseling in Comm Disorders	2 to 4
SHS 579	Prof/Eth/Legal Issues AuD/SLP	3
SHS 580	Cochlear Implants	4
SHS 581	Auditory Processing Disorders	3
SHS 593	Special Problems (Section SS - Systems & Signals)	1 to 8
SHS 593	Special Problems (Section EA Educational Audiology)	1 to 8
SHS 593	Special Problems (Section ARI Advanced Aural Rehab)	1 to 8
SHS 593	Special Problems (Section BPS Business Practice Seminar)	1 to 8
Graduate Level Statistics course such as EPSY 580 or PSYC 506		
Electives/specialty emphasis		12-16
Clinical practica		**25**
SHS 557	Adv Clin Prac Aud Assess Rehab	1 to 8
Doctoral/Capstone Project		**10**
SHS 593	Special Problems (Capstone Project)	1 to 8
Total Hours		**112**

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Masters Degree Required for Admission to AuD?	No
Qualifying Exam Required:	Yes
Preliminary Exam Required:	Yes
Final Exam/Dissertation Defense Required:	Yes
Dissertation Deposit Required:	No
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the department's* graduate programs *(*http://www.shs.illinois.edu/Graduates/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Audiology, AUD

Learning Outcomes for the degree of Doctor of Audiology in Audiology

1. Students will demonstrate academic knowledge and clinical skills in the foundations of the practice of audiology, including principles and practices derived from the study of hearing and balance in normal and disordered populations across the lifespan.
2. Students will demonstrate, with knowledge and skills, the ability to work as independent clinicians, for the prevention, identification, assessment, and intervention of hearing and balance disorders across the lifespan.
3. Students will demonstrate, with knowledge and skills, the ability to advocate, consult, and educate on behalf of individuals with hearing and balance disorders across the lifespan.
4. Students will demonstrate, with knowledge and skills, the ability to critically review and discuss research evidence and apply this ability to evidence-based practice for audiological services.

Biochemistry, MS

for the Master of Science in Biochemistry

head of the department: Satish K. Nair
associate head of the department: Rutilio A. (Rudy) Fratti
director of graduate studies:
overview of admissions & requirements:
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department website: http://mcb.illinois.edu/departments/biochemistry (http://mcb.illinois.edu/departments/biochemistry/)
department faculty:
department office: 417 Roger Adams Laboratory, 600 S. Mathews Avenue, Urbana, IL 61801
phone: (217) 333-2013
email: biocUG@life.illinois.edu

A coursework master's degree requires a minimum of two full-time semesters. A thesis master's degree usually requires a minimum of three semesters.

Graduate Degree Programs in Biochemistry

Biochemistry, MS (p. 613)
Biochemistry, PhD (p. 614)

The Department of Biochemistry offers graduate programs leading to the Master of Science and the Doctor of Philosophy degrees. For an application and departmental materials that provide greater detail on programs, offerings, admission, degree requirements, and financial aid, visit our website at www.mcb.illinois.edu/graduate/gradprospect.html. The Department of Biochemistry is a part of the School of Molecular and Cellular Biology (MCB), which also includes the Departments of Cell and Developmental Biology, Microbiology and Molecular and Integrative Physiology as well as Programs in Biophysics and Neurosciences. The Department is part of an umbrella program in MCB that encompasses over 70 different research laboratories. Students admitted into any of these departmental graduate programs can select faculty thesis advisors from these active research laboratories in the School. In addition, dual degrees via the Medical Scholars Program are offered. Close ties are also maintained with the School of Integrative Biology, the School of Chemical Sciences, the College of Medicine, and the College of Veterinary Medicine.

Admission

Interested students must apply directly to the School of Molecular and Cellular Biology (www.mcb.illinois.edu/graduate/gradprospect.html). During the first semester, students perform three laboratory rotations, choosing from any laboratory in the School. Students select a laboratory for their thesis research in December in mutual agreement with their desired advisor and formally join the appropriate graduate program/department at that time. Students electing biochemistry as a major for an advanced degree should have a strong background in chemistry, biology, physics, and calculus and a grade point average of a 3.0 or higher (A = 4.0). Admission requirements include: a bachelor's degree; Graduate Record Examination (GRE) scores. In addition to the above requirements, international students must attain a minimum paper-based Test of English as a Foreign Language (TOEFL) score of 590 (243 on the computer-based test). A score of 96 on the internet-based test (iBT), with a score of 24 on the speaking section, is also accepted. The department does not normally admit students directly into the M.S. program.

Graduate Teaching Experience

Experience in teaching is considered a vital part of the graduate program and is required as part of the academic work of all Ph.D. candidates in this program.

Centers, Programs, and Institutes

Biochemistry faculty are appointed and active in several cross-campus academic and research units, including the Center for Biophysics & Computational Biology, the Beckman Institute for Advanced Science and Technology, the Institute for Genomic Biology, as well as the interdepartmental graduate programs in Biophysics & Computational Biology, and Neuroscience, and the joint M.D./Ph.D. Medical Scholars Program of the College of Medicine.

Faculty Research Interests

Faculty research in the Department of Biochemistry covers a broad spectrum of the most dynamic areas of current research in biological chemistry and molecular biology: physical approaches to the structure and function of macromolecules and membranes; nucleic acid biochemistry and enzymology, enzyme mechanisms and evolution; membrane biochemistry and bioenergetics; protein-lipid interactions; protein-nucleic acid interactions and molecular recognition; molecular biological approaches to gene organization and expression; immunology; microbial physiology, and signal transduction.

Facilities and Resources

Campus resources for science research are state-of-the-art and available to all faculty research programs. Notably among these is the Roy J. Carver Biotechnology Center, which comprises the W.M. Keck Center for Comparative and Functional Genomics (Custom Library Services, High-Throughput Sequencing and Genotyping, DNA Core Sequencing, Fragment Analysis, Oligonucleotide Synthesis, Functional Genomics and Bioinformatics), Proteomics Services (Protein Science Facility, Immunological Resource Center and Flow Cytometry Facility), a

Metabolomics Center and a Transgenic Mouse Facility. It also provides career counseling through the Career Services Office. Many other cross-campus facilities are important for the faculty research programs in Biochemistry, including the Fred Seitz Materials Research Laboratory, the National Center for Supercomputing Applications (NCSA), the high-field VOICE NMR Laboratory, Mass Spectrometry Center, Microanalysis Laboratory, Cell Media Facility, and many electronics, machine and glass shop service facilities. The University of Illinois is also a full member of the LS-CAT beamline for macromolecular crystallography at the Advanced Photon Source, Argonne National Laboratory.

Financial Aid

Financial aid for Ph.D. graduate students in biochemistry is available in the form of fellowships, teaching and research assistantships, and tuition and partial fee waivers. In addition, interdepartmental training grants from the National Institutes of Health support multidisciplinary training programs. Qualified candidates are considered for financial support upon application. Graduate students making satisfactory progress toward their degrees generally receive a stipend, as well as a full tuition waiver and a partial fee waiver.

for the Master of Science in Biochemistry

For additional details and requirements refer to the department's Program of Study (http://www.mcb.illinois.edu/departments/biochemistry/gradpgmstudy.html) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Thesis Option

Code	Title	Hours
Core curriculum		20
BIOC 599	Thesis Research (12 max applied toward degree)	0-12
Total Hours		32

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum Hours Required Within the Unit:	8
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	3.0

Non-Thesis Option

Code	Title	Hours
Core curriculum		32
Total Hours		32

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum Hours Required Within the Unit:	8
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	3.0

Learning Outcomes: Biochemistry, MS

Learning Outcomes for the Master of Science in Biochemistry

At the conclusion of the degree program students will be able to:

1. Develop and demonstrate an in-depth knowledge of a specific area of biochemical research, which may include (but is not limited to) protein, nucleic acid and/or membrane biochemistry, cancer and molecular immunology, computational and quantitative biology, etc.
2. Demonstrate independent and critical skills necessary to formulate specific experiments aimed at understanding molecular processes.
3. Gain the necessary experience and skills to train others in the performance of experiments.
4. Develop communication skills suitable to discuss scientific outcomes at a level for the layperson to understand but critical enough for peers. Typically, such training is developed through writing and editing scientific manuscripts, with input from a faculty advisor.
5. Deliver effective oral and written presentations of the results and conclusions of experimental work.
6. Be able to ask and answer questions within the research areas of Biochemistry.
7. Develop skills and abilities for effective teaching of Biochemistry in a course room setting.
8. Develop the skills and intellectual background to succeed at postdoctoral work in academics or in the commercial sector.
9. Demonstrate ethical conduct within the research process and the responsibilities of the scientist.

Biochemistry, PhD

for the Doctor of Philosophy in Biochemistry

head of the department: Satish K. Nair
associate head of the department: Rutilio A. (Rudy) Fratti
director of graduate studies:
overview of admissions & requirements:
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department website: http://mcb.illinois.edu/departments/biochemistry (http://mcb.illinois.edu/departments/biochemistry/)
department faculty:
department office: 417 Roger Adams Laboratory, 600 S. Mathews Avenue, Urbana, IL 61801
phone: (217) 333-2013
email: biocUG@life.illinois.edu

Graduate Degree Programs in Biochemistry

Biochemistry, MS (p. 613)
Biochemistry, PhD (p. 614)

The Department of Biochemistry offers graduate programs leading to the Master of Science and the Doctor of Philosophy degrees. For an application and departmental materials that provide greater detail on programs, offerings, admission, degree requirements, and financial aid, visit our website at www.mcb.illinois.edu/graduate/gradprospect.html. The Department of Biochemistry is a part of the School of Molecular

and Cellular Biology (MCB), which also includes the Departments of Cell and Developmental Biology, Microbiology and Molecular and Integrative Physiology as well as Programs in Biophysics and Neurosciences. The Department is part of an umbrella program in MCB that encompasses over 70 different research laboratories. Students admitted into any of these departmental graduate programs can select faculty thesis advisors from these active research laboratories in the School. In addition, dual degrees via the Medical Scholars Program are offered. Close ties are also maintained with the School of Integrative Biology, the School of Chemical Sciences, the College of Medicine, and the College of Veterinary Medicine.

Admission

Interested students must apply directly to the School of Molecular and Cellular Biology (www.mcb.illinois.edu/graduate/gradprospect.html). During the first semester, students perform three laboratory rotations, choosing from any laboratory in the School. Students select a laboratory for their thesis research in December in mutual agreement with their desired advisor and formally join the appropriate graduate program/department at that time. Students electing biochemistry as a major for an advanced degree should have a strong background in chemistry, biology, physics, and calculus and a grade point average of a 3.0 or higher (A = 4.0). Admission requirements include: a bachelor's degree; Graduate Record Examination (GRE) scores. In addition to the above requirements, international students must attain a minimum paper-based Test of English as a Foreign Language (TOEFL) score of 590 (243 on the computer-based test). A score of 96 on the internet-based test (iBT), with a score of 24 on the speaking section, is also accepted. The department does not normally admit students directly into the M.S. program.

Graduate Teaching Experience

Experience in teaching is considered a vital part of the graduate program and is required as part of the academic work of all Ph.D. candidates in this program.

Centers, Programs, and Institutes

Biochemistry faculty are appointed and active in several cross-campus academic and research units, including the Center for Biophysics & Computational Biology, the Beckman Institute for Advanced Science and Technology, the Institute for Genomic Biology, as well as the interdepartmental graduate programs in Biophysics & Computational Biology, and Neuroscience, and the joint M.D./Ph.D. Medical Scholars Program of the College of Medicine.

Faculty Research Interests

Faculty research in the Department of Biochemistry covers a broad spectrum of the most dynamic areas of current research in biological chemistry and molecular biology: physical approaches to the structure and function of macromolecules and membranes; nucleic acid biochemistry and enzymology, enzyme mechanisms and evolution; membrane biochemistry and bioenergetics; protein-lipid interactions; protein-nucleic acid interactions and molecular recognition; molecular biological approaches to gene organization and expression; immunology; microbial physiology, and signal transduction.

Facilities and Resources

Campus resources for science research are state-of-the-art and available to all faculty research programs. Notably among these is the Roy J. Carver Biotechnology Center, which comprises the W.M. Keck Center for Comparative and Functional Genomics (Custom Library Services, High-Throughput Sequencing and Genotyping, DNA Core Sequencing, Fragment Analysis, Oligonucleotide Synthesis, Functional Genomics and Bioinformatics), Proteomics Services (Protein Science Facility, Immunological Resource Center and Flow Cytometry Facility), a Metabolomics Center and a Transgenic Mouse Facility. It also provides career counseling through the Career Services Office. Many other cross-campus facilities are important for the faculty research programs in Biochemistry, including the Fred Seitz Materials Research Laboratory, the National Center for Supercomputing Applications (NCSA), the high-field VOICE NMR Laboratory, Mass Spectrometry Center, Microanalysis Laboratory, Cell Media Facility, and many electronics, machine and glass shop service facilities. The University of Illinois is also a full member of the LS-CAT beamline for macromolecular crystallography at the Advanced Photon Source, Argonne National Laboratory.

Financial Aid

Financial aid for Ph.D. graduate students in biochemistry is available in the form of fellowships, teaching and research assistantships, and tuition and partial fee waivers. In addition, interdepartmental training grants from the National Institutes of Health support multidisciplinary training programs. Qualified candidates are considered for financial support upon application. Graduate students making satisfactory progress toward their degrees generally receive a stipend, as well as a full tuition waiver and a partial fee waiver.

for the Doctor of Philosophy in Biochemistry

For additional details and requirements refer to the department's Program of Study (http://www.mcb.illinois.edu/departments/biochemistry/gradpgmstudy.html) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Biochemistry, PhD

Code	Title	Hours
Biochemistry/MCB core courses and advanced elective courses		32
BIOC 599	Thesis Research (min/max applied toward degree)	64
Total Hours		96

Other Requirements

Requirement	Description
Other requirements may overlap	
A minimum of one semester at 50% FTE or two semesters of 25% FTE of teaching in lecture or laboratory courses is required.	
A thesis based on original research must be presented to a review committee at least two weeks before the final oral examination.	
Masters Degree Required Before Admission to PhD?	No, but Masters level requirements must be met (32 hours)
Preliminary Exam Required	Yes, administered by the end of the second year.
Final Exam/Dissertation Defense Required	Yes, and the final examination is limited to a defense of the thesis research.
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

Learning Outcomes: Biochemistry, PhD

Learning Outcomes for the Doctor of Philosophy in Biochemistry

The Biochemistry Department has the following expectations and goals for graduates of its Ph.D. degree program: Many basic outcomes from Standards for the Ph.D. Degree in Biochemistry and Molecular Biology. Recommendations of the Education Committee of the International Union of Biochemistry. TIBS(1989)14:205-209.

At the conclusion of the degree program students will be able to:

1. Develop and demonstrate an in-depth knowledge of a specific area of biochemical research, which may include (but is not limited to) protein, nucleic acid and/or membrane biochemistry, cancer and molecular immunology, computational and quantitative biology, etc.
2. Demonstrate independent and critical skills necessary to formulate specific experiments aimed at understanding molecular processes.
3. Gain the necessary experience and skills to train others in the performance of experiments.
4. Develop communication skills suitable to discuss scientific outcomes at a level for the layperson to understand but critical enough for peers. Typically, such training is developed through writing and editing scientific manuscripts, with input from a faculty advisor.
5. Deliver effective oral and written presentations of the results and conclusions of experimental work.
6. Be able to ask and answer questions within the research areas of Biochemistry.
7. Develop skills and abilities for effective teaching of Biochemistry in a course room setting.
8. Develop the skills and intellectual background to succeed at postdoctoral work in academics or in the commercial sector.
9. Demonstrate ethical conduct within the research process and the responsibilities of the scientist.

Bioengineering, MEng

for the degree of Master of Engineering in Bioengineering (on campus & online)

department head: Mark Anastasio (mfi@illinois.edu)
director of graduate studies: Gregory Underhill (gunderhi@illinois.edu)
director of MEng program: Wawrzyniec Dobrucki (dobrucki@illinois.edu)
overview of admissions & requirements: https://bioemeng.illinois.edu/admissions/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://bioengineering.illinois.edu
program website: https://bioemeng.illinois.edu
college website: https://grainger.illinois.edu/
contact: Liezl Bowman (liezlb@illinois.edu)
address: 1240 Everitt Laboratory, 1406 W Green St, Urbana, IL 61801
phone: (217) 300-8066
email: bioe-meng@illinois.edu

The MEng in Bioengineering is a professionally-oriented degree designed to bridge the skills gap by developing students with advanced technical know-how, a better understanding of the medical healthcare industry and more business acumen through coursework and project work, which provides students exposure to real world industry issues.

Students pursuing this major must select one of three concentrations:

Bioinstrumentation (p. 617)
Computational Genomics (p. 618)
General Bioengineering (p. 620)

Admission Requirements

Students must select one of the concentrations under the MEng in Bioengineering program to apply to and will not be able to complete multiple concentrations. Students should have an undergraduate degree in an engineering or a science related field or must have taken engineering or science related coursework. Applicants should have a minimum grade point average of 3.00 (A = 4.00) or equivalent for the last two years of undergraduate study and show evidence of strong quantitative skills and of serious interest in the life sciences through their personal statement. Students with less than a 3.0 GPA may be considered for a limited status admission. Students in the program do not have automatic admission to the PhD program in any engineering department.

All applicants whose native language is not English are required to submit TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) scores as evidence of English proficiency. Minimum admission requirements (https://grad.illinois.edu/admissions/instructions/04c/) are set by the Graduate College. Students applying to the online program must satisfy the full status admissions requirement.

All applicants whose native language is not English must submit a minimum TOEFL (http://www.toefl.org/) score of 103 (iBT), 257 (CBT), or 613 (PBT); or minimum International English Language Testing System (IELTS) (http://www.ielts.org/) academic exam scores of 7.0 overall and 6.0 in all subsections for full admission into the program. Applicants may be exempt from the TOEFL if certain criteria (http://grad.illinois.edu/admissions/instructions/04c/)are met. Applicants with lesser scores may still apply. Limited status (http://grad.illinois.edu/admissions/instructions/04c/) is granted for lesser scores and requires

enrollment in English as a Second Language (ESL) courses (http://linguistics.illinois.edu/students/esl/guidelines/) based on an ESL Placement Test (EPT) taken upon arrival to campus.

Financial Aid

For tuition information and external funding resources, please visit the program's tuition and fees Web site (https://bioemeng.illinois.edu/tuition-fees/). Students in the MEng in Bioengineering program are not eligible for Board of Trustees (BOT) tuition-waiver generating assistantships at the University of Illinois.

Department Research

Bioengineering faculty perform research in the areas of Bio-Imaging at Multi-Scale; Molecular, Cellular and Tissue Engineering; Bio-Micro and Nanotechnology; Computational and Systems Bioengineering; and Synthetic Bioengineering. MEng students are able to do independent study research projects with Bioengineering faculty and affiliate faculty (https://bioengineering.illinois.edu/directory/) for class credit.

Other Graduate Programs in the Department of Bioengineering

degrees:

Bioengineering, MS (p. 621)
optional concentrations:
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)
Bioengineering, PhD (p. 623)
optional concentrations:
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)|Computational Science and Engineering (p. 1089)

The Department of Bioengineering offers studies leading to the Master of Engineering in Bioengineering (MEng), the Master of Science in Bioengineering (MS), and the Doctor of Philosophy (PhD) in Bioengineering. The Bioengineering Graduate Program provides students with educational and research experiences that integrate the sciences of biology and medicine with the practices and principles of engineering. For the MS and PhD programs, areas of focus include Bio-imaging, Cell & Tissue Engineering, Micro and Molecular Technologies, and Computational Biology.

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for the degree of Master of Engineering in Bioengineering (on campus & online)

Students pursuing this major must select one of three concentrations:

Bioinstrumentation (p. 617)
Computational Genomics (p. 618)
General Bioengineering (p. 620)

For additional details and requirements for all degrees, please refer to the department's Graduate Studies Web site (https://bioengineering.illinois.edu/academics/graduate/) and the Graduate College Handbook (http://grad.illinois.edu/gradhandbook/).

Learning Outcomes: Bioengineering, MENG

Learning Outcomes for the degree of Master of Engineering in Bioengineering (on campus & online)

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1. Ability to apply quantitative skills and engineering principles to propose novel and practical solutions to medical/human health problems
2. Prepare students for professional careers
3. Ability to gain basic understanding of business, finances, intellectual property and regulatory matters
4. Understanding of professional and ethical responsibilities
5. Ability to communicate real-world scientific problems with bigger vision and offer solutions, as well as their impact, effectively to a diverse audience and stakeholders, both orally and in writing
6. Demonstrate moderate to high technical mastery in chosen research area, shown by the ability to identify an important scientific problem, formulate a hypothesis, and design experiments to conduct research and data analysis to test the hypothesis. The student should also be able to formulate alternatives.
7. Develop effective leadership skills in order to foster the ability to conduct collaborative research and work with a diverse team

Bioengineering: Bioinstrumentation, MEng

for the degree of Master of Engineering in Bioengineering, Bioinstrumentation Concentration

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department head: Mark Anastasio (mfi@illinois.edu)
director of graduate studies: Gregory Underhill (gunderhi@illinois.edu)
director of MEng program: Wawrzyniec Dobrucki (dobrucki@illinois.edu)
overview of admissions & requirements: https://bioemeng.illinois.edu/admissions/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://bioengineering.illinois.edu
program website: https://bioemeng.illinois.edu
college website: https://grainger.illinois.edu/
contact: Liezl Bowman (liezlb@illinois.edu)
address: 1240 Everitt Laboratory, 1406 W Green St, Urbana, IL 61801
phone: (217) 300-8066
email: bioe-meng@illinois.edu

The MEng in Bioengineering is a professionally-oriented degree designed to bridge the skills gap by developing students with advanced technical know-how, a better understanding of the medical healthcare industry and more business acumen through coursework and project work, which provides students exposure to real world industry issues. Other concentrations under the MEng in Bioengineering major include General Bioengineering (p. 620), Computational Genomics (p. 618), Entrepreneurship & Innovation (http://catalog.illinois.edu/

graduate/engineering/concentration/entrepreneurship-innovation/) and Pharmaceutical Engineering (p. 1103).

Admission Requirements

Students must select one of the concentrations under the MEng in Bioengineering program to apply to and will not be able to complete multiple concentrations. Students should have an undergraduate degree in an engineering or a science related field or must have taken engineering or science related coursework. Applicants should have a minimum grade point average of 3.00 (A = 4.00) or equivalent for the last two years of undergraduate study and show evidence of strong quantitative skills and of serious interest in the life sciences through their personal statement. Students with less than a 3.0 GPA may be considered for a limited status admission. Students in the program do not have automatic admission to the PhD program in any engineering department.

All applicants whose native language is not English are required to submit TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) scores as evidence of English proficiency. Minimum admission requirements (https://grad.illinois.edu/admissions/instructions/04c/) are set by the Graduate College. Students applying to the online program must satisfy the full status admissions requirement.

All applicants whose native language is not English must submit a minimum TOEFL (http://www.toefl.org/) score of 103 (iBT), 257 (CBT), or 613 (PBT); or minimum International English Language Testing System (IELTS) (http://www.ielts.org/) academic exam scores of 7.0 overall and 6.0 in all subsections for full admission into the program. Applicants may be exempt from the TOEFL if certain criteria (http://grad.illinois.edu/admissions/instructions/04c/)are met. Applicants with lesser scores may still apply. Limited status (http://grad.illinois.edu/admissions/instructions/04c/) is granted for lesser scores and requires enrollment in English as a Second Language (ESL) courses (http://linguistics.illinois.edu/students/esl/guidelines/) based on an ESL Placement Test (EPT) taken upon arrival to campus.

Financial Aid

For tuition information and external funding resources, please visit the program's tuition and fees Web site (https://bioemeng.illinois.edu/tuition-fees/). Students in the MEng in Bioengineering program are not eligible for Board of Trustees (BOT) tuition-waiver generating assistantships at the University of Illinois.

Department Research

Bioengineering faculty perform research in the areas of Bio-Imaging at Multi-Scale; Molecular, Cellular and Tissue Engineering; Bio-Micro and Nanotechnology; Computational and Systems Bioengineering; and Synthetic Bioengineering. MEng students are able to do independent study research projects with Bioengineering faculty and affiliate faculty (https://bioengineering.illinois.edu/directory/) for class credit.

Other Graduate Programs in the Department of Bioengineering

degrees:

Bioengineering, MS (p. 621)
optional concentrations:
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)
Bioengineering, PhD (p. 623)
optional concentrations:
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)|Computational Science and Engineering (p. 1089)

The Department of Bioengineering offers studies leading to the Master of Engineering in Bioengineering (MEng), the Master of Science in Bioengineering (MS), and the Doctor of Philosophy (PhD) in Bioengineering. The Bioengineering Graduate Program provides students with educational and research experiences that integrate the sciences of biology and medicine with the practices and principles of engineering. For the MS and PhD programs, areas of focus include Bio-imaging, Cell & Tissue Engineering, Micro and Molecular Technologies, and Computational Biology.

for the degree of Master of Engineering in Bioengineering, Bioinstrumentation Concentration

For additional details and requirements for all degrees, please refer to the department's Graduate Studies Web site (https://bioengineering.illinois.edu/academics/graduate/) and the Graduate College Handbook (http://grad.illinois.edu/gradhandbook/).

Code	Title	Hours
Core Concentration		18
	Technical Coursework from approved list	
	Business Coursework from approved list	
Elective Courses chosen in consultation with advisor		8
Professional Development from approved list		6
Total Hours		32

Other Requirements

Code	Title	Hours
Minimum 500-level hours required overall:		12
Minimum GPA:		3.0
Minimum credit hours taken from the University of Illinois at Urbana-Champaign campus:		20
Maximum number of previous University of Illinois at Urbana-Champaign graduate-level coursework not applied to any other degree that may be transferred and applied to the major pending department and Graduate College approval		12

Bioengineering: Computational Genomics, MEng

for the degree of Master of Engineering in Bioengineering, Computational Genomics Concentration

department head: Mark Anastasio (mfi@illinois.edu)
director of graduate studies: Gregory Underhill (gunderhi@illinois.edu)
director of MEng program: Wawrzyniec Dobrucki (dobrucki@illinois.edu)
overview of admissions & requirements: https://bioemeng.illinois.edu/admissions/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://bioengineering.illinois.edu
program website: https://bioemeng.illinois.edu
college website: https://grainger.illinois.edu/
contact: Liezl Bowman (liezlb@illinois.edu)
address: 1240 Everitt Laboratory, 1406 W Green St, Urbana, IL 61801
phone: (217) 300-8066
email: bioe-meng@illinois.edu

The MEng in Bioengineering is a professionally-oriented degree designed to bridge the skills gap by developing students with advanced technical know-how, a better understanding of the medical healthcare industry and more business acumen through coursework and project work, which provides students exposure to real world industry issues. Other concentrations under the MEng in Bioengineering major include Bioinstrumentation (p. 617) and General Bioengineering (p. 620).

Admission Requirements

Students must select one of the concentrations under the MEng in Bioengineering program to apply to and will not be able to complete multiple concentrations. Students should have an undergraduate degree in an engineering or a science related field or must have taken engineering or science related coursework. Applicants should have a minimum grade point average of 3.00 (A = 4.00) or equivalent for the last two years of undergraduate study and show evidence of strong quantitative skills and of serious interest in the life sciences through their personal statement. Students with less than a 3.0 GPA may be considered for a limited status admission. Students in the program do not have automatic admission to the PhD program in any engineering department.

All applicants whose native language is not English are required to submit TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) scores as evidence of English proficiency. Minimum admission requirements (https://grad.illinois.edu/admissions/instructions/04c/) are set by the Graduate College. Students applying to the online program must satisfy the full status admissions requirement.

All applicants whose native language is not English must submit a minimum TOEFL (http://www.toefl.org/) score of 103 (iBT), 257 (CBT), or 613 (PBT); or minimum International English Language Testing System (IELTS) (http://www.ielts.org/) academic exam scores of 7.0 overall and 6.0 in all subsections for full admission into the program. Applicants may be exempt from the TOEFL if certain criteria (http://grad.illinois.edu/admissions/instructions/04c/)are met. Applicants with lesser scores may still apply. Limited status (http://grad.illinois.edu/admissions/instructions/04c/) is granted for lesser scores and requires enrollment in English as a Second Language (ESL) courses (http://linguistics.illinois.edu/students/esl/guidelines/) based on an ESL Placement Test (EPT) taken upon arrival to campus.

Financial Aid

For tuition information and external funding resources, please visit the program's tuition and fees Web site (https://bioemeng.illinois.edu/tuition-fees/). Students in the MEng in Bioengineering program are not eligible for Board of Trustees (BOT) tuition-waiver generating assistantships at the University of Illinois.

Department Research

Bioengineering faculty perform research in the areas of Bio-Imaging at Multi-Scale; Molecular, Cellular and Tissue Engineering; Bio-Micro and Nanotechnology; Computational and Systems Bioengineering; and Synthetic Bioengineering. MEng students are able to do independent study research projects with Bioengineering faculty and affiliate faculty (https://bioengineering.illinois.edu/directory/) for class credit.

Other Graduate Programs in the Department of Bioengineering

degrees:

Bioengineering, MS (p. 621)
optional concentrations:
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)
Bioengineering, PhD (p. 623)
optional concentrations:
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)|Computational Science and Engineering (p. 1089)

The Department of Bioengineering offers studies leading to the Master of Engineering in Bioengineering (MEng), the Master of Science in Bioengineering (MS), and the Doctor of Philosophy (PhD) in Bioengineering. The Bioengineering Graduate Program provides students with educational and research experiences that integrate the sciences of biology and medicine with the practices and principles of engineering. For the MS and PhD programs, areas of focus include Bio-imaging, Cell & Tissue Engineering, Micro and Molecular Technologies, and Computational Biology.

for the degree of Master of Engineering in Bioengineering, Computational Genomics Concentration

For additional details and requirements for all degrees, please refer to the department's Graduate Studies Web site (https://bioengineering.illinois.edu/academics/graduate/) and the Graduate College Handbook (http://grad.illinois.edu/gradhandbook/).

Code	Title	Hours
Core Concentration		18
	Technical Coursework from approved list	
	Business Coursework from approved list	
Elective Courses chosen in consultation with advisor		8
Professional Development from approved list		6
Total Hours		32

Other Requirements

Code	Title	Hours
Minimum 500-level hours required overall:		12
Minimum GPA:		3.0
Minimum credit hours taken from the University of Illinois at Urbana-Champaign campus:		20
Maximum number of previous University of Illinois at Urbana-Champaign graduate-level coursework not applied to any other degree that may be transferred and applied to the major pending department and Graduate College approval		12

Bioengineering: General Bioengineering, MEng

for the degree of Master of Engineering in Bioengineering, General Bioengineering Concentration

department head: Mark Anastasio (mfi@illinois.edu)
director of graduate studies: Gregory Underhill (gunderhi@illinois.edu)
director of MEng program: Wawrzyniec Dobrucki (dobrucki@illinois.edu)
overview of admissions & requirements: https://bioemeng.illinois.edu/admissions/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://bioengineering.illinois.edu
program website: https://bioemeng.illinois.edu
college website: https://grainger.illinois.edu/
contact: Liezl Bowman (liezlb@illinois.edu)
address: 1240 Everitt Laboratory, 1406 W Green St, Urbana, IL 61801
phone: (217) 300-8066
email: bioe-meng@illinois.edu

The MEng in Bioengineering is a professionally-oriented degree designed to bridge the skills gap by developing students with advanced technical know-how, a better understanding of the medical healthcare industry and more business acumen through coursework and project work, which provides students exposure to real world industry issues. Other concentrations under the MEng in Bioengineering major include Bioinstrumentation (p. 617) and Computational Genomics (p. 618).

Admission Requirements

Students must select one of the concentrations under the MEng in Bioengineering program to apply to and will not be able to complete multiple concentrations. Students should have an undergraduate degree in an engineering or a science related field or must have taken engineering or science related coursework. Applicants should have a minimum grade point average of 3.00 (A = 4.00) or equivalent for the last two years of undergraduate study and show evidence of strong quantitative skills and of serious interest in the life sciences through their personal statement. Students with less than a 3.0 GPA may be considered for a limited status admission. Students in the program do not have automatic admission to the PhD program in any engineering department.

All applicants whose native language is not English are required to submit TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) scores as evidence of English proficiency. Minimum admission requirements (https://grad.illinois.edu/admissions/instructions/04c/) are set by the Graduate College. Students applying to the online program must satisfy the full status admissions requirement.

All applicants whose native language is not English must submit a minimum TOEFL (http://www.toefl.org/) score of 103 (iBT), 257 (CBT), or 613 (PBT); or minimum International English Language Testing System (IELTS) (http://www.ielts.org/) academic exam scores of 7.0 overall and 6.0 in all subsections for full admission into the program. Applicants may be exempt from the TOEFL if certain criteria (http://grad.illinois.edu/admissions/instructions/04c/)are met. Applicants with lesser scores may still apply. Limited status (http://grad.illinois.edu/admissions/instructions/04c/) is granted for lesser scores and requires enrollment in English as a Second Language (ESL) courses (http://linguistics.illinois.edu/students/esl/guidelines/) based on an ESL Placement Test (EPT) taken upon arrival to campus.

Financial Aid

For tuition information and external funding resources, please visit the program's tuition and fees Web site (https://bioemeng.illinois.edu/tuition-fees/). Students in the MEng in Bioengineering program are not eligible for Board of Trustees (BOT) tuition-waiver generating assistantships at the University of Illinois.

Department Research

Bioengineering faculty perform research in the areas of Bio-Imaging at Multi-Scale; Molecular, Cellular and Tissue Engineering; Bio-Micro and Nanotechnology; Computational and Systems Bioengineering; and Synthetic Bioengineering. MEng students are able to do independent study research projects with Bioengineering faculty and affiliate faculty (https://bioengineering.illinois.edu/directory/) for class credit.

Other Graduate Programs in the Department of Bioengineering

degrees:

- Bioengineering, MS (p. 621)
  - **optional concentrations:**
    - Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)
- Bioengineering, PhD (p. 623)
  - **optional concentrations:**
    - Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)|Computational Science and Engineering (p. 1089)

The Department of Bioengineering offers studies leading to the Master of Engineering in Bioengineering (MEng), the Master of Science in Bioengineering (MS), and the Doctor of Philosophy (PhD) in Bioengineering. The Bioengineering Graduate Program provides students with educational and research experiences that integrate the sciences of biology and medicine with the practices and principles of engineering. For the MS and PhD programs, areas of focus include Bio-imaging, Cell & Tissue Engineering, Micro and Molecular Technologies, and Computational Biology

for the degree of Master of Engineering in Bioengineering, General Bioengineering Concentration

For additional details and requirements for all degrees, please refer to the department's Graduate Studies Web site (https://bioengineering.illinois.edu/academics/graduate/) and the Graduate College Handbook (http://grad.illinois.edu/gradhandbook/).

Code	Title	Hours
Core Concentration		18
	Technical Coursework from approved list	
	Business Coursework from approved list	
Elective Courses chosen in consultation with advisor		8
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Other Requirements

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Minimum GPA:		3.0
Minimum credit hours taken from the University of Illinois at Urbana-Champaign campus:		20
Maximum number of previous University of Illinois at Urbana-Champaign graduate-level coursework not applied to any other degree that may be transferred and applied to the major pending department and Graduate College approval		12

Bioengineering, MS

for the degree of Master of Science in Bioengineering

department head: Mark Anastasio (mfi@illinois.edu)
director of graduate studies: Gregory Underhill (bodony@illinois.edu)
overview of admissions & requirements: https://bioengineering.illinois.edu/admissions/graduate/ (https://bioengineering.illinois.edu/admissions/graduate/process-and-requirements.html)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://bioengineering.illinois.edu/
program website: https://bioengineering.illinois.edu/academics/graduate/ms/
department faculty: https://bioengineering.illinois.edu/directory/
college website: https://grainger.illinois.edu/
contact: L (kristasm@illinois.edu)iezl Bowman (liezlb@illinois.edu)
address: 1240 Everitt Laboratory, 1406 W Green St, Urbana, IL 61801
phone: (217) 300-8066
email: bioe-gradprograms@illinois.edu (bioengineering@illinois.edu)

The Department of Bioengineering offers both an MS with thesis and an MS non-thesis program. Students in the MS with thesis program are required to have a research advisor and applicants are encouraged to contact department faculty (https://bioengineering.illinois.edu/directory/) in their areas of interest to inquire about possible research and funding opportunities.

Opportunity exists for specializing in i) biomechanics via the Biomechanics (p. 1085) optional graduate concentration and ii) cancer nanotechnology via the Cancer Nanotechnology (p. 1088) optional graduate concentration.

Admission Requirements

Applicants should have an undergraduate degree in a natural science, computer science, or engineering. A minimum grade point average of 3.00 (A = 4.00) for the last two years of undergraduate study is required. Applicants should show evidence of strong quantitative skills and of serious interest in the life sciences. All applicants must submit results from the Graduate Record Examination (GRE) (http://www.ets.org/) general test.

All applicants whose native language is not English are required to submit TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) scores as evidence of English proficiency. Minimum admission requirements (https://grad.illinois.edu/admissions/instructions/04c/) are set by the Graduate College.

Financial Aid

Qualified students may qualify for financial aid in the form of fellowships, teaching and research assistantships, and waivers of tuition and service fees.

All applicants, regardless of U.S. citizenship, whose native language is not English and who wish to be considered for teaching assistantships must demonstrate spoken English language proficiency (http://grad.illinois.edu/admissions/taengprof.htm) by achieving a minimum score of 24 on the speaking subsection of the TOEFL iBT or 8 on the speaking subsection of the IELTS. For students who are unable to take the iBT or IELTS, a minimum score of 4CP is required on the EPI test (http://cte.illinois.edu/testing/oral_eng/epi_overview.html), offered on campus. All new teaching assistants are required to participate in the Graduate Academy for College Teaching (https://citl.illinois.edu/citl-101/teaching-learning/grad-academy-for-college-teaching/) conducted prior to the start of the semester.

Department Research

Bioengineering faculty perform research in the areas of Bio-Imaging at Multi-Scale, Molecular, Cellular and Tissue Engineering, Bio-Micro and Nanotechnology, Computational and Systems Bioengineering, and Synthetic Bioengineering. In addition to Bioengineering faculty, the Department of Bioengineering has more than 50 affiliate faculty (http://bioengineering.illinois.edu/directory/).

Other Graduate Programs in the Department of Bioengineering

degrees:

Bioengineering, MEng (p. 616)
optional concentrations:
Bioinstrumentation (p. 617)|Computational Genomics (p. 618)|General Bioengineering (p. 620)
Bioengineering, PhD (p. 623)
optional concentrations:
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)|Computational Science and Engineering (p. 1089)
concentrations:

Biomechanics (p. 1085)
available for:
Bioinformatics: Bioengineering, MS (p. 626)|Electrical & Computer Engineering, MS (p. 738)|Electrical & Computer Engineering, PhD (p. 740)|Materials Engineering, MEng (p. 860)|Materials Science & Engineering, MS (p. 861)|Materials Science & Engineering, PhD (p. 863)|Mechanical Engineering, MS (p. 870)|Mechanical Engineering, MEng (p. 869)|Mechanical Engineering, PhD (p. 872)|Theoretical & Applied Mechanics, MS (p. 1054)|Theoretical & Applied Mechanics, PhD (p. 1057)
Cancer Nanotechnology (p. 1088)
available for:
Bioinformatics: Bioengineering, MS (p. 626)|Electrical & Computer Engineering, MS (p. 738)|Electrical & Computer Engineering, PhD (p. 740)|Materials Engineering, MEng (p. 860)|Materials Science & Engineering, MS (p. 861)|Materials Science & Engineering, PhD (p. 863)|Mechanical Engineering, MS (p. 870)|Mechanical Engineering, MEng (p. 869)|Mechanical Engineering, PhD (p. 872)|Theoretical & Applied Mechanics, MS (p. 1054)|Theoretical & Applied Mechanics, PhD (p. 1057)

The Department of Bioengineering offers studies leading to the Master of Engineering in Bioengineering (MEng), the Master of Science in Bioengineering (MS), and the Doctor of Philosophy (PhD) in Bioengineering. The Bioengineering Graduate Program provides students with educational and research experiences that integrate the sciences of biology and medicine with the practices and principles of engineering. For the MS and PhD programs, areas of focus include Bio-Imaging at Multi-Scale, Molecular, Cellular and Tissue Engineering, Bio-Micro and Nanotechnology, Computational and Systems Bioengineering, and Synthetic Bioengineering.

for the degree of Master of Science in Bioengineering

For additional details and requirements for all degrees, please refer to the department's Graduate Studies Web site (http://bioengineering.illinois.edu/) and the Graduate College Handbook (http://grad.illinois.edu/gradhandbook/).

Bioengineering, MS

Thesis Option

Code	Title	Hours
BIOE 599	Thesis Research (min-max applied toward degree)	4
BIOE 500	Graduate Seminar (BIOE 500 must be taken at least twice. A maximum of 2 hours may be applied toward the degree.)	2
BIOE 501	Seminar Discussion	1
BIOE 502	Bioengineering Professionalism	2
BIOE 504	Analytical Methods in Bioeng	4
BIOE 505	Computational Bioengineering	4
BIOE 506	Molecular Biotechniques	4
BIOE 507	Advanced Bioinstrumentation	4
Elective Courses		7
Total Hours		32

Other Requirements and Conditions

Requirement	Description
Minimum GPA:	3.0

Non-Thesis Option

Code	Title	Hours
BIOE 500	Graduate Seminar (BIOE 500 must be taken at least twice. A maximum of 2 hours may be applied toward the degree.)	2
BIOE 501	Seminar Discussion	1
BIOE 502	Bioengineering Professionalism	2
BIOE 504	Analytical Methods in Bioeng	4
BIOE 505	Computational Bioengineering	4
BIOE 506	Molecular Biotechniques	4
BIOE 507	Advanced Bioinstrumentation	4
Elective Courses		19
Total Hours		40

Other Requirements and Conditions

Requirement	Description
Minimum GPA:	3.0

Learning Outcomes: Bioengineering, MS

Learning Outcomes for the degree of Master of Science in Bioengineering

Thesis Option

1. Ability to apply **quantitative skills and engineering principles** to propose novel and practical solutions to medical/human health problems
2. Understanding of **professional and ethical responsibilities**
3. Ability to **communicate** scientific problems and solutions, as well as their impact, effectively to a diverse audience and stakeholders, both orally and in writing
4. Demonstrate moderate **technical** mastery in chosen research area, shown by the ability to identify an important scientific problem,

formulate a hypothesis, and design experiments to conduct research and data analysis to test the hypothesis. The student should also be able to formulate alternatives.
5. Develop effective **leadership** skills in order to foster the ability to conduct **collaborative** research and work with a diverse team

Non-Thesis Option

1. Ability to apply quantitative skills and engineering principles to propose novel and practical solutions to medical/human health problems
2. Understanding of professional and ethical responsibilities
3. Ability to communicate scientific problems and solutions, as well as their impact, effectively to a diverse audience and stakeholders, both orally and in writing
4. Demonstrate moderate conceptual mastery in chosen research area, with the capability of expanding it into a future research project in preparation for an industry career or PhD degree
5. Develop effective leadership skills in order to foster the ability to conduct collaborative research and work with a diverse team

Bioengineering, PhD

for the degree of Doctor of Philosophy in Bioengineering

department head: Mark Anastasio (mfi@illinois.edu)
director of graduate studies: Gregory Underhill (bodony@illinois.edu)
overview of admissions & requirements: https://bioengineering.illinois.edu/admissions/graduate/ (https://bioengineering.illinois.edu/admissions/graduate/process-and-requirements.html)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://bioengineering.illinois.edu/
program website: https://bioengineering.illinois.edu/academics/graduate/phd/
department faculty: https://bioengineering.illinois.edu/directory/
college website: https://grainger.illinois.edu/
contact: Liezl Bowman (liezlb@illinois.edu)
address: 1240 Everitt Laboratory, 1406 W Green St, Urbana, IL 61801
phone: (217) 300-8066
email: bioe-gradprograms@illinois.edu (bioengineering@illinois.edu)

The Department of Bioengineering offers both a traditional doctoral program (for students with a previous master's degree) and a direct doctoral program (for students with only a bachelor's degree). Students in both programs are required to have a research advisor and applicants are encouraged to contact department faculty (https://bioengineering.illinois.edu/directory/) in their areas of interest to inquire about possible research and funding opportunities.

Opportunity exists for specializing in i) biomechanics via the Biomechanics (p. 1085) optional graduate concentration, ii) cancer nanotechnology via the Cancer Nanotechnology (p. 1088) optional graduate concentration, and iii) computational science and engineering via the Computational Science & Engineering (p. 1089) optional graduate concentration.

Admission Requirements

Applicants should have an undergraduate or graduate degree in a natural science, computer science, or engineering. A minimum grade point average of 3.00 (A = 4.00) for the last two years of undergraduate study is required. Applicants should show evidence of strong quantitative skills and of serious interest in the life sciences. All applicants must submit results from the Graduate Record Examination (GRE) (http://www.ets.org/) general test.

All applicants whose native language is not English are required to submit TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) scores as evidence of English proficiency. Minimum admission requirements (https://grad.illinois.edu/admissions/instructions/04c/) are set by the Graduate College.

Financial Aid

Qualified students may apply for financial aid in the form of fellowships, teaching and research assistantships, and waivers of tuition and service fees. Starting in Fall 2020, Grainger Engineering PhD students in their first five years of enrollment who meet the minimum eligibility requirements (https://grainger.illinois.edu/academics/graduate/phd-funding-guarantee/) are guaranteed a funded appointment for fall and spring that includes a full tuition waiver, a partial fee waiver, and a stipend.

All applicants, regardless of US citizenship, whose native language is not English and who wish to be considered for teaching assistantships must demonstrate spoken English language proficiency (http://grad.illinois.edu/admissions/taengprof.htm) by achieving a minimum score of 24 on the speaking subsection of the TOEFL iBT or 8 on the speaking subsection of the IELTS. For students who are unable to take the iBT or IELTS, a minimum score of 4CP is required on the EPI test (http://cte.illinois.edu/testing/oral_eng/epi_overview.html), offered on campus. All new teaching assistants are required to participate in the Graduate Academy for College Teaching (http://cte.illinois.edu/programs/ta_train.html) conducted prior to the start of the semester.

Department Research

Bioengineering faculty perform research in the areas of Bio-Imaging at Multi-Scale; Molecular, Cellular and Tissue Engineering; Bio-Micro and Nanotechnology; Computational and Systems Bioengineering; and Synthetic Bioengineering. In addition to Bioengineering faculty, the Department of Bioengineering has more than 50 affiliate faculty (http://bioengineering.illinois.edu/directory/).

Other Graduate Programs in the Department of Bioengineering

degrees:

Bioengineering, MEng (p. 616)
optional concentrations:
Bioinstrumentation (p. 617)|Computational Genomics (p. 618)|General Bioengineering (p. 620)
Bioengineering, MS (p. 621)
optional concentrations:
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)
concentrations:

Biomechanics (p. 1085)
available for:
Bioinformatics: Bioengineering, MS (p. 626)|Electrical & Computer Engineering, MS (p. 738)|Electrical & Computer Engineering, PhD (p. 740)|Materials Engineering, MEng (p. 860)|Materials Science & Engineering, MS (p. 861)|Materials Science & Engineering, PhD (p. 863)|Mechanical Engineering, MS (p. 870)|Mechanical Engineering, MEng (p. 869)|Mechanical Engineering, PhD (p. 872)|Theoretical & Applied Mechanics, MS (p. 1054)|Theoretical & Applied Mechanics, PhD (p. 1057)
Cancer Nanotechnology (p. 1088)
available for:
Bioinformatics: Bioengineering, MS (p. 626)|Electrical & Computer Engineering, MS (p. 738)|Electrical & Computer Engineering, PhD (p. 740)|Materials Engineering, MEng (p. 860)|Materials Science & Engineering, MS (p. 861)|Materials Science & Engineering, PhD (p. 863)|Mechanical Engineering, MS (p. 870)|Mechanical Engineering, MEng (p. 869)|Mechanical Engineering, PhD (p. 872)|Theoretical & Applied Mechanics, MS (p. 1054)|Theoretical & Applied Mechanics, PhD (p. 1057)

The Department of Bioengineering offers studies leading to the Master of Engineering in Bioengineering (MEng), the Master of Science in Bioengineering (MS), and the Doctor of Philosophy (PhD) in Bioengineering. The Bioengineering Graduate Program provides students with educational and research experiences that integrate the sciences of biology and medicine with the practices and principles of engineering. For the MS and PhD programs, areas of focus include Bio-Imaging at Multi-Scale, Molecular, Cellular and Tissue Engineering, Bio-Micro and Nanotechnology, Computational and Systems Bioengineering, and Synthetic Bioengineering.

for the degree of Doctor of Philosophy in Bioengineering

For additional details and requirements for all degrees, please refer to the department's Graduate Studies Web site (http://bioengineering.illinois.edu/) and the Graduate College Handbook (http://grad.illinois.edu/gradhandbook/).

Entering with approved M.S. degree

Code	Title	Hours
BIOE 599	Thesis Research (min-max applied toward degree)	52
Elective courses		12
Total Hours		64

Other Requirements and Conditions

Requirement	Description
Other Requirements and Conditions may overlap	
Minimum program GPA:	3.0
A Masters degree is required for admission to the Ph.D. program.	
Qualifying exam[1]	
Preliminary exam	
Final exam and dissertation defense	
Dissertation deposit	

[1] Qualifying Examination information (http://bioengineering.illinois.edu/graduate-programs/current-graduate-students/qualifying-exam/)

Entering with B.S. degree

Code	Title	Hours
BIOE 599	Thesis Research (min-max applied toward degree)	55
500-level BioE courses: See approved list		21
Elective courses: At least 12 hours must be engineering graduate-level courses. See website for more details.		20
Total hours		**96**

Other Requirements and Conditions

Requirement	Description
Other Requirements and Conditions may overlap	
Minimum program GPA:	3.0
Qualifying exam [1]	
Preliminary exam	
Final exam and dissertation defense	
Dissertation deposit	

[1] Qualifying Examination information (http://bioengineering.illinois.edu/graduate-programs/current-graduate-students/qualifying-exam/)

Learning Outcomes: Bioengineering, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Bioengineering

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1. Ability to apply **quantitative** skills and **engineering principles** to propose novel and practical solutions to medical/human health problems
2. Understanding of **professional** and **ethical** responsibilities
3. Ability to **communicate** scientific problems and solutions, as well as their impact, effectively to a diverse audience and stakeholders, both orally and in writing
4. Demonstrate moderate **technical** mastery in chosen research area, shown by the ability to identify an important scientific problem, formulate a hypothesis, and design experiments to conduct research

and data analysis to test the hypothesis. The student should also be able to formulate alternatives.

5. Develop effective **leadership** skills in order to foster the ability to conduct **collaborative** research and work with a diverse team

Bioinformatics, MS

for the degree of Master of Science in Bioinformatics

bioinformatics website: https://www.informatics.illinois.edu/bioinformatics-masters/
overview of school admissions & requirements: contact the individual departments listed below
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
on-campus contact: contact the individual departments listed below

Students pursing this major must choose one of these concentrations:

Animal Sciences (p. 625)
Crop Sciences (p. 631)
Chemical & Biomolecular Engineering (p. 628)- not currently accepting applications
Computer Science (p. 629)
Bioengineering (p. 626)- not currently accepting applications
Information Sciences (p. 633)

The MS degree can be taken in a thesis or non-thesis format, depending on the department. For either format, the research adviser must be affiliated with the Bioinformatics program.

Programs in Informatics

Undergraduate Minor

Informatics Minor (p. 501)

Graduate Majors

Bioinformatics, MS (http://catalog.illinois.edu/graduate/provost/ms_bioinfo/)
- Animal Sciences Concentration (p. 625)
- Bioengineering Concentration (p. 626)
- Chemical & Biomolecular Engineering Concentration (p. 628)
- Computer Science Concentration (http://catalog.illinois.edu/graduate/engineering/ms-bioinfo_cs/)
- Crop Sciences Concentration (p. 631)
- Information Sciences Concentration (http://catalog.illinois.edu/graduate/ischool/ms_bioinfo_lis/)

Informatics, PhD (http://catalog.illinois.edu/graduate/provost/phd_informatics/)

Admission

Applicants must hold a bachelor's degree equivalent to that granted by the University of Illinois at Urbana-Champaign. The recommended background for graduate students entering the Bioinformatics degree program is a bachelor's or master's degree in life sciences, computer and mathematical sciences, or engineering, with a minimum of five hours of molecular and cell biology, six hours of general chemistry, nineteen hours of mathematics and statistics, and three hours of introduction to computing. Prerequisites vary somewhat for the different departmental concentrations. Students should view the web page of the specific department they wish to apply to for detailed information about admission criteria and degree requirements. Those links are below:

- Department of Animal Sciences (http://www.ansci.illinois.edu)
- Department of Bioengineering (http://bioengineering.illinois.edu/) - Not currently accepting applications
- Department of Chemical and Biomolecular Engineering (http://chbe.illinois.edu) - Not currently accepting applications
- Department of Computer Science (http://cs.illinois.edu)
- Department of Crop Sciences (http://www.cropsci.illinois.edu)
- School of Information Sciences (http://ischool.illinois.edu)

Financial Aid

Fellowships, research assistantships, and teaching assistantships (all of which include tuition and partial fee waivers) are awarded on a competitive basis by the admitting department. All applicants, regardless of U.S. citizenship, whose native language is not English and who wish to be considered for teaching assistantships (the most common form of financial aid for new graduate students in the department) must submit a score of at least 50 on the Test of Spoken English (TSE) (http://www.grad.illinois.edu/admissions/taengprof.htm).

Bioinformatics: Animal Sciences, MS

for the Master of Science Major in Bioinformatics, Animal Sciences Concentration

department head: Rodney Johnson
graduate program coordinator: Sandra Rodriguez-Zas
department website: https://ansc.illinois.edu
department faculty: https://ansc.illinois.edu/directory/faculty/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://aces.illinois.edu/
department office: 110 Animal Sciences Laboratory, 1207 West Gregory Drive, Urbana, IL 61801
phone: (217) 333-3131
email: ansci-gradprog@illinois.edu

Graduate Degree Programs in Animal Sciences

Graduate Majors:

Animal Sciences, MANSC (p. 568)
Animal Sciences, MS (p. 569)
Animal Sciences, PhD (p. 570)

Graduate Concentrations:

Bioinformatics: Animal Sciences, MS (p. 625)

for the Master of Science Major in Bioinformatics, Animal Sciences Concentration

For additional details and requirements refer to the department's Graduate Handbook (http://ansci.illinois.edu/grads/degree-requirements/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Thesis Option

Code	Title	Hours
Biology (choose one)		4
ANSC 441	Human Genetics	

ANSC 444	Applied Animal Genetics	
ANSC 446	Population Genetics	
BIOP 401	Introduction to Biophysics	
BIOP 550	Biomolecular Physics	
CPSC 452	Advanced Plant Genetics	
CPSC 466	Genomics for Plant Improvement	
CPSC 563	Chromosomes	
CPSC 566	Plant Gene Regulation	
MCB 400	Cancer Cell Biology	
MCB 450	Introductory Biochemistry	
MCB 501	Advanced Biochemistry	
MCB 502	Advanced Molecular and Cell Biology	
Fundamental Bioinformatics (choose one)		4
ANSC 542	Applied Bioinformatics	
ANSC 545	Statistical Genomics	
CHBE 571	Bioinformatics	
CPSC 567	Bioinformatics & Systems Biol	
CS 466	Introduction to Bioinformatics	
IB 467	Principles of Systematics	
MCB 432	Computing in Molecular Biology	
Computer Science and Informatics (choose one)		4
CS 411	Database Systems	
CS 466	Introduction to Bioinformatics	
CS 473	Algorithms	
CPSC 565	Perl & UNIX for Bioinformatics	
IS 455	Database Design and Prototyping	
IS 507	Data, Statistical Models and Information	
STAT 428	Statistical Computing	
STAT 440	Statistical Data Management	
STAT 448	Advanced Data Analysis	
STAT 480	Data Science Foundations	
STAT 525	Computational Statistics	
Graduate seminar (ANSC 590) enrollment is required every semester (max 2 hours can be applied to the degree)		2
ANSC 599	Thesis Research (min/max applied toward degree)	8
Electives		14
Total Hours		36

Other Requirements

Requirement
Other Requirements and conditions may overlap
A concentration is required.
Minimum Hours Overall Required Within the Unit: 8
Minimum 500-level Hours Required Overall: 12
A comprehensive oral examination concerning the thesis and other areas of Bioinformatics and Animal Sciences is required.
Thesis Deposit Required: Yes
Minimum GPA: 3.0

Learning Outcomes: Animal Sciences Concentration

Learning Outcomes for the Master of Science Major in Bioinformatics, Animal Sciences Concentration

1. Graduate-level understanding of essential concepts and approaches in the area of bioinformatics with application to animal sciences. The essential bioinformatics concepts will enable the graduate to secure a mid-management position in industry or federal agencies or pursue Ph.D. studies and to advance throughout the professional ranks.
2. Capacity to execute supervised thesis research including: a) understanding of the scientific method, research objectives, materials and methods, advanced data analysis, and appreciation of the findings; and b) leadership on the implementation of essential research activities.
3. Ability to effectively communicate essential bioinformatics and animal sciences knowledge and thesis research findings in oral and written formats.
4. Aptitude to advocate for interdisciplinary research and education efforts to advance food security, food safety, animals and human health and wellbeing or environmental stewardship.

Bioinformatics: Bioengineering, MS

for the Master of Science in Bioinformatics, Bioengineering Concentration

This program is not currently accepting applications.

Other Graduate Programs in Bioengineering

degrees:

Bioengineering, MEng (p. 616)
concentrations:
Bioinstrumentation (p. 617)|Computational Genomics (p. 618)|General Bioengineering (p. 620)
Bioengineering, MS (p. 621)
optional concentrations:
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)
Bioengineering, PhD (p. 623)
optional concentrations:
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)|Computational Science & Engineering (p. 1089)

concentrations:

Biomechanics (p. 1085)
available for:
Electrical & Computer Engineering, MS (p. 738)|Electrical & Computer Engineering, PhD|(p. 740)Materials Engineering, MEng|Materials Science & Engineering, MS (p. 861)|Materials Science & Engineering, PhD (p. 863)|Mechanical Engineering, MS (p. 870)|Mechanical Engineering, MEng (p. 869)|Mechanical Engineering, PhD (p. 872)|Theoretical & Applied Mechanics, MS (p. 1054)|Theoretical & Applied Mechanics, PhD (p. 1057)

Cancer Nanotechnology (p. 1088)
available for:
Electrical & Computer Engineering, MS (p. 738)|Electrical & Computer Engineering, PhD|(p. 740)Materials Engineering, MEng|Materials Science & Engineering, MS (p. 861)|Materials Science & Engineering, PhD (p. 863)|Mechanical Engineering, MS (p. 870)|Mechanical Engineering, MEng (p. 869)|Mechanical Engineering, PhD (p. 872)|Theoretical & Applied Mechanics, MS (p. 1054)|Theoretical & Applied Mechanics, PhD (p. 1057)

for the Master of Science in Bioinformatics, Bioengineering Concentration

For additional details and requirements for all degrees, please refer to the department's Graduate Studies Web site (https://bioengineering.illinois.edu/academics/graduate/) and the Graduate College Handbook (http://grad.illinois.edu/gradhandbook/).

Thesis Option [1]

Code	Title	Hours
BIOE 599	Thesis Research (min applied toward degree)	4
BIOE 504	Analytical Methods in Bioeng	4
or BIOE 505	Computational Bioengineering	
Computer Science and Informatics (choose one)		4
CS 411	Database Systems	
CS 466	Introduction to Bioinformatics	
CS 473	Algorithms	
CPSC 565	Perl & UNIX for Bioinformatics	
IS 455	Database Design and Prototyping	
IS 542	Research and Inquiry for Youth	
STAT 428	Statistical Computing	
STAT 440	Statistical Data Management	
STAT 448	Advanced Data Analysis	
STAT 480	Data Science Foundations	
STAT 525	Computational Statistics	
Fundamental Bioinformatics (choose one)		4
ANSC 542	Applied Bioinformatics	
ANSC 545	Statistical Genomics	
CHBE 571	Bioinformatics	
CPSC 567	Bioinformatics & Systems Biol	
CS 466	Introduction to Bioinformatics	
IB 467	Principles of Systematics	
MCB 432	Computing in Molecular Biology	
Biology (choose one)		4
ANSC 441	Human Genetics	
ANSC 444	Applied Animal Genetics	
ANSC 446	Population Genetics	
BIOP 401	Introduction to Biophysics	
BIOP 550	Biomolecular Physics	
CPSC 452	Advanced Plant Genetics	
CPSC 466	Genomics for Plant Improvement	
CPSC 563	Chromosomes	
CPSC 564		
CPSC 566	Plant Gene Regulation	
MCB 400	Cancer Cell Biology	
MCB 450	Introductory Biochemistry	
MCB 501	Advanced Biochemistry	
MCB 502	Advanced Molecular and Cell Biology	
One course in systems biology from departmental list (http://bioengineering.illinois.edu/graduate-programs/prospective-graduate-students/bioengineering-courses-illinois/#electives)		3
Elective Courses (http://bioengineering.illinois.edu/graduate-programs/prospective-graduate-students/bioengineering-courses-illinois/#electives)		9
Total Hours		32

Non-Thesis Option [1]

Code	Title	Hours
BIOE 504	Analytical Methods in Bioeng	4
or BIOE 505	Computational Bioengineering	
Computer Science and Informatics (choose one)		4
CS 411	Database Systems	
CS 466	Introduction to Bioinformatics	
CS 473	Algorithms	
CPSC 565	Perl & UNIX for Bioinformatics	
IS 455	Database Design and Prototyping	
IS 542	Research and Inquiry for Youth	
STAT 428	Statistical Computing	
STAT 440	Statistical Data Management	
STAT 448	Advanced Data Analysis	
STAT 480	Data Science Foundations	
STAT 525	Computational Statistics	
Fundamental Bioinformatics (choose one)		4
ANSC 542	Applied Bioinformatics	
ANSC 545	Statistical Genomics	
CHBE 571	Bioinformatics	
CPSC 567	Bioinformatics & Systems Biol	
CS 466	Introduction to Bioinformatics	
IB 467	Principles of Systematics	
MCB 432	Computing in Molecular Biology	
Biology (choose one)		4
ANSC 441	Human Genetics	
ANSC 444	Applied Animal Genetics	
ANSC 446	Population Genetics	
BIOP 401	Introduction to Biophysics	

BIOP 550	Biomolecular Physics	
CPSC 452	Advanced Plant Genetics	
CPSC 466	Genomics for Plant Improvement	
CPSC 563	Chromosomes	
CPSC 564		
CPSC 566	Plant Gene Regulation	
MCB 400	Cancer Cell Biology	
MCB 450	Introductory Biochemistry	
MCB 501	Advanced Biochemistry	
MCB 502	Advanced Molecular and Cell Biology	
One course in systems biology from departmental list (http://bioengineering.illinois.edu/graduate-programs/prospective-graduate-students/bioengineering-courses-illinois/#electives)		3
Elective Courses (http://bioengineering.illinois.edu/graduate-programs/prospective-graduate-students/bioengineering-courses-illinois/#electives)		17
Total Hours		36

[1]Other Requirements

Requirement	Description
Other Requirements and Conditions may overlap	
A concentration is required.	
A minimum of 12 500-level credit hours overall applied toward the degree, with 8 hours being Bioengineering courses; a maximum of 2 hours of seminar courses can be counted to towards these 12 hours.	
The non-thesis option is only available with permission of the advisor. Requirements include an additional 8 hours of elective courses which, with the approval of an advisor, may include supervised research experiences including internships and projects.	
Minimum GPA:	3.0

Bioinformatics: Chemical & Biomolecular Engineering, MS

for the Master of Science in Bioinformatics, Chemical & Biomolecular Engineering Concentration

This program is not currently accepting applications.

Other Graduate Programs in Chemical & Biomolecular Engineering

degrees:

Chemical Engineering, MS (p. 653)
Chemical Engineering, PhD (p. 654)
optional concentrations:
Computational Science and Engineering (p. 1089)

The Department of Chemical & Biomolecular Engineering offers graduate programs leading to degrees of Master of Science and Doctor of Philosophy in Chemical Engineering, as well as a Chemical & Biomolecular Engineering Concentration under the MS in Bioinformatics.

for the Master of Science in Bioinformatics, Chemical & Biomolecular Engineering Concentration

For additional details and requirements for all degrees, please refer to the department's Graduate Studies Web site (https://chbe.illinois.edu/graduate-program/) and the Graduate College Handbook (http://grad.illinois.edu/gradhandbook/).

Thesis Option

Code	Title	Hours
Computer Science and Informatics (choose one)		4
CS 411	Database Systems	
CS 466	Introduction to Bioinformatics	
CS 473	Algorithms	
CPSC 565	Perl & UNIX for Bioinformatics	
IS 455	Database Design and Prototyping	
IS 542	Research and Inquiry for Youth	
STAT 428	Statistical Computing	
STAT 440	Statistical Data Management	
STAT 448	Advanced Data Analysis	
STAT 480	Data Science Foundations	
STAT 525	Computational Statistics	
Fundamental Bioinformatics (choose one)		4
ANSC 542	Applied Bioinformatics	
ANSC 545	Statistical Genomics	
CHBE 571	Bioinformatics	
CPSC 567	Bioinformatics & Systems Biol	
CS 466	Introduction to Bioinformatics	
IB 467	Principles of Systematics	
MCB 432	Computing in Molecular Biology	
Biology (choose one)		4
ANSC 441	Human Genetics	
ANSC 444	Applied Animal Genetics	
ANSC 446	Population Genetics	
BIOP 401	Introduction to Biophysics	
BIOP 550	Biomolecular Physics	
CPSC 452	Advanced Plant Genetics	
CPSC 466	Genomics for Plant Improvement	
CPSC 563	Chromosomes	
CPSC 564		
CPSC 566	Plant Gene Regulation	
MCB 400	Cancer Cell Biology	
MCB 450	Introductory Biochemistry	
MCB 501	Advanced Biochemistry	
MCB 502	Advanced Molecular and Cell Biology	

CHBE 572 & CHBE 580	Metabolic Systems Engineering and Lab Techs in Bioinformatics	6
CHBE 599	Thesis Research (min/max applied toward degree)	4
Total Hours		**32**

Other Requirements

Requirement	Description
Other requirements may overlap	
A concentration is required.	
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	2.75

Non-Thesis Option

Code	Title	Hours
Computer Science and Informatics (choose one)		4
CS 411	Database Systems	
CS 466	Introduction to Bioinformatics	
CS 473	Algorithms	
CPSC 565	Perl & UNIX for Bioinformatics	
IS 455	Database Design and Prototyping	
IS 542	Research and Inquiry for Youth	
STAT 428	Statistical Computing	
STAT 440	Statistical Data Management	
STAT 448	Advanced Data Analysis	
STAT 480	Data Science Foundations	
STAT 525	Computational Statistics	
Fundamental Bioinformatics (choose one)		4
ANSC 542	Applied Bioinformatics	
ANSC 545	Statistical Genomics	
CHBE 571	Bioinformatics	
CPSC 567	Bioinformatics & Systems Biol	
CS 466	Introduction to Bioinformatics	
IB 467	Principles of Systematics	
MCB 432	Computing in Molecular Biology	
Biology (choose one)		4
ANSC 441	Human Genetics	
ANSC 444	Applied Animal Genetics	
ANSC 446	Population Genetics	
BIOP 401	Introduction to Biophysics	
BIOP 550	Biomolecular Physics	
CPSC 452	Advanced Plant Genetics	
CPSC 466	Genomics for Plant Improvement	
CPSC 563	Chromosomes	
CPSC 564		
CPSC 566	Plant Gene Regulation	
MCB 400	Cancer Cell Biology	
MCB 450	Introductory Biochemistry	
MCB 501	Advanced Biochemistry	
MCB 502	Advanced Molecular and Cell Biology	
CHBE 572 & CHBE 580	Metabolic Systems Engineering and Lab Techs in Bioinformatics	6
Total Hours		**36**

Other Requirements

Requirement	Description
Other requirements may overlap	
A concentration is required.	
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	2.75

Bioinformatics: Computer Science, MS

for the degree of Master of Science in Bioinformatics, Computer Science Concentration

department head: Nancy Amato (namato@illinois.edu)
director of graduate studies: Robin Kravets (rhk@illinois.edu)
overview of admissions & requirements: https://cs.illinois.edu/admissions/graduate/applications-process-requirements (https://cs.illinois.edu/admissions/graduate/applications-process-requirements/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://cs.illinois.edu/
program websites: https://cs.illinois.edu/academics/graduate/ms-bioinformatics-program (https://cs.illinois.edu/academics/graduate/ms-bioinformatics-program/) **and** https://www.informatics.illinois.edu/bioinformatics-masters/
informatics faculty affiliates: https://www.informatics.illinois.edu/faculty-affiliates/
college website: https://grainger.illinois.edu/
computer science contact: Viveka P Kudaligama (kudaliga@illinois.edu)
address: 1210 Siebel Center, 201 N Goodwin, Urbana, IL 61801
phone: (217) 333-4428
email: academic@cs.illinois.edu
informatics contact: Karin Readel (kereadel@illinois.edu)
phone: (217)-244-1220

The Department of Computer Science is one of the longest established computer science departments in the world and is consistently ranked as a top-5 graduate program.

The MS in Bioinformatics, Computer Science Concentration is an interdisciplinary degree that can be counted toward the PhD in Computer Science.

Admission Requirements

Applicants must hold a bachelor's degree equivalent to that granted by the University of Illinois at Urbana-Champaign. The recommended background for students entering a Computer Science graduate degree program is a bachelor's degree in computer science or computer engineering. The Graduate Record Examination (GRE) (http://www.ets.org/) general aptitude tests (Verbal, Quantitative, and Analytical)

are no longer required. However, in some cases, GRE general scores may provide helpful supporting information.

Applicants to the Computer Science Concentration of the MS in Bioinformatics program must have a minimum grade point average (GPA) of 3.20 (A = 4.00) in their undergraduate studies (international GPAs are systematically converted) to be considered. The department reserves the right to admit applicants with lower GPAs under rare and exceptional circumstances. If an applicant also holds a graduate degree, the minimum GPA for that degree must be 3.00. Full details of the programs offered by Computer Science, admissibility, application procedures, and deadlines can be found at the department's Prospective Graduate Student Information Web site (http://cs.illinois.edu/admissions/graduate/).

All applicants whose native language is not English are required to submit TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) scores as evidence of English proficiency. Minimum admission requirements (https://grad.illinois.edu/admissions/instructions/04c/) are set by the Graduate College.

Financial Aid

Research assistantships and teaching assistantships (all of which include tuition and partial fee waivers) are awarded on a competitive basis. All applicants, regardless of US citizenship, whose native language is not English and who wish to be considered for teaching assistantships (one of the most common forms of financial aid for new graduate students in the department) must demonstrate spoken English language proficiency (http://grad.illinois.edu/admissions/taengprof.htm) by achieving a minimum score of 24 on the speaking subsection of the TOEFL iBT or 8 on the speaking subsection of the IELTS (academic exam). Students who are unable to take the iBT or IELTS are required to receive a minimum score of 5 on the EPI test (http://cte.illinois.edu/testing/oral_eng/epi_overview.html), offered on campus. All new teaching assistants are required to participate in the Graduate Academy for College Teaching (https://citl.illinois.edu/citl-101/teaching-learning/grad-academy-for-college-teaching/) conducted prior to the start of the semester.

Other Graduate Programs in the Department of Computer Science

degrees:

Computer Science, MCS (p. 679)
optional concentrations:
Computational Science and Engineering (p. 1089)
Computer Science, MS (p. 681)
optional concentrations:
Computational Science and Engineering (p. 1089)
Computer Science, PhD (p. 682)
optional concentrations:
Computational Science and Engineering (p. 1089)
joint programs:
Computer Science, MCS & Architecture, MArch (p. 1151)
Computer Science, MCS & Law, JD (p. 1151)

The Department of Computer Science (CS) offers other graduate programs leading to the degrees of Master of Science and Doctor of Philosophy in Computer Science and a Master of Computer Science (MCS). The MCS program is also available online for students who are working full-time and unable to come to campus.

for the degree of Master of Science in Bioinformatics, Computer Science Concentration

The Computer Science concentration for the MS in Bioinformatics is an interdisciplinary degree that can be counted toward the Computer Science PhD.

For additional details and requirements refer to the department's Graduate Degree Requirements (http://cs.illinois.edu/academics/graduate/ms-bioinformatics-program/) and the Graduate College Handbook (http://grad.illinois.edu/gradhandbook/).

Code	Title	Hours
CS 411	Database Systems	4
CS 473	Algorithms	4
STAT 410	Statistics and Probability II	4
Fundamental Bioinformatics (choose one)		4
ANSC 542	Applied Bioinformatics	
ANSC 545	Statistical Genomics	
CHBE 571	Bioinformatics	
CPSC 567	Bioinformatics & Systems Biol	
CS 466	Introduction to Bioinformatics	
IB 467	Principles of Systematics	
MCB 432	Computing in Molecular Biology	
Biology (choose one)		4
ANSC 441	Human Genetics	
ANSC 444	Applied Animal Genetics	
ANSC 446	Population Genetics	
BIOP 401	Introduction to Biophysics	
BIOP 550	Biomolecular Physics	
CPSC 452	Advanced Plant Genetics	
CPSC 466	Genomics for Plant Improvement	
CPSC 563	Chromosomes	
CPSC 564		
CPSC 566	Plant Gene Regulation	
MCB 400	Cancer Cell Biology	
MCB 450	Introductory Biochemistry	
MCB 501	Advanced Biochemistry	
MCB 502	Advanced Molecular and Cell Biology	
CS electives, chosen from a departmental list of CS electives. (http://cs.illinois.edu/academics/graduate/ms-bioinformatics-program/)		12
One additional 4-credit hour graduate course (may be from the bioinformatics or biological science categories above)		4
Total Hours		**36**

Other Requirements

Code	Title	Hours
Other Requirements and Conditions may overlap		
A minimum of 12 500-level credit hours overall.		
The minimum program GPA is 3.0		

All degree requirements must be completed within five consecutive semesters (only fall and spring semesters are counted).

Bioinformatics: Crop Sciences, MS

for the Master of Science in Bioinformatics, Crop Sciences Concentration

head of department: Adam Davis
advisor: Nathan Schroeder
department website: https://cropsciences.illinois.edu/
email: cptomlin@illinois.edu
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://aces.illinois.edu/
department office: AW-101 Turner Hall, 1102 South Goodwin Avenue, Urbana, IL 61801
phone:(217) 244-0396

Graduate Degree Programs in Crop Sciences

Crop Sciences, MS (p. 686) **(on campus & online)**
Bioinformatics: Crop Sciences, MS (p. 631)
Plant Biotechnology, MS - Professional Science Master's (p. 967)
Crop Sciences, PhD (p. 687)

The genomic and proteomic projects are generating large amounts of complex biological data that require effective storage, retrieval, analysis and interpretation. The bioinformatics degree program provides students with the skills necessary to augment the understanding and use of agricultural, biological and medical information and resources through the application of molecular, chemical, physical, computational, statistical, mathematical and informatic techniques. Students interested in this program may come with undergraduate training in one of the following areas:

1. biological and agricultural sciences,
2. statistical, mathematical and computer sciences,
3. informatics and engineering sciences.

Graduates from the bioinformatics program will be able to integrate basic and applied concepts in the three areas and apply them to biotechnology and medical research. For additional information, please see our website at https://cropsciences.illinois.edu/graduate/.

Admission

Applicants are considered for admission to the Master of Science program if they have a bachelor's or equivalent degree comparable to that granted by the University of Illinois. Strong letters of reference, evident motivation to undertake graduate study, and good preparation in basic science courses enhance an applicant's credentials. For some programs, greater emphasis is given to previous training in plant sciences, chemistry, or mathematics. A grade point average equivalent to at least a B in the last 60 semester hours of undergraduate course work plus any graduate level work completed is required. All applicants whose native language is not English are required to submit the results of the TOEFL or IELTS as evidence of English proficiency. Official scores are required to be submitted directly from TOEFL/ETS or IELTS to the University. Additional information for international applicants can be found at: https://grad.illinois.edu/admissions/apply/begin/international (https://grad.illinois.edu/admissions/apply/begin/international/). Please see our web page for additional information: https://cropsciences.illinois.edu/graduate/admissions/.

Graduate Teaching Experience

Experience in teaching is considered an important part of the graduate experience in this program.

Faculty Research Interests

Please refer to the following webpage for a detailed listing of our faculty and their areas of interest https://cropsciences.illinois.edu/people/faculty/.

Financial Aid

Fellowships and assistantships are available to outstanding students on a competitive basis. Awards for financial assistance are based principally on a candidate's academic record, statement of plans, and letters of reference.

for the Master of Science in Bioinformatics, Crop Sciences Concentration

The Crop Sciences concentration within the M.S. degree in Bioinformatics can be earned with a thesis option or a non-thesis option, which requires optional supervised research experiences.

For additional details and requirements refer to the department's graduate handbook (http://cropsci.illinois.edu/sites/cropsci.illinois.edu/files/pdf/Grad_Student_Handbook_2013.pdf) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Thesis Option

Code	Title	Hours
Biology (choose one)		4
ANSC 441	Human Genetics	
ANSC 444	Applied Animal Genetics	
ANSC 446	Population Genetics	
BIOP 401	Introduction to Biophysics	
BIOP 550	Biomolecular Physics	
CPSC 452	Advanced Plant Genetics	
CPSC 466	Genomics for Plant Improvement	
CPSC 554	Quantitative Genetics and Genomics	
CPSC 563	Chromosomes	
CPSC 566	Plant Gene Regulation	
MCB 400	Cancer Cell Biology	
MCB 450	Introductory Biochemistry	
MCB 501	Advanced Biochemistry	
MCB 502	Advanced Molecular and Cell Biology	
Fundamental Bioinformatics (choose one)		4
ANSC 542	Applied Bioinformatics	
ANSC 545	Statistical Genomics	
CHBE 571	Bioinformatics	
CPSC 567	Bioinformatics & Systems Biol	
CS 466	Introduction to Bioinformatics	
IB 467	Principles of Systematics	
MCB 432	Computing in Molecular Biology	
Computer Science and Informatics (choose one)		4

CS 411	Database Systems	
CS 466	Introduction to Bioinformatics	
CS 473	Algorithms	
CPSC 565	Perl & UNIX for Bioinformatics	
IS 455	Database Design and Prototyping	
IS 507	Data, Statistical Models and Information	
STAT 428	Statistical Computing	
STAT 440	Statistical Data Management	
STAT 448	Advanced Data Analysis	
STAT 480	Data Science Foundations	
STAT 525	Computational Statistics	
Seminar (1 per semester)		
Electives		16
CPSC 599	Thesis Research	4
or PLPA 599		
Total Hours		**32**

Other Requirements

Code	Title	Hours
Other requirements and conditions may overlap		
A concentration is required		
Minimum Hours Required Within the Unit:		5
Minimum 500-level Hours Required overall:		12
Minimum GPA:		3.0

Non-Thesis Option

Code	Title	Hours
Biology (choose one)		4
ANSC 441	Human Genetics	
ANSC 444	Applied Animal Genetics	
ANSC 446	Population Genetics	
BIOP 401	Introduction to Biophysics	
BIOP 550	Biomolecular Physics	
CPSC 452	Advanced Plant Genetics	
CPSC 466	Genomics for Plant Improvement	
CPSC 554	Quantitative Genetics and Genomics	
CPSC 563	Chromosomes	
CPSC 566	Plant Gene Regulation	
MCB 400	Cancer Cell Biology	
MCB 450	Introductory Biochemistry	
MCB 501	Advanced Biochemistry	
MCB 502	Advanced Molecular and Cell Biology	
Fundamental Bioinformatics (choose one)		4
ANSC 542	Applied Bioinformatics	
ANSC 545	Statistical Genomics	
CHBE 571	Bioinformatics	
CPSC 567	Bioinformatics & Systems Biol	
CS 466	Introduction to Bioinformatics	
IB 467	Principles of Systematics	
MCB 432	Computing in Molecular Biology	
Computer Science and Informatics (choose one)		4
CS 411	Database Systems	
CS 466	Introduction to Bioinformatics	
CS 473	Algorithms	
CPSC 565	Perl & UNIX for Bioinformatics	
IS 455	Database Design and Prototyping	
IS 507	Data, Statistical Models and Information	
STAT 428	Statistical Computing	
STAT 440	Statistical Data Management	
STAT 448	Advanced Data Analysis	
STAT 480	Data Science Foundations	
STAT 525	Computational Statistics	
Seminar (1 per semester)		
Electives		24
Total Hours		**36**

Other Requirements

Code	Title	Hours
Other requirements and conditions may overlap		
A concentration is required		
Minimum Hours Required Within the Unit:		5
Minimum 500-level Hours Required overall:		12
Minimum GPA:		3.0

Learning Outcomes: Bioinformatics: Crop Sciences, MS

Learning Outcomes for the Master of Science in Bioinformatics, Crop Sciences Concentration

Thesis

1. Students will be able to read, understand, knowledgeably discuss and summarize in writing the primary scientific literature of their particular disciplinary research area (bioinformatics and statistics, crop genetic improvement, crop production, plant protection, sustainable food systems, and water quality and environmental systems).
2. Students will assume responsibility and ownership in research project development and execution.
3. Students will acquire professional scientific writing and communication skills.
4. Students will develop the capacity to communicate and collaborate across interdisciplinary boundaries.
5. Students will develop the interpersonal skills to be competitive for career opportunities in plant sciences and agriculture.

Non-Thesis

1. Students will be able to read, understand, knowledgeably discuss and summarize in writing the primary scientific literature of their particular disciplinary research area (bioinformatics and statistics, crop genetic improvement, crop production, plant protection, sustainable food systems, and water quality and environmental systems).
2. Students will acquire professional scientific writing and communication skills.
3. Students will develop the capacity to communicate and collaborate across interdisciplinary boundaries.

4. Students will develop the interpersonal skills to be competitive for career opportunities in plant sciences and agriculture.

Biology, MS

for the degree of Master of Science in Biology

head of department: Andrew Suarez
director of graduate studies: Becky Fuller
director of admissions committee: Becky Fuller
email: eeb@life.illinois.edu
department website: http://sib.illinois.edu/eeb/
department faculty: https://sib.illinois.edu/eeb/faculty (https://sib.illinois.edu/eeb/faculty/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department office: 515 Morrill Hall, 505 South Goodwin Avenue Urbana, IL 61801
phone: (217) 333-7801

Students pursuing this major select the Ecology, Ethology, and Evolution concentration (p. 633).

Graduate Degree Programs in Evolution, Ecology, and Behavior

Biology, MS (p. 633)
required concentration:
Biology: Ecology, Ethology, & Evolution, MS (p. 633)
Biology, PhD (p. 634)
required concentration:
Biology: Ecology, Ethology, & Evolution, PhD (p. 635)

The Department of Evolution, Ecology, and Behavior administers graduate degree programs as concentrations in biology. Areas of training include the broadly defined disciplines of Animal Behavior, Biomechanics, Comparative Anatomy, Conservation Biology, Ecology, Evolution, Genetics/Genomics and Physiology.

Admission

Acceptance for graduate study in animal biology is based on the applicant's research potential and academic achievement. An undergraduate degree in the life sciences is the usual preparation, but students majoring in mathematics, computer science, or the physical and social sciences are also considered. Courses required for admission are inorganic and organic chemistry, a year of physics, and mathematics through calculus. Students lacking one or more of these courses may be admitted with the provision that such deficiencies be completed in addition to the normal graduate course load. A grade point average of at least 3.0 (A = 4.0) for the last two years of undergraduate work in a four-year undergraduate degree program or the last three years of a five-year undergraduate program and for any graduate study is mandatory. Considerable emphasis is placed on a student's interest and ability in research as demonstrated by previous work and letters of recommendation. Applications are considered for fall admission only. The deadline for application materials is December 15. A minimum paper-based Test of English as a Foreign Language (TOEFL) score of 570 (230 on the computer-based version, 88 on the internet-based version) is preferred for international applicants.

Financial Aid

Financial aid is available in the form of fellowships and teaching and research assistantships for qualified students.

Learning Outcomes: Biology, MS

Learning Outcomes for the degree of Master of Science in Biology

Since the subject matter of our Program is interdisciplinary and broad, there is no one set of subject-based learning outcomes that is suitable for the evaluation of our graduate students. Instead, we will focus on appropriate research and professional development skills.

1. Design and implement independent research and integrate and apply core knowledge related to their field in 3 core areas out of 6 (behavior, conservation biology, ecology, evolution, genetics/genomics, physiology/ anatomy)
2. Demonstrate effective oral and written communication skills
   a. Presentations
   b. Publications
   c. Grant writing
3. Apply rigorous statistics/analytical methods that typify their area of study
4. Professional skills
   a. Data management
   b. Citation management
   c. Mentoring
   d. Ethics
   e. Professionalism
   f. Networking
5. Teaching experience

Biology: Ecology, Ethology, & Evolution, MS

for the Master of Science in Biology, Ecology, Ethology, and Evolution Concentration

head of department: Andrew Suarez
director of graduate studies: Becky Fuller
director of admissions committee: Becky Fuller
department website: http://sib.illinois.edu/eeb/
department faculty: https://sib.illinois.edu/eeb/faculty (https://sib.illinois.edu/eeb/faculty/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department office: 515 Morrill Hall, 505 South Goodwin Avenue Urbana, IL 61801
phone: (217) 333-7801
email: eeb@life.illinois.edu

Students pursuing this major select the Ecology, Ethology, and Evolution concentration (p. 635).

Graduate Degree Programs in Evolution, Ecology, and Behavior

Biology, MS (p. 633)
required concentration:
Biology: Ecology, Ethology, & Evolution, MS (p. 633)
Biology, PhD (p. 634)
required concentration:
Biology: Ecology, Ethology, & Evolution, PhD (p. 635)

The Department of Evolution, Ecology, and Behavior administers graduate degree programs as concentrations in biology. Areas of training include the broadly defined disciplines of Animal Behavior, Biomechanics, Comparative Anatomy, Conservation Biology, Ecology, Evolution, Genetics/Genomics and Physiology.

Admission

Acceptance for graduate study in the Department of Evolution, Ecology, and Behavior is based on the applicant's research potential and academic achievement. An undergraduate degree in the life sciences is the usual preparation, but students majoring in mathematics, computer science, or the physical and social sciences are also considered. Students should have taken courses in at least two of the following six areas: evolution, ecology, genetics, behavior, conservation, physiology/morphology. Students lacking one or more of these courses may be admitted with the provision that such deficiencies be completed in addition to the normal graduate course load. A grade point average of at least 3.0 (A = 4.0) for the last two years of undergraduate work in a four-year undergraduate degree program or the last three years of a five-year undergraduate program and for any graduate study is required or the candidate will have to petition for an exception. Considerable emphasis is placed on a student's interest and ability in research as demonstrated by previous work and letters of recommendation. Applications are typically only considered for fall admission unless special arrangements are made with the Department. The deadline for application materials is December 15. A minimum paper-based Test of English as a Foreign Language (TOEFL) score of 613 (257 on the computer-based version, 103-104 on the internet-based version) is preferred for international applicants.

Financial Aid

Financial aid is available in the form of fellowships and teaching and research assistantships for qualified students.

for the Master of Science in Biology, Ecology, Ethology, and Evolution Concentration

For additional details and requirements refer to the department and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Thesis Option

Code	Title	Hours
BIOL 599	Thesis Research (0 min applied toward degree)	0
Total Hours		**32**

Other Requirements

Requirement	Description
A concentration is required	
Masters Thesis Deposit Required	Yes
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	3.0

Non-Thesis Option

Code	Title	Hours
Total Hours		**32**

Other Requirements

Requirement	Description
A concentration is required	
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	3.0

Learning Outcomes: Biology: Ecology, Ethology, & Evolution, MS

Learning Outcomes for the Master of Science in Biology, Ecology, Ethology, and Evolution Concentration

Since the subject matter of our Program is interdisciplinary and broad, there is no one set of subject-based learning outcomes that is suitable for the evaluation of our graduate students. Instead, we will focus on appropriate research and professional development skills.

1. Design and implement independent research and integrate and apply core knowledge related to their field in 3 core areas out of 6 (behavior, conservation biology, ecology, evolution, genetics/genomics, physiology/ anatomy)
2. Demonstrate effective oral and written communication skills
   a. Presentations
   b. Publications
   c. Grant writing
3. Apply rigorous statistics/analytical methods that typify their area of study
4. Professional skills
   a. Data management
   b. Citation management
   c. Mentoring
   d. Ethics
   e. Professionalism
   f. Networking
5. Teaching experience

Biology, PhD

for the degree of Doctor of Philosophy in Biology

head of department: Andrew Suarez
director of graduate studies: Becky Fuller
director of admissions committee: Becky Fuller
department website: http://sib.illinois.edu/eeb/
department faculty: https://sib.illinois.edu/eeb/faculty (https://sib.illinois.edu/eeb/faculty/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department office: 515 Morrill Hall, 505 South Goodwin Avenue Urbana, IL 61801
phone: (217) 333-7801
email: eeb@life.illinois.edu

Students pursuing this major select the Ecology, Ethology, and Evolution (p. 635) concentration.

Graduate Degree Programs in Evolution, Ecology, and Behavior

Biology, MS (p. 633)
required concentration:
Biology: Ecology, Ethology, & Evolution, MS (p. 633)
Biology, PhD (p. 634)
required concentration:
Biology: Ecology, Ethology, & Evolution, PhD (p. 635)

The Department of Evolution, Ecology, and Behavior administers graduate degree programs as concentrations in biology. Areas of training include the broadly defined disciplines of Animal Behavior, Biomechanics, Comparative Anatomy, Conservation Biology, Ecology, Evolution, Genetics/Genomics and Physiology.

Admission

Acceptance for graduate study in animal biology is based on the applicant's research potential and academic achievement. An undergraduate degree in the life sciences is the usual preparation, but students majoring in mathematics, computer science, or the physical and social sciences are also considered. Courses required for admission are inorganic and organic chemistry, a year of physics, and mathematics through calculus. Students lacking one or more of these courses may be admitted with the provision that such deficiencies be completed in addition to the normal graduate course load. A grade point average of at least 3.0 (A = 4.0) for the last two years of undergraduate work in a four-year undergraduate degree program or the last three years of a five-year undergraduate program and for any graduate study is mandatory. Considerable emphasis is placed on a student's interest and ability in research as demonstrated by previous work and letters of recommendation. Applications are considered for fall admission only. The deadline for application materials is December 15. A minimum paper-based Test of English as a Foreign Language (TOEFL) score of 570 (230 on the computer-based version, 88 on the internet-based version) is preferred for international applicants.

Financial Aid

Financial aid is available in the form of fellowships and teaching and research assistantships for qualified students.

Learning Outcomes: Biology, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Biology

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Since the subject matter of our Program is interdisciplinary and broad, there is no one set of subject-based learning outcomes that is suitable for the evaluation of our graduate students. Instead, we will focus on appropriate research and professional development skills.

1. Design and implement independent research and integrate and apply core knowledge related to their field in 3 core areas out of 6 (behavior, conservation biology, ecology, evolution, genetics/genomics, physiology/ anatomy)
2. Demonstrate effective oral and written communication skills
   a. Presentations
   b. Publications
   c. Grant writing
3. Apply rigorous statistics/analytical methods that typify their area of study
4. Professional skills
   a. Data management
   b. Citation management
   c. Mentoring
   d. Ethics
   e. Professionalism
   f. Networking
5. Teaching experience

Biology: Ecology, Ethology, & Evolution, PhD

for the degree of Doctor of Philosophy in Biology, Ecology, Ethology and Evolution concentration

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head of department: Andrew Suarez
director of graduate studies: Becky Fuller
director of admissions committee: Becky Fuller
department website: http://sib.illinois.edu/eeb/
department faculty: https://sib.illinois.edu/eeb/faculty (https://sib.illinois.edu/eeb/faculty/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department office: 515 Morrill Hall, 505 South Goodwin Avenue Urbana, IL 61801
phone: (217) 333-7801
email: eeb@life.illinois.edu

Students pursuing this major select the Ecology, Ethology, and Evolution concentration (p. 635).

Graduate Degree Programs in Evolution, Ecology, and Behavior

Biology, MS (p. 633)
required concentration:
Biology: Ecology, Ethology, & Evolution, MS (p. 633)
Biology, PhD (p. 634)
required concentration:
Biology: Ecology, Ethology, & Evolution, PhD (p. 635)

The Department of Evolution, Ecology, and Behavior administers graduate degree programs as concentrations in biology. Areas of training include the broadly defined disciplines of Animal Behavior, Biomechanics, Comparative Anatomy, Conservation Biology, Ecology, Evolution, Genetics/Genomics and Physiology.

Admission

Acceptance for graduate study in the Department of Evolution, Ecology, and Behavior is based on the applicant's research potential and academic achievement. An undergraduate degree in the life sciences is the usual preparation, but students majoring in mathematics, computer science, or the physical and social sciences are also considered. Students should have taken courses in at least two of the following six areas: evolution, ecology, genetics, behavior, conservation, physiology/morphology. Students lacking one or more of these courses may be admitted with the provision that such deficiencies be completed in addition to the normal graduate course load. A grade point average of at least 3.0 (A = 4.0) for the last two years of undergraduate work in a four-year undergraduate degree program or the last three years of a five-year undergraduate program and for any graduate study is required or the candidate will have to petition for an exception. Considerable emphasis is placed on a student's interest and ability in research as demonstrated by previous work and letters of recommendation. Applications are typically only considered for fall admission unless special arrangements are made with the Department. The deadline for application materials is December 15. A minimum paper-based Test of English as a Foreign Language (TOEFL) score of 613 (257 on the computer-based version, 103-104 on the internet-based version) is preferred for international applicants.

Financial Aid

Financial aid is available in the form of fellowships and teaching and research assistantships for qualified students.

for the degree of Doctor of Philosophy in Biology, Ecology, Ethology and Evolution concentration

For additional details and requirements refer to the department and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Requirements

Code	Title	Hours
Courses in statistics are required		
BIOL 599	Thesis Research (0 min applied toward degree)	0 to 16
Total Hours		**64**

Other Requirements [1]

Requirement	Description
A concentration is required.	
Experience in Teaching is required as part of the academic work of all PH.D. candidates in this program	
Masters Degree Required for Admission to PhD?	No, but Masters level requirements must be met (additional 32 hours)
Qualifying Exam Required:	No
Preliminary Exam Required:	Yes
Final Exam/Dissertation Defense Required:	Yes
Dissertation Deposit Required:	Yes
Minimum GPA:	3.0

Learning Outcomes: Biology: Ecology, Ethology, & Evolution, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Biology, Ecology, Ethology and Evolution concentration

Since the subject matter of our Program is interdisciplinary and broad, there is no one set of subject-based learning outcomes that is suitable for the evaluation of our graduate students. Instead, we will focus on appropriate research and professional development skills.

1. Design and implement independent research and integrate and apply core knowledge related to their field in 3 core areas out of 6 (behavior, conservation biology, ecology, evolution, genetics/genomics, physiology/ anatomy)
2. Demonstrate effective oral and written communication skills
   a. Presentations
   b. Publications
   c. Grant writing
3. Apply rigorous statistics/analytical methods that typify their area of study
4. Professional skills
   a. Data management
   b. Citation management
   c. Mentoring
   d. Ethics
   e. Professionalism
   f. Networking
5. Teaching experience

Biomedical Image Computing, MS

for the degree of Master of Science in Biomedical Image Computing

department head: Mark Anastasio (mfi@illinois.edu)
director of graduate studies: Gregory Underhill (bodony@illinois.edu)
overview of admissions & requirements: https://bioengineering.illinois.edu/admissions/graduate/ (https://bioengineering.illinois.edu/admissions/graduate/process-and-requirements.html)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://bioengineering.illinois.edu/
program website: https://bioengineering.illinois.edu/academics/graduate/ms/
department faculty: https://bioengineering.illinois.edu/directory/
college website: https://grainger.illinois.edu/
contact: L (kristasm@illinois.edu)iezl Bowman (liezlb@illinois.edu)
address: 1240 Everitt Laboratory, 1406 W Green St, Urbana, IL 61801
phone: (217) 300-8066
email: bioe-gradprograms@illinois.edu (bioengineering@illinois.edu)

The M.S. in Biomedical Image Computing blends together the fields of biomedical imaging science and machine learning. Students will receive a rigorous training in imaging systems and analysis, computational imaging, and machine learning, in preparation for an industry career.

Admission Requirements

Applicants should have a bachelor's degree in an engineering or other quantitative discipline from an accredited college or university. Students should have a minimum grade point average of 3.00 (A=4.00) or equivalent for the last two years of undergraduate study and show evidence of strong quantitative skills and of serious interest in imaging and machine learning through their personal statement. Students in the program do not have automatic admission to the Ph.D. program in any engineering department.

All applicants whose native language is not English must submit a minimum TOEFL score of 102 (iBT), 257 (CBT), or 613 (PBT); or minimum International English Language Testing System (IELTS) academic exam scores of 7.0 overall and 6.0 in all subsections. Applicants may be exempt from the TOEFL if certain criteria are met. Applicants with lesser scores may still apply. Limited status is granted for lesser scores and requires enrollment in English as a Second Language (ESL) courses based on an ESL Placement Test (EPT) taken upon arrival to campus.

Financial Aid

The tuition and fees for the M.S. in Biomedical Image Computing are the standard Graduate and Professional Programs rates for the College of Engineering. Students in the M.S. in Biomedical Image Computing program are not eligible for tuition-waiver generating assistantships.

Department Research

Bioengineering faculty perform research in the areas of Bio-Imaging at Multi-Scale, Molecular, Cellular and Tissue Engineering, Bio-Micro and Nanotechnology, Computational and Systems Bioengineering, and Synthetic Bioengineering. In addition to Bioengineering faculty, the Department of Bioengineering has more than 50 affiliate faculty (http://bioengineering.illinois.edu/directory/).

Other Graduate Programs in the Department of Bioengineering

degrees:

- Bioengineering, MEng (p. 616)
  - **optional concentrations:**
    - Bioinstrumentation (p. 617)|Computational Genomics (p. 618)|General Bioengineering (p. 620)
- Biomedical Image Computing, MS (p. 636)
- Bioengineering, PhD (p. 623)
  - **optional concentrations:**
    - Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)|Computational Science and Engineering (p. 1089)

concentrations:

- Biomechanics (p. 1085)
  - **available for:**
    - Bioinformatics: Bioengineering, MS (p. 626)|Electrical & Computer Engineering, MS (p. 738)|Electrical & Computer Engineering, PhD (p. 740)|Materials Engineering, MEng (p. 860)|Materials Science & Engineering, MS (p. 861)|Materials Science & Engineering, PhD (p. 863)|Mechanical Engineering, MS (p. 870)|Mechanical Engineering, MEng (p. 869)|Mechanical Engineering, PhD (p. 872)|Theoretical & Applied Mechanics, MS (p. 1054)|Theoretical & Applied Mechanics, PhD (p. 1057)
- Cancer Nanotechnology (p. 1088)
  - **available for:**
    - Bioinformatics: Bioengineering, MS (p. 626)|Electrical & Computer Engineering, MS (p. 738)|Electrical & Computer Engineering, PhD (p. 740)|Materials Engineering, MEng (p. 860)|Materials Science & Engineering, MS (p. 861)|Materials Science & Engineering, PhD (p. 863)|Mechanical Engineering, MS (p. 870)|Mechanical Engineering, MEng (p. 869)|Mechanical Engineering, PhD (p. 872)|Theoretical & Applied Mechanics, MS (p. 1054)|Theoretical & Applied Mechanics, PhD (p. 1057)

The Department of Bioengineering offers studies leading to the Master of Engineering in Bioengineering (MEng), the Master of Science in Bioengineering (MS), and the Doctor of Philosophy (PhD) in Bioengineering. The Bioengineering Graduate Program provides students with educational and research experiences that integrate the sciences of biology and medicine with the practices and principles of engineering. For the MS and PhD programs, areas of focus include Bio-Imaging at Multi-Scale, Molecular, Cellular and Tissue Engineering, Bio-Micro and Nanotechnology, Computational and Systems Bioengineering, and Synthetic Bioengineering.

for the degree of Master of Science in Biomedical Image Computing

Code	Title	Hours
Core Coursework		
BIOE 483	Biomedical Computed Imaging Systems	4
BIOE 484	Statistical Analysis of Biomedical Images	4

BIOE 485	Computational Mathematics for Machine Learning and Imaging	4
BIOE 486	Applied Deep Learning for Biomedical Imaging	4
BIOE 488	Applied High-Performance Computing for Imaging Science	3
BIOE 489	Regulations, Ethics and Logistics in Biomedical Applications of Machine Learning	4
BIOE 580	Foundations of Imaging Science	4
BIOE 588	Biomedical Image Computing Capstone Project Literature Review	1
BIOE 589	Biomedical Image Computing Capstone Project	4
Choose one of the following:		4
BIOE 586	Deep Generative Models in Bioimaging	
	OR	
Approved Elective Course (see below)		
Approved Elective Courses:		
BIOE 505	Computational Bioengineering	
BIOE 507	Advanced Bioinstrumentation	
BIOE 597	Individual Study	
CS 543	Computer Vision	
CS 547	Deep Learning	
ECE 534	Random Processes	
ECE 543	Statistical Learning Theory	
ECE 544	Topics in Signal Processing	
ECE 547	Topics in Image Processing	
ECE 549	Computer Vision	
ECE 558	Digital Imaging	
ECE 561	Statistical Inference for Engineers and Data Scientists	
ECE 564	Modern Light Microscopy	
ECE 569	Inverse Problems in Optics	
ECE 580	Optimiz by Vector Space Methds	
Total Hours		36

Other Requirements

Code	Title	Hours
Minimum 500-level hours required overall:		12
Minimum GPA:		3.0
Minimum credit hours taken from the University of Illinois at Urbana-Champaign campus:		12
Maximum number of previous University of Illinois at Urbana-Champaign graduate-level coursework not applied to any other degree that may be transferred and applied to the major pending department and Graduate College approval.		12

Biophysics & Quantitative Biology, MS

for the degree of Master of Science in Biophysics and Quantitative Biology

center director: Satish Nair
overview of admissions & requirements: Biophysics and Quantitative Biology Admissions (http://www.life.illinois.edu/biophysics/program/admissions.html)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department website: Biophysics (http://biophysics.illinois.edu/)
department faculty: Biophysics Faculty (http://biophysics.illinois.edu/people/faculty/)
department office: 179 Loomis, 1110 West Green Street, Urbana, IL 61801
phone: (217) 333-1630
email: biophysics@life.illinois.edu

Graduate Degree Programs in Department

Biophysics and Quantitative Biology, MS (p. 638)
Biophysics and Quantitative Biology, PhD (p. 640)
optional concentration:
Computational Science and Engineering (p. 1089)

Biophysics and Quantitative Biology offers a doctor of philosophy degree program. In rare circumstances and with special permission of the director and advisor, a current student may obtain a terminal master's degree after meeting the requirements of the degree. Biophysics students are not admitted initially into the program for a master's degree. Opportunity also exists for specializing in computational science and engineering within the department's graduate program via the Computational Science and Engineering (CSE) Concentration (http://www.cse.illinois.edu/education/minor-and-concentration/graduate-concentration/).

Admission

The objective of the program in biophysics is to give students sufficient training in physics, chemistry, and biology to enable them to apply the conceptual, instrumental, and mathematical approaches of the physical sciences for solving biological problems. The curriculum is broadly based and provides sufficient flexibility for students entering with either previous training in the physical sciences or for students with a background in biology and some experience in the physical sciences.

Admission requirements are usually one year of college biology, one year of college physics, chemistry through organic chemistry, and mathematics through calculus; however deficiencies in one of these areas can be corrected during the first two years of study. Most applicants who are accepted into the program have general Graduate Record Examination (GRE) scores in the 70%-90% range. The Biophysics and Quantitative Biology Program does not require the subject GRE for admission. The Test of English as a Foreign Language (TOEFL iBT) or IELTS is required for international applicants.

Please refer to the Biophysics and Quantitative Biology Admissions web page (http://www.life.illinois.edu/biophysics/program/admissions.html) for additional information and application deadlines.

Graduate Teaching Experience

Experience in teaching is considered a vital part of the graduate program and is required as part of the academic work of all Ph.D. candidates in this program. Every biophysics student is required to serve as a teaching assistant for one semester at the quarter time level or higher.

Faculty Research Interests

Over 40 faculty members from the Schools of Molecular and Cellular Biology, Chemical Sciences, and Medicine, and the Colleges of Engineering and Veterinary Medicine, are affiliated with the Center for Biophysics and Quantitative Biology. Faculty interests range from experimental biophysics (single molecule spectroscopy, protein and RNA folding, molecular dynamics, cellular biophysics, imaging, etc.) to computational and theoretical biophysics (utilizing a wide range of computer platforms to simulate diverse biological phenomena at many levels as well as bioinformatics). Individual faculty interests can be found on the Biophysics web site (http://biophysics.illinois.edu/people/faculty/).

Facilities and Resources

Center faculty and students have access to world-class research facilities at the University of Illinois, including the Beckman Institute, the Carl R Woese Institute for Genomic Biology, Blue Waters Sustained Petascale Computing, the National Center for Supercomputing Applications, the Biomedical Imaging Center, the Roy J Carver Biotechnology Center, and the School of Chemical Sciences' Mass Spectroscopy Center and Electron Paramagnetic Resonance (EPR) Research Center.

Financial Aid

All incoming graduate students in biophysics will be supported by the Center for the first semester in the program. Continuing support for subsequent years will be granted as long as students remain in good standing and continue to make satisfactory academic progress, contingent upon the availability of funds. This support can be in the form of research assistantships, teaching assistantships, traineeships, or fellowships. After the first semester of study, most students are supported directly by their research advisor in the form of a research assistantship.

for the degree of Master of Science in Biophysics and Quantitative Biology

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For additional details and requirements refer to the department's Student Handbook (http://biophysics.illinois.edu/program/courses/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Thesis Option

Code	Title	Hours
10 hours of 500-level biophysics courses with a minimum GPA of 3.25 (does not include seminar courses and/or research units and can include no more than 2 hours of tutorials). 500-level courses in other departments count towards this 500-level formal course requirement if they are on the approved Biophysics course list.		10
BIOP 401	Introduction to Biophysics (or equivalent)	3
Elective hours approved by Center Director to bring total hours to		32
BIOP 599	Thesis Research (4 min applied toward degree)	4
Total Hours		32

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	3.0

Non-Thesis Option

Code	Title	Hours
10 hours of 500-level biophysics courses with a minimum GPA of 3.25 (does not include seminar courses and/or research units and can include no more than 2 hours of tutorials). 500-level courses in other departments count towards this 500-level formal course requirement if they are on the approved Biophysics course list.		10
BIOP 401	Introduction to Biophysics (or equivalent)	3
Research/Project Hours (4 min applied toward degree)		4
Elective hours approved by Center Director to bring total course work hours to		32
Total Hours		32

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	3.0

Approved Biophysics Course List and Computational & Experimental Lab Course Lists

Biophysics Course List

Code	Title	Hours
ANSC 542	Applied Bioinformatics	4
BIOE 505	Computational Bioengineering	4
BIOE 598	Special Topics (section TL)	1 to 4
BIOP 576	Computational Chemical Biology	4
CHBE 594	Special Topics (section HZ2)	1 to 4
CHEM 546	Advanced Statistical Mechanics	4
CHEM 570	Concepts in Chemical Biology	4
CHEM 572	Enzyme Reaction Mechanisms	3 or 4
CPSC 567	Bioinformatics & Systems Biol	4
CS 598	Special Topics (section JP or SS)	2 to 4
ECE 564	Modern Light Microscopy	4
MCB 571	Bioinformatics	4
PHYS 504	Statistical Physics (section A)	4

Computational Lab Course List

Code	Title	Hours
BIOC 455	Technqs Biochem & Biotech	4
PHYS 598	Special Topics in Physics (section OM or BP)	1 to 4
CHEM 483	Solid State Structural Anlys	4
PATH 521	Biophysics of Viruses	2

Experimental Lab Course List

Code	Title	Hours
ANSC 449	Biological Modeling	3 or 4
BIOP 576	Computational Chemical Biology	4
BIOP 586	Special Topics in Biophysics (section C)	1 to 4
BIOE 505	Computational Bioengineering	4
BIOE 598	Special Topics (section AGB)	1 to 4
CHBE 571	Bioinformatics	4
MCB 432	Computing in Molecular Biology	3
STAT 530	Bioinformatics	4

Biophysics & Quantitative Biology, PhD

for the degree of Doctor of Philosophy in Biophysics and Quantitative Biology

center director: Satish Nair
overview of admissions & requirements: Biophysics and Quantitative Biology Admissions (http://www.life.illinois.edu/biophysics/program/admissions.html)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department website: Biophysics (http://biophysics.illinois.edu/)
department faculty: Biophysics Faculty (http://biophysics.illinois.edu/people/faculty/)
department office: 179 Loomis, 1110 West Green Street, Urbana, IL 61801
phone: (217) 333-1630
email: biophysics@life.illinois.edu

The Ph.D. degree is a research degree, and the program is designed with a major emphasis on individual research.

Graduate Degree Programs in Department

Biophysics and Quantitative Biology, MS (p. 638)
Biophysics and Quantitative Biology, PhD (p. 640)
optional concentration:
Computational Science and Engineering (p. 1089)

Biophysics and Quantitative Biology offers a doctor of philosophy degree program. In rare circumstances and with special permission of the director and advisor, a current student may obtain a terminal master's degree after meeting the requirements of the degree. Biophysics students are not admitted initially into the program for a master's degree. Opportunity also exists for specializing in computational science and engineering within the department's graduate program via the Computational Science and Engineering (CSE) Concentration (http://www.cse.illinois.edu/education/minor-and-concentration/graduate-concentration/).

Admission

The objective of the program in biophysics is to give students sufficient training in physics, chemistry, and biology to enable them to apply the conceptual, instrumental, and mathematical approaches of the physical sciences for solving biological problems. The curriculum is broadly based and provides sufficient flexibility for students entering with either previous training in the physical sciences or for students with a background in biology and some experience in the physical sciences.

Admission requirements are usually one year of college biology, one year of college physics, chemistry through organic chemistry, and mathematics through calculus; however deficiencies in one of these areas can be corrected during the first two years of study. Most applicants who are accepted into the program have general Graduate Record Examination (GRE) scores in the 70%-90% range. The Biophysics and Quantitative Biology Program does not require the subject GRE for admission. The Test of English as a Foreign Language (TOEFL iBT) or IELTS is required for international applicants.

Please refer to the Biophysics and Quantitative Biology Admissions web page (http://www.life.illinois.edu/biophysics/program/admissions.html) for additional information and application deadlines.

Graduate Teaching Experience

Experience in teaching is considered a vital part of the graduate program and is required as part of the academic work of all Ph.D. candidates in this program. Every biophysics student is required to serve as a teaching assistant for one semester at the quarter time level or higher.

Faculty Research Interests

Over 40 faculty members from the Schools of Molecular and Cellular Biology, Chemical Sciences, and Medicine, and the Colleges of Engineering and Veterinary Medicine, are affiliated with the Center for Biophysics and Quantitative Biology. Faculty interests range from experimental biophysics (single molecule spectroscopy, protein and RNA folding, molecular dynamics, cellular biophysics, imaging, etc.) to computational and theoretical biophysics (utilizing a wide range of computer platforms to simulate diverse biological phenomena at many levels as well as bioinformatics). Individual faculty interests can be found on the Biophysics web site (http://biophysics.illinois.edu/people/faculty/).

Facilities and Resources

Center faculty and students have access to world-class research facilities at the University of Illinois, including the Beckman Institute, the Carl R Woese Institute for Genomic Biology, Blue Waters Sustained Petascale Computing, the National Center for Supercomputing Applications, the Biomedical Imaging Center, the Roy J Carver Biotechnology Center, and the School of Chemical Sciences' Mass Spectroscopy Center and Electron Paramagnetic Resonance (EPR) Research Center.

Financial Aid

All incoming graduate students in biophysics will be supported by the Center for the first semester in the program. Continuing support for subsequent years will be granted as long as students remain in good standing and continue to make satisfactory academic progress, contingent upon the availability of funds. This support can be in the form of research assistantships, teaching assistantships, traineeships, or fellowships. After the first semester of study, most students are supported directly by their research advisor in the form of a research assistantship.

for the degree of Doctor of Philosophy in Biophysics and Quantitative Biology

A qualifying examination is offered each spring. This qualifier must be passed by the end of the second year. By the end of the third year, after formulating a definite research problem, the student takes a preliminary

examination where the chosen research topic is presented to the student's faculty committee. The committee also examines the candidate on their chosen general research area. The Ph.D. thesis is based on original work of the student and is defended at a final public examination. The thesis and the exam must demonstrate a thorough knowledge of theory and techniques in one of the areas of biophysics.

For additional details and requirements refer to the department's Student Handbook (http://biophysics.illinois.edu/program/courses/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
BIOP 401	Introduction to Biophysics (or equivalent)	3
BIOP 581	Lab Rotation I	2
BIOP 582	Lab Rotation II	2
BIOP 583	Lab Rotation III	2
BIOP 586 & BIOP 590	Special Topics in Biophysics and Individual Topics	10
BIOP 595	Biophysics Seminars (Sections A & B)	3
BIOP 599	Thesis Research (32 max applied toward degree)	32
Two 500-level courses from the pre-approved Biophysics course list (see Course Lists tab)		
One computational or experimental lab course – based on the student's research focus (see Course Lists tab)		
MCB 580	Res Ethics & Responsibilities	1
Total Hours		64

Other Requirements

Requirement	Description
Other requirements may overlap	
Students are required to teach for a minimum of one semester during their graduate career	
Masters Degree Required in Biophysics and Quantitative Biology for Admission to PhD?	No, but Masters level requirements must be met (32 additional hours min)
Qualifying Exam Required	Yes
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

Approved Biophysics Course List and Computational & Experimental Lab Course Lists

Biophysics Course List

Code	Title	Hours
ANSC 542	Applied Bioinformatics	4
BIOE 505	Computational Bioengineering	4
BIOE 598	Special Topics (section TL)	1 to 4
BIOP 576	Computational Chemical Biology	4
CHBE 594	Special Topics (section HZ2)	1 to 4
CHEM 546	Advanced Statistical Mechanics	4
CHEM 570	Concepts in Chemical Biology	4
CHEM 572	Enzyme Reaction Mechanisms	3 or 4
CPSC 567	Bioinformatics & Systems Biol	4
CS 598	Special Topics (section JP or SS)	2 to 4
ECE 564	Modern Light Microscopy	4
MCB 571	Bioinformatics	4
PHYS 504	Statistical Physics (section A)	4

Computational Lab Course List

Code	Title	Hours
BIOC 455	Technqs Biochem & Biotech	4
PHYS 598	Special Topics in Physics (section OM or BP)	1 to 4
CHEM 483	Solid State Structural Anlys	4
PATH 521	Biophysics of Viruses	2

Experimental Lab Course List

Code	Title	Hours
ANSC 449	Biological Modeling	3 or 4
BIOP 576	Computational Chemical Biology	4
BIOP 586	Special Topics in Biophysics (section C)	1 to 4
BIOE 505	Computational Bioengineering	4
BIOE 598	Special Topics (section AGB)	1 to 4
CHBE 571	Bioinformatics	4
MCB 432	Computing in Molecular Biology	3
STAT 530	Bioinformatics	4

Bioprocessing & Bioenergy, MS - Professional Science Master's

for the degree of Master of Bioprocessing & Bioenergy: Professional Master's Concentration

department website: Bioprocessing & Bioenergy (https://abe.illinois.edu/graduate/professional-science-masters/)
department faculty: Bioprocessing & Bioenergy Faculty (https://abe.illinois.edu/directory/faculty/)
overview of college admissions & requirements: TSM admissions (https://psm.illinois.edu/technical-systems-management/)
email: hcrump@illinois.edu

for the degree of Master of Bioprocessing & Bioenergy: Professional Master's Concentration

The curriculum requires 42 graduate hours, consisting of a core and elective program, in addition to the required PSM concentration. The areas of specialty are Plants, Soils and Feedstocks; Production, Processing and Use; Environment, Economics and Policy & Law, and Tools and Methods.

Code	Title	Hours
Business courses prescribed by the Illinois PSM program		**10**
PSM 501	PSM Industry Seminar I	0
PSM 502	PSM Industry Seminar II	0
PSM 503	PSM Industry Seminar III	0
PSM 555	PSM Internship	0

Code	Title	Hours
ABE 594	Graduate Seminar (Required for 2 semesters)	0
TSM 486	Grain Bioprocessing Coproducts	3
Courses (7 to 9) in the area of specialty from a designated list, and in consultation with the Director of Graduate Study		29
Total Hours		**42**

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
A PSM concentration is required.	
Minimum 500-level Hours Required Overall:	12
Minimum Hours Required Within the Unit:	8 at the 500 level
Students will not be eligible to transfer graduate credit into this major. See individual program pages for specific details of disciplinary requirements.	
Minimum GPA:	2.75

Learning Outcomes: Bioprocessing and Bioenergy, PSM

Learning Outcomes for the degree of Master of Bioprocessing & Bioenergy: Professional Master's Concentration

1. Advanced knowledge in bioprocessing and bioenergy. There is no specific undergraduate major that focuses on either bioprocessing or bioenergy, so introducing the scientific basis for converting biomass to value-added products is the key component of the bioprocessing and bioenergy curriculum.
2. Business: Introduce students with strong technical undergraduate degrees to business fundamental concepts such as project management, finance, and accounting.
3. Industry experience that gives the students a realistic view of job opportunities and the hurdles faced by bioprocessing and bioenergy companies.
4. PSM: ability to identify career interests, career path, goals to reach career aspirations, materials and knowledge for a successful internship & career search.
5. PSM: ability to communicate science to a non-science audience; ability to work on a team.

Business Administration, MBA - Online (iMBA)

for the Masters of Business Administration in Business Administration

associate dean: W. Brooke Elliott
email: onlineMBA@illinois.edu
program website: https://onlinemba.illinois.edu/
department faculty: https://business.illinois.edu/people/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://giesbusiness.illinois.edu/
department office: 2302 Fox Drive, Suite D, Champaign, IL 61820
phone: (217) 333-4240

The Gies College of Business offers a degree program leading to the Master of Business Administration (M.B.A.) in 3 delivery modes. The traditional full-time MBA and the Professional MBA are offered on the Urbana campus. **The residential MBA and Professional MBA programs are no longer accepting applications.** The online program is offered for students who need more flexibility in their MBA programs.

All Illinois MBA programs require 72 hours of credit. Students graduate with a Masters of Business Administration from the University of Illinois at Urbana-Champaign. Student transcripts do not vary based upon program format.

The **Full-time MBA** is offered in a lockstep, face-to-face cohort format for the first-year core curriculum. The core consists of 40 hours of classwork that provide the foundation. During the second year, students have the flexibility to customize their area of concentration by taking 32 hours of business and non-business courses.

The Illinois **Professional MBA** uses a lockstep hybrid cohort format, including in-person and. The program consists of eighteen four-credit courses for a total of 72 credit hours. Modules (semesters) are ten or five weeks long, unless otherwise noted. The cohort class structure allows members of each class to begin the program at the same time and advance through the curriculum together. During each module, study teams are created that are designed to draw upon the diverse academic and professional backgrounds of the class.

The **online MBA(iMBA)** uses a flexible program format. The iMBA consists of eighteen four-credit courses for a total of 72 credit hours. During each course, virtual study teams are created that are designed to draw upon the diverse academic and professional backgrounds of the class. The online MBA caters to a segment of the population that values mobility, convenience, and believes that the online programs better fit their learning styles and life circumstances.

Graduate Degree Programs in Business Administration

Majors:

Business Administration, MBA (p. 642) **(online-iMBA)**
Business Administration, MS (p. 646)
with optional concentrations: Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Corporate Governance & International Business (p. 1090), Supply Chain Management (p. 1109)
Management, MS (p. 858)
On-campus concentrations: Business Data Analytics (p. 1086), Finance (p. 1096), Technology Management (p. 859)
Technology Management, MS (p. 1048)
with optional concentrations: Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Information Technology & Control (p. 1100), Supply Chain Management (p. 1109)
Business Administration, PhD (p. 647)

Minors:

Information Technology & Control (p. 1136)
Corporate Governance & International Business (p. 1130)
Supply Chain Management (p. 1144)

Concentrations:

Business Data Analytics (p. 1086)
Corporate Governance & International Business (p. 1090)
Information Technology & Control (p. 1100)
Supply Chain Management (p. 1109)

Joint Degree Program:

Accountancy, MS (iMSA) & Business Administration, MBA (iMBA) (http://catalog.illinois.edu/graduate/bus/joint-degree/accountancy-ms-business-mba-online/)

Admission

Admission to the Illinois Gies MBA is dependent upon an earned undergraduate degree, acceptable scores on the Graduate Management Admission Test (GMAT) or Graduate Record Examination (GRE), two letters of recommendation, professional resume and essays. Applicants whose native language is not English are also required to submit scores from the Test of English as a Foreign Language (TOEFL) or the IELTS. For additional requirements the applicant should refer to the MBA application.

Applicants to the **online MBA (iMBA)** program must have completed an earned undergraduate degree and submit scores on the Graduate Management Admission Test (GMAT) or Graduate Record Examination (GRE) if available. Two letters of recommendation and essays are also required. Applicants whose native language is not English are required to submit scores from the Test of English as a Foreign Language (TOFEL) or the IELTS.

Scholarships/Financial Aid

Scholarships are generally not available for the iMBA.

for the Masters of Business Administration in Business Administration

The goal for the iMBA program at Illinois is to deliver a high-quality program that is accessible to global audiences. A mirror of the EMBA curriculum, the online MBA (iMBA) uses a flexible program format. During each iMBA course, virtual study teams are created that are designed to draw upon the diverse academic and professional backgrounds of the class. The program caters to a segment of the population that values mobility, convenience, and believes that the online programs better fit their learning styles and life circumstances.

For additional details and requirements refer to the department's curriculum overview (https://onlinemba.illinois.edu/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Program Requirements

Code	Title	Hours
BADM 508	Leadership and Teams	4
BADM 509	Managing Organizations	4
BADM 520	Marketing Management	4
BADM 544	Strategic Management	4
BADM 567	Process Management	4
BADM 572	Stat for Mgt Decision Making	4
ACCY 500	Accounting Measurement, Reporting, and Control	4
ACCY 503	Managerial Accounting	4
FIN 511	Investments	4
FIN 520	Financial Management	4
ECON 528	Microeconomics for Business	4
ECON 529	Macroeconomics for Business	4
Complete one of the following Focus Areas		**12**
Digital Marketing		
MBA 541	Marketing in a Digital World	
MBA 542	Digital Marketing Analytics	
MBA 543	Digital Media & Marketing	
MBA 544	Marketing in an Analog World	
MBA 590	Specialization Capstone	
Global Challenges in Business		
MBA 546	Global Business Horizons	
MBA 547	Global Impact: Cultural Psychology & Business Ethics	
MBA 548	Global Strategy	
MBA 590	Specialization Capstone	
Entrepreneurship & Strategic Innovation		
MBA 551	Strategic Innovation	
MBA 552	Fostering Creative Thinking	
MBA 553	Entrepreneurship: From Startup to Growth	
MBA 590	Specialization Capstone	
Data Insights to Business and Operational Excellence		
MBA 561	Introduction to Business Analytics with R	
MBA 562	Introduction to Business Analytics: Communicating with Data	
MBA 563	Data Toolkit: Business Data Modeling & Predictive Analytics	
MBA 564	Data Analytics Applications in Business	
MBA 590	Specialization Capstone	

Choose an additional Focus Area from the list above or 12 hours from the following courses:		
MBA 541	Marketing in a Digital World	
MBA 542	Digital Marketing Analytics	
MBA 543	Digital Media & Marketing	
MBA 544	Marketing in an Analog World	
MBA 546	Global Business Horizons	
MBA 547	Global Impact: Cultural Psychology & Business Ethics	
MBA 548	Global Strategy	
MBA 551	Strategic Innovation	
MBA 552	Fostering Creative Thinking	
MBA 553	Entrepreneurship: From Startup to Growth	
MBA 561	Introduction to Business Analytics with R	
MBA 562	Introduction to Business Analytics: Communicating with Data	
MBA 563	Data Toolkit: Business Data Modeling & Predictive Analytics	
MBA 564	Data Analytics Applications in Business	
BADM 589	Project Management	
MBA 591	Program Capstone	0
Total hours		**72**

Other Requirements (may overlap)

Requirement	Description
Complete any two core or focus area specialization capstones (MBA 590) plus an integrated capstone final project (MBA 591)	
The prescribed courses may only be used to satisfy the requirements of one specialization.	
Course substitutions may be approved by the Department of Business Administration.	
Minimum Hours Required Within the Unit:	72
Minimum 500-level Hours Required Overall:	72
Minimum GPA:	2.75

Business Administration, MBA (professional)

for the Master of Business Administration in Business Administration

associate dean: W. Brooke Elliott
email: mba@illinois.edu
department website: https://giesbusiness.illinois.edu/mba (https://giesbusiness.illinois.edu/mba/)
department faculty: https://business.illinois.edu/people/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://giesbusiness.illinois.edu/
department office: Business Instructional Facility, Room 3019, 515 E. Gregory, Champaign, IL 61820
phone: (217) 244-7602

The Gies College of Business offers a degree program leading to the Master of Business Administration (M.B.A.) in 3 delivery modes. The traditional full-time MBA and the Professional MBA are offered on the Urbana campus. **The residential MBA and Professional MBA programs are no longer accepting applications.** The online program is offered for students who need more flexibility in their MBA programs.

All Illinois MBA programs require 72 hours of credit. Students graduate with a Masters of Business Administration from the University of Illinois at Urbana-Champaign. Student transcripts do not vary based upon program format.

The **Professional MBA** program provides a general management curriculum and focus. The curriculum includes 72 credit hours that are completed over a two and a half year period. This program is designed especially for employed professionals who want to continue working while they pursue the MBA degree.

Graduate Degree Programs in Business Administration

Majors:

Business Administration, MBA (p. 646) **(Full-Time)**
with optional concentrations: Accountancy (p. 1073), Business Data Analytics (p. 1086), Corporate Governance & International Business (p. 1090), Information Technology & Control (p. 1100), Real Estate (p. 1105), Supply Chain Management (p. 1109)

Business Administration, MBA (p. 644) **(Professional - part-time)**
with optional concentrations: Business Data Analytics (p. 1086), Information Technology & Control (p. 1100), Supply Chain Management (p. 1109)

Business Administration, MBA (Online iMBA) (p. 642)
Digital Marketing (p. 1094), Entrepreneurship & Strategic Innovation (p. 1096), Global Challenges in Business (p. 1097)

Business Administration, MS (p. 646)
with optional concentrations: Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Corporate Governance & International Business (p. 1090), Finance (p. 1096), Supply Chain Management (p. 1109)

Business Analytics, MS (p. 649)

Management, MS (p. 858)
with optional concentrations: Business Data Analytics, (p. 1086) Digital Marketing (p. 1094), Entrepreneurship & Strategic Innovation (p. 1096), Finance (p. 1096), Global Challenges in Business (p. 1097), Technology Management (http://catalog.illinois.edu/graduate/bus/concentration/badm/technology-management/)

Technology Management, MS (p. 1048)
with optional concentrations: Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Finance (p. 1096), Information Technology & Control (p. 1100), Supply Chain Management (p. 1109)

Business Administration, PhD (p. 647)

Minors:

Information Technology & Control (p. 1136)
Corporate Governance & International Business (p. 1130)
Supply Chain Management (p. 1144)

Concentrations:

Business Data Analytics (p. 1086)
Corporate Governance & International Business (p. 1090)
Digital Marketing (p. 1094)
Entrepreneurship & Strategic Innovation (p. 1096)
Global Challenges in Business (p. 1097)
Information Technology & Control (p. 1100)
Supply Chain Management (p. 1109)

Joint Degree Program:

Accountancy, MS (iMSA) & Business Administration, MBA (iMBA) (http://catalog.illinois.edu/graduate/bus/joint-degree/accountancy-ms-business-mba-online/)

Admission

Admission to the Illinois Gies MBA is dependent upon an earned undergraduate degree, acceptable scores on the Graduate Management Admission Test (GMAT) or Graduate Record Examination (GRE), two letters of recommendation, professional resume and essays. Applicants whose native language is not English are also required to submit scores from the Test of English as a Foreign Language (TOEFL) or the IELTS. For additional requirements the applicant should refer to the MBA application.

Faculty Research Interests

Faculty research interests are in the areas of marketing, organizational behavior, organization theory, decision sciences, information systems, strategic management, risk analysis, judgment under uncertainty, international business, production and operations management, accounting, economics, entrepreneurship, and finance. The Gies College of Business houses computer facilities, a behavioral science laboratory, and a separate library. The college maintains contacts with industry and government through its Survey Research Laboratory, Illinois Business Consulting, the Academy for Entrepreneurial Leadership and several professional and scholarly journals edited by its faculty.

Scholarships/Financial Aid

The Illinois Gies MBA offers a limited number of merit scholarships to outstanding domestic and international applicants. The merit scholarships are awarded at the time of admission. U.S. citizens and permanent residents may be eligible for federal and private student loans.

for the Master of Business Administration in Business Administration

Code	Title	Hours
BADM 508	Leadership and Teams	4
ECON 528	Microeconomics for Business	4
BADM 520	Marketing Management	4
ACCY 500	Accounting Measurement, Reporting, and Control	4
BADM 572	Stat for Mgt Decision Making	4
BADM 567	Process Management	4
BADM 590	Seminar in Business Admin (Section PMB)	4
BADM 521	Marketing Strategy	4
BADM 573	Decision Analytics	4
BADM 593	Research in Special Fields	4
ECON 529	Macroeconomics for Business	4
FIN 520	Financial Management	4
BADM 509	Managing Organizations	4
FIN 511	Investments	4
BADM 544	Strategic Management	4
ACCY 503	Managerial Accounting	4
BADM 552	Legal Aspects of Mgt Decisions	4
Free electives		4
Total Hours		72

Other Requirements [1]

Other requirements may overlap	
Minimum Hours Required Within the College:	68
Minimum 500-level Hours Required Overall:	72
Minimum GPA:	2.75

[1] *For additional details and requirements refer to the department's* graduate curriculum *(*https://mba.illinois.edu/academics/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Business Administration: Executive, MBA

for the degree of Master of Business Administration major in Business Administration Executive Program concentration

The program culminates with an international study experience in which students consult on real business issues with international organizations and travel overseas to present their recommendations to these companies**.**

This program caters to senior executives. Each course in the EMBA program is conducted over four weekends. Since the class schedule is compressed over a short period of time, exams / final projects / final assignments are due two weeks after the last class meeting.

For additional details and requirements refer to the department's curriculum overview *(*http://www.mbachicago.illinois.edu/curriculum/overview.aspx*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Requirement	Description
Required Courses	Required Hours
Modules 1-10 (19 courses)	72
Total Hours	72

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum Hours Requiured Within the Unit:	72
Minimum 500-level Hours Required Overall:	72
Minimum GPA:	2.75

Business Administration, MS

for the Master of Science in Business Administration

interim chair of department: Cele Otnes
director of graduate studies: Deepak Somaya
director of admissions committee: Rakesh Bhatt
email: ba@business.illinois.edu
program website: https://giesbusiness.illinois.edu/msba **(**https://giesbusiness.illinois.edu/msba/**)**
department faculty: https://business.illinois.edu/people/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply **(**https://grad.illinois.edu/admissions/apply/**)**
college website: https://giesbusiness.illinois.edu/
department office: 350 Wohlers Hall, 1206 S. Sixth Street, Champaign, IL 61820
phone: (217) 333-4240

The Master of Science in Business Administration is a 40 graduate hours master's program best suited for those with a strong technical expertise in one of the concentrations offered within the Ph.D. program. The focus is on preparation for advanced study in the doctoral program or for a research-oriented position. The coursework can usually be completed in four semesters. A major must be specified from one of six areas offered within the Department of Business Administration: organizational behavior/theory, strategic management, marketing, decision sciences and information systems, and process management/management science. At least two courses should be chosen from another area within the Department of Business Administration or a related area outside the department or college.

The program also admits a cohort of professional students focusing on International Business. The cohort requires 12 hours of coursework in International Business, normally completed in three semesters. Students have the option of pursuing an internship during their third (summer) semester.

Graduate Degree Programs in Business Administration

Majors:

Business Administration, MBA (p. 642) **(online-iMBA)**
Business Administration, MS (p. 646)
with optional concentrations: Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Corporate Governance & International Business (p. 1090), Finance (p. 1096), Supply Chain Management (p. 1109)
Business Analytics, MS (p. 649)
Management, MS (p. 858)
with optional concentrations: Business Data Analytics (p. 1086), Finance, (p. 1096) Corporate Governance & International Business (p. 1090)
Technology Management, MS (p. 1048)
with optional concentrations: Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Finance (p. 1096), Information Technology & Control (p. 1100), Supply Chain Management (p. 1109)
Business Administration, PhD (p. 647)

Minors:

Information Technology & Control (p. 1136)
Corporate Governance & International Business (p. 1130)
Supply Chain Management (p. 1144)

Concentrations:

Business Data Analytics (p. 1086)
Corporate Governance & International Business (p. 1090)
Information Technology & Control (p. 1100)
Supply Chain Management (p. 1109)

Certificates:

Digital Marketing, CERT (p. 1115)
Entrepreneurship & Strategic Innovation, CERT (p. 1116)
Financial Management, CERT (p. 1117)
Global Challenges in Business, CERT (p. 1118)
Managerial Economics & Business Analysis, CERT (p. 1119)
Strategic Leadership Management, CERT (p. 1120)
Value Chain Management, CERT (p. 1121)

Joint Degree Program:

Accountancy, MS (iMSA) & Business Administration, MBA (iMBA) (http://catalog.illinois.edu/graduate/bus/joint-degree/accountancy-ms-business-mba-online/)

Admission

Admission to the MS in Business Administration requires an undergraduate degree with a scholastic average of at least B for the last 60 hours, three letters of recommendation, and a statement of career goals. Applicants whose native language is not English are also required to submit scores from the Test of English as a Foreign Language (TOEFL), CBT, iBT or IELTS. Candidates must achieve the University minimum scores on these examinations (currently 550 on the paper-based TOEFL or 213 on the computer-based TOEFL or 79 on the iBT.

www.grad.illinois.edu/admissions/apply (http://www.grad.illinois.edu/admissions/apply/)

Faculty Research Interests

Faculty research interests are in the areas of marketing, organizational behavior, organization theory, decision sciences, information systems, strategic management, risk analysis, judgment under uncertainty, international business, production and operations management, accounting, economics, entrepreneurship, and finance. The Gies College of Business houses computer facilities, a behavioral science laboratory, and a separate library. The college maintains contacts with industry and government through its Survey Research Laboratory, Illinois Business Consulting, the Academy for Entrepreneurial Leadership and several professional and scholarly journals edited by its faculty.

Financial Aid

Most Ph.D. students receive some form of financial assistance. This assistance is likely to be in the form of a teaching or research assistantship, which includes a waiver of tuition and some fees, and/or the award of a merit-based fellowship. The M.S. in Business Administration, the M.S. in Management, the M.S. in Strategic Brand Communication, and the M.S. in Technology Management do not provide assistantships.

for the Master of Science in Business Administration

Code	Title	Hours
Total Hours		**40**

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	2.75

[1] *For additional details and requirements refer to the department's* Program Curriculum *(*http://business.illinois.edu/msba/academics/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Business Administration, PhD

for the Doctor of Philosophy in Business Administration

interim chair of department: Carlos Javier Torelli
director of graduate studies: Olga Khessina
email: ba-phd@business.illinois.edu (ba@business.illinois.edu)
program website: https://giesbusiness.illinois.edu/programs/doctoral/business-administration (https://giesbusiness.illinois.edu/programs/doctoral/business-administration/)
department faculty: https://business.illinois.edu/people/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://giesbusiness.illinois.edu/
department office: 350 Wohlers Hall, 1206 S. Sixth Street, Champaign, IL 61820
phone: (217) 333-4240

This program offers an in-depth education in teaching and research in selected areas of business and administration. Doctoral students can specialize in marketing, organizational behavior/theory, management science/process management, information systems, and strategic management. The program is intensive, flexible, and adapted to individual needs.

Each student's program entails sufficient study and preparation to achieve the following:

1. competence in a common core covering substantive and research methods courses, which are formulated by the faculty in each area;
2. in-depth expertise in a major area;
3. expertise in at least one area in addition to the chosen major area, with this minor area selected from within or outside the department;
4. teaching experience; and
5. research or problem-solving competence.

Competency is determined by comprehensive written and/or oral examinations. Following successful completion of all coursework and comprehensive examinations in major and minor areas, students must propose and gain approval of a thesis topic at a public colloquium. The final program requirement is the successful oral defense of the thesis. Applicants should contact the department for current requirements and program design.

The program usually is completed in four years. Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program.

Graduate Degree Programs in Business Administration

Majors:

Business Administration, MBA (p. 642) **(online-iMBA)**
Business Administration, MS (p. 646)
with optional concentrations: Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Corporate Governance & International Business (p. 1090), Finance (p. 1096), Supply Chain Management (p. 1109)
Business Analytics, MS (p. 649)
Management, MS (p. 858)
with optional concentrations: Business Data Analytics (p. 1086), Finance, (p. 1096) Corporate Governance & International Business (p. 1090)
Technology Management, MS (p. 1048)
with optional concentrations: Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Finance (p. 1096), Information Technology & Control (p. 1100), Supply Chain Management (p. 1109)
Business Administration, PhD (p. 647)

Minors:

Information Technology & Control (p. 1136)
Corporate Governance & International Business (p. 1130)
Supply Chain Management (p. 1144)

Concentrations:

Business Data Analytics (p. 1086)
Corporate Governance & International Business (p. 1090)
Information Technology & Control (p. 1100)
Supply Chain Management (p. 1109)

Certificates:

Digital Marketing, CERT (p. 1115)
Entrepreneurship & Strategic Innovation, CERT (p. 1116)
Financial Management, CERT (p. 1117)
Global Challenges in Business, CERT (p. 1118)
Managerial Economics & Business Analysis, CERT (p. 1119)
Strategic Leadership Management, CERT (p. 1120)
Value Chain Management, CERT (p. 1121)

Joint Degree Program:

Accountancy, MS (iMSA) & Business Administration, MBA (iMBA) (http://catalog.illinois.edu/graduate/bus/joint-degree/accountancy-ms-business-mba-online/)

Admission

Admission to the Ph.D. program requires an undergraduate degree with a scholastic average of at least B for the last 60 hours, acceptable scores on the Graduate Management Admission Test (GMAT) or Graduate Records Examination (GRE), three letters of recommendation, and a statement of career goals including research interests.

Applicants whose native language is not English are also required to submit scores from the Test of English as a Foreign Language (TOEFL), CBT, iBT or IELTS. Ph.D. candidates must achieve the University minimum scores on these examinations.

The Ph.D. program allows fall admission only. Please check the Departmental listing for current requirements and program information:

https://giesbusiness.illinois.edu/programs/doctoral/business-administration (https://giesbusiness.illinois.edu/programs/doctoral/business-administration/)

Faculty Research Interests

Faculty research interests are in the areas of marketing, organizational behavior, organization theory, decision sciences, information systems, strategic management, risk analysis, judgment under uncertainty, international business, production and operations management, accounting, economics, entrepreneurship, and finance. The Gies College of Business houses computer facilities, a behavioral science laboratory, and a separate library. The college maintains contacts with industry and government through its Survey Research Laboratory, Illinois Business Consulting, the Academy for Entrepreneurial Leadership and several professional and scholarly journals edited by its faculty.

Financial Aid

Most Ph.D. students receive some form of financial assistance. This assistance is likely to be in the form of a teaching or research assistantship, which includes a waiver of tuition and some fees, and/or the award of a merit-based fellowship.

for the Doctor of Philosophy in Business Administration

Entering with approved M.S./M.A. degree

Code	Title	Hours
Business Administration core requirement		4
Concentration area courses (12 min)		12
Minor area courses (12 min)		12
3 courses in research methodology (12 min)		12
Students are required to attend pro-seminars in their respective areas		0-4
BADM 599	Dissertation Research (min/max applied toward degree)	32
Total Hours		64

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Ph.D. candidates must maintain continuous registration through the approval of a dissertation proposal, unless a leave has been approved by the department.	
Qualifying Exam Required	No
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	2.75

[1] *For additional details and requirements refer to the department's* Programs of Study *(*https://business.illinois.edu/ba/doctoral/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Entering with approved B.S./B.A. degree

Code	Title	Hours
Business Administration core requirement		4
Concentration area courses (12 min)		12
Minor area courses (12 min)		12
3 courses in research methodology (12 min)		12
Students are required to attend pro-seminars in their respective areas		0-4
BADM 599	Dissertation Research (min/max applied toward degree)	32
Total Hours		96

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Ph.D. candidates must maintain continuous registration through the approval of a dissertation proposal, unless a leave has been approved by the department.	
Qualifying Exam Required	No
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	2.75

[1] *For additional details and requirements refer to the department's* Programs of Study *(*https://business.illinois.edu/ba/doctoral/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Business Analytics, MS

for the Master of Science in Business Analytics

interim chair of department: Cele Otnes
director of graduate studies: Jeff Loewenstein
director of admissions committee: Rakesh Bhatt
email: ba@business.illinois.edu
program website:
department faculty:
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://giesbusiness.illinois.edu/
department office: 350 Wohlers Hall, 1206 S. Sixth Street, Champaign, IL 61820
phone: (217) 333-4240

The Master of Science (MS) in Business Analytics prepares students to master and apply contemporary analytics approaches to identify and address business problems and opportunities. It can be completed in residence or online. The course work includes foundations in managing,

analyzing, and conveying patterns and implications of business data, followed by an array of analytics elective courses that enable students to deepen their skills and understanding in business application areas such as finance, accountancy, and marketing, among others. This is an intensive program for those interested in making decisions and innovating through the use of business analytics approaches.

Graduate Degree Programs in Business Administration

Majors:

Business Administration, MBA (p. 642) **(online-iMBA)**
Business Administration, MS (p. 646)
with optional concentrations: Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Corporate Governance & International Business (p. 1090), Finance (p. 1096), Supply Chain Management (p. 1109)
Business Analytics, MS (p. 649)
Management, MS (p. 858)
with optional concentrations: Business Data Analytics (p. 1086), Finance, (p. 1096) Corporate Governance & International Business (p. 1090)
Technology Management, MS (p. 1048)
with optional concentrations: Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Finance (p. 1096), Information Technology & Control (p. 1100), Supply Chain Management (p. 1109)
Business Administration, PhD (p. 647)

Minors:

Information Technology & Control (p. 1136)
Corporate Governance & International Business (p. 1130)
Supply Chain Management (p. 1144)

Concentrations:

Business Data Analytics (p. 1086)
Corporate Governance & International Business (p. 1090)
Information Technology & Control (p. 1100)
Supply Chain Management (p. 1109)

Certificates:

Digital Marketing, CERT (p. 1115)
Entrepreneurship & Strategic Innovation, CERT (p. 1116)
Financial Management, CERT (p. 1117)
Global Challenges in Business, CERT (p. 1118)
Managerial Economics & Business Analysis, CERT (p. 1119)
Strategic Leadership Management, CERT (p. 1120)
Value Chain Management, CERT (p. 1121)

Joint Degree Program:

Accountancy, MS (iMSA) & Business Administration, MBA (iMBA) (http://catalog.illinois.edu/graduate/bus/joint-degree/accountancy-ms-business-mba-online/)

Admission

www.grad.illinois.edu/admissions/apply (http://www.grad.illinois.edu/admissions/apply/)

Faculty Research Interests

Financial Aid

Most Ph.D. students receive some form of financial assistance. This assistance is likely to be in the form of a teaching or research assistantship, which includes a waiver of tuition and some fees, and/or the award of a merit-based fellowship. The M.S. in Business Administration, the M.S. in Management, the M.S. in Strategic Brand Communication, and the M.S. in Technology Management do not provide assistantships.

for the Master of Science in Business Analytics

For additional details and requirements, refer to the department's Program Curriculum and the Graduate College Handbook.

The MS in Business Analytics requires a minimum of 36 hours. The program rests on three required courses (12 credit hours) covering foundations of business data management, analysis, and communication. Students need to take at least four analytics elective courses (at least 16 credit hours) that will enable them to deepen their understanding of analytics methods and tools as well as to specialize in existing and emerging application areas. Finally, students are able to take up to two general elective courses (up to 8 credit hours) to provide foundations in application areas. Students with sufficient background may petition the academic director to replace core classes, with analytics electives. Additional analytics elective and general elective graduate course offerings may be approved by a program advisor.

Code	Title	Hours
Core Courses:		
BADM 554	Enterprise Database Management	4
FIN 510	Big Data Analytics in Finance for Predictive and Causal Analysis	4
BDI 513	Data Storytelling	4
Analytics Electives		**20-24**
BADM 550	Business Practicum	
BADM 557	Business Intelligence	
BADM 562	Social Media Strategy	
BADM 571	Digital Business & IT Strategy	
BADM 572	Stat for Mgt Decision Making	
BADM 573	Decision Analytics	
BADM 575	Supply Chain Analytics	
BADM 576	Data Science and Analytics	
BADM 577	Predictive Data Analytics	
BADM 590	Seminar in Business Admin	
FIN 552	Applied Financial Econometrics	
FIN 553	Machine Learning in Finance	
FIN 555	Financial Innovation	
FIN 567	Financial Risk Management	
FIN 580	Special Topics in Finance	
ACCY 512	Data Analytics for Management Accounting	
ACCY 569	Data Driven Decisions in Accounting	
ACCY 570	Data Analytics Foundations for Accountancy	
ACCY 571	Statistical Analyses for Accountancy	

ACCY 575	Data Analytics Applications in Accountancy	
ACCY 576	Data Preparation for Accounting	
ACCY 577	Machine Learning for Accounting	
ACCY 593	Special Research Problems	
General Graduate Electives		**0 to 4**
Total Hours		**36**

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall	12
Minimum GPA:	3.0
International students with TOEFL scores below 613 (paper-based), 257 (computer-based), or 103 (internet-based), or IELTS score below 7.0, are required to take the English Placement Test (EPT) when they arrive on campus. After taking the EPT, most students are required to take a Business English course sequence. For these students, completion of the ESL course sequence is mandatory but does not count towards the 36 hour degree requirement.	

Cell & Developmental Biology, MS

for the Master of Science in Cell & Developmental Biology

head of the department: Supriya Prasanth
director of graduate studies: Jie Chen
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
overview of mcb admissions requirements: https://mcb.illinois.edu/graduate/gradprospect (https://mcb.illinois.edu/graduate/gradprospect/)
college website: https://las.illinois.edu/
department website: http://mcb.illinois.edu/departments/cdb/
department faculty: http://mcb.illinois.edu/faculty/cdb (http://mcb.illinois.edu/faculty/cdb/)
department office: B107 Chemical and Life Sciences Laboratory, 601 South Goodwin Avenue, Urbana, IL 61801
phone: (217) 333-6118
email: mcbinfo@life.uiuc.edu

Graduate Degree Programs in Cell & Developmental Biology

Cell & Developmental Biology, MS (p. 651)
Cell & Developmental Biology, PhD (p. 652)

The graduate curriculum in Cell and Developmental Biology is designed to educate students for careers in research and teaching in the biological sciences. Departmental faculty are concerned with the structural and functional relationships of cells and organisms, with research emphases upon eukaryotic cell and molecular biology, neurobiology, developmental biology, and molecular genetics. The department has embarked on a major program to develop research strengths in molecular aspects of developmental, neural, structural, and eukaryotic cell biology to complement existing faculty interests. Students are not admitted to the M.S. program; M.S. requirements are completed as part of the Ph.D. program.

Admission

Students interested in this program must apply directly to the School of Molecular and Cellular Biology (www.mcb.illinois.edu/graduate/gradprospect.html (http://www.mcb.illinois.edu/graduate/gradprospect.html)). During the first semester, students perform three laboratory rotations, choosing from any laboratory in the School. Students select a laboratory for their thesis research in December and formally join the appropriate graduate program/department at that time.

Important factors in the evaluation of applications are general academic performance, background in the biological and chemical sciences and mathematics, Graduate Record Examination (GRE) scores, and letters of recommendation from college professors. The department does not admit students to the M.S. program.

Graduate Teaching Experience

Experience in teaching is considered a vital part of the graduate program and is required as part of the academic work of all Ph.D. candidates in this program.

Facilities and Resources

Facilities include modern, well-equipped laboratories for cellular, developmental, genetic, molecular, and structural studies. The University offers exceptional and broadly based research support services. These include the Center for Electron Microscopy, with state-of-the-art instrumentation; the Center for Biotechnology, which includes facilities for molecular cloning, DNA and protein synthesis and sequencing, and transgenic animals; the Cell Science Center, which houses and staffs a hybridoma facility and flow cytometry unit; School of Molecular and Cellular Biology-subsidized shops; and a superb university library system, the third largest in the nation. The University offers outstanding computer services and is home to the National Center for Supercomputing Applications. The Beckman Institute for Advanced Science and Technology combines research in the physical and biological sciences. Opportunities for interaction in the cellular and molecular sciences are also available in many other units within the Schools of Molecular and Cellular Biology, Integrative Biology, and Chemical Sciences and the Colleges of Medicine, Agricultural, Consumer and Environmental Sciences, and Engineering.

Financial Aid

Financial aid is available to qualified applicants in the form of university fellowships (awarded on a competitive basis), teaching assistantships (awarded by the department), research assistantships, and tuition and fee waivers. Outstanding applicants are nominated for support from the Cell and Molecular Biology, Molecular Biophysics.

for the Master of Science in Cell & Developmental Biology

For additional details and requirements refer to the department's Graduate Student Handbook (http://mcb.illinois.edu/departments/cdb/gradcurrent.html) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Cell and Developmental Biology, MS

Code	Title	Hours
MCB 501	Advanced Biochemistry	4
MCB 502	Advanced Molecular and Cell Biology	4
MCB 529	Special Topics in Cell and Developmental Biology (Section WRI)	2
MCB 580	Res Ethics & Responsibilities	1
MCB 581 & MCB 582 & MCB 583	Laboratory Rotation I and Laboratory Rotation II and Laboratory Rotation III	9
CDB 595	Graduate Sem Cell Devel Biol (Sections A and C) CDB 595 Section A and CDB 595 Section C must each be taken once for 1 credit hour each.	2
Approved elective coursework hours to bring total course work hours to 32		10
Total Hours		32

Other Requirements

Requirement	Description
Other requirements may overlap	
Completion of one of the following: Pass the Preliminary Exam, or approval of the graduate program committee (chaired by a tenured CDB faculty member and comprised of at least 5 CDB faculty members), or by approval of the research advisor and department head.	
Minimum GPA:	3.00

Learning Outcomes: Cell & Developmental Biology, MS

Learning Outcomes for the Master of Science in Cell & Developmental Biology

Cell & Developmental Biology graduates will:

1. Have mastered the foundational knowledge that defines the fields of cell and developmental biology.
2. Be able to write clearly and effectively about cell and developmental biology at the graduate level as well as in layperson terms.
3. Be able to explain cell and developmental biology orally to professional scientists, students of the discipline, and to a lay audience.
4. Be prepared to teach foundational cell and developmental biology at the college level.
5. Be able to analyze scientific data and draw conclusions from it.
6. Be able to identify important unsolved problems in cell and developmental biology.
7. Be able to articulate a hypothesis of an unsolved problem and design a research plan to test the hypothesis.
8. Be able to perform controlled experiments to test hypotheses.
9. Be able to organize results from experiments into a clear narrative that advances the field.
10. Be able to articulate the significance of their research in the broader context of the field.

Cell & Developmental Biology, PhD

for the Doctor of Philosophy in Cell & Developmental Biology

head of the department: Supriya Prasanth
director of graduate studies: Jie Chen
overview of admissions & requirements:
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department website: http://mcb.illinois.edu/departments/cdb/
department faculty: http://mcb.illinois.edu/faculty/cdb (http://mcb.illinois.edu/faculty/cdb/)
department office: B107 Chemical and Life Sciences Laboratory, 601 South Goodwin Avenue, Urbana, IL 61801
phone: (217) 333-6118
email: mcbinfo@life.uiuc.edu

Graduate Degree Programs in Cell & Developmental Biology

Cell & Developmental Biology, MS (p. 651)
Cell & Developmental Biology, PhD (p. 652)

The graduate curriculum in Cell and Developmental Biology is designed to educate students for careers in research and teaching in the biological sciences. Departmental faculty are concerned with the structural and functional relationships of cells and organisms, with research emphases upon eukaryotic cell and molecular biology, neurobiology, developmental biology, and molecular genetics. The department has embarked on a major program to develop research strengths in molecular aspects of developmental, neural, structural, and eukaryotic cell biology to complement existing faculty interests. Students are not admitted to the M.S. program; M.S. requirements are completed as part of the Ph.D. program.

Admission

Students interested in this program must apply directly to the School of Molecular and Cellular Biology (www.mcb.illinois.edu/graduate/gradprospect.html (http://www.mcb.illinois.edu/graduate/gradprospect.html)). During the first semester, students perform three laboratory rotations, choosing from any laboratory in the School. Students select a laboratory for their thesis research in December and formally join the appropriate graduate program/department at that time.

Important factors in the evaluation of applications are general academic performance, background in the biological and chemical sciences and mathematics, Graduate Record Examination (GRE) scores, and letters of recommendation from college professors. The department does not admit students to the M.S. program.

Graduate Teaching Experience

Experience in teaching is considered a vital part of the graduate program and is required as part of the academic work of all Ph.D. candidates in this program.

Facilities and Resources

Facilities include modern, well-equipped laboratories for cellular, developmental, genetic, molecular, and structural studies. The University offers exceptional and broadly based research support services. These include the Center for Electron Microscopy, with state-of-the-art instrumentation; the Center for Biotechnology, which includes facilities for molecular cloning, DNA and protein synthesis and sequencing, and transgenic animals; the Cell Science Center, which houses and staffs a hybridoma facility and flow cytometry unit; School of Molecular and Cellular Biology-subsidized shops; and a superb university library system, the third largest in the nation. The University offers outstanding computer services and is home to the National Center for Supercomputing Applications. The Beckman Institute for Advanced Science and Technology combines research in the physical and biological sciences. Opportunities for interaction in the cellular and molecular sciences are also available in many other units within the Schools of Molecular and Cellular Biology, Integrative Biology, and Chemical Sciences and the Colleges of Medicine, Agricultural, Consumer and Environmental Sciences, and Engineering.

Financial Aid

Financial aid is available to qualified applicants in the form of university fellowships (awarded on a competitive basis), teaching assistantships (awarded by the department), research assistantships, and tuition and fee waivers. Outstanding applicants are nominated for support from the Cell and Molecular Biology, Molecular Biophysics.

for the Doctor of Philosophy in Cell & Developmental Biology

For additional details and requirements refer to the department's Graduate Student Handbook (http://mcb.illinois.edu/departments/cdb/gradcurrent.html) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Cell and Developmental Biology, PhD

Code	Title	Hours
MCB 501	Advanced Biochemistry	4
MCB 502	Advanced Molecular and Cell Biology	4
MCB 529	Special Topics in Cell and Developmental Biology (Section WRI)	2
MCB 580	Res Ethics & Responsibilities	1
MCB 581 & MCB 582 & MCB 583	Laboratory Rotation I and Laboratory Rotation II and Laboratory Rotation III	9
CDB 595	Graduate Sem Cell Devel Biol (Sections A and C) CDB 595 Section A and CDB 595 Section C must each be taken once for 1 credit hour each.	2
Approved elective coursework hours to bring total course work hours to 32		10
CDB 599	Thesis Research (min/max applied toward degree)	64
Total Hours		96

Other Requirements

Requirement	Description
Other requirements may overlap	
The department requires each graduate student to teach the equivalent of 50% for one semester.	
Masters Degree Required for Admission to PhD?	No
Preliminary Exam Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

Learning Outcomes: Cell & Developmental Biology, PhD

Learning Outcomes for the Doctor of Philosophy in Cell & Developmental Biology

Cell & Developmental Biology graduates will:

1. Have mastered the foundational knowledge that defines the fields of cell and developmental biology.
2. Be able to write clearly and effectively about cell and developmental biology at the graduate level as well as in layperson terms.
3. Be able to explain cell and developmental biology orally to professional scientists, students of the discipline, and to a lay audience.
4. Be prepared to teach foundational cell and developmental biology at the college level.
5. Be able to analyze scientific data and draw conclusions from it.
6. Be able to identify important unsolved problems in cell and developmental biology.
7. Be able to articulate a hypothesis of an unsolved problem and design a research plan to test the hypothesis.
8. Be able to perform controlled experiments to test hypotheses.
9. Be able to organize results from experiments into a clear narrative that advances the field.
10. Be able to articulate the significance of their research in the broader context of the field.

Chemical Engineering, MS

for the degree of Master of Science in Chemical Engineering

This program is not currently accepting applications.

Students must be enrolled in the Chemical Engineering PhD (p. 654) program in order to receive the MS in Chemical Engineering.

for the degree of Master of Science in Chemical Engineering

For additional details and requirements refer to the department's degree programs information *(*http://chbe.illinois.edu/graduate-program/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Thesis Option

Code	Title	Hours
Coursework		20
CHBE 599	Thesis Research (min 12 applied toward degree)	12
Total Hours		32

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Credit for CHBE 565 may not be applied to the degree requirements.	
Minimum Hours Overall Required Within the Unit:	8
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	2.75

[1] *For additional details and requirements refer to the* department's degree programs information *(*http://chbe.illinois.edu/graduate-program/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Non-Thesis Option

Code	Title	Hours
Coursework		30-32
CHBE 565	CHBE Seminar (Must be taken every semester that the student is in residence. Max 2 hours may be applied.)	0-2
Total Hours		32

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Maximum hours of CHBE 565 applied to the degree	2
Minimum Hours Overall Required Within the Unit:	12
Minimum 500-level Hours Required Overall:	16
Minimum GPA:	2.75

[1] *For additional details and requirements refer to the* department's degree programs information *(*http://chbe.illinois.edu/graduate-program/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Chemical Engineering, MS

Learning Outcomes for the degree of Master of Science in Chemical Engineering

1. Knowledge of the concepts and problem-solving skills in mathematics, science, and engineering that are relevant to identifying, formulating, and solving defined research problems in the field of chemical and biomolecular engineering.
2. Ability to clearly and persuasively communicate (orally and in writing) the motivation for a research project, relevant scientific and engineering concepts, approach, experimental data, data interpretation, conclusions drawn from the research, and the significance of the findings to both experts in the field and non-expert scientists and engineers.
3. Ability to develop and conduct appropriate experimentation or computer simulation, analyze and interpret data, and use engineering judgment to draw conclusions.
4. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Chemical Engineering, PhD

for the degree of Doctor of Philosophy in Chemical Engineering

department head: Paul JA Kenis (kenis@illinois.edu)
director of graduate studies: Mary L Kraft (mlkraft@illinois.edu)
overview of admissions & requirements: https://chbe.illinois.edu/graduate-program/graduate-admissions/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://chbe.illinois.edu/
program website: https://chbe.illinois.edu/graduate-program/ph-d-program-overview/
department faculty: https://chbe.illinois.edu/directory/
college websites: https://las.illinois.edu/ **and** https://grainger.illinois.edu/
contact: Cindy Dodds (dodds@illinois.edu)
address: 114 Roger Adams Lab, 600 S Mathews Ave, Urbana, IL 61801
phone: (217) 244-9214
email: chbe-gradrecruiting@illinois.edu

Opportunity exists for specializing in computational science and engineering via the Computational Science & Engineering (p. 1089) optional graduate concentration.

Admission Requirements

Ideal candidates for advanced degrees in chemical engineering should have a background in chemistry and chemical engineering comparable to the training offered in the undergraduate chemical engineering curriculum at the University of Illinois at Urbana-Champaign. Students whose prior training is deficient in one or more basic areas of chemistry or chemical engineering may be admitted with the understanding that extra coursework will be required to address their deficiencies. Graduate College admission requirements also apply.

All applicants whose native language is not English are required to submit TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) scores as evidence of English proficiency. Minimum admission requirements (https://grad.illinois.edu/admissions/instructions/04c/) are set by the Graduate College.

Financial Aid

Students who remain in good standing and continue to make satisfactory academic progress are guaranteed a funded appointment that includes

a full tuition waiver, a partial fee waiver, and a stipend for the duration of their studies in the program.

Graduate Teaching Experience

Experience in teaching is considered a vital part of the Chemical & Biomolecular Engineering PhD program. As part of their academic work, all students in the program are required to serve as a teaching assistant for at least three semesters.

In order to satisfy this requirement, all students whose native language is not English, regardless of US citizenship, must demonstrate spoken English language proficiency (http://www.grad.illinois.edu/admissions/taengprof.htm) by achieving a minimum score of 24 on the speaking subsection of the TOEFL iBT or 8 on the speaking subsection of the IELTS. For students who are unable to take the iBT or IELTS, a minimum score of 4CP is required on the EPI test (http://cte.illinois.edu/testing/oral_eng/epi_overview.html), offered on campus. All new teaching assistants are required to participate in the Graduate Academy for College Teaching (https://citl.illinois.edu/citl-101/teaching-learning/grad-academy-for-college-teaching/) conducted prior to the start of the semester.

Department Research

Please see chbe.illinois.edu/research (http://chbe.illinois.edu/research/).

Other Graduate Programs in Chemical & Biomolecular Engineering

degrees:

Chemical Engineering, MS (p. 653)
Bioinformatics: Chemical & Biomolecular Engineering, MS (p. 628)

The Department of Chemical and Biomolecular Engineering offers graduate programs leading to degree of Master of Science and Doctor of Philosophy in Chemical Engineering, as well as a Chemical & Biomolecular Engineering Concentration under the MS in Bioinformatics.

for the degree of Doctor of Philosophy in Chemical Engineering

For additional details and requirements refer to the department's degree programs information (http://chbe.illinois.edu/graduate-program/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Chemical Engineering, PhD

Code	Title	Hours
Minimum four of graduate-level courses in chemical engineering		16
A coherent program of four additional graduate level courses		16
CHBE 599	Thesis Research (0 min applied toward degree)	0
Total Hours		96

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum Hours Overall Required Within the Unit:	16
Minimum 500-level Hours Required Overall:	20
Teaching experience is required	
Requirements include satisfactory performance on qualifying and certification examinations, and a thesis.	
Masters Degree Required for Admission to PhD?	No
Qualifying Exam Required	Yes, the qualifying examination is a written test usually taken during the first year of study.
Preliminary Exam Required	Yes, the preliminary examination is an individual oral examination taken after the student has satisfied the course requirements.
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	2.75

Learning Outcomes: Chemical Engineering, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Chemical Engineering

1. Knowledge of the concepts and problem-solving skills in mathematics, science, and engineering that are relevant to identifying, formulating, and solving defined research problems in the field of chemical and biomolecular engineering.
2. Ability to clearly and persuasively communicate (orally and in writing) the motivation for a research project, relevant scientific and engineering concepts, approach, experimental data, data interpretation, conclusions drawn from the research, and the significance of the findings to both experts in the field and non-expert scientists and engineers.
3. Ability to develop and conduct appropriate experimentation or computer simulation, analyze and interpret data, and use engineering judgment to draw conclusions.
4. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Chemical Physics, PhD

for the degree of Doctor of Philosophy in Chemical Physics

department head chemistry: Catherine J. Murphy
director of graduate studies: Wilfred van der Donk
overview of admissions & requirements:
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: department website link
program website: program website link
department faculty: department faculty link
college website: college website
department office:
phone:
email:

Not accepting applications at this time.

Students with undergraduate degrees in chemistry should direct inquiries and applications to the Department of Chemistry
109 Noyes Laboratory, 505 South Mathews Avenue, Urbana, IL 61801.

Students with undergraduate degrees in physics should direct inquiries and applications to the Graduate Advising Office, Department of Physics
227 Loomis Laboratory of Physics, 1110 West Green Street, Urbana, IL 61801-3080

Graduate Degree Programs in Chemistry

Chemistry, MA (p. 657)
Chemistry, MS (p. 658)
Chemistry, PhD (p. 659)
concentrations:
Astrochemistry (p. 1076)|Computational Science & Engineering (p. 1089)
Chemical Physics, PhD (p. 655)
Teaching of Chemistry, MS (p. 1039)
joint programs:
Chemistry, MS & Law, JD (p. 1157)

A chemical physics program leading to the Doctor of Philosophy makes it possible for students to gain the necessary background and perform original research in this interdisciplinary field of science. Fundamental research on many properties of molecular and solid-state systems is based on an understanding of chemistry, physics, and mathematics that can best be obtained by training in more than one department. Students may use the facilities in both the School of Chemical Sciences and the Department of Physics.

Admission

Applicants who have fulfilled the usual undergraduate course requirements, including at least 25 semester hours in chemistry (properly distributed) and a grade point average of 3.0 (A = 4.0), may be considered for admission to the graduate programs. Applications from students with less than the usual preparation in chemistry or with grade point averages below 3.0 may be considered on an individual basis.

International students whose native language is not English are required to have a minimum paper-based TOEFL score of 580 (237 on the computer-based test). In addition, teaching is a requirement in the Chemistry graduate program and there are special requirements for applicants whose native language is not English. The University requires a minimum TOEFL iBT speaking score of 24 for a contact teaching assistant appointment. Any applicant whose native language is not English is expected to provide TOEFL scores in order to receive full consideration for admission and financial aid.

Please contact chemistry graduate admissions for further information.

Financial Aid

Students may apply for fellowships and assistantships from either the Department of Chemistry or the Department of Physics.

for the degree of Doctor of Philosophy in Chemical Physics

Students entering through the Department of Chemistry must satisfy the registration examination, literature seminar, preliminary examination, and original research proposal requirements of Physical Chemistry. The guidelines for these requirements are in the Department of Chemistry Graduate Manual. Students entering through the Department of Physics must satisfy the PhD requirements of the Department of Physics. Research for the thesis is performed under the direction of faculty members who are currently active in chemical physics. Many of these staff members are affiliated with the Materials Research Laboratory (MRL). MRL is a multidisciplinary facility shared by staff and students from the Departments of Physics, Chemistry, Materials Science and Engineering, Electrical and Computer Engineering, and other related departments that have common interests in materials science.

Entering with approved M.S./M.A. degree

Code	Title	Hours
Required courses		20
CHEM 599	Thesis Research (min 0 applied toward degree)	0
Total Hours		64

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Qualifying Exam Required	Yes
Preliminary Exam Required	Yes
Original Research Proposal	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the department's* Graduate Programs *(*http://www.chemistry.illinois.edu/research/chemphys/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Entering with approved B.S./B.A. degree

Code	Title	Hours
Required courses		20
CHEM 599	Thesis Research (0 min applied toward degree)	0
Total Hours		96

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Qualifying Exam Required	Yes
Preliminary Exam Required	Yes
Original Research Proposal	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the department's* Graduate Programs *(*http://www.chemistry.illinois.edu/research/chemphys/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Chemistry, MA

for the degree of Master of Arts in Chemistry

department head chemistry: Catherine J. Murphy
overview of admissions & requirements:
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: department website link
department faculty: department faculty link
college website: college website
department office:
phone:
email:

Not accepting applications at this time

Graduate Degree Programs in Chemistry

Chemistry, MA (p. 657)
Chemistry, MS (p. 658)
Chemistry, PhD (p. 659)
concentrations:
Astrochemistry (p. 1076)|Computational Science & Engineering (p. 1089)
Chemical Physics, PhD (p. 655)
Teaching of Chemistry, MS (p. 1039)
joint programs:
Chemistry, MS & Law, JD (p. 1157)

Admission

Graduate College requirements apply. Further, applicants should have at least 25 semester hours in chemistry (properly distributed) and a grade point average of 3.0 (A = 4.0), to be considered for admission to the graduate programs. Applications from students with less than the usual preparation in chemistry or with grade point averages below 3.0 may be considered on an individual basis.

International students whose native language is not English are required to have a minimum paper-based Test of English as a Foreign Language (TOEFL) score of 580 (237 on the computer-based test). In addition, teaching is a requirement in the chemistry graduate program, and there are special requirements for applicants whose native language is not English. The University requires a minimum Test of Spoken English (TSE) score of 50. Any applicant whose native language is not English is expected to provide TSE scores in order to receive full consideration for admission and financial aid.

Students who are currently enrolled in graduate programs at other institutions are advised that they should first complete degree work at their current institution before they will be considered for admission to the chemistry PhD program at the University of Illinois. In addition, we require a statement from the applicant and a letter from the applicant's research adviser or department head detailing the situation. Students might be admitted without a degree from their current institution under exceptional circumstances that will need to be described in detail via a letter from the applicant and a separate statement from the department head of the student's current graduate program.

Contact chemistry graduate admissions for further information. The department does not currently accept applications for the MA program.

Financial Aid

Support for graduate students is available through fellowships and assistantships. All candidates are considered for these upon application. Graduate students making normal progress toward their degrees generally receive a tuition waiver as well as a stipend.

for the degree of Master of Arts in Chemistry

Thesis Option

Code	Title	Hours
CHEM 599	Thesis Research (12 max applied toward degree)	12
Total Hours		32

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	3.0

Non-Thesis Option

Code	Title	Hours
Total Hours		**32**

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall:	20 (16 in CHEM)
Minimum GPA:	3.0

Learning Outcomes: Chemistry, MA

Learning outcomes for the degree of Master of Arts in Chemistry

NOTE: Some of the learning outcomes below were taken or adapted from the 2013 American Chemical Society Presidential Commission

on Graduate Education in the Chemical Sciences. The Department of Chemistry uses these as its main guidelines.

1. To have a deep working knowledge of the principles, techniques, and concepts of contemporary chemistry.
2. To be able to effectively design and carry out independent research leading to new knowledge or a practical, applicable result.
3. To be able to communicate clearly and effectively within and across disciplinary lines.
4. To be able to educate students interested in chemical sciences.
5. To be aware of and prepare for various career opportunities with an advanced degree in chemistry.
6. To clearly understand the ethical conduct of research.
7. To understand and adopt the best safety practices in chemical research.

Chemistry, MS

for the degree of Master of Science in Chemistry

department head chemistry: Catherine J. Murphy
overview of admissions & requirements: https://chemistry.illinois.edu/admissions/graduate-admissions (https://chemistry.illinois.edu/admissions/graduate-admissions/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: Chemistry (https://chemistry.illinois.edu/)
department faculty: https://chemistry.illinois.edu/directory/faculty-by-type (https://chemistry.illinois.edu/directory/faculty-by-type/)
college website: https://las.illinois.edu/
department office: 109 Noyes Laboratory, 505 South Mathews Avenue, Urbana, IL 61801-3080
phone: (217) 333-0711
email: c (chemadm@scs.uiuc.edu)hemistry@illinois.edu (http://catalog.illinois.edu/graduate/las/chemistry-ms/chemadm@scs.uiuc.edu)

Graduate Degree Programs in Chemistry

Chemistry, MA (p. 657)
Chemistry, MS (p. 658)
Chemistry, PhD (p. 659)
concentrations:
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Teaching of Chemistry, MS (p. 1039)
joint programs:
Chemistry, MS & Law, JD (p. 1157)

Admission

Graduate College requirements apply. Further, applicants should have at least 25 semester hours in chemistry (properly distributed) and a grade point average of 3.0 (A = 4.0), to be considered for admission to the graduate programs. Applications from students with less than the usual preparation in chemistry or with grade point averages below 3.0 may be considered on an individual basis.

International students whose native language is not English are required to have a minimum paper-based Test of English as a Foreign Language (TOEFL) score of 580 (237 on the computer-based test). In addition, teaching is a requirement in the chemistry graduate program, and there are special requirements for applicants whose native language is not English. The University requires a minimum Test of Spoken English (TSE) score of 50. Any applicant whose native language is not English is expected to provide TSE scores in order to receive full consideration for admission and financial aid.

Students who are currently enrolled in graduate programs at other institutions are advised that they should first complete degree work at their current institution before they will be considered for admission to the chemistry PhD program at the University of Illinois. In addition, we require a statement from the applicant and a letter from the applicant's research adviser or department head detailing the situation. Students might be admitted without a degree from their current institution under exceptional circumstances that will need to be described in detail via a letter from the applicant and a separate statement from the department head of the student's current graduate program.

Contact chemistry graduate admissions for further information.

Financial Aid

Support for graduate students is available through fellowships and assistantships. All candidates are considered for these upon application. Graduate students making normal progress toward their degrees generally receive a tuition waiver as well as a stipend.

for the degree of Master of Science in Chemistry

The program leading to the degree of Master Science in Chemistry is designed to be completed in one year of full-time study by students entering without deficiencies. A research thesis is optional.
For additional details and requirements refer to the department's Graduate Programs (https://chemistry.illinois.edu/academics/graduate-studies/)and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Thesis Option

Code	Title	Hours
CHEM 599	Thesis Research (12 max applied toward degree)	12
Total Hours		32

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	3.0

Non-Thesis Option

Code	Title	Hours
Total Hours		**32**

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall:	20 (16 in CHEM)
Minimum GPA:	3.0

Learning Outcomes: Chemistry, MS

Learning Outcomes for the degree of Master of Science in Chemistry

NOTE: Some of the learning outcomes below were taken or adapted from the 2013 American Chemical Society Presidential Commission on Graduate Education in the Chemical Sciences. The Department of Chemistry uses these as its main guidelines.

1. To have a deep working knowledge of the principles, techniques, and concepts of contemporary chemistry.
2. To be able to effectively design and carry out independent research leading to new knowledge or a practical, applicable result.
3. To be able to communicate clearly and effectively within and across disciplinary lines.
4. To be able to educate students interested in chemical sciences.
5. To be aware of and prepare for various career opportunities with an advanced degree in chemistry.
6. To clearly understand the ethical conduct of research.
7. To understand and adopt the best safety practices in chemical research.

Chemistry, PhD

for the degree of Doctor of Philosophy in Chemistry

department head chemistry: Catherine J. Murphy
overview of admissions & requirements: https://chemistry.illinois.edu/admissions/graduate-admissions (https://chemistry.illinois.edu/admissions/graduate-admissions/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: Chemistry (https://chemistry.illinois.edu/)
department faculty: https://chemistry.illinois.edu/directory/faculty-by-type (https://chemistry.illinois.edu/directory/faculty-by-type/)
college website: https://las.illinois.edu/
department office: 109 Noyes Laboratory, 505 South Mathews Avenue, Urbana, IL 61801-3080
phone: (217) 333-0711
email: c (http://catalog.illinois.edu/graduate/las/chemistry-phd/chemadm@illinois.edu)hemistry@illinois.edu (http://catalog.illinois.edu/graduate/las/chemistry-phd/chemadm@illinois.edu)

Graduate Degree Programs in Chemistry

Chemistry, MA (p. 657)
Chemistry, MS (p. 658)
Chemistry, PhD (p. 659)
concentrations:
Astrochemistry (p. 1076)|Computational Science & Engineering (p. 1089)
Chemical Physics, PhD (p. 655)
Teaching of Chemistry, MS (p. 1039)
joint programs:
Chemistry, MS & Law, JD (p. 1157)

Admission

Graduate College requirements apply. Further, applicants should have at least 25 semester hours in chemistry (properly distributed) and a grade point average of 3.0 (A = 4.0), to be considered for admission to the graduate programs. Applications from students with less than the usual preparation in chemistry or with grade point averages below 3.0 may be considered on an individual basis.

International students whose native language is not English are required to have a minimum paper-based Test of English as a Foreign Language (TOEFL) score of 580 (237 on the computer-based test). In addition, teaching is a requirement in the chemistry graduate program, and there are special requirements for applicants whose native language is not English. The University requires a minimum Test of Spoken English (TSE) score of 50. Any applicant whose native language is not English is expected to provide TSE scores in order to receive full consideration for admission and financial aid.

Students who are currently enrolled in graduate programs at other institutions are advised that they should first complete degree work at their current institution before they will be considered for admission to the chemistry PhD program at the University of Illinois. In addition, we require a statement from the applicant and a letter from the applicant's research adviser or department head detailing the situation. Students might be admitted without a degree from their current institution under exceptional circumstances that will need to be described in detail via a letter from the applicant and a separate statement from the department head of the student's current graduate program.

Contact chemistry graduate admissions for further information.

Graduate Teaching Experience

Experience in teaching is considered a vital part of the graduate program and is required as part of the academic work of all Ph.D. candidates in this program.

Financial Aid

Support for graduate students is available through fellowships and assistantships. All candidates are considered for these upon application. Graduate students making normal progress toward their degrees generally receive a tuition waiver as well as a stipend.

for the Doctor of Philosophy in Chemistry

Doctoral programs are offered in a wide range of specialties, including the traditional areas of analytical, inorganic, organic, and physical chemistry as well as materials chemistry and chemical biology. The formal course requirements involve 12 or more hours of 500-level courses, plus 8 or fewer hours of 400-level coures, for a total of 20 hours in chemistry and

allied relevant fields. Besides completing formal coursework, students will present a literature seminar, have a formal review of progress following the completion of coursework, pass an oral preliminary examination on research preparation, present and defend an original research proposal not related to their thesis research, and submit a thesis on original research, which is defended at a final oral examination.

For additional details and requirements refer to the department's Graduate Programs (https://chemistry.illinois.edu/academics/graduate-studies/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Entering with M.S./M.A. degree

Code	Title	Hours
400- 500-level courses in Chemistry or allied fields (max 8 at 400-level)		20
Seminar (CHEM 5X5)		1
CHEM 599	Thesis Research (0 min applied toward degree)	0
Total Hours		64

Other Requirements

Requirement	Description
Other requirements may overlap	
Teaching experience	1 year
Qualifying Exam Required	No
Preliminary Exam Required	Yes
Original Research Proposal	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

Entering with approved B.S./B.A. degree

Code	Title	Hours
400- or 500-level courses in the Chemistry or allied fields (max 8 at 400-level)		20
Seminar		1
CHEM 599	Thesis Research (0 min applied toward degree)	0
Total Hours		96

Other Requirements

Requirement	Description
Other requirements may overlap	
Teaching experience	1 year
Qualifying Exam Required	No
Preliminary Exam Required	Yes
Original Research Proposal	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

Learning Outcomes: Chemistry, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Chemistry

NOTE: Some of the learning outcomes below were taken or adapted from the 2013 American Chemical Society Presidential Commission on Graduate Education in the Chemical Sciences. The Department of Chemistry uses these as its main guidelines.

1. To have a deep working knowledge of the principles, techniques, and concepts of contemporary chemistry.
2. To be able to effectively design and carry out independent research leading to new knowledge or a practical, applicable result.
3. To be able to communicate clearly and effectively within and across disciplinary lines.
4. To be able to educate students interested in chemical sciences.
5. To be aware of and prepare for various career opportunities with an advanced degree in chemistry.
6. To clearly understand the ethical conduct of research.
7. To understand and adopt the best safety practices in chemical research.

Civil Engineering, MS

for the degree of Master of Science in Civil Engineering (on campus & non-thesis online)

head of department: Ana Barros (https://cee.illinois.edu/directory/staff/office-department-head/)
director of graduate studies: Jeffery R Roesler (jroesler@illinois.edu)
overview of admissions & requirements: https://cee.illinois.edu/admissions/graduate/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://cee.illinois.edu/
program website: https://cee.illinois.edu/academics/graduate-programs/ms-degree-and-curriculum (https://cee.illinois.edu/academics/graduate-programs/ms-degree-and-curriculum/)
department faculty: https://cee.illinois.edu/directory/faculty (https://cee.illinois.edu/directory/faculty/)
college website: https://grainger.illinois.edu/
contact: Joan Christian (jchristn@illinois.edu)
address: 1108 Newmark Civil Engineering Lab, 205 N Mathews Ave, Urbana, IL 61801
phone: (217) 265-4496
email: civil@illinois.edu

The Department of Civil and Environmental Engineering, consistently ranked as having one of the best graduate programs in the country, offers graduate work leading to master's and doctoral degrees. These are in a variety of specialized areas through departmental and joint programs which are described on this page.

Opportunity exists for specializing in computational science and engineering via the Computational Science & Engineering (p. 1089) optional graduate concentration.

Admission Requirements

The Department of Civil & Environmental Engineering accepts applications for admission to the graduate program for both fall and spring semesters.

A prerequisite for graduate study in civil engineering is the equivalent of the BS in Civil Engineering (p. 92) from an accredited institution whose requirements for the bachelor's degree are substantially equivalent to those of the University of Illinois and his or her cumulative grade point average is at least 3.00 (A = 4.00). The Graduate Record Examination (GRE) (http://www.ets.org/portal/site/ets/menuitem.fab2360b1645a1de9b3a0779f1751509/?vgnextoid=b195e3b5f64f4010VgnVCM10000022f95190RCRD) is required.

All applicants whose native language is not English are required to submit TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) scores as evidence of English proficiency. Minimum admission requirements (https://grad.illinois.edu/admissions/instructions/04c/) are set by the Graduate College. Students applying to the online program must satisfy the full status admissions requirement.

Applicants to the joint programs with Architecture or Urban Planning must meet the admissions standards for both degree programs and be accepted by both programs. For more information on the joint degree program, please see Civil Engineering, MS & Architecture, MARCH (p. 1150) or Urban Planning, MUP & Related majors, MS (p. 1168)

Financial Aid

Financial aid is available in the form of fellowships and research and teaching assistantships. All applicants, regardless of US citizenship, whose native language is not English and who wish to be considered for teaching assistantships must demonstrate spoken English language proficiency (http://www.grad.illinois.edu/admissions/taengprof.htm) by achieving a minimum score of 50 or 24 on the speaking subsection of the TOEFL iBT or 8 on the speaking subsection of the IELTS. For students who are unable to take the iBT or IELTS, a minimum score of 4CP is required on the EPI test (http://cte.illinois.edu/testing/oral_eng/epi_overview.html), offered on campus. All new teaching assistants are required to participate in the Graduate Academy for College Teaching (https://citl.illinois.edu/citl-101/teaching-learning/grad-academy-for-college-teaching/) conducted prior to the start of the semester.

Department Research

Areas of study and research pursued by our world-renowned faculty are focused in the following ten specializations:

•construction management	•environmental engineering and science	•environmental hydrology and hydraulic engineering	•geotechnical engineering	•materials
•structural engineering	•transportation engineering	•sustainable and resilient infrastructure systems	•energy-water-environment sustainability	•societal risk and hazard mitigation

More information about these specialized areas may be found at the department's research Web site (https://cee.illinois.edu/areas/).

Through the research centers based in the department, CEE students participate in a wide range of groundbreaking research projects with immediate relevance to real-world engineering applications. For more information, see the department's research centers Web site (https://cee.illinois.edu/research/research-centers/).

CEE at Illinois is one of the nation's best-equipped programs, with a broad range of facilities for civil and environmental engineering education and research. For more information, see the department's research facilities Web site (https://cee.illinois.edu/research/research-facilities/).

Other Graduate Programs in the Department of Civil & Environmental Engineering

degrees:

Civil Engineering, PhD (p. 662)
optional concentrations:
Computational Science and Engineering (p. 1089)
Environmental Engineering in Civil Engineering, MS (p. 757)
optional concentrations:
Computational Science and Engineering (p. 1089)
Environmental Engineering in Civil Engineering, PhD (p. 759)
optional concentrations:
Computational Science and Engineering (p. 1089)

concentrations:

Railway Engineering (p. 750)
available for:
Engineering, MENG (p. 745)

joint programs:

Civil Engineering, MS & Architecture, MARCH (p. 1150), **(Construction Management or Structures)**
Civil Engineering, MS & Urban Planning, MS (p. 1168)

Opportunity also exists for specializing in energy and sustainability engineering via the

Energy and Sustainability Engineering (EaSE) Graduate Certificate Option (http://ease.illinois.edu/)

for the degree of Master of Science in Civil Engineering (on campus & non-thesis online)

The degree requirements for the online programs are the same as for the on-campus non-thesis M.S. program—36 hours of course work—and the degree awarded to online students is the same degree awarded to resident students. Online students have five years to complete the program.

The M.S. degree in Civil Engineering offered online is currently available for specialization in Construction Management, Infrastructure, Structural Engineering, and Transportation Engineering. Students can also develop cross-disciplinary programs in consultation with their advisers. Additional courses are available online in the following areas of concentration to complement the student's area of specialty above: Construction Materials, Environmental Engineering and Science, Environmental Hydrology and Hydraulic Engineering, and Geotechnical Engineering.

For additional details and requirements refer to the department's Graduate Handbook (https://cee.illinois.edu/academics/graduate-programs/graduate-handbook/) and the Graduate College Handbook (http://grad.illinois.edu/gradhandbook/).

This degree program can be completed either on campus or online; with or without a thesis, the requirements are listed below:

Code	Title	Hours
Non-Thesis Option		
Elective courses	36 hours subject to Other Requirements and Conditions below	
Total Hours	**Non-Thesis Option**	**36**
Thesis Option		
CEE 599	Thesis Research (4 to 12 hours)	
Elective courses	20-28 hours subject to Other Requirements and Conditions below	
Total Hours	**Thesis Option**	**32**

Other Requirements

Requirement	Description
Other Requirements may overlap	
Individual programs are developed by the students in consultation with their academic advisors.	
A minimum of 16 hours of credit within the major field with 8 graded and at the 500 level.	
A minimum of 12 hours at the 500-level overall.	
A maximum of 8 hours of CEE 597 (or other independent study) may be applied toward the elective course work requirement.	
At least half of the minimum hours required for the degree must be in Illinois courses meeting on the Urbana-Champaign campus or in courses meeting in other locations approved by the Graduate College for residency credit for the degree.	
Minimum program GPA	2.75

Learning Outcomes: Civil Engineering, MS

Learning Outcomes for the degree of Master of Science in Civil Engineering (on campus & non-thesis online)

1. Ability to identify and utilize advanced mathematical, computational, design and/or experimental skills to solve complex problems in civil and environmental engineering
2. Demonstrate technical knowledge and depth in at least one or more CEE subject areas and breadth of knowledge in at least one additional area.
3. Demonstrate the ability to communicate effectively (written, oral presentation, and other media) technical ideas, design concepts, or research results.
4. Understanding of the student's professional and scientific ethical responsibilities;
5. Propose, plan, and execute original research idea that target current or future societal challenges related to civil and environmental engineering.
6. Demonstrate skills to teach technical subjects in CEE at the university level

Civil Engineering, PhD

for the degree of Doctor of Philosophy in Civil Engineering

head of department: Ana Barros (https://cee.illinois.edu/directory/staff/office-department-head/)
director of graduate studies: Jeffery R Roesler (jroesler@illinois.edu)
overview of admissions & requirements: https://cee.illinois.edu/admissions/graduate/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://cee.illinois.edu/
program website: https://cee.illinois.edu/academics/graduate-programs/phd-degree-and-curriculum (https://cee.illinois.edu/academics/graduate-programs/phd-degree-and-curriculum/)
department faculty: https://cee.illinois.edu/directory/faculty (https://cee.illinois.edu/directory/faculty/)
college website: https://grainger.illinois.edu/
contact: Joan Christian (jchristn@illinois.edu)
address: 1108 Newmark Civil Engineering Lab, 205 N Mathews Ave, Urbana, IL 61801
phone: (217) 265-4496
email: civil@illinois.edu

The Department of Civil and Environmental Engineering, consistently ranked as having one of the best graduate programs in the country, offers graduate work leading to master's and doctoral degrees. These are in a variety of specialized areas through departmental programs which are described on this page.

Opportunity exists for specializing in computational science and engineering via the Computational Science & Engineering (p. 1089) optional graduate concentration.

Admission Requirements

The Department of Civil & Environmental Engineering accepts applications for admission to the graduate program for both fall and spring semesters.

Admission to the Graduate College with full status in civil engineering is granted to graduates of accredited institutions whose requirements for the master's degree are substantially equivalent to those of the University of Illinois, provided the applicant's preparation is appropriate for advanced study in his or her chosen major field and his or her cumulative grade point average is at least 3.00 (A = 4.00). The Graduate Record Examination (GRE) (http://www.ets.org/portal/site/ets/menuitem.fab2360b1645a1de9b3a0779f1751509/?vgnextoid=b195e3b5f64f4010VgnVCM10000022f95190RCRD) is required. For additional information, see the departmental Web site (http://cee.illinois.edu/programs/Grad/GradApps/).

All applicants whose native language is not English are required to submit TOEFL (http://www.toefl.org/) or International English Language

Testing System (IELTS) (http://www.ielts.org/) scores as evidence of English proficiency. Minimum admission requirements (https://grad.illinois.edu/admissions/instructions/04c/) are set by the Graduate College.

Financial Aid

Financial aid is available in the form of fellowships and research and teaching assistantships. Starting in Fall 2020, Grainger Engineering PhD students in their first five years of enrollment who meet the minimum eligibility requirements (https://grainger.illinois.edu/academics/graduate/phd-funding-guarantee/) are guaranteed a funded appointment for fall and spring that includes a full tuition waiver, a partial fee waiver, and a stipend.

All applicants, regardless of US citizenship, whose native language is not English and who wish to be considered for teaching assistantships must demonstrate spoken English language proficiency (http://www.grad.illinois.edu/admissions/taengprof.htm) by achieving a minimum score of 50 or 24 on the speaking subsection of the TOEFL iBT or 8 on the speaking subsection of the IELTS. For students who are unable to take the iBT or IELTS, a minimum score of 4CP is required on the EPI test (http://cte.illinois.edu/testing/oral_eng/epi_overview.html), offered on campus. All new teaching assistants are required to participate in the Graduate Academy for College Teaching (https://citl.illinois.edu/citl-101/teaching-learning/grad-academy-for-college-teaching/) conducted prior to the start of the semester.

Department Research

Areas of study and research pursued by our world-renowned faculty are focused in the following ten specializations:

•construction management	•environmental engineering and science	•environmental hydrology and hydraulic engineering	•geotechnical engineering	•materials
•structural engineering	•transportation engineering	•sustainable and resilient infrastructure systems	•energy-water-environment sustainability	•societal risk and hazard mitigation

More information about these specialized areas may be found at the department's research Web site (https://cee.illinois.edu/areas/).

Through the research centers based in the department, CEE students participate in a wide range of groundbreaking research projects with immediate relevance to real-world engineering applications. For more information, see the department's research centers Web site (https://cee.illinois.edu/research/research-centers/).

CEE at Illinois is one of the nation's best-equipped programs, with a broad range of facilities for civil and environmental engineering education and research. For more information, see the department's research facilities Web site (https://cee.illinois.edu/research/research-facilities/).

Other Graduate Programs in the Department of Civil & Environmental Engineering

degrees:

Civil Engineering, MS (p. 660)
optional concentrations:
Computational Science and Engineering (p. 1089)
Environmental Engineering in Civil Engineering, MS (p. 757)
optional concentrations:
Computational Science and Engineering (p. 1089)
Environmental Engineering in Civil Engineering, PhD (p. 759)
optional concentrations:
Computational Science and Engineering (p. 1089)

concentrations:

Railway Engineering (p. 750)
available for:
Engineering, MENG (p. 745)

joint programs:

Civil Engineering, MS & Architecture, MARCH (p. 1150), **(Construction Management or Structures)**
Civil Engineering, MS & Urban Planning, MS (p. 1168)

Opportunity also exists for specializing in energy and sustainability engineering via the

Energy and Sustainability Engineering (EaSE) Graduate Certificate Option (http://ease.illinois.edu/)

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for the degree of Doctor of Philosophy in Civil Engineering

The degree of Doctor of Philosophy, primarily a research degree, requires from three to four years of graduate study beyond the master's degree. The major area of specialization encompasses courses and research that are closely related, but the courses need not be offered by a single major department. Candidates must demonstrate a capacity for independent research by preparing an original thesis on a topic within the major field of study, must meet the qualifying requirements or examination in the area of specialization, and must pass both preliminary and final examinations.

For additional details and requirements refer to the department's Graduate Handbook (https://ws.engr.illinois.edu/sitemanager/getfile.asp?id=3334)and the Graduate College Handbook (http://grad.illinois.edu/gradhandbook/).

Entering with an approved Master's Degree:

Code	Title	Hours
CEE 599	Thesis Research (min-max applied toward degree)	32
Elective courses (subject to Other Requirements and Conditions below)		32
Total Hours		64

Other Requirements

Requirement	Description
Other Requirements and Conditions may overlap	
A maximum of 8 hours of CEE 597 (or other independent study) may be applied toward the elective course work requirement; approval required.	

There is no department-wide foreign language requirement. However, the faculties of some areas of specialization may require foreign language proficiency if essential to the conduct of research in that area.	
64 graduate hours must be completed in residence.	
A Masters degree is required for admission to the Ph.D. program.	
Ph.D. exam and dissertation requirements:	
Qualifying exam[1]	
Preliminary exam	
Final exam or dissertation defense	
Dissertation deposit	
The minimum program GPA is 2.75.	

Entering with an approved Baccalaureate Degree:

Code	Title	Hours
CEE 599	Thesis Research	32-40
Elective Courses (subject to Other Requirements and Conditions below)		56-64
Total Hours		96

Other Requirements

Requirement	Description
Other Requirements and Conditions may overlap	
A maximum of 8 hours of CEE 597 (or other independent study) may be applied toward the elective course work requirement; approval required.	
There is no department-wide foreign language requirement. However, the faculties of some areas of specialization may require foreign language proficiency if essential to the conduct of research in that area.	
24 credit hours must be in major field. 24 credit hours of elective coursework must be at the 500-level, with at least 12 hours in major field.	
64 graduate hours must be completed in residence.	
Ph.D. exam and dissertation requirements:	
Qualifying exam[1]	
Preliminary exam	
Final exam or dissertation defense	
Dissertation deposit	
The minimum program GPA is 2.75.	

[1] Qualifying Exam Information (http://cee.illinois.edu/academics/graduate-programs/phd-degree-and-curriculum/)

Learning Outcomes: Civil Engineering, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Civil Engineering

1. Ability to identify and utilize advanced mathematical, computational, design and/or experimental skills to solve complex problems in civil and environmental engineering
2. Demonstrate technical knowledge and depth in at least one or more CEE subject areas and breadth of knowledge in at least one additional area.
3. Demonstrate the ability to communicate effectively (written, oral presentation, and other media) technical ideas, design concepts, or research results.
4. Understanding of the student's professional and scientific ethical responsibilities;
5. Propose, plan, and execute original research idea that target current or future societal challenges related to civil and environmental engineering.
6. Demonstrate skills to teach technical subjects in CEE at the university level

Classical Philology, PhD

for the degree of Doctor of Philosophy in Classical Philology

chair of department: Curtis Perry (FA 2021); Craig Williams (SP 2022)
director of graduate studies: Brian Walters
department website: http://www.classics.illinois.edu
college website: https://las.illinois.edu/
overview of graduate college admissions & requirements: Graduate Admissions (https://grad.illinois.edu/admissions/apply/)
overview of college admissions & requirements:
department office: 4080 Foreign Languages Building, 707 South Mathews Avenue, Urbana, IL 61801
phone: (217) 333-1008
email: classics@illinois.edu

The Doctor of Philosophy is offered only in classical philology, which requires advanced work in both Greek and Latin. Candidates for the Ph.D. program are eligible for acceptance upon completion of the master's degree in classics or its equivalent. Once admitted, they must complete at least 64 additional graduate hours of coursework. Admission to Stage III requires passing examinations in the translation of Greek and Latin into English, the history of Greek and Latin literature, and a special author, as well as a preliminary oral examination (dissertation prospectus).

Graduate Degree Programs in Classics

Classics, MA (p. 666)
concentrations: Greek (p. 667) | Latin (p. 668) | Medieval Studies (p. 1101)
Teaching of Latin, MA (p. 1042)
Classical Philology, PhD (p. 664)
concentration: Medieval Studies (p. 1101)

Admission

Applicants for admission to the MA in Classics (Greek and Latin) must ordinarily present a minimum of 20 semester hours in one of the two languages (Greek or Latin) and 15 semester hours in the other language; candidates for admission to the MA with specialization in either Greek or Latin, or the MAT in Latin, must ordinarily present at least 20 semester hours in the relevant language. Previous work in ancient history, ancient art and archaeology, philosophy, literary criticism, or linguistics is desirable.

Applicants should apply online (www.grad.illinois.edu/admissions/apply (http://www.grad.illinois.edu/admissions/apply/)) and submit a personal statement of 2-3 pages, a resume or CV, transcripts showing all undergraduate and graduate work completed, and a writing sample of approximately 20 pages (one or two papers) that showcases the applicant's ability to work in the original classical languages and incorporates relevant scholarship as appropriate. Three letters of recommendation are also required.

Graduate Record Examination (GRE) scores are required and should be submitted to institution code 1836. Applicants whose native language is not English are required to take the Test of English as a Foreign Language (TOEFL) and must score at least 79 on the internet-based test (iBT); they must also pass the speaking sub-section of the iBT with a minimum score of 24 (see www.grad.illinois.edu/Admissions/instructions/04c (http://www.grad.illinois.edu/Admissions/instructions/04c/)). Applications are accepted for fall admission only. Application questions may be directed to SLCL Graduate Student Services at slclgradservices@illinois.edu.

Certifications

Students wishing to add teacher certification in Latin to an MAT, M.A. in Latin, or Ph.D. must apply to the Foreign Language Teacher Education Program (http://www.flte.illinois.edu).

In order to receive certification, students must complete an M.A. in Classics with a concentration in Latin, an M.A. in Classics with a concentration in Greek and Latin, or an M.A. in the Teaching of Latin.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program, and almost all students teach. Non-native English speakers must first pass a test of their oral English ability (see www.grad.illinois.edu/admissions/taengprof.htm (http://www.grad.illinois.edu/admissions/taengprof.htm)).

Faculty Research Interests

Greek and Latin literature of all periods; gender and sexuality; Latin poetry of the imperial period; Greek historiography and ethnography; Greek and Roman drama; reception of Classics, especially in film; animal studies; pedagogy. For further details see www.classics.illinois.edu/people/ (http://www.classics.illinois.edu/people/)

Facilities and Resources

We have a renowned university library which boasts the second largest number of volumes among US university libraries after Harvard. Housed within the main library building is our first-rate Classics collection (see www.library.illinois.edu/clx/ (http://www.library.illinois.edu/clx/)) with over 60,000 volumes on open shelves. The University of Illinois Library's Rare Book Room houses the Turyn Archive of Greek manuscript photographs and the American Center of the International Photographic Archive of Papyri. The Department of the Classics also publishes the widely circulating peer-reviewed journal *Illinois Classical Studies* and its Supplements. The Krannert Art Museum and the Spurlock Museum of World Cultures have outstanding collections of ancient vases and other artifacts.

Financial Aid

University fellowships are available for the academic year. Teaching assistantships are available for both the academic year and Summer Session II.

for the degree of Doctor of Philosophy in Classical Philology

Code	Title	Hours
CLCV 550	Intro to Teaching of Classics (if not taken previously)	0 or 4
24 hours of Greek and Latin, with at least eight hours in each language and at least twenty at the 500 level, including:		24
GRK 595	Intro to Classical Studies (if not taken previously)	
or LAT 595	Intro to Classical Studies	
LAT 511	Advanced Prose Composition (if not taken previously)	
GRK 511	Advanced Composition (if not taken previously)	
LAT 580	Latin Seminar	
GRK 580	Greek Seminar	
Elective		4-8
Language Requirement: Reading knowledge of two ancillary languages: German, and either French or Italian. Knowledge of one of these languages must be demonstrated at the time of admission to Stage II and the second before the start of the second year at Stage II.		
GRK/LAT 599	Thesis Research	12-32
Total Hours		64

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Masters Degree Required for Admission to PhD?:	Yes
Qualifying Exam Required:	Yes
Preliminary Exam Required:	Yes
Final Exam/Dissertation Defense Required:	Yes
Dissertation Deposit Required:	Yes
Minimum GPA:	2.75

[1] *For additional details and requirements refer to the department's* graduate program requirements *(*http://www.classics.illinois.edu/programs/graduate/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Classical Phillology, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Classical Philology

1. Students demonstrate knowledge of Greek and/or Latin languages at an expert level. Students are able to carry out a detailed analysis of the language, style, and content of individual works of Greek and/or Latin literature.
2. Students demonstrate expert knowledge of the history of Greek and Latin literature (as well as of the relevant secondary work on those subjects)and the ways in which classical texts have been transmitted through the centuries down to our own time.
3. Students are able to conduct and effectively present the results of original scholarly research.
4. Students are familiar with the printed and electronic resources available for advanced study of classical languages and literatures.
5. Students are prepared to teach college-level courses in the languages and literature of ancient Greece and Rome in an effective manner.6. Students know about opportunities for alternative employment/non-academic career paths and can articulate the value of a Classical education for these.

Classics, MA

for the degree of Master of Arts in Classics

chair of department: Curtis Perry (FA 2021); Craig Williams (SP 2022)
director of graduate studies: Brian Walters
department website: http://www.classics.illinois.edu
college website: https://las.illinois.edu/
overview of graduate college admissions & requirements: Graduate Admissions (https://grad.illinois.edu/admissions/apply/)
overview of college admissions & requirements:
department office: 4080 Foreign Languages Building, 707 South Mathews Avenue, Urbana, IL 61801
phone: (217) 333-1008
email: classics@illinois.edu

The Department of the Classics offers programs of study leading to the Master of Arts in Classics. Within the master's degree program, students may choose from three options: both Greek and Latin (= Classics), Greek, or Latin. In addition, the department offers the Master of Arts in the Teaching of Latin and the Doctor of Philosophy in Classical Philology. A further concentration in Medieval Studies is available to students pursuing graduate degrees in the Classics.

Graduate students in Classics at Illinois may concentrate at different stages of their study on various aspects of the Greek and Latin languages, literatures, and cultures; classical archaeology; ancient philosophy; or, in conjunction with the appropriate department, comparative literature, ancient history, or linguistics. Additional information is available on our website www.classics.illinois.edu (http://www.classics.illinois.edu/).

Graduate Degree Programs in Classics

Classics, MA (p. 666)
concentrations: Greek (p. 667) | Latin (p. 668) | Medieval Studies (p. 1101)
Teaching of Latin, MA (p. 1042)
Classical Philology, PhD (p. 664)
concentration: Medieval Studies (p. 1101)

Admission

Applicants for admission to the MA in Classics (Greek and Latin) must ordinarily present a minimum of 20 semester hours in one of the two languages (Greek or Latin) and 15 semester hours in the other language; candidates for admission to the MA with specialization in either Greek or Latin, or the MAT in Latin, must ordinarily present at least 20 semester hours in the relevant language. Previous work in ancient history, ancient art and archaeology, philosophy, literary criticism, or linguistics is desirable.

Applicants should apply online (www.grad.illinois.edu/admissions/apply (http://www.grad.illinois.edu/admissions/apply/)) and submit a personal statement of 2-3 pages, a resume or CV, transcripts showing all undergraduate and graduate work completed, and a writing sample of approximately 20 pages (one or two papers) that showcases the applicant's ability to work in the original classical languages and incorporates relevant scholarship as appropriate. Three letters of recommendation are also required.

Graduate Record Examination (GRE) scores are required and should be submitted to institution code 1836. Applicants whose native language is not English are required to take the Test of English as a Foreign Language (TOEFL) and must score at least 79 on the internet-based test (iBT); they must also pass the speaking sub-section of the iBT with a minimum score of 24 (see www.grad.illinois.edu/Admissions/instructions/04c (http://www.grad.illinois.edu/Admissions/instructions/04c/)). Applications are accepted for fall admission only. Application questions may be directed to SLCL Graduate Student Services at slclgradservices@illinois.edu.

Certifications

Students wishing to add teacher certification in Latin to an MAT, M.A. in Latin, or Ph.D. must apply to the Foreign Language Teacher Education Program (http://www.flte.illinois.edu).

In order to receive certification, students must complete an M.A. in Classics with a concentration in Latin, an M.A. in Classics with a concentration in Greek and Latin, or an M.A. in the Teaching of Latin.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program, and almost all students teach. Non-native English speakers must first pass a test of their oral English ability (see www.grad.illinois.edu/admissions/taengprof.htm (http://www.grad.illinois.edu/admissions/taengprof.htm)).

Faculty Research Interests

Greek and Latin literature of all periods; gender and sexuality; Latin poetry of the imperial period; Greek historiography and ethnography; Greek and

Roman drama; reception of Classics, especially in film; animal studies; pedagogy. For further details see www.classics.illinois.edu/people/ (http://www.classics.illinois.edu/people/)

Facilities and Resources

We have a renowned university library which boasts the second largest number of volumes among US university libraries after Harvard. Housed within the main library building is our first-rate Classics collection (see www.library.illinois.edu/clx/ (http://www.library.illinois.edu/clx/)) with over 60,000 volumes on open shelves. The University of Illinois Library's Rare Book Room houses the Turyn Archive of Greek manuscript photographs and the American Center of the International Photographic Archive of Papyri. The Department of the Classics also publishes the widely circulating peer-reviewed journal *Illinois Classical Studies* and its Supplements. The Krannert Art Museum and the Spurlock Museum of World Cultures have outstanding collections of ancient vases and other artifacts.

Financial Aid

University fellowships are available for the academic year. Teaching assistantships are available for both the academic year and Summer Session II.

for the degree of Master of Arts in Classics

Thesis Option

Code	Title	Hours
Greek and Latin in regular courses, with at least eight hours in each language, including GRK 411 and LAT 411, with at least 12 hours at the 500 level		24
GRK/LAT 599	Thesis Research (min/max applied toward degree)	8
Total Hours		32

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
A concentration is not required.	
Satisfactory examinations in Greek and Latin	
Minimum 500-level Hours Required Overall:	12 (excluding 500-501)
Minimum GPA:	2.75

[1] *For additional details and requirements refer to the department's* graduate program requirements *(*http://www.classics.illinois.edu/programs/graduate/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Non-Thesis Option

Code	Title	Hours
Greek and Latin in regular courses, with at least eight hours in each language, including GRK 411 and LAT 411, with at least 12 hours at the 500 level		24
CLCV 550	Intro to Teaching of Classics	4
Elective		4
Total Hours		32

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
A concentration is not required.	
Satisfactory examinations in Greek and Latin	
Minimum 500-level Hours Required Overall:	12 (excluding 500-501)
Minimum GPA:	2.75

[1] *For additional details and requirements refer to the department's* graduate program requirements *(*http://www.classics.illinois.edu/programs/graduate/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Classics: Greek, MA

for the degree of Master of Arts in Classics, Greek Concentration

chair of department: Curtis Perry (FA 2021); Craig Williams (SP 2022)
director of graduate studies: Brian Walters
department website: http://www.classics.illinois.edu
college website: https://las.illinois.edu/
overview of graduate college admissions & requirements: Graduate Admissions (https://grad.illinois.edu/admissions/apply/)
overview of college admissions & requirements:
department office: 4080 Foreign Languages Building, 707 South Mathews Avenue, Urbana, IL 61801
phone: (217) 333-1008
email: classics@illinois.edu

The Department of the Classics offers programs of study leading to the Master of Arts in Classics. Within the master's degree program, students may choose from three options: both Greek and Latin (= Classics), Greek, or Latin. In addition, the department offers the Master of Arts in the Teaching of Latin and the Doctor of Philosophy in Classical Philology. A further concentration in Medieval Studies is available to students pursuing graduate degrees in the Classics.

Graduate students in Classics at Illinois may concentrate at different stages of their study on various aspects of the Greek and Latin languages, literatures, and cultures; classical archaeology; ancient philosophy; or, in conjunction with the appropriate department, comparative literature, ancient history, or linguistics. Additional information is available on our website www.classics.illinois.edu (http://www.classics.illinois.edu/).

Graduate Degree Programs in Classics

Classics, MA (p. 666)
concentrations: Greek (p. 667) | Latin (p. 668) | Medieval Studies (p. 1101)
Teaching of Latin, MA (p. 1042)
Classical Philology, PhD (p. 664)
concentration: Medieval Studies (p. 1101)

Admission

Applicants for admission to the MA in Classics (Greek and Latin) must ordinarily present a minimum of 20 semester hours in one of the two

languages (Greek or Latin) and 15 semester hours in the other language; candidates for admission to the MA with specialization in either Greek or Latin, or the MAT in Latin, must ordinarily present at least 20 semester hours in the relevant language. Previous work in ancient history, ancient art and archaeology, philosophy, literary criticism, or linguistics is desirable.

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Certifications

Students wishing to add teacher certification in Latin to an MAT, M.A. in Latin, or Ph.D. must apply to the Foreign Language Teacher Education Program (http://www.flte.illinois.edu).

In order to receive certification, students must complete an M.A. in Classics with a concentration in Latin, an M.A. in Classics with a concentration in Greek and Latin, or an M.A. in the Teaching of Latin.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program, and almost all students teach. Non-native English speakers must first pass a test of their oral English ability (see www.grad.illinois.edu/admissions/taengprof.htm (http://www.grad.illinois.edu/admissions/taengprof.htm)).

Faculty Research Interests

Greek and Latin literature of all periods; gender and sexuality; Latin poetry of the imperial period; Greek historiography and ethnography; Greek and Roman drama; reception of Classics, especially in film; animal studies; pedagogy. For further details see www.classics.illinois.edu/people/ (http://www.classics.illinois.edu/people/)

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Financial Aid

University fellowships are available for the academic year. Teaching assistantships are available for both the academic year and Summer Session II.

for the degree of Master of Arts in Classics, Greek Concentration

For additional details and requirements refer to the department's graduate program requirements *(*http://www.classics.illinois.edu/programs/graduate/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

This degree program can be completed either with or without a thesis, the requirements are listed below:

Code	Title	Hours
Thesis Option		
24 hours in Greek in regular courses, including GRK 411, with at least 12 hours at the 500 level		24
GRK 599	Thesis Research (min/max applied toward the degree)	8
Total Hours Thesis Option		**32**
Non-Thesis Option		
24 hours in Greek in regular courses, including GRK 411, with at least 12 hours at the 500 level		24
CLCV 550	Intro to Teaching of Classics	4
Elective		4
Total Hours Non-Thesis Option		**32**

Other Requirements

Requirement	Description
Other requirements may overlap	
Satisfactory examination in Greek	
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	2.75

Classics: Latin, MA

for the degree of Master of Arts in Classics, Latin Concentration

chair of department: Curtis Perry (FA 2021); Craig Williams (SP 2022)
director of graduate studies: Brian Walters
department website: http://www.classics.illinois.edu
college website: https://las.illinois.edu/
overview of graduate college admissions & requirements: Graduate Admissions (https://grad.illinois.edu/admissions/apply/)
overview of college admissions & requirements:
department office: 4080 Foreign Languages Building, 707 South Mathews Avenue, Urbana, IL 61801
phone: (217) 333-1008
email: classics@illinois.edu

The Department of the Classics offers programs of study leading to the Master of Arts in Classics. Within the master's degree program, students may choose from three options: both Greek and Latin (= Classics), Greek,

or Latin. In addition, the department offers the Master of Arts in the Teaching of Latin and the Doctor of Philosophy in Classical Philology. A further concentration in Medieval Studies is available to students pursuing graduate degrees in the Classics.

Graduate students in Classics at Illinois may concentrate at different stages of their study on various aspects of the Greek and Latin languages, literatures, and cultures; classical archaeology; ancient philosophy; or, in conjunction with the appropriate department, comparative literature, ancient history, or linguistics. Additional information is available on our website www.classics.illinois.edu (http://www.classics.illinois.edu/).

Graduate Degree Programs in Classics

Classics, MA (p. 666)
concentrations: Greek (p. 667) | Latin (p. 668) | Medieval Studies (p. 1101)
Teaching of Latin, MA (p. 1042)
Classical Philology, PhD (p. 664)
concentration: Medieval Studies (p. 1101)

Admission

Applicants for admission to the MA in Classics (Greek and Latin) must ordinarily present a minimum of 20 semester hours in one of the two languages (Greek or Latin) and 15 semester hours in the other language; candidates for admission to the MA with specialization in either Greek or Latin, or the MAT in Latin, must ordinarily present at least 20 semester hours in the relevant language. Previous work in ancient history, ancient art and archaeology, philosophy, literary criticism, or linguistics is desirable.

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Graduate Record Examination (GRE) scores are required and should be submitted to institution code 1836. Applicants whose native language is not English are required to take the Test of English as a Foreign Language (TOEFL) and must score at least 79 on the internet-based test (iBT); they must also pass the speaking sub-section of the iBT with a minimum score of 24 (see www.grad.illinois.edu/Admissions/instructions/04c (http://www.grad.illinois.edu/Admissions/instructions/04c/)). Applications are accepted for fall admission only. Application questions may be directed to SLCL Graduate Student Services at slclgradservices@illinois.edu.

Certifications

Students wishing to add teacher certification in Latin to an MAT, M.A. in Latin, or Ph.D. must apply to the Foreign Language Teacher Education Program (http://www.flte.illinois.edu).

In order to receive certification, students must complete an M.A. in Classics with a concentration in Latin, an M.A. in Classics with a concentration in Greek and Latin, or an M.A. in the Teaching of Latin.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program, and almost all students teach. Non-native English speakers must first pass a test of their oral English ability (see www.grad.illinois.edu/admissions/taengprof.htm (http://www.grad.illinois.edu/admissions/taengprof.htm)).

Faculty Research Interests

Greek and Latin literature of all periods; gender and sexuality; Latin poetry of the imperial period; Greek historiography and ethnography; Greek and Roman drama; reception of Classics, especially in film; animal studies; pedagogy. For further details see www.classics.illinois.edu/people/ (http://www.classics.illinois.edu/people/)

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Financial Aid

University fellowships are available for the academic year. Teaching assistantships are available for both the academic year and Summer Session II.

for the degree of Master of Arts in Classics, Latin Concentration

For additional details and requirements refer to the department's graduate program requirements *(*http://www.classics.illinois.edu/programs/graduate/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Thesis Option

Code	Title	Hours
24 hours in Latin in regular courses, including LAT 411, with at least 12 hours at the 500 level		24
LAT 599	Thesis Research	8
Total Hours		32

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Satisfactory examination in Latin	
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	2.75

[1] *For additional details and requirements refer to the department's* graduate program requirements *(*http://www.classics.illinois.edu/programs/graduate/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Non-Thesis Option

Code	Title	Hours
24 hours in Latin in regular courses, including LAT 411, with at least 12 hours at the 500 level		24
CLCV 550	Intro to Teaching of Classics	4
Elective		4
Total Hours		32

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Satisfactory examination in Latin	
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	2.75

[1] *For additional details and requirements refer to the department's* graduate program requirements *(*http://www.classics.illinois.edu/programs/graduate/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Classics, MA

Learning Outcomes for the degree of Master of Arts in Classics

1. Students demonstrate knowledge of Greek and/or Latin languages at an advanced level. Students are able to carry out a detailed analysis of the language, style, and content of individual works of Greek and/or Latin literature.
2. Students demonstrate an advanced knowledge of the history of Greek and Latin literature and the ways in which classical texts have been transmitted through the centuries down to our own time.
3. Students are familiar with the methods of research and criticism in Classics and can use these to generate new ideas.
4. Students are familiar with the printed and electronic resources available for advanced study of classical languages and literatures.
5. Students are able to teach Greek and/or Latin language and literature in an effective manner.

Communication, MA

for the degree of Master of Arts in Communication (on campus & online)

chair of department: John Caughlin
director of graduate studies: Travis Dixon
department website: http://communication.illinois.edu
college website: https://las.illinois.edu/
overview of graduate college admissions & requirements: Graduate Admissions (https://grad.illinois.edu/admissions/apply/)
overview of department admissions & requirements: Web site (https://communication.illinois.edu/admissions/apply-graduate-program/)
department office: 3001 Lincoln Hall, 702 S. Wright Street, Urbana, IL 61801
phone: (217) 333-2683
email: communication@illinois.edu

Place Highlighted Text about specific program here if required.

Graduate Degree Programs in Communication

Communication, MA (p. 670)
concentration:
Medieval Studies (p. 1101)
Health Communication, MS (on campus & online) (p. 799)
concentration:
Medieval Studies (p. 1101)
Communication, PhD (p. 671)
concentration:
Medieval Studies (p. 1101)|Second Language Acquisition & Teacher Education (p. 1106)|Writing Studies Concentration (p. 1111)

The Department of Communication offers a broad curriculum in communication research. In consultation with an advisor, students assemble individualized programs, concentrating in organizational and group communication, interpersonal and family communication, health communication, communication technology, political communication, rhetoric and public discourse, communication in cultural contexts, or mass communication. Interdisciplinary programs are also encouraged.

Admission

An application must include official transcripts from every post-secondary institution the applicant has attended; scores on the general aptitude parts of the Graduate Record Examination (GRE); at least three letters of recommendation, preferably from academic recommenders; a major paper or essay as a sample of academic writing; and a statement of purpose. Students whose native language is not English must present their official scores on the Test of English as a Foreign Language (TOEFL) examination as part of their applications. The department follows the Graduate College's recommendations for English proficiency. Detailed information about admissions and financial aid can be found on the department's Web site (https://communication.illinois.edu/admissions/apply-graduate-program/). Ordinarily, students are admitted to begin graduate study in the fall semester.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program.

Financial Aid

Financial aid is usually offered in the form of part-time teaching assistantships; some fellowships and research assistantships are available.

for the degree of Master of Arts in Communication (on campus & online)

The entering student should present the equivalent of 16 semester hours of undergraduate work in communication or a related area. In some cases an oral examination is also stipulated. A thesis is optional.

Thesis Option

Code	Title	Hours
Elective hours		24
Independent Study Hours (4 max applied toward degree)		0-4
CMN 599	Thesis Research (8 max applied toward degree)	8
Total Hours		32

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum Hours Required Within the Unit:	24
Minimum 500-level Hours Required Overall:	12 (8 in CMN)
Minimum GPA:	2.75

[1] *For additional details and requirements refer to the department's* Graduate Programs *(*http://www.communication.illinois.edu/prospective/grad/degrees/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Non-Thesis Option

Code	Title	Hours
Elective hours (32 min)		32
Independent Study Hours (4 max applied toward degree)		0-4
Total Hours		32

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum Hours Required Within the Unit:	24
Minimum 500-level Hours Required Overall:	12 (8 in CMN)
Minimum GPA:	2.75

[1] *For additional details and requirements refer to the department's* Graduate Programs *(*http://www.communication.illinois.edu/prospective/grad/degrees/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Communication, MA

Learning Outcomes for the degree of Master of Arts in Communication (on-campus & online)

1. **Intellectual Reasoning and Knowledge:** Students will acquire broad and deep knowledge of communication research, theory, and practice.
2. **Creative Inquiry and Discovery:** Students will assimilate and conduct original research to generate new ideas about communication.
3. **Proficiency with diversity:** Students will engage in constructive discourse and deliberation about ideas from across the breadth of the field of communication and cognate fields.
4. **Career Preparedness:** Students will gain professional development experiences that afford them rewarding career opportunities in education, policy, business, and/or industry.

Communication, PhD

for the degree of Doctor of Philosophy in Communication

chair of department: John Caughlin
director of graduate studies: Travis Dixon
department website: http://communication.illinois.edu
college website: https://las.illinois.edu/
overview of graduate college admissions & requirements: Graduate Admissions (https://grad.illinois.edu/admissions/apply/)
overview of department admissions & requirements: Web site (https://communication.illinois.edu/admissions/apply-graduate-program/)
department office: 3001 Lincoln Hall, 702 S. Wright Street, Urbana, IL 61801
phone: (217) 333-2683
email: communication@illinois.edu

To be accepted as a candidate for the Ph.D. degree, a student must either present a well-rounded undergraduate education with an emphasis in communication and a master's in a cognate discipline, or hold a master's degree in communication from an accredited institution.

Graduate Degree Programs in Communication

Communication, MA (p. 670)
concentration:
Medieval Studies (p. 1101)
Health Communication, MS (on campus & online) (p. 799)
concentration:
Medieval Studies (p. 1101)
Communication, PhD (p. 671)
concentration:
Medieval Studies (p. 1101)|Second Language Acquisition & Teacher Education (p. 1106)|Writing Studies (p. 1111)

The Department of Communication offers a broad curriculum in communication research. In consultation with an advisor, students assemble individualized programs, concentrating in organizational and group communication, interpersonal and family communication, health communication, communication technology, political communication,

rhetoric and public discourse, communication in cultural contexts, or mass communication. Interdisciplinary programs are also encouraged.

Admission

An application must include official transcripts from every post-secondary institution the applicant has attended; scores on the general aptitude parts of the Graduate Record Examination (GRE); at least three letters of recommendation, preferably from academic recommenders; a major paper or essay as a sample of academic writing; and a statement of purpose. Students whose native language is not English must present their official scores on the Test of English as a Foreign Language (TOEFL) examination as part of their applications. The department follows the Graduate College's recommendations for English proficiency. Detailed information about admissions and financial aid can be found on the department's Web site (https://communication.illinois.edu/admissions/apply-graduate-program/). Ordinarily, students are admitted to begin graduate study in the fall semester.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program.

Financial Aid

Financial aid is usually offered in the form of part-time teaching assistantships; some fellowships and research assistantships are available.

for the degree of Doctor of Philosophy in Communication

In addition to meeting general requirements of the Graduate College, the student must satisfactorily complete written and oral preliminary examinations, an oral defense of the thesis prospectus, and an oral defense of the thesis. Students must demonstrate competency in research procedures and tools that may include proficiency in one or more foreign languages, various research methods, or cognate academic work. Students must enroll in CMN 595 in the semester of the preliminary examination and in CMN 599 (thesis hours) in semesters spent working on the dissertation.

Code	Title	Hours
Minimum in appropriate research method; these are in addition to the 40 hours of additional coursework. (8 min)		8
Courses from outside the department		12
Elective hours (not in method or thesis hours)		40
Independent Study Hours (8 max applied toward degree)		8
Language Requirement: based on major		
CMN 599	Thesis Research (0 min applied toward degree)	0
Total Hours		64

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum Non-Method/Thesis Hours Required Within the Unit:	20
Masters Degree Required for Admission to PhD?	Yes
Qualifying Exam Required:	No
Preliminary Exam Required:	Yes
Final Exam/Dissertation Defense Required:	Yes
Dissertation Deposit Required:	Yes
Minimum GPA:	2.75

[1] *For additional details and requirements refer to the department's* Graduate Programs *(*http://www.communication.illinois.edu/prospective/grad/degrees/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Communication, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Communication

1. **Intellectual Reasoning and Knowledge:** Students will acquire broad and deep knowledge of communication research, theory, and practice.
2. **Creative Inquiry and Discovery:** Students will assimilate and conduct original research to generate new ideas about communication.
3. **Proficiency with diversity:** Students will engage in constructive discourse and deliberation about ideas from across the breadth of the field of communication and cognate fields.
4. **Career Preparedness:** Students will gain professional development experiences that afford them rewarding career opportunities in education, policy, business, and/or industry.

Communications & Media, PhD

Doctor of Philosophy in Communications and Media

director of graduate studies: Mira Sotirovic
email: icr@illinois.edu
department website: https://media.illinois.edu/icr (https://media.illinois.edu/icr/)
department faculty: https://media.illinois.edu/phd-program/faculty (https://media.illinois.edu/phd-program/faculty/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: College of Media (https://media.illinois.edu/)
department office: 119 Gregory Hall, 810 S. Wright Street, Urbana, IL 61801
phone: (217) 333-1549

Since its inception, the Institute of Communications Research's (ICR) doctoral program has encouraged interdisciplinary studies of communication and media. ICR faculty represent the three academic departments within the College of Media: Advertising (https://media.illinois.edu/advertising/), Journalism (https://media.illinois.edu/journalism/), Media & Cinema Studies (https://media.illinois.edu/media-cinema-studies/). ICR faculty are also active in a wide array of interdisciplinary campus initiatives which include but are not limited to: Illinois Informatics Institute, Beckman, Institute for Advanced Science

and Technology, National Center for Supercomputing Applications (NCSA), Unit for Criticism and Interpretive Theory, Center for Advanced Study (CAS), Center for Latin American and Caribbean Studies, Illinois Program for Research in the Humanities (IPRH), and the Departments of Gender and Women's Studies, Latina/Latino Studies, Communication, Psychology and Business Administration. These affiliate networks allow ICR students to develop and pursue unique programs of research that extend the boundaries of current scholarship.

Coursework: The ICR requires 64 credits of coursework and dissertation research for students entering with a Master's degree. Students are responsible for designing their own programs of coursework, which are submitted for approval by the Institute's Program Evaluation Committee. Although students are given the broadest latitude in designing interdisciplinary programs, they must include courses that fill certain requirements. Specifically, all new students will take a two course Proseminar sequence during their first year. Because students are admitted from diverse backgrounds, these courses introduce them to the history of and current trends in the field of media and communication research. This sequence also helps new students begin to locate their own research interests more precisely within the broad landscape of contemporary media and communication research.

Programs in the Institute of Communications Research

Graduate Programs:

degree: Communications and Media, PhD (p. 672)

Admission

Any student with a bachelor's or master's degree and with a substantial background in the humanities, social sciences, or physical sciences is eligible to apply to the doctoral program. It is suggested *but not required* that students have or will have a master's degree before starting the program. All candidates for admission must submit an application for admission along with the application fee, official transcripts of all undergraduate and graduate courses taken and grades earned, three letters of recommendation, and Graduate Record Examination scores.

Our application process is administered through the ApplyYourself (http://www.grad.illinois.edu/admissions/apply/) system managed by the Graduate College at the University of Illinois. Applicants should consult the instructions on the Graduate College's website and the guidelines to applicants available on the ICR web page.

Applicants from non-English-speaking countries are required to take the Test of English as a Foreign Language (TOEFL) before they come to the University. Depending on the results, they may be required to take further instruction in English after their arrival. Rules for "International Students & Applicants" can be found on the Graduate College website.

New students will begin the program during the fall term. All material for fall admission should be submitted by a date designated each year on the ICR website.

Financial Aid

Financial aid is available in the form of assistantships and fellowships. Students from populations underrepresented in communications research are eligible for certain University fellowships. Currently, all admitted ICR students receive financial support, including a tuition waiver and stipend. Insofar as possible, the Institute makes financial aid and admission decisions simultaneously.

See also Graduate College Financial Aid (http://www.grad.illinois.edu/funding-jobs/) and Fellowship Office (http://www.grad.illinois.edu/fellowships/).

Doctor of Philosophy in Communications and Media

Entering with a Bachelors Degree

Code	Title	Hours
Proseminar		
MDIA 571	Proseminar I	4
MDIA 572	Proseminar II	4
Two research methods courses, 1 quantitative and 1 qualitative		8
Elective Hours		64
MDIA 599	Thesis Research (min/max applied toward degree)	16
Total Hours		96

Entering with an approved Masters Degree

Code	Title	Hours
Proseminar		
MDIA 571	Proseminar I	4
MDIA 572	Proseminar II	4
Two research methods courses, 1 quantitative and 1 qualitative		8
Elective Hours		32
MDIA 599	Thesis Research (min/max applied toward degree)	16
Total Hours		64

Other Requirements [1]

Requirement	Description
Qualifying Exam Required	No
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

Research Methods

Students must complete at least 8 hours in research methods. In order to provide a competent background for constructively understanding the field's wide-ranging literature, students are required to take one quantitative and one qualitative course.

In addition to methodology courses taught by the College of Media faculty, students are encouraged to consider relevant courses in quantitative or non-quantitative methods elsewhere on campus. Listings of such courses are available in the ICR office.

Preliminary Exams

Students, in consultation with their chosen advisors, select a committee of four faculty members for their preliminary exams. Upon completion of coursework, students undertake preparing written examinations. Upon completing written answers for each examiner, along with a dissertation proposal, students undergo a 2-hour oral examination. Upon passing the preliminary examination, students proceed with work on their dissertations.

Dissertation

Because the Doctor of Philosophy degree is primarily a research degree, candidates are required to demonstrate a capacity for independent research by producing an original dissertation on a topic within the general area of communications and media research.

Final Examination

After students distribute polished drafts of their dissertations, they take final oral examinations administered by their chosen committees. The student is required to support and interpret the dissertation to the committee's satisfaction, as well as to show an adequate grasp of the selected area of concentration that it represents.

Learning Outcomes: Communications and Media, PhD

Learning Outcomes for the Doctor of Philosophy in Communications and Media

1. Knowledge of both important historical themes and current trends in Media and Communication scholarship.
2. Expertise in at least one research methodology, and general familiarity with both quantitative and qualitative methods, since both methods have informed research traditions in Media & Communication Studies.Expertise in these two methods is one facet of our doctoral program's emphasis on interdisciplinary perspectives theory and research practices. Students in our program are encouraged to design a program of study across departments, within and beyond the College of Media.
3. Teaching proficiency, as demonstrated by serving as the Instructor of Record (IOR) for at least one course as a graduate student.
4. Understanding of the various professional nuances of academia, including the job-search process, promotion and tenure, institutional differences (e.g. Carnegie classifications), research/teaching/service expectations, etc.
5. Presence in a community of scholars through organizational membership, conference participation, etc.

Community Health, MS

for the Master of Science in Community Health

Department Head: Kim Graber
Director of Graduate Studies: Steven Petruzzello
Graduate Office: Julie Jenkins
Graduate Office Address: 906 South Goodwin Ave, 112 Freer Hall MC-052, Urbana, IL 61801
Graduate Phone: (217) 333-1083
Graduate Email: jjenkns@illinois.edu
Department Website: https://ahs.illinois.edu/community-health (https://ahs.illinois.edu/community-health/)
Program Website: https://ahs.illinois.edu/master-of-science-in-community-health (https://ahs.illinois.edu/master-of-science-in-community-health/)

Graduate Degree Programs

Community Health, MS (p. 674)
Community Health, PhD (p. 675)
Joint Degree Program: Community Health, PhD and Master of Public Health, MPH (p. 1162)

Admissions

Applications are due on **January 15** for Fall admissions. Applications are due **October 1** for Spring admissions.

Applicants should have a grade point average of at least 3.0 (A = 4.0) for the last 60 semester hours of their undergraduate degree work (excluding fieldwork, student teaching, and physical activity courses). In addition, satisfactory scores on the Graduate Record Examination (GRE) are required. A statement of education and career goals, and three letters of recommendation are required.

International students must also submit Test of English as a Foreign Language (TOEFL) scores, with a minimum for full status admission: greater than 102 (IBT), greater than 253 (CBT), greater than 610 (PBT), or greater than 7.0 (IELTS). Scores cannot be more than 2 years old. (see https://grad.illinois.edu/admissions/instructions/04c (https://grad.illinois.edu/admissions/instructions/04c/))

for the Master of Science in Community Health

Code	Title	Hours
CHLH 429	Research Techniques	4
CHLH 540	Health Behavior: Theory	4
Choose from one of the following:		4
CHLH 421	Health Data Analysis	
CHLH 576	Analytical Epidemiology	
CHLH 578	Applied Epidemiology	
CHLH 582	Advanced Biostatistics	
Electives (chosen in consultation with student's advisor)		8
CHLH 591	Seminar (min/max applied toward degree)	4
CHLH 599	Thesis Research (min/max applied toward degree)	8
Total Hours		32

Other Requirements [1]

Requirement	Description
Minimum Hours Required Within the Unit:	20

Minimum 500-level Hours Required Overall:	12 (8 within the unit)
Total Required Hours	32
Minimum GPA:	3.0

Learning Outcomes: Community Health, MS

Learning Outcomes for the Master of Science in Community Health

1. **Content Knowledge:** Students will demonstrate an advanced understanding of current and historically significant theories, models, themes, and ideas in the biomechanical, physiological, psychological, behavioral, pedagogical, biological, socioeconomic, epidemiological, environmental, and sociocultural correlates of Community Health.
2. **Critical Thinking and Discovery:** Students will demonstrate ethical practices while applying advanced quantitative and/or qualitative methods in collecting, analyzing, and interpreting data which will then be disseminated through publications and/or oral presentations.
3. **Awareness and Understanding:** Students will understand and appreciate the diverse environmental, biological, psychological, socioeconomic, sociocultural, philosophical, and historical factors that influence health, rehabilitation, and human movement.
4. **Programming and Assessment:** Students will apply best practices in developing, implementing, assessing, and evaluating programs and interventions related to public health, health promotion, physical activity adoption and adherence, and the prevention and treatment of diseases in culturally diverse populations.
5. **Leadership and Engagement:** Students will demonstrate leadership and effective communication skills, showcasing an appreciation and commitment to health and physical activity as they develop and sustain productive relationships and work for the common good at local, national, and global levels.

Community Health, PhD

for the Doctor of Philosophy in Community Health

Department Head: Kim Graber
Director of Graduate Studies: Steven Petruzzello
Graduate Office: Julie Jenkins
Graduate Office Address: 906 South Goodwin Ave, 112 Freer Hall MC-052, Urbana, IL 61801
Graduate Phone: (217) 333-1083
Graduate Email: jjenkns@illinois.edu
Department Website: https://ahs.illinois.edu/community-health (https://ahs.illinois.edu/community-health/)
Program Website: https://ahs.illinois.edu/community-health/phd (https://ahs.illinois.edu/community-health/phd/)

Graduate Degree Programs

Community Health, MS (p. 674)
Community Health, PhD (p. 675)
Joint Degree Program: Community Health, PhD and Master of Public Health, MPH (p. 1162)

Admissions

Applications are due on **January 15** for Fall admissions. Applications are due on **October 1** for Spring admissions.

Admissions to the PhD degree program requires a minimum of a baccalaureate degree from an accredited institution of higher education with a minimum grade point average of 3.5 (A = 4.0) for the last two years of undergraduate study. Applicants who have a master's degree should have a grade point average of 3.5 for previous graduate-level work. All applicants are required to submit Graduate Record Examination (GRE) test scores, a statement of interest, and three letters of recommendation.

International students must also submit Test of English as a Foreign Language (TOEFL) scores, with a minimum for full status admission: greater than 102 (IBT), greater than 253 (CBT), greater than 610 (PBT), or greater than 7.0 (IELTS). Scores cannot be more than 2 years old. (see https://grad.illinois.edu/admissions/instructions/04c (https://grad.illinois.edu/admissions/instructions/04c/)).

for the Doctor of Philosophy in Community Health

Graduate course experience in public health and statistics with grades of B or better is expected prior to admission. Before admission to the Ph.D. program, students may be required to take up to 12 hours of additional coursework to remedy deficiencies. The candidate is required to pass written preliminary examinations covering disciplinary and professional aspects of community health, the literature and theoretical perspectives in the major area of study and methological perspectives and research techniques. Students must also pass an oral preliminary examination on the area of specialization and dissertation proposal; and to pass an oral defense of dissertation research.

Doctor of Philosophy in Community Health
Entering with a Bachelors degree

Code	Title	Hours
Competency in research methods/statistics		12
CHLH 565	Teaching in the Professoriate	4
CHLH 591	Seminar	12
Two courses in area of specialization		8
CHLH 593	Special Projects	0-16
Electives		12
CHLH 599	Thesis Research	32
Total Hours		96

Requirement	Description
Other requirements may overlap	
Qualifying Exam Required	No
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Specialized coursework from approved list	12
Minimum GPA	3.0

Entering with an approved Masters degree

Code	Title	Hours
Advanced research methods/statistics		4
CHLH/KIN/SHS 565/RST 560	Teaching in the Professoriate	4
CHLH 591	Seminar	8
Two courses in an area of specialization		8
Additional research methods/statistics		8
CHLH 599	Thesis Research	32
Total Hours		64

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Approved Masters Degree Required for Admission to PhD?	Yes
Qualifying Exam Required:	No
Preliminary Exam Required:	Yes
Final Exam/dissertation Defense Required:	Yes
Dissertation Deposit Required:	Yes
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the department's* Graduate Handbook *(*http://kch.illinois.edu/kch-grad-handbook/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Community Health, PhD

Learning Outcomes for the Doctor of Philosophy in Community Health

1. **Content Knowledge:** Students will demonstrate an advanced understanding of current and historically significant theories, models, themes, and ideas in the biomechanical, physiological, psychological, behavioral, pedagogical, biological, socioeconomic, epidemiological, environmental, and sociocultural correlates of Community Health.
2. **Critical Thinking and Discovery:** Students will demonstrate ethical practices while applying advanced quantitative and/or qualitative methods in collecting, analyzing, and interpreting data which will then be disseminated through publications and/or oral presentations.
3. **Awareness and Understanding:** Students will understand and appreciate the diverse environmental, biological, psychological, socioeconomic, sociocultural, philosophical, and historical factors that influence health, rehabilitation, and human movement.
4. **Programming and Assessment:** Students will apply best practices in developing, implementing, assessing, and evaluating programs and interventions related to public health, health promotion, physical activity adoption and adherence, and the prevention and treatment of diseases in culturally diverse populations.
5. **Leadership and Engagement:** Students will demonstrate leadership and effective communication skills, showcasing an appreciation and commitment to health and physical activity as they develop and sustain productive relationships and work for the common good at local, national, and global levels.

Comparative Literature, MA

for the degree of Master of Arts in Comparative Literature

chair of department: Robert A. Rushing
director of graduate studies: Brett Kaplan
department website: http://www.complit.illinois.edu/Welcome.html
college website: https://las.illinois.edu/
overview of graduate college admissions & requirements: Graduate Admissions (https://grad.illinois.edu/admissions/apply/)
overview of college admissions & requirements:
department office: 3080 Foreign Languages Building, 707 South Mathews Avenue, Urbana, IL 61801
phone: (217) 333-4987
email: complit@illinois.edu

The candidate must demonstrate a competency in at least two foreign languages as well as in English. Latin is required for students specializing in European and/or American literatures before 1800. Competence in the languages offered is measured either by the successful completion of one advanced course in the literature of each of the languages chosen or by passing an examination administered by the program in comparative literature with the assistance of an expert in the language concerned. This choice is intended to provide for languages that may not be taught in regular departments.

Graduate Degree Programs in Comparative Literature

Comparative Literature, MA (p. 676)
concentration:
Medieval Studies (p. 1101)
Comparative Literature, PhD (p. 677)
concentration:
Medieval Studies (p. 1101)

The Program in Comparative & World Literature offers graduate courses leading to the Doctor of Philosophy degree, and is designed to provide a systematic study of subjects and problems common to several literatures. Its purpose is to enable students who have varied linguistic competence and preparation to explore the theory of literature and criticism; the interrelations of several literatures; the main currents, periods, and movements in literary history; the development of literary themes and types; and the relations between literature and the other arts. Students are not normally admitted to a terminal master's degree program.

Admission

A student entering the program should have an undergraduate major in Comparative Literature, English, the classics, or a foreign language. Majors in history and philosophy or other humanistic areas that present suitable linguistic and literary competence may also be granted admission by the Admissions Committee. Students entering with a recognized Masters degree from another university or from another department of this University have the option of taking the program's regular Master of Arts examination at the end of the first year as a qualifying test. For all other students, the Master of Arts examination taken at the end of the second year will function as the qualifying test to proceed to stage two of the PhD program.

Applicants should apply online (www.grad.illinois.edu/admissions/apply/ (http://www.grad.illinois.edu/admissions/apply/)), submit a statement of purpose, three letters of recommendation and a writing sample.

Original transcripts showing all undergraduate and graduate work completed should be sent to SLCL Graduate Student Services, 3070 Foreign Languages Bldg., 707 S. Mathews Ave., Urbana, IL 61801. Graduate Record Examination (GRE) scores are required and should be submitted to institution code 1836. Applicants whose native language is not English are required to take the Test of English as a Foreign Language (TOEFL) and must score at least 105 on the internet-based test (iBT); they must also pass the speaking sub-section of the iBT with a minimum score of 24 (see www.grad.illinois.edu/Admissions/instructions/04c (http://www.grad.illinois.edu/Admissions/instructions/04c/)). Applications are accepted for fall admission only. Application questions may be directed to SLCL Graduate Student Services at slclgradservices@illinois.edu

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program. Non-native English speakers must first pass a test of their oral English ability (see www.grad.illinois.edu/admissions/taengprof.htm (http://www.grad.illinois.edu/admissions/taengprof.htm)).

Financial Aid

The Program aims to support all graduate students for five years through a combination of fellowships, teaching, and other means, but support is always contingent on the student making timely progress to the degree. Such progress is measured by course load, taking exams on time, grades, and other factors.

for the degree of Master of Arts in Comparative Literature

The candidate must complete a minimum of 32 gh of credit, including two courses in the theory of literature (CWL 501 and CWL 502), and two seminars in comparative literature selected from CWL 551, CWL 561, CWL 571, and CWL 581. At least 12 of the other 16 gh should be taken in two or three national literatures in a distribution approved by the adviser. The candidate must pass a written examination based on a reading list, which is designed to test knowledge of literary history as well as ability to interpret a literary or critical text.

Code	Title	Hours
CWL 501 & CWL 502	Theory of Literature and Methods of Comparative Lit	8
Select two of the following:		8
CWL 551	Seminar Lit Movements	
CWL 561	Seminar Genres - Forms	
CWL 571	Seminar in Literary Relations	
CWL 581	Seminar Lit Themes	
One or two courses in the major literature		4-8
At least one course in the minor literature		4
One or two courses from the above categories. (A student may take one course in a non-literary field that will provide cultural and historical contexts for the study of the student's literatures.)		4-8
Total Hours		32

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
The candidate must pass a written examination based on a reading list, which is designed to test knowledge of literary history as well as ability to interpret a literary or critical text.	
Minimum 500-level Hours Required Overall:	20
Minimum GPA:	3.25

[1] *For additional details and requirements refer to the department's* graduate handbook *(*http://www.complit.illinois.edu/Graduate_files/Grad%20Handbook.pdf*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Comparative Literature, MA

Learning Outcomes for the degree of Master of Arts in Comparative Literature

1. **Linguistic Mastery:** Mastery of at least three foreign languages (one of which can be English) and a research language.
2. **Comparative and Cross-Cultural Analysis:** Ability to analyze problems and questions that cut across national, linguistic, and cultural lines.
3. **Literary / Critical Theory:** Demonstration of mastery of major fields of theoretical inquiry current in the discipline, such as Marxism, psychoanalysis, post-structuralism, feminism / queer studies, post-colonialism.
4. **Teaching experience:** Ability to teach a wide range of literary topics; put together syllabi, tests, written assignments, and lectures. Familiarity with current trends in pedagogy for language, literature, and culture. Depending on the area of specialization, teaching in the target language or in the Rhetoric program.
5. **Professionalization:** Completion of CWL 582 (Proseminar), including learning to give talks, making a syllabus, converting seminar papers into conference presentations and journal articles, learning to write book reviews, learning to write cover letters, fellowship applications, and grant applications.Preparation for the academic job market in literary studies and other allied fields.Preparation for relevant non-academic jobs, including editing and publishing, museum work, journalism, artistic and creative careers.

Comparative Literature, PhD

for the degree of Doctor of Philosophy in Comparative Literature

chair of department: Robert A. Rushing
director of graduate studies: Brett Kaplan
department website: http://www.complit.illinois.edu/Welcome.html
college website: https://las.illinois.edu/
overview of graduate college admissions & requirements: Graduate Admissions (https://grad.illinois.edu/admissions/apply/)
overview of college admissions & requirements:
department office: 3080 Foreign Languages Building, 707 South Mathews Avenue, Urbana, IL 61801
phone: (217) 333-4987
email: complit@illinois.edu

A candidate for the Doctor of Philosophy degree must fulfill the general requirements of the Graduate College in addition to those specified for the master's degree. At least 12 additional gh of work, normally at the 500 level, should be taken in courses regularly offered by the literature departments; among these, courses cross listed with the program in comparative literature are especially recommended. The candidate is responsible for a knowledge of the history of the literature in one modern language. The student also selects a period of major interest and is responsible for a knowledge of two other literatures in this period, which are considered as minors. The periods may be the Middle Ages, Renaissance, Neoclassicism and the Enlightenment, or the modern (nineteenth and twentieth centuries). Some chronological variations in coordinating the minors will be allowed for students studying non-Western literatures. A preliminary examination, i.e. a four-part written examination based on the individual program, and an oral examination with emphasis on the thesis project must be passed. The candidate must present an acceptable thesis embracing several national literatures and pass a final oral examination on the thesis.

Graduate Degree Programs in Comparative Literature

Comparative Literature, MA (p. 676)
concentration:
Medieval Studies (p. 1101)
Comparative Literature, PhD (p. 677)
concentration:
Medieval Studies (p. 1101)

The Program in Comparative & World Literature offers graduate programs leading to the degrees of Master of Arts and Doctor of Philosophy and is designed to provide a systematic study of subjects and problems common to several literatures. Its purpose is to enable students who have varied linguistic competence and preparation to explore the theory of literature and criticism; the interrelations of several literatures; the main currents, periods, and movements in literary history; the development of literary themes and types; and the relations between literature and the other arts. We consider the Master of Arts program to be the first step toward the Ph.D. degree; we expect students admitted to the M.A. program to receive the M.A. and go on to complete a Ph.D. We therefore do not offer a formal terminal M.A. program.

Admission

A student entering the program should have an undergraduate major in Comparative Literature, English, the classics, or a foreign language. Majors in history and philosophy or other humanistic areas that present suitable linguistic and literary competence may also be granted admission by the Admissions Committee. Students entering with a recognized Masters degree from another university or from another department of this University have the option of taking the comparative literature and critical theory component and a literary component of this program's regular Master of Arts examination at the end of the first year as a qualifying test. All other students typically take the Master of Arts examination at the end of their second year as the qualifying exam to proceed to stage two of the PhD.

Applicants should apply online (www.grad.illinois.edu/admissions/apply/ (http://www.grad.illinois.edu/admissions/apply/)), submit a statement of purpose, three letters of recommendation and a writing sample.

Original transcripts showing all undergraduate and graduate work completed should be sent to SLCL Graduate Student Services, 3070 Foreign Languages Bldg., 707 S. Mathews Ave., Urbana, IL 61801. Graduate Record Examination (GRE) scores are required and should be submitted to institution code 1836. Applicants whose native language is not English are required to take the Test of English as a Foreign Language (TOEFL) and must score at least 105 on the internet-based test (iBT); they must also pass the speaking sub-section of the iBT with a minimum score of 24 (see www.grad.illinois.edu/Admissions/instructions/04c (http://www.grad.illinois.edu/Admissions/instructions/04c/)). Applications are accepted for fall admission only. Application questions may be directed to SLCL Graduate Student Services at slclgradservices@illinois.edu

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program. Non-native English speakers must first pass a test of their oral English ability (see www.grad.illinois.edu/admissions/taengprof.htm (http://www.grad.illinois.edu/admissions/taengprof.htm)).

Financial Aid

The Program aims to support all graduate students for five years through a combination of fellowships, teaching, and other means, but support is always contingent on the student making timely progress to the degree. Such progress is measured by course load, taking exams on time, grades, and other factors.

for the degree of Doctor of Philosophy in Comparative Literature

Code	Title	Hours
CWL 582	Proseminar	4
Select three of the following: [1]		12
CWL 551	Seminar Lit Movements	
CWL 561	Seminar Genres - Forms	
CWL 571	Seminar in Literary Relations	
CWL 581	Seminar Lit Themes	
Two courses in the major literature		8
One course in each of the minor literatures of specialization		8
Language Requirement: Command of at least three languages besides English. Three of these four languages must coincide with the student's areas of specialization and with the dissertation field.		
CWL 599	Thesis Research (min/max applied toward degree)	24-32
Total Hours		64

Other Requirements [2]

Requirement	Description
Other requirements may overlap	
Students must be enrolled in graduate seminars until the preliminary examinations are taken and passed.	
Masters Degree Required for Admission to PhD?	Yes
Qualifying Eaxam Required:	No
Preliminary Exam Required:	Yes
Final Exam/Dissertation Defense Required:	Yes
Dissertation Deposit Required:	Yes
Minimum GPA:	3.25

1 One of these courses must be cross-cultural.

2 *For additional details and requirements refer to the department's* graduate handbook *(*http://www.complit.illinois.edu/Graduate_files/Grad%20Handbook.pdf*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Comparative Literature, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Comparative Literature

1. **Linguistic Mastery:** Mastery of at least three foreign languages (one of which can be English) and a research language.
2. **Comparative and Cross-Cultural Analysis:** Ability to analyze problems and questions that cut across national, linguistic, and cultural lines.
3. **Literary / Critical Theory:** Demonstration of mastery of major fields of theoretical inquiry current in the discipline, such as Marxism, psychoanalysis, post-structuralism, feminism / queer studies, post-colonialism.
4. **Teaching experience:** Ability to teach a wide range of literary topics; put together syllabi, tests, written assignments, and lectures. Familiarity with current trends in pedagogy for language, literature, and culture. Depending on the area of specialization, teaching in the target language or in the Rhetoric program.
5. **Professionalization:** Completion of CWL 582 (Proseminar), including learning to give talks, making a syllabus, converting seminar papers into conference presentations and journal articles, learning to write book reviews, learning to write cover letters, fellowship applications, and grant applications.Preparation for the academic job market in literary studies and other allied fields.Preparation for relevant non-academic jobs, including editing and publishing, museum work, journalism, artistic and creative careers.

Computer Science, MCS

for the degree of Master of Computer Science in Computer Science (on campus or online)

department head: Nancy Amato (namato@illinois.edu)
director of graduate studies: Robin Kravets (rhk@illinois.edu)
overview of admissions & requirements: https://cs.illinois.edu/admissions/graduate/applications-process-requirements (https://cs.illinois.edu/admissions/graduate/applications-process-requirements/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: h (https://cs.illinois.edu/)ttps://cs.illinois.edu/ (https://cs.illinois.edu/)
program website: https://cs.illinois.edu/academics/graduate/professional-master-computer-science (https://cs.illinois.edu/academics/graduate/professional-master-computer-science/)
college website: https://grainger.illinois.edu/
contact: Viveka P Kudaligama (kudaliga@illinois.edu)
address: 1210 Siebel Center, 201 N Goodwin, Urbana, IL 61801
phone: (217) 333-4428
email: academic@cs.illinois.edu

The Department of Computer Science is one of the longest established computer science departments in the world and is consistently ranked as a top-5 graduate program.

The MCS in Computer Science is a professionally-oriented, coursework-based degree program offered as an on-campus program or online. The online option allows individuals to earn the MCS from a leader in information technology entirely online with no required campus visits. Online students have the option to complete the comprehensive MCS track or the MCS program with a data science track. All online classes are taught by our world-recognized faculty. Online students also receive additional instructional support from Computer Science Graduate Teaching Assistants and program staff. The on-campus MCS program is designed to allow students to complete the degree in as little as one year with a maximum of three continuous semesters. Online students have 5 years in which to complete the program.

Opportunity exists for specializing in computational science and engineering via the Computational Science & Engineering (p. 1089) optional graduate concentration.

Admission Requirements

Applicants must hold a bachelor's degree equivalent to that granted by the University of Illinois at Urbana-Champaign. The recommended background for students entering a Computer Science graduate degree program is a bachelor's in computer science or computer engineering. The Graduate Record Examination (GRE) (http://www.ets.org/) general aptitude tests (Verbal, Quantitative, and Analytical) are not required. However, in some cases, GRE general scores may provide helpful supporting information.

Applicants to the MCS program must have a minimum grade point average (GPA) of 3.20 (A = 4.00) in their undergraduate studies (international GPAs are systematically converted) to be considered. The department reserves the right to admit applicants with lower GPAs under rare and exceptional circumstances. If an applicant also holds a graduate degree, the minimum GPA for that degree must be 3.00. Full details of the programs offered by Computer Science, admissibility, application procedures, and deadlines can be found at the department's Prospective Graduate Student Information Web site (http://cs.illinois.edu/admissions/graduate/).

All applicants whose native language is not English are required to submit TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) scores as evidence of English proficiency. Minimum admission requirements (https://grad.illinois.edu/admissions/instructions/04c/) are set by the Graduate College. Students applying to the online program must satisfy the full status admissions requirement.

Financial Aid

Research assistantships and teaching assistantships (all of which include tuition and partial fee waivers) are awarded on a competitive basis. All applicants, regardless of US citizenship, whose native language is not English and who wish to be considered for teaching assistantships (one of the most common forms of financial aid for new graduate students in the department) must demonstrate spoken English language proficiency (http://grad.illinois.edu/admissions/taengprof.htm) by achieving a minimum score of 24 on the speaking subsection of the TOEFL iBT or 8 on the speaking subsection of the IELTS. Students who are unable to take the iBT or IELTS are required to receive a minimum score of 5 on the EPI test (http://cte.illinois.edu/testing/oral_eng/epi_overview.html), offered on campus. All new teaching assistants are required to participate in the Graduate Academy for College Teaching (https://citl.illinois.edu/citl-101/teaching-learning/grad-academy-for-college-teaching/) conducted prior to the start of the semester.

The Department of Computer Science does not offer research or teaching assistantships to students enrolled in our online programs, including the Online MCS.

Other Graduate Programs in the Department of Computer Science

degrees:

Computer Science, MS (p. 681)
optional concentrations:
Computational Science and Engineering (p. 1089)
Computer Science, PhD (p. 682)
optional concentrations:
Computational Science and Engineering (p. 1089)
Bioinformatics: Computer Science, MS (p. 629)
joint programs:
Computer Science, MCS & Architecture, MArch (p. 1151)
Computer Science, MCS & Law, JD (p. 1151)

The Department of Computer Science (CS) offers other graduate programs leading to the degrees of Master of Science and Doctor of Philosophy in Computer Science, as well as a Computer Science concentration under the interdisciplinary Master of Science in Bioinformatics.

for the degree of Master of Computer Science in Computer Science (on campus or online)

For additional details and requirements refer to the department's Graduate Degree Requirements *(*http://cs.illinois.edu/academics/graduate/professional-mcs-program/*) and the* Graduate College Handbook *(*http://grad.illinois.edu/gradhandbook/*).*

This degree program can be completed either on campus or online; the requirements are listed below:

Code	Title	Hours
Breadth Requirement (http://cs.illinois.edu/academics/graduate/professional-mcs-program/mcs-degree-requirements/)		12-16
Advanced courses – chosen from CS 500 - CS 590 and CS 598; CS 597, or an approved non-CS 500-level course may satisfy 4 credit hours of this requirement.		12
Elective courses (subject to Other Requirements and Conditions below)		4-8
Total Hours		32

Other Requirements and Conditions

Requirement
Other Requirements and Conditions may overlap
A minimum of 24 CS credit hours must be taken from the University of Illinois at Urbana-Champaign campus.
A minimum of 12 500-level credit hours overall.
A maximum of 4 hours of CS 591 and CS 491 may be applied toward the degree.
A grade of B- or higher is required for Breadth course work.
At most, 12 semester credit hours of previous graduate course work may be transferred and applied to the M.C.S. degree requirements and 12 credit hours of non-degree graduate courses completed in the Department of Computer Science at the University of Illinois at Urbana-Champaign campus may be transferred and applied to the M.C.S. degree requirements.
All degree requirements must be completed within three consecutive semesters (only fall and spring semesters are counted).
Off-campus students have 5 years in which to complete this degree.
The minimum program GPA is 3.0.

Learning Outcomes: Computer Science, MCS

Learning Outcomes for the degree of Master of Computer Science in Computer Science (on campus or online)

1. Plan and conduct original research that addresses questions of significance in a particular subject area in Computer Science.
2. Analyze and be able to articulate the scientific advances and limitations of results described in the research literature.
3. Demonstrate the ability to effectively communicate research proposals and results.
4. Demonstrate in-depth knowledge of a particular subject area and broad knowledge of other areas in Computer Science.
5. Demonstrate an understanding of and ability to follow ethical standards in research, teaching, and professional service.
6. Demonstrate the ability to teach concepts in Computer Science at the university level. Additionally, for the MS Bioinformatics program:
7. Demonstrate broad knowledge of topics in bioinformatics.
8. Demonstrate knowledge of at least one subject in biological sciences.

Computer Science, MS

for the degree of Master of Science in Computer Science

department head: Nancy Amato (namato@illinois.edu)
director of graduate studies: Robin Kravets (rhk@illinois.edu)
overview of admissions & requirements: https://cs.illinois.edu/admissions/graduate/applications-process-requirements (https://cs.illinois.edu/admissions/graduate/applications-process-requirements/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://cs.illinois.edu/ (https://cs.illinois.edu/)
program website: https://cs.illinois.edu/academics/graduate/ms-program (https://cs.illinois.edu/academics/graduate/ms-program/)
department faculty: https://cs.illinois.edu/people/faculty/department-faculty (https://cs.illinois.edu/people/faculty/department-faculty/)
college website: https://grainger.illinois.edu/
contact: Viveka P Kudaligama (kudaliga@illinois.edu)
address: 1210 Siebel Center, 201 N Goodwin, Urbana, IL 61801
phone: (217) 333-4428
email: academic@cs.illinois.edu

The Department of Computer Science is one of the longest established computer science departments in the world and is consistently ranked as a top-5 graduate program.

The MS in Computer Science is a research-oriented degree that can be counted toward the PhD in Computer Science.

Opportunity exists for specializing in computational science and engineering via the Computational Science & Engineering (p. 1089) optional graduate concentration.

Admission Requirements

Applicants must hold a bachelor's degree equivalent to that granted by the University of Illinois at Urbana-Champaign. The recommended background for students entering a Computer Science graduate degree program is a bachelor's degree in computer science or computer engineering. The Graduate Record Examination (GRE) (http://www.ets.org/) general aptitude tests (Verbal, Quantitative, and Analytical) are no longer required. However, in some cases, GRE general scores may provide helpful supporting information.

Applicants to the computer science MS program must have a minimum grade point average (GPA) of 3.20 (A = 4.00) in their undergraduate studies (international GPAs are systematically converted) to be considered. The department reserves the right to admit applicants with lower GPAs under rare and exceptional circumstances. If an applicant also holds a graduate degree, the minimum GPA for that degree must be 3.00. Full details of the programs offered by Computer Science, admissibility, application procedures, and deadlines can be found at the department's Prospective Graduate Student Information Web site (http://cs.illinois.edu/admissions/graduate/). To apply, click here (http://www.grad.uiuc.edu/admissions/apply/).

All applicants whose native language is not English are required to submit TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) scores as evidence of English proficiency. Minimum admission requirements (https://grad.illinois.edu/admissions/instructions/04c/) are set by the Graduate College.

Financial Aid

Fellowships, research assistantships, and teaching assistantships (all of which include tuition and partial fee waivers) are awarded on a competitive basis. All applicants, regardless of US citizenship, whose native language is not English and who wish to be considered for teaching assistantships (one of the most common forms of financial aid for new graduate students in the department) must demonstrate spoken English language proficiency (http://grad.illinois.edu/admissions/taengprof.htm) by achieving a minimum score of 24 on the speaking subsection of the TOEFL iBT or 8 on the speaking subsection of the IELTS (academic exam). Students who are unable to take the iBT or IELTS are required to receive a minimum score of 5 on the EPI test (http://cte.illinois.edu/testing/oral_eng/epi_overview.html), offered on campus. All new teaching assistants are required to participate in the Graduate Academy for College Teaching (https://citl.illinois.edu/citl-101/teaching-learning/grad-academy-for-college-teaching/) conducted prior to the start of the semester.

Department Research

Illinois has been an international leader in computing research for almost five decades. Broadly organized around 11 research areas (http://cs.illinois.edu/research/), 80 faculty members (http://cs.illinois.edu/people/faculty/) conduct research with over 475 graduate students. They regularly collaborate with researchers across campus, in other departments or research units.

The home of the Department of Computer Science at Illinois is the Thomas M. Siebel Center for Computer Science (http://cs.illinois.edu/about-us/), a state-of-the-art building that opened its doors in 2004. On the north side of campus, home to The Grainger College of Engineering (https://grainger.illinois.edu/), Siebel Center is an interactive computing habitat, made possible by a gift from alumnus Tom Siebel. The vision for the building was not only to create a magnificent space to work in, but to offer opportunities to investigate and apply computing tools on the building itself. Advanced wireless and wired communication networks, sensors, actuators, video capture and display equipment, video walls and information panels and storage and computing capabilities within the building allow researchers to examine communication and computation issues related to pervasive computing, multimedia infrastructure, building intelligence, security and privacy, and art.

Other Graduate Programs in the Department of Computer Science

degrees:

- Computer Science, MCS (p. 679)
  - **optional concentrations:**
    - Computational Science and Engineering (p. 1089)
- Computer Science, PhD (p. 682)
  - **optional concentrations:**
    - Computational Science and Engineering (p. 1089)
- Bioinformatics: Computer Science, MS (p. 629)

joint programs:

- Computer Science, MCS & Architecture, MArch (p. 1151)
- Computer Science, MCS & Law, JD (p. 1151)

The Department of Computer Science (CS) offers other graduate programs leading to the degrees of Doctor of Philosophy in Computer

Science and Master of Computer Science (MCS), as well as a Computer Science concentration under the interdisciplinary Master of Science in Bioinformatics. The MCS program is also available online for students who are working full-time and unable to come to campus.

for the degree of Master of Science in Computer Science

The Master of Science (MS) in Computer Science is a research-oriented degree that can be counted toward the Computer Science PhD. For additional details and requirements refer to the department's Graduate Degree Requirements (https://cs.illinois.edu/academics/graduate/ms-program/) and the Graduate College Handbook (http://grad.illinois.edu/gradhandbook/).

The Master of Science (M.S.) in Computer Science is a research-oriented degree that can be counted toward the Computer Science Ph.D. For additional details and requirements refer to the department's Graduate Degree Requirements (http://cs.illinois.edu/academics/graduate/ms-program/) and the Graduate College Handbook (http://grad.illinois.edu/gradhandbook/).

Requirements

Code	Title	Hours
CS 599	Thesis Research (minimum applied toward degree)	4
Breadth Requirement - One course from each of three different (out of eight) core areas (http://cs.illinois.edu/current-students/graduate-students/ms-thesis/)		9-12
Advanced courses – One 500-level course from one of the three areas selected in the Breadth Requirement; Remaining hours from any 500-level CS course (500-590 or 598) except CS 591 or CS 597. An approved 500-level non-CS course may satisfy 4 credit hours of this requirement; CS 599 (thesis) may satisfy 4 credit hours of this requirement.		12
Elective courses (subject to Other Requirements and Conditions below)		4-7
Total Hours		32

Other Requirements

Requirement
Other Requirements and Conditions may overlap
A minimum of 16 CS credit hours must be taken from the University of Illinois at Urbana-Champaign campus.
A minimum of 12 500-level credit hours overall.
A maximum of 4 hours of CS 591 and CS 491 may be applied toward the degree.
A grade of B- or higher is required for Breadth Requirement course work.
At most, 12 semester credit hours of previous graduate course work may be transferred and applied to the M.S. degree requirements and 12 credit hours of non-degree graduate courses completed in the Department of Computer Science at the University of Illinois at Urbana-Champaign may be transferred and applied to the M.S. degree requirements.
It is each student's responsibility to secure a M.S. thesis advisor and start thesis research no later than the beginning of the third semester in the program.
All degree requirements must be completed within five consecutive semesters (only fall and spring semesters are counted).
The minimum program GPA is 3.0.

Learning Outcomes: Computer Science, MS

Learning Outcomes for the degree of Master of Science in Computer Science

1. Plan and conduct original research that addresses questions of significance in a particular subject area in Computer Science.
2. Analyze and be able to articulate the scientific advances and limitations of results described in the research literature.
3. Demonstrate the ability to effectively communicate research proposals and results.
4. Demonstrate in-depth knowledge of a particular subject area and broad knowledge of other areas in Computer Science.
5. Demonstrate an understanding of and ability to follow ethical standards in research, teaching, and professional service.
6. Demonstrate the ability to teach concepts in Computer Science at the university level. Additionally, for the MS Bioinformatics program:
7. Demonstrate broad knowledge of topics in bioinformatics.
8. Demonstrate knowledge of at least one subject in biological sciences.

Computer Science, PhD

for the degree of Doctor of Philosophy in Computer Science

department head: Nancy Amato (namato@illinois.edu)
director of graduate studies: Robin Kravets (rhk@illinois.edu)
overview of admissions & requirements: https://cs.illinois.edu/admissions/graduate/applications-process-requirements (https://cs.illinois.edu/admissions/graduate/applications-process-requirements/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://cs.illinois.edu/ (https://cs.illinois.edu/)
program website: https://cs.illinois.edu/academics/graduate/phd-program (https://cs.illinois.edu/academics/graduate/phd-program/)
department faculty: https://cs.illinois.edu/people/faculty/department-faculty (https://cs.illinois.edu/people/faculty/department-faculty/)
college website: https://grainger.illinois.edu/
contact: Viveka P Kudaligama (kudaliga@illinois.edu)
address: 1210 Siebel Center, 201 N Goodwin, Urbana, IL 61801
phone: (217) 333-4428
email: academic@cs.illinois.edu

The Department of Computer Science is one of the longest established computer science departments in the world and is consistently ranked as a top-5 graduate program.

Opportunity exists for specializing in computational science and engineering via the Computational Science & Engineering (p. 1089) optional graduate concentration.

Admission Requirements

Applicants must hold a bachelor's degree equivalent to that granted by the University of Illinois at Urbana-Champaign. The recommended background for students entering a Computer Science graduate degree program is a bachelor's or a master's degree (only if applying to the PhD program) in computer science or computer engineering. The Graduate Record Examination (GRE) (http://www.ets.org/) general aptitude tests (Verbal, Quantitative, and Analytical) are no longer required. However, in some cases, GRE general scores may provide helpful supporting information.

Applicants to the computer science PhD program must have a minimum grade point average (GPA) of 3.40 (A = 4.00) in their undergraduate studies (international GPAs are systematically converted) to be considered. The department reserves the right to admit applicants with lower GPAs under rare and exceptional circumstances. If an applicant also holds a graduate degree, the minimum GPA for that degree must be 3.00. Full details of the programs offered by Computer Science, admissibility, application procedures, and deadlines can be found at the department's Prospective Graduate Student Information Web site (http://cs.illinois.edu/admissions/graduate/).

All applicants whose native language is not English are required to submit TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) scores as evidence of English proficiency. Minimum admission requirements (https://grad.illinois.edu/admissions/instructions/04c/) are set by the Graduate College.

Financial Aid

Fellowships, research assistantships, and teaching assistantships (all of which include tuition and partial fee waivers) are awarded on a competitive basis. Starting in Fall 2020, Grainger Engineering PhD students in their first five years of enrollment who meet the minimum eligibility requirements (https://grainger.illinois.edu/academics/graduate/phd-funding-guarantee/) are guaranteed a funded appointment for fall and spring that includes a full tuition waiver, a partial fee waiver, and a stipend.

All applicants, regardless of US citizenship, whose native language is not English and who wish to be considered for teaching assistantships (one of the most common forms of financial aid for new graduate students in the department) must demonstrate spoken English language proficiency (http://grad.illinois.edu/admissions/taengprof.htm) by achieving a minimum score of 24 on the speaking subsection of the TOEFL iBT or 8 on the speaking subsection of the IELTS. Students who are unable to take the iBT or IELTS are required to receive a minimum score of 5 on the EPI test (http://cte.illinois.edu/testing/oral_eng/epi_overview.html), offered on campus. All new teaching assistants are required to participate in the Graduate Academy for College Teaching (https://citl.illinois.edu/citl-101/teaching-learning/grad-academy-for-college-teaching/) conducted prior to the start of the semester.

Department Research

Illinois has been an international leader in computing research for almost five decades. Broadly organized around 11 research areas (http://cs.illinois.edu/research/), 80 faculty members (http://cs.illinois.edu/people/faculty/) conduct research with over 475 graduate students. They regularly collaborate with researchers across campus, in other departments or research units.

The home of the Department of Computer Science at Illinois is the Thomas M. Siebel Center for Computer Science (http://cs.illinois.edu/about-us/), a state-of-the-art building that opened its doors in 2004. On the north side of campus, home to The Grainger College of Engineering (https://grainger.illinois.edu/), Siebel Center is an interactive computing habitat, made possible by a gift from alumnus Tom Siebel. The vision for the building was not only to create a magnificent space to work in, but to offer opportunities to investigate and apply computing tools on the building itself. Advanced wireless and wired communication networks, sensors, actuators, video capture and display equipment, video walls and information panels and storage and computing capabilities within the building allow researchers to examine communication and computation issues related to pervasive computing, multimedia infrastructure, building intelligence, security and privacy, and art.

Other Graduate Programs in the Department of Computer Science

degrees:

Computer Science, MCS (p. 679)
optional concentrations:
Computational Science and Engineering (p. 1089)
Computer Science, MS (p. 681)
optional concentrations:
Computational Science and Engineering (p. 1089)
Bioinformatics: Computer Science, MS (p. 629)
joint programs:
Computer Science, MCS & Architecture, MArch (p. 1151)
Computer Science, MCS & Law, JD (p. 1151)

The Department of Computer Science offers other graduate programs leading to the degrees of Master of Science in Computer Science and Master of Computer Science (MCS), as well as a Computer Science concentration under the interdisciplinary Master of Science in Bioinformatics. The MCS program is also available online for students who are working full-time and unable to come to campus.

for the degree of Doctor of Philosophy in Computer Science

For additional details and requirements refer to the department's Graduate Degree Requirements (http://cs.illinois.edu/academics/graduate/phd-program/) and the Graduate College Handbook (http://grad.illinois.edu/gradhandbook/).

Doctor of Philosophy in Computer Science

Entering with approved M.S. degree

Code	Title	Hours
CS 599	Thesis Research (minimum applied toward degree)	32
500-level course work (12 hours must be CS courses)		16
Additional graduate-level course work or thesis research credit (subject to Other Requirements and Conditions below)		16
Total Hours		64

Other Requirements and Conditions

Requirement	Description
Other Requirements and Conditions may overlap	

Minimum hours of CS course work:	12
CS 597 and CS 591 may not be applied to the 500-level course work requirement.	
CS 591 section PHD must be taken in the first semester. A maximum of 4 credit hours of CS 591 can be applied toward the Ph.D. degree.	
A teaching assistantship for an entire term, with a satisfactory performance evaluation by the department, is required by the end of the 5th year.	
Ph.D. exam and dissertation requirements:	
International Students must show demonstration of English proficiency (equivalent to that necessary to be a TA-see Financial Aid) before taking the Qualifying Exam.	
Qualifying exam[1]	
Preliminary exam[2]	
Final exam or dissertation defense[3]	
Dissertation deposit[4]	
Minimum GPA:	3.0

Entering with B.S. degree

Code	Title	Hours
CS 599	Thesis Research (minimum applied toward degree)	32
500-level course work (12 hours must be CS courses)		24
400- or 500-level course work		24
Additional graduate-level course work or thesis research credit (subject to Other Requirements and Conditions below)		16
Total Hours		96

Other Requirements and Conditions

Requirement	Description
Other Requirements and Conditions may overlap	
Minimum hours of CS course work:	12
CS 597 and CS 591 may not be applied to the 500-level course work requirement.	
CS 591 section PHD must be taken in the first semester. A maximum of 4 credit hours of CS 591 can be applied toward the Ph.D. degree.	
A teaching assistantship for an entire term, with a satisfactory performance evaluation by the department, is required by the end of the 5th year.	
Ph.D. exam and dissertation requirements:	
International Students must show demonstration of English proficiency (equivalent to that necessary to be a TA-see Financial Aid) before taking the Qualifying Exam.	
Qualifying exam[1]	
Preliminary exam[1]	
Final exam or dissertation defense[3]	
Dissertation deposit[4]	
Minimum GPA:	3.0

1. Qualifying Exam information (http://cs.illinois.edu/academics/graduate/phd-program/qualifying-exam/)
2. Preliminary Exam information (http://cs.illinois.edu/academics/graduate/phd-program/preliminary-exam/)
3. Final exam or dissertation defense information (http://cs.illinois.edu/academics/graduate/phd-program/final-exam-thesis-defense/)
4. Dissertation deposit information (http://cs.illinois.edu/academics/graduate/phd-program/phd-thesis-format-review-guidelines/)

Learning Outcomes: Computer Science, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Computer Science

1. Plan and conduct original research that addresses questions of significance in a particular subject area in Computer Science.
2. Analyze and be able to articulate the scientific advances and limitations of results described in the research literature.
3. Demonstrate the ability to effectively communicate research proposals and results.
4. Demonstrate in-depth knowledge of a particular subject area and broad knowledge of other areas in Computer Science.
5. Demonstrate an understanding of and ability to follow ethical standards in research, teaching, and professional service.
6. Demonstrate the ability to teach concepts in Computer Science at the university level. Additionally, for the MS Bioinformatics program:
7. Demonstrate broad knowledge of topics in bioinformatics.
8. Demonstrate knowledge of at least one subject in biological sciences.

Creative Writing, MFA

for the degree of Master of Fine Arts in Creative Writing

head of department: Bob Markley
director of graduate studies: Justine Murison
director of creative writing: Ted Sanders
associate director of creative writing: John Dudek
overview of graduate college admissions & requirements: Graduate Admissions (https://grad.illinois.edu/admissions/apply/)
overview of college admissions & requirements:
department website: http://creativewriting.english.illinois.edu/
college website: https://las.illinois.edu/
department office: 210 English Building, 608 South Wright Street, Urbana, IL 61801
phone: (217) 333-3646
email: shockey@illinois.edu

The Department of English offers a program of study in Creative Writing leading to the Master of Fine Arts degree. We welcome qualified students who wish to pursue their interests in fiction or poetry writing.

Graduate Degree Programs in Creative Writing

Creative Writing, MFA (p. 684)

Admission

A candidate for the MFA must spend at least four semesters or the equivalent in residence and complete at least 48 graduate hours. A full-time student typically completes this program in three academic years. Because applications for admission usually far exceed capacity, in recent years undergraduate grade point averages of students admitted have been significantly higher than the 3.0 (A = 4.0) required by the Graduate College.

All applicants whose native language is not English are required to submit Test of English as a Foreign Language (TOEFL) scores. Currently, a minimum score of 550 on the paper-based test (213 on the computer-based test) is required. Before a teaching assistantship involving classroom instruction or student consultation can be awarded to a non-native speaker of English, the applicant must take the Test of Spoken English (TSE) and achieve a score of 50 or higher (230 or higher before 1996).

The committee on admissions tends to select those applicants who have a solid array of undergraduate courses, strong recommendations, and above all a compelling writing sample: in short, a demonstration of an academic record that shows promise of a student capable of doing outstanding work in the field and earning a degree within a reasonable time. Preference is given to applicants who will be full-time students and active degree candidates. Applicants are considered only in spring for fall admission, and the deadline for submitting applications is December 1st.

Graduate Teaching Experience

Experience in teaching is considered a vital part of the graduate program and all MFA candidates will have ample opportunity to teach undergraduate writing classes.

Financial Aid

Financial aid is available to students in the form of fellowships, teaching assistantships, and waivers of tuition and service fees. For complete information about the program, prospective applicants should consult our website at https://english.illinois.edu/admissions/our-mfa-creative-writing (https://english.illinois.edu/admissions/our-mfa-creative-writing/).

for the degree of Master of Fine Arts in Creative Writing

For additional details and requirements refer to the department's program requirements *(*http://creativewriting.english.illinois.edu/graduate/requirements/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Code	Title	Hours
Workshops		16
Craft course in the appropriate genre		4
Proseminar		4
Approved Literature courses at the 400 and 500 level		8
Electives		8
CW 595	Final Project	8
Total Hours		**48**

Other Requirements

Requirement
Other requirements may overlap
Four semesters in residence
Teaching experience is required.
A public reading from the completed project is required for graduation
Minimum 500-level Hours Required Overall: 12
Minimum GPA: 3.0

Learning Outcomes: Creative Writing, MFA

Learning outcomes for the degree of Master of Fine Arts in Creative Writing

1. Writing: Students will focus on creating works of high literary quality, honing their own distinctive personal writing styles. They will demonstrate the ability to revise drafts of their work in response to useful critical commentary. Upon completion of the program, students will understand how to create and polish individual shorter works; they will also understand how to compile and complete a book-length manuscript in the genre of their choice.
2. Craft discussion: Students will demonstrate an advanced ability to read, analyze, and discuss published works of literature—especially contemporary literature—from a craft perspective, identifying authorial choices and evaluating the effect of those choices on the work.
3. Literary Community and Profession: Students will demonstrate an understanding of the professional creative writing field with regards to literary journals, presses, and other iterations of the literary community, and will have participated in one or more professional activities, including editorial work on Ninth Letter, giving a public reading, attending a writers' conference, etc.
4. Teaching: Students will learn best practices for leading creative writing workshops and mentoring beginning writers.

Crop Sciences, MS

for the Master of Science in Crop Sciences (on campus & online)

head of department: Adam Davis
director of graduate studies: Nathan Schroeder
director of online MS degree program: DoKyoung Lee

director of admissions committee: Nathan Schroeder
email: c (sdcarson@illinois.edu)**ptomlin@illinois.edu**
department website: https://cropsciences.illinois.edu/
department faculty: https://cropsciences.illinois.edu/people/faculty/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://aces.illinois.edu/
department office: AW-101 Turner Hall, 1102 South Goodwin Avenue, Urbana, IL 61801
phone:(217) 244-0396

Graduate Degree Programs in Crop Sciences

Crop Sciences, MS (p. 686) **(on campus & online)**
Bioinformatics: Crop Sciences, MS (p. 631)
Plant Biotechnology, MS - Professional Science Master's (p. 967)
Crop Sciences, PhD (p. 687)

Admission

Applicants are considered for admission to the Master of Science program if they have a bachelor's or equivalent degree comparable to that granted by the University of Illinois. Admission to the Ph.D. program will be considered for applicants with the M.S., those nearing completion of the M.S., and in some cases, those with the B.S. Because of the diversity of programs in the Department of Crop Sciences, the preparation that is needed varies considerably. Strong letters of reference, evident motivation to undertake graduate study, and good preparation in basic science courses enhance an applicant's credentials. For some programs, greater emphasis is given to previous training in plant sciences, chemistry, or mathematics. A grade point average equivalent to at least a B in the last 60 semester hours of undergraduate course work plus any graduate level work completed is required. All applicants whose native language is not English are required to submit the results of the TOEFL or IELTS as evidence of English proficiency. Official scores are required to be submitted directly from TOEFL/ETS or IELTS to the University. Additional information for international applicants can be found at: https://grad.illinois.edu/admissions/apply/begin/international (https://grad.illinois.edu/admissions/apply/begin/international/).

Graduate Teaching Experience

Experience in teaching is considered an important part of the graduate experience in this program.

Faculty Research Interests

Please refer to the following webpage for a detailed listing of our faculty and their areas of interest https://cropsciences.illinois.edu/people/faculty/.

Financial Aid

Fellowships and assistantships are available to outstanding on campus MS students on a competitive basis. Awards for financial assistance are based principally on a candidate's academic record, statement of plans, and letters of reference.

for the Master of Science in Crop Sciences (on campus & online)

Candidates must complete 32 hours of graduate study as approved by their graduate guidance committee with at least a B average. An oral final examination is required of all M.S. candidates, and written examinations may be required at the option of the examining committee.

The Online M.S. in Crop Sciences program enables students to strengthen their education typically through part-time study, as most students are working professionals. Courses are delivered mainly through online and other distance education technologies and occasional site-based programming (site-based courses are optional and not required to complete the degree). The Crop Sciences Online M.S. degree program is completed as a non-thesis degree. The program has a 30-plus year history of providing high quality University of Illinois courses and began granting off-campus MS degrees in 1986 to agriculture professionals across Illinois, as well as in neighboring states. Students may enroll in individual courses for personal or professional advancement or may apply for admission to the master's degree program in Crop Sciences. Students who successfully complete three qualifying courses may also receive a Professional Development Certificate in Crop Sciences.

The Online M.S. in Crop Sciences program also works in conjunction with the Natural Resources and Environmental Studies Online M.S. program and the Agriculture Education Online M.S. program to offer a diverse set of courses. The Department of Crop Sciences is looking to the future and the needs of non-traditional students. Therefore, new courses are continually in development for online delivery and blended formats. A student may complete their entire degree requirements online from anywhere in the world and they are available to in-state students and out-of-state students at the same tuition rates. For more information on Crop Sciences, the Online M.S. in Crop Sciences degree program or certificate offerings, please visit https://cropsciences.illinois.edu/online/.

For additional details and requirements refer to the Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

This degree program can be completed either on campus or online; with or without a thesis, the requirements are listed below:

Code	Title	Hours
Thesis Option		
CPSC 594	Professional Orientation CPSC	1
CPSC 598	Seminar (required each semester; maximum applied toward degree)	4
Electives including at least 4 hours of graded coursework at the 500 level other than CPSC 599 (elective courses are chosen in consultation with faculty advisor)		20
CPSC 599	Thesis Research (minimum applied toward degree)	7
Total Hours Thesis		**32**
Non-Thesis Option		
CPSC 594	Professional Orientation CPSC	1

CPSC 598	Seminar (required each semester for on-campus MS program; not required for online MS program)	0 or 4
Electives including at least 4 hours of graded coursework at the 500 level other than CPSC 599 (elective courses are chosen in consultation with faculty advisor)		27-31
Total Hours Non-Thesis		**32**

Other Requirements

Requirement
Other requirements and conditions may overlap
Minimum 500-level Hours Required overall: 12
Minimum GPA: 3.0

Learning Outcomes: Crop Sciences, MS

Learning Outcomes for the Master of Science in Crop Sciences (on campus & online)

Thesis

1. Students will be able to read, understand, knowledgeably discuss and summarize in writing the primary scientific literature of their particular disciplinary research area (bioinformatics and statistics, crop genetic improvement, crop production, plant protection, sustainable food systems, and water quality and environmental systems).
2. Students will assume responsibility and ownership in research project development and execution.
3. Students will acquire professional scientific writing and communication skills.
4. Students will develop the capacity to communicate and collaborate across interdisciplinary boundaries.
5. Students will develop the interpersonal skills to be competitive for career opportunities in plant sciences and agriculture.

Non-Thesis

1. Students will be able to read, understand, knowledgeably discuss and summarize in writing the primary scientific literature of one or more disciplinary areas (bioinformatics and statistics, crop genetic improvement, crop production, plant protection, sustainable food systems, and water quality and environmental systems).
2. Students will acquire professional scientific writing and communication skills.
3. Students will develop the capacity to communicate and collaborate across interdisciplinary boundaries.
4. Students will develop the interpersonal skills to be competitive for career opportunities in plant sciences and agriculture.

Online

1. Students will be able to evaluate crop research methods critically and significantly contribute in the research community.
2. Students will be able to apply principles of crop sciences to determine agronomic problems and formulate and implement practical management.
3. Students will be able to describe and critically review concepts and practices associated with agriculture and the environment.
4. Students will be able to critically assess scientific papers. Students will be able to synthesize concepts to solve complex scientific problems.

Crop Sciences, PhD

for the degree of Doctor of Philosophy in Crop Sciences

head of department: Adam Davis
director of graduate studies: Nathan Schroeder
director of admissions committee: Nathan Schroeder
email: c (sdcarson@illinois.edu)**ptomlin@illinois.edu**
department website: https://cropsciences.illinois.edu/
department faculty: https://cropsciences.illinois.edu/people/faculty/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://aces.illinois.edu/
department office: AW-101 Turner Hall, 1102 South Goodwin Avenue, Urbana, IL 61801
phone:(217) 244-0396

Graduate Degree Programs in Crop Sciences

Crop Sciences, MS (p. 686) **(on campus & online)**
Bioinformatics: Crop Sciences, MS (p. 631)
Plant Biotechnology, MS - Professional Science Master's (p. 967)
Crop Sciences, PhD (p. 687)

Admission

Admission to the Ph.D. program will be considered for applicants with the M.S., those nearing completion of the M.S., and highly motivated students with the B.S. Because of the diversity of programs in the Department of Crop Sciences, the preparation that is needed varies considerably. Strong letters of reference, evident motivation to undertake graduate study, and good preparation in basic science courses enhance an applicant's credentials. For some programs, greater emphasis is given to previous training in plant sciences, chemistry, or mathematics. A grade point average equivalent to at least a B in the last 60 semester hours of undergraduate course work plus any graduate level work completed is required. All applicants whose native language is not English are required to submit the results of the TOEFL or IELTS as evidence of English proficiency. Official scores are required to be submitted directly from TOEFL/ETS or IELTS to the University. Additional information for international applicants can be found at: https://grad.illinois.edu/admissions/apply/begin/international (https://grad.illinois.edu/admissions/apply/begin/international/). Please see our web page for additional information: https://cropsciences.illinois.edu/graduate/admissions/.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program.

Faculty Research Interests

Please refer to the following webpage for a detailed listing of our faculty and their areas of interest https://cropsciences.illinois.edu/people/faculty/.

Financial Aid

Fellowships and assistantships are available to outstanding students on a competitive basis. Awards for financial assistance are based principally on a candidate's academic record, statement of plans, and letters of reference.

for the degree of Doctor of Philosophy in Crop Sciences

Students are required to pass a preliminary examination within five semesters of first enrolling, not including the summer terms, and after substantial completion of the Ph.D. graded coursework requirement. The preliminary examination is comprised of both an oral and written component and students are expected to defend their Thesis Proposal at the oral component of the examination. Those students on the BA to PhD plan must also pass a Qualifying Exam. An acceptable dissertation is required. Residence requirements are the same as those of the Graduate College.

For additional details and requirements refer to the department's graduate handbook (http://cropsci.illinois.edu/sites/cropsci.illinois.edu/files/pdf/Grad_Student_Handbook_2013.pdf) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Entering with approved M.S./M.A. degree

Code	Title	Hours
Minimum Graded Coursework approved by the graduate guidance committee not including CPSC 594 or CPSC 598, with a grade point average of at least a B.		12
CPSC 594	Professional Orientation CPSC (not required if it was taken in fulfillment of the master's degree.)	1
CPSC 598	Seminar (CPSC 598: Graduate Student Seminar (enrollment required each semester)) Maximum applied toward degree	14
CPSC 599	Thesis Research (minimum applied toward degree)	37
Total Hours		64

Other Requirements

Requirement	Description
Other requirements and conditions may overlap	
64 hours of in-residence credit beyond the M.S.	
Qualifying Exam Required:	No
Preliminary Exam Required:	Yes
Final Exam/Dissertation Defense Required:	Yes
Dissertation Deposit Required:	Yes
Minimum GPA:	3.0

Entering with approved B.S./B.A. degree

Code	Title	Hours
Coursework approved by the graduate guidance committee not including CPSC 594 or CPSC 598, with a grade point average of at least a B.		32
CPSC 594	Professional Orientation CPSC	1
CPSC 598	Seminar (Enrollment required each semester) Maximum applied toward degree	14
CPSC 599	Thesis Research (minimum applied toward degree)	49
Total Hours		96

Other Requirements

Requirement	Description
Other requirements and conditions may overlap	
64 hours of in-residence credit beyond the M.S.	
Minimum 500-level Hours Required Overall:	36
Qualifying Exam Required:	Yes
Preliminary Exam Required:	Yes
Final Exam/Dissertation Defense Required:	Yes
Dissertation Deposit Required:	Yes
Minimum GPA:	3.0

Learning Outcomes: Crop Sciences, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Crop Sciences

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BA Track

1. Students will be able to read, understand, knowledgeably discuss and summarize in writing the primary scientific literature of their particular disciplinary research area (bioinformatics and statistics, crop genetic improvement, crop production, plant protection, sustainable food systems, and water quality and environmental systems).
2. Students will assume responsibility and ownership in research project development and execution. They will also learn to independently conceive and develop their research projects.
3. Students will acquire professional scientific writing and communication skills.
4. Students will develop the capacity to communicate and collaborate across interdisciplinary boundaries.
5. Students will develop the interpersonal skills to be competitive for career opportunities in plant sciences and agriculture.

MS Track

1. Students will be able to read, understand, knowledgeably discuss and summarize in writing the primary scientific literature of their particular disciplinary research area (bioinformatics and statistics, crop genetic improvement, crop production, plant protection,

sustainable food systems, and water quality and environmental systems).
2. Students will assume responsibility and ownership in research project development and execution. They will also learn to independently conceive and develop their research projects.
3. Students will acquire professional scientific writing and communication skills.
4. Students will develop the capacity to communicate and collaborate across interdisciplinary boundaries.
5. Students will develop the interpersonal skills to be competitive for career opportunities in plant sciences and agriculture.

Curriculum & Instruction, CAS

for the Certificate of Advanced Study in Curriculum and Instruction

head of the department: Sarah McCarthey
director of graduate studies: Gloriana Gonzalez
graduate admissions information: Mitzi Koeberlein
overview of admissions & requirements: College of Education (https://education.illinois.edu/programs/grad/how-to-apply/?url=/programs/grad)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: http://education.illinois.edu/ci (http://education.illinois.edu/ci/)
program website: College of Education Programs (https://education.illinois.edu/faceted-search/programs/)
department faculty: Curriculum & Instruction Faculty (https://education.illinois.edu/faculty-finder/ci/)
college website: http://education.illinois.edu/
department office: 142 Education Building, 1310 South Sixth Street, Champaign, IL 61820
phone: (217) 244-3542
email: gradservices@education.illinois.edu

Graduate Degree Programs in Curriculum & Instruction

Curriculum and Instruction, EdM (p. 693) **(on campus, off-campus & online)**
optional concentrations: Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)
Curriculum and Instruction, MA (p. 695)
optional concentrations: Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)
Curriculum and Instruction, MS (p. 697)
optional concentrations: Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)
Curriculum and Instruction, CAS (p. 689) **(on campus, off-campus & online)**
optional concentration: Bilingual-Bicultural Education (p. 1076)
Curriculum and Instruction, EdD (p. 691) **(on campus, off-campus & online)**
optional concentrations: Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)
Curriculum and Instruction, PhD (p. 699)
optional concentrations (PhD only):
Digital Learning (p. 1093)|Second Language Acquisition and Teacher Education (http://www.slate.illinois.edu/)
Writing Studies (p. 1111)
Early Childhood Education, EdM (p. 703) **with teacher licensure**
optional concentrations: Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)
Elementary Education, EdM (p. 742) **with teacher licensure**
optional concentrations: Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)
Secondary Education, EdM (p. 994) **with teacher licensure**
concentrations: English (p. 996)|Mathematics (p. 997)|Sciences (p. 997)|Social Science: History (p. 999)
optional concentrations: Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)

Through the Master of Education and the Certificate of Advanced Study, experienced teachers are prepared to become more competent and better informed practitioners who serve as leaders for educational reform in local schools and school districts.

Also offered are master's degree programs leading to teacher licensure for individuals who have a degree in a field other than education and wish to become teachers. The three majors leading to licensure are Early Childhood Education (Birth - Grade 2), Elementary Education (Grades 1 - 6), and Secondary Education (Grades 9 - 12). In addition to completing the courses required for an Ed.M. degree, students in these programs follow the same sequence of professional education courses as undergraduate students.

Only master's students wishing to become licensed teachers in one of these three areas should apply to the Early Childhood Education, Elementary Education, or Secondary Education majors. Master's candidates who do not wish to become teachers, or are already teachers, should apply to the major in Curriculum and Instruction.

Two doctoral degree programs are offered. The Ph.D. program prepares degree candidates for careers involving research and scholarship, including those in colleges and universities where research is generally

combined with teacher education. The Ed.D. Program prepares scholarly practitioners for leadership positions in teacher training institutions, state education agencies, and public school districts.

Length of time for a degree: an Ed.M. program can be completed in a calendar year, while the M.S. or M.A. often takes longer. The Ed.M. with licensure typically takes two years to complete. Doctoral programs usually require four to five years of full time study.

Admission

Interested applicants should start at http://education.illinois.edu/programs/grad (http://education.illinois.edu/programs/grad/). In addition to the application, the applicant is required to submit the following information: a statement of purpose, updated resume, official transcripts from all colleges attended, and three letters of recommendation. Graduate Record Examination (GRE) scores must be submitted for all doctoral applicants. A scholarly writing sample in English, such as a master's thesis, article, or paper, is required for application to a doctoral program. Note: The master's with teacher licensure program only admits students for the fall term.

International applicants must submit TOEFL scores. The Department of Curriculum and Instruction's TOEFL requirement for full status admission is greater than 102; the minimum score for limited status is 550 on the paper-based test, 79 on the internet-based test and 213 on the computer-based test. International applicants must also submit a Declaration and Certification of Finances. Please note: TOEFL or IELTS scores must be less than two years old from the first day of class at the proposed term of entry in order to be valid. In addition, individual academic programs may require a higher score, or evidence of spoken English language proficiency; contact your proposed program of study office (http://www.grad.illinois.edu/admissions/depts/) for the minimum TOEFL, TSE, or IELTS requirement for admission. For additional details, refer to the Graduate College Handbook www.grad.illinois.edu/admissions/instructions/04c (http://www.grad.illinois.edu/admissions/instructions/04c/).

Faculty Research Interests

For information about specific faculty research interests, current grants, and publications, please visit the Faculty Finder (https://education.illinois.edu/faculty-finder/).

Facilities and Resources

Departmental resources consist of cooperation with Children's Research Center, Center for Small Urban Communities, as well as other resources in the College. Students who are interested in second language acquisition can become a part of the SLATE program. The department is connected to the University of Illinois Writing Project and the following journals: *International Journal of Education & the Arts, Journal of Curriculum Studies*, and *American Educational Research Journal.* The department also has available resources and some workshops provided during the academic year. Program areas including DELTA, CREATE, Language & Literacy, and MSE offer discipline-specific resources.

The College of Education also has many resources to assist graduate students through their academic career. The Bureau of Educational Research works with students to secure research funding. The Council on Teacher Education (http://cote.illinois.edu/) entitles candidates seeking a Professional Educator License and provides accreditation of professional education programs. Each student completing a degree program is assigned a graduate adviser, who is available to assist the student with planning the program of study and determining degree requirements, courses and timelines for degree completion.

Information on University resources can be found at http://www.grad.illinois.edu/current-students (http://www.grad.illinois.edu/current-students/).

Financial Aid

Financial aid in the form of assistantships, scholarships, fellowships, and tuition waivers can be found throughout the college (https://education.illinois.edu/current-students/graduate/financial-aid/) and campus. Campus opportunities can be found at the Graduate College (http://www.grad.illinois.edu/funding-jobs/) and the Office of Student Financial Aid (http://www.osfa.illinois.edu/). **Please note: Graduate students employed as Staff by the University of Illinois at Urbana-Champaign are not eligible for a College of Education Award or Scholarship.**

for the Certificate of Advanced Study in Curriculum and Instruction

A list of additional requirements can be found on the program's website, (https://education.illinois.edu/faceted-search/programs/?degree=cas&department=ci) the College of Education Graduate Programs Handbook (https://education.illinois.edu/current-students/graduate/coe-graduate-handbook/), and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Students may select a concentration in Bilingual-Bicultural Education. (http://catalog.illinois.edu/graduate/education/concentration/bilingual-bicultural-education/)

Code	Title	Hours
If the student does not have a Master's degree from the University of Illinois at Urbana-Champaign, Foundation Courses must be completed as prerequisites:		
Psychological Foundations Courses in Educational Psychology		
Select one of the following:		4
EPSY 400	Psychology of Learning in Education	
EPSY 401	Child Language and Education	
EPSY 402	Sociocultural Influence on Learning	
EPSY 404	Adjustment in School Settings	
EPSY 405	Personality and Soc Dev	
EPSY 406	Psychology of Classroom Management	
EPSY 407	Adult Learning and Development	
EPSY 408	Learning and Human Development with Educational Technology	
EPSY 430	Early Adolescent Development	
EPSY 485	Assessing Student Performance	
EPSY 490	Developments in Educational Psychology	
EPSY 553	Global Issues in Learning	
Philosophical and Social Foundations Courses in Education Policy, Organization and Leadership		
Select one of the following:		4
EPOL 401	History of American Education	
EPOL 402	Asian American Education	
EPOL 403	Historical and Social Barriers	
EPOL 405	School and Society	
EPOL 406	Professional Ethics in Education	

EPOL 407	Critical Thinking in Education	
EPOL 408	Aesthetic Education	
EPOL 409	Sociology of Education	
EPOL 410	Racial and Ethnic Families	
EPOL 412	Politics of Education	
EPOL 413	Economics of Education	
EPOL 480	Technology and Educational Reform	
EPOL 539		
Elective Hours:		24-32
General Coursework Required: 16 hours		
Research/Project/Independent Study Hours (min/max applied toward degree):		0-8
Total Hours		32

Other Requirements (may overlap)

Requirement	Description
Other requirements may overlap	
Enrollment must be preceded by at least two years of acceptable professional work experience.	
500-Level Hours Required:	16 hours (Independent Study included)
Minimum GPA:	3.0

Curriculum & Instruction, EdD

for the degree of Doctor of Education Major in Curriculum and Instruction

head of the department: Sarah McCarthey
director of graduate studies: Gloriana Gonzalez
graduate admissions information: Mitzi Koeberlein
overview of admissions & requirements: College of Education (https://education.illinois.edu/programs/grad/how-to-apply/?url=/programs/grad)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: http://education.illinois.edu/ci (http://education.illinois.edu/ci/)
program website: College of Education Programs (https://education.illinois.edu/faceted-search/programs/)
department faculty: Curriculum & Instruction Faculty (https://education.illinois.edu/faculty-finder/ci/)
college website: http://education.illinois.edu/
department office: 142 Education Building, 1310 South Sixth Street, Champaign, IL 61820
phone: (217) 244-3542
email: gradservices@education.illinois.edu

Graduate Degree Programs in Curriculum & Instruction

Curriculum and Instruction, EdM (p. 693) **(on campus, off-campus & online)**
- **optional concentrations:** Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)

Curriculum and Instruction, MA (p. 695)
- **optional concentrations:** Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)

Curriculum and Instruction, MS (p. 697)
- **optional concentrations:** Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)

Curriculum and Instruction, CAS (p. 689) **(on campus, off-campus & online)**
- **optional concentration:** Bilingual-Bicultural Education (p. 1076)

Curriculum and Instruction, EdD (p. 691) **(on campus, off-campus & online)**
- **optional concentrations:** Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)

Curriculum and Instruction, PhD (p. 699)
- **optional concentrations (PhD only):**
  - Digital Learning (p. 1093)|Second Language Acquisition and Teacher Education (http://www.slate.illinois.edu/)
  - Writing Studies (p. 1111)

Early Childhood Education, EdM (p. 703) **with teacher licensure**
- **optional concentrations:** Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)

Elementary Education, EdM (p. 742) **with teacher licensure**
- **optional concentrations:** Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)

Secondary Education, EdM (p. 994) **with teacher licensure**
- **concentrations:** English (p. 996)|Mathematics (p. 997)|Sciences (p. 997)|Social Science: History (p. 999)
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Only master's students wishing to become licensed teachers in one of these three areas should apply to the Early Childhood Education, Elementary Education, or Secondary Education majors. Master's candidates who do not wish to become teachers, or are already teachers, should apply to the major in Curriculum and Instruction.

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combined with teacher education. The Ed.D. Program prepares scholarly practitioners for leadership positions in teacher training institutions, state education agencies, and public school districts.

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Admission

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Faculty Research Interests

For information about specific faculty research interests, current grants, and publications, please visit the Faculty Finder (https://education.illinois.edu/faculty-finder/).

Facilities and Resources

Departmental resources consist of cooperation with Children's Research Center, Center for Small Urban Communities, as well as other resources in the College. Students who are interested in second language acquisition can become a part of the SLATE program. The department is connected to the University of Illinois Writing Project and the following journals: *International Journal of Education & the Arts, Journal of Curriculum Studies*, and *American Educational Research Journal.* The department also has available resources and some workshops provided during the academic year. Program areas including DELTA, CREATE, Language & Literacy, and MSE offer discipline-specific resources.

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Information on University resources can be found at http://www.grad.illinois.edu/current-students (http://www.grad.illinois.edu/current-students/).

Financial Aid

Financial aid in the form of assistantships, scholarships, fellowships, and tuition waivers can be found throughout the college (https://education.illinois.edu/current-students/graduate/financial-aid/) and campus. Campus opportunities can be found at the Graduate College (http://www.grad.illinois.edu/funding-jobs/) and the Office of Student Financial Aid (http://www.osfa.illinois.edu/). **Please note: Graduate students employed as Staff by the University of Illinois at Urbana-Champaign are not eligible for a College of Education Award or Scholarship.**

for the degree of Doctor of Education Major in Curriculum and Instruction

The Department of Curriculum and Instruction offers many programs leading to the degree of Doctor of Education (Ed.D.). A list of programs and additional requirements can be found on the program's website, (https://education.illinois.edu/faceted-search/programs/?degree=edd&department=ci) the College of Education Graduate Programs Handbook (https://education.illinois.edu/current-students/graduate/coe-graduate-handbook/), and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Students may select a concentration in Bilingual-Bicultural Education (http://catalog.illinois.edu/graduate/education/concentration/bilingual-bicultural-education/) or Digital Learning (http://catalog.illinois.edu/graduate/education/concentration/digital-learning/).

Code	Title	Hours
Major subject coursework (includes concentration courses)		12
Research Methods		12
Elective Hours (includes 0-12 hours of independent study)		36
CI 599	Thesis Research (min/max applied toward degree)	4-16
Total Hours		64

Other Requirements

Requirement	Description
Master's Degree Required for Admission to Ph.D.	
Residency	2 consecutive full-time (12 hours) semesters of study on campus
Qualifying Exams	
Human Subjects Approval	
Premiminary Exam	
Final Exam/Dissertation Defense	
Dissertation Deposit	
Minimum GPA	3.0

Learning Outcomes: Curriculum & Instruction, EdD

Learning Outcomes for the degree of Doctor of Education Major in Curriculum and Instruction

1. Students will develop a deep knowledge of a content area and a related cognate connected to curriculum and instruction.
2. Students will demonstrate the ability to plan, implement, analyze data, and author a dissertation.
3. Students will read, interpret, and critique scholarship in their academic field and across multiple fields.
4. Students will understand issues related to school and society including existing inequities.
5. Students will connect research with instructional practices that support learning and connect research to their professional practices.

Curriculum & Instruction, EdM

for the degree of Master of Education in Curriculum & Instruction

head of the department: Sarah McCarthey
director of graduate studies: Gloriana Gonzalez
graduate admissions information: Mitzi Koeberlein
overview of admissions & requirements: College of Education (https://education.illinois.edu/programs/grad/how-to-apply/?url=/programs/grad)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: http://education.illinois.edu/ci (http://education.illinois.edu/ci/)
program website: College of Education Programs (https://education.illinois.edu/faceted-search/programs/)
department faculty: Curriculum & Instruction Faculty (https://education.illinois.edu/faculty-finder/ci/)
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email: gradservices@education.illinois.edu

Graduate Degree Programs in Curriculum & Instruction

Curriculum and Instruction, EdM (p. 693) **(on campus, off-campus & online)**
- **optional concentrations:** Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)

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- **concentrations:** English (p. 996)|Mathematics (p. 997)|Sciences (p. 997)|Social Science: History (p. 999)
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Code	Title	Hours
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Select one of the following:		4
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EPSY 402	Sociocultural Influence on Learning	
EPSY 404	Adjustment in School Settings	
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EPSY 490	Developments in Educational Psychology	
EPSY 553	Global Issues in Learning	
Philosophical and Social Foundations Courses in Education Policy, Organization and Leadership		
Select one of the following:		4
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EPOL 402	Asian American Education	
EPOL 403	Historical and Social Barriers	
EPOL 405	School and Society	
EPOL 406	Professional Ethics in Education	

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EPOL 408	Aesthetic Education	
EPOL 409	Sociology of Education	
EPOL 410	Racial and Ethnic Families	
EPOL 412	Politics of Education	
EPOL 413	Economics of Education	
EPOL 480	Technology and Educational Reform	
EPOL 539		
Elective Hours:		24
400/500-Level Hours Required: 12 hours (Independent Study included)		
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Research/Project/Independent Study Hours (min/max applied toward degree):		0-8
Total Hours		32

Other Requirements

Requirement	Description
Minimum GPA	3.0

Learning Outcomes: Curriculum & Instruction, EdM

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Curriculum & Instruction, MA

for the degree of Master of Arts in Curriculum & Instruction

head of the department: Sarah McCarthey
director of graduate studies: Gloriana Gonzalez
graduate admissions information: Mitzi Koeberlein
overview of admissions & requirements: College of Education (https://education.illinois.edu/programs/grad/how-to-apply/?url=/programs/grad)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: http://education.illinois.edu/ci (http://education.illinois.edu/ci/)
program website: College of Education Programs (https://education.illinois.edu/faceted-search/programs/)
department faculty: Curriculum & Instruction Faculty (https://education.illinois.edu/faculty-finder/ci/)
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Philosophical and Social Foundations Courses in Education Policy, Organization and Leadership		**4**
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overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: http://education.illinois.edu/ci (http://education.illinois.edu/ci/)
program website: College of Education Programs (https://education.illinois.edu/faceted-search/programs/)
department faculty: Curriculum & Instruction Faculty (https://education.illinois.edu/faculty-finder/ci/)
college website: http://education.illinois.edu/
department office: 142 Education Building, 1310 South Sixth Street, Champaign, IL 61820
phone: (217) 244-3542
email: gradservices@education.illinois.edu

Graduate Degree Programs in Curriculum & Instruction

Curriculum and Instruction, EdM (p. 693) **(on campus, off-campus & online)**
- **optional concentrations:** Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)

Curriculum and Instruction, MA (p. 695)
- **optional concentrations:** Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)

Curriculum and Instruction, MS (p. 697)
- **optional concentrations:** Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)

Curriculum and Instruction, CAS (p. 689) **(on campus, off-campus & online)**
- **optional concentration:** Bilingual-Bicultural Education (p. 1076)

Curriculum and Instruction, EdD (p. 691) **(on campus, off-campus & online)**
- **optional concentrations:** Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)

Curriculum and Instruction, PhD (p. 699)
- **optional concentrations (PhD only):**
  - Digital Learning (p. 1093)|Second Language Acquisition and Teacher Education (http://www.slate.illinois.edu/)
  - Writing Studies (p. 1111)

Early Childhood Education, EdM (p. 703) **with teacher licensure**
- **optional concentrations:** Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)

Elementary Education, EdM (p. 742) **with teacher licensure**
- **optional concentrations:** Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)

Secondary Education, EdM (p. 994) **with teacher licensure**
- **concentrations:** English (p. 996)|Mathematics (p. 997)|Sciences (p. 997)|Social Science: History (p. 999)
- **optional concentrations:** Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)

Through the Master of Education and the Certificate of Advanced Study, experienced teachers are prepared to become more competent and better informed practitioners who serve as leaders for educational reform in local schools and school districts.

Also offered are master's degree programs leading to teacher licensure for individuals who have a degree in a field other than education and wish to become teachers. The three majors leading to licensure are Early Childhood Education (Birth - Grade 2), Elementary Education (Grades 1 - 6), and Secondary Education (Grades 9 - 12). In addition to completing the courses required for an Ed.M. degree, students in these programs follow the same sequence of professional education courses as undergraduate students.

Only master's students wishing to become licensed teachers in one of these three areas should apply to the Early Childhood Education, Elementary Education, or Secondary Education majors. Master's candidates who do not wish to become teachers, or are already teachers, should apply to the major in Curriculum and Instruction.

Two doctoral degree programs are offered. The Ph.D. program prepares degree candidates for careers involving research and scholarship, including those in colleges and universities where research is generally combined with teacher education. The Ed.D. Program prepares scholarly practitioners for leadership positions in teacher training institutions, state education agencies, and public school districts.

Length of time for a degree: an Ed.M. program can be completed in a calendar year, while the M.S. or M.A. often takes longer. The Ed.M. with licensure typically takes two years to complete. Doctoral programs usually require four to five years of full time study.

Admission

Interested applicants should start at http://education.illinois.edu/programs/grad (http://education.illinois.edu/programs/grad/). In addition to the application, the applicant is required to submit the following information: a statement of purpose, updated resume, official transcripts from all colleges attended, and three letters of recommendation. A scholarly writing sample in English, such as a master's thesis, article, or paper, is required for application to a doctoral program. Note: The master's with teacher licensure program only admits students for the fall term.

International applicants must submit TOEFL scores. The Department of Curriculum and Instruction's TOEFL requirement for full status admission is greater than 102; the minimum score for limited status is 550 on the paper-based test, 79 on the internet-based test and 213 on the computer-based test. International applicants must also submit a Declaration and Certification of Finances. Please note: TOEFL or IELTS scores must be less than two years old from the first day of class at the proposed term of entry in order to be valid. In addition, individual academic programs may require a higher score, or evidence of spoken English language proficiency; contact your proposed program of study office (http://www.grad.illinois.edu/admissions/depts/) for the minimum TOEFL, TSE, or IELTS requirement for admission. For additional details, refer to the Graduate College Handbook www.grad.illinois.edu/admissions/instructions/04c (http://www.grad.illinois.edu/admissions/instructions/04c/).

Faculty Research Interests

For information about specific faculty research interests, current grants, and publications, please visit the Faculty Finder (https://education.illinois.edu/faculty-finder/).

Facilities and Resources

Departmental resources consist of cooperation with Children's Research Center, Center for Small Urban Communities, as well as other resources in the College. Students who are interested in second language acquisition can become a part of the SLATE program. The department is connected to the University of Illinois Writing Project and the following journals: *International Journal of Education & the Arts, Journal of Curriculum Studies*, and *American Educational Research Journal.* The department also has available resources and some workshops provided during the academic year. Program areas including DELTA, CREATE, Language & Literacy, and MSE offer discipline-specific resources.

The College of Education also has many resources to assist graduate students through their academic career. The Bureau of Educational Research works with students to secure research funding. The Council on Teacher Education (http://cote.illinois.edu/) entitles candidates seeking a Professional Educator License and provides accreditation of professional education programs. Each student completing a degree program is assigned a graduate adviser, who is available to assist the student with planning the program of study and determining degree requirements, courses and timelines for degree completion.

Information on University resources can be found at http://www.grad.illinois.edu/current-students (http://www.grad.illinois.edu/current-students/).

Financial Aid

Financial aid in the form of assistantships, scholarships, fellowships, and tuition waivers can be found throughout the college (https://education.illinois.edu/current-students/graduate/financial-aid/) and campus. Campus opportunities can be found at the Graduate College (http://www.grad.illinois.edu/funding-jobs/) and the Office of Student Financial Aid (http://www.osfa.illinois.edu/). **Please note: Graduate students employed as Staff by the University of Illinois at Urbana-Champaign are not eligible for a College of Education Award or Scholarship.**

for the degree of Doctor of Philosophy in Curriculum & Instruction

The Department of Curriculum and Instruction offers many programs leading to the degree of Doctor of Philosophy (Ph.D.). A list of programs and additional requirements can be found on the program's website, (https://education.illinois.edu/faceted-search/programs/?degree=edd&department=ci) the College of Education Graduate Programs Handbook (https://education.illinois.edu/current-students/graduate/coe-graduate-handbook/), and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Students may select a concentration in Digital Learning (http://catalog.illinois.edu/graduate/education/concentration/digital-learning/), Second Language Acquisition and Teacher Education (http://www.slate.illinois.edu/), or Writing Studies (http://catalog.illinois.edu/graduate/las/concentration/writing-studies/).

Code	Title	Hours
Completion of at least 64 hours beyond the master's degree including:		
Major Subject Coursework (minimum)		32
CI 599	Thesis Research (min/max applied toward degree)	4-20
Independent Study (min/max applied toward degree)		0-12
Research Coursework [1]		16-20
Total Hours		64

Other Requirements

Requirement	Description
Master's Degree Required for Admission to Ph.D.	
Residency	2 consecutive full-time (12 hours) semesters of study on campus
Early Research Requirement	
Qualifying Exams	
Human Subjects Approval	
Preliminary Exam	
Final Exam/Dissertation Defense	
Dissertation Deposit	
Minimum GPA	3.0

[1] *All students will take a minimum of 16-20 credit hours, depending on area of methodology focus, in approved* research methods courses *(*https://education.illinois.edu/current-students/graduate/coe-graduate-handbook/phd/#PhDResearch*).*

Learning Outcomes: Curriculum & Instruction, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Curriculum & Instruction

1. Students will develop a deep knowledge of a content area connected to curriculum and instruction
2. Students will demonstrate the ability to plan, implement, analyze data, and author academic papers.
3. Students will read, interpret, and critique scholarship in their academic field and across multiple fields.
4. Students will understand issues related to school and society including existing inequities.
5. Students will connect research with instructional practices that support learning.

Dance, MFA

for the degree of Master of Fine Arts in Dance

department head: Jan Erkert
director of the MFA program: Jennifer Monson
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: Dance (https://dance.illinois.edu/)
college website: College of Fine & Applied Arts (https://faa.illinois.edu/)
department office: 907 1/2 West Nevada Street, Urbana, IL 61801
phone: (217) 333-3890
email: dance@illinois.edu

The MFA Curriculum is designed to promote a candidate's progress through our stated objectives: Choreography, Communication, Moving, Teaching, and Career Planning.
Included in these are courses in dance studies, somatics, pedagogy, and two semesters devoted to an innovative lab team taught by our faculty and designed in collaboration with students. The final year of study is devoted to synthesizing the above objectives evidenced by the production of the candidate's choreography, their written thesis document, oral presentation, and plans for propelling students' career into the professional sphere.

Graduate Degree Programs in Dance

Dance, MFA (p. 701)
Graduate Minor in Dance (p. 1131)

The Department of Dance offers a graduate program leading to the Master of Fine Arts degree. The mission of the MFA Program is to foster substantive choreographic research that posits dance as a force in contemporary culture. The program embraces a wide spectrum of individual movement research and embodied practice to create a dynamic learning atmosphere for critical engagement with choreographic process.

The Dance Department expects MFA candidates to conduct a creative inquiry that leads to the development of a sophisticated sense of self-definition. Individual research and analysis should culminate in the development of a personal artistic process and mission and should be evident in the following contexts:

- Choreographing- Candidates will develop a distinctive choreographic research methodology and demonstrate its skillful application in a performative context. This ideology must establish solid foundation for ongoing research and engagement that contributes to the global dialogue about dance and contemporary culture.
- Communicating- Candidates will develop the ability to express their choreographic vision and process in verbal and written language that is clear, cogent, and convincing and demonstrates clear analytic skill, critical thinking, awareness of historical context, and knowledge of contemporary culture.
- Moving- Candidates will demonstrate a commitment to movement investigation and practice that defines, advances, and sustains their choreographic vision.
- Teaching-Candidates will apply their research vision in clear pedagogic principles while fostering a stimulating teaching/ learning environment.
- Career Planning-Candidates are assessed on their ability to develop innovative career strategies in order to advance their artistic mission in the field and demonstrate the capacity to implement these plans with professionalism in all the above contexts.

Admission Requirements

Prerequisites for admission to the MFA program are:

1. An undergraduate degree and significant experience in dance is required.
2. Demonstrated choreographic achievement and potential to make innovative contributions to the field.
3. Demonstrated potential to engage in critical thinking and writing.
4. A minimum grade point average of 3.0 on a 4 point scale, computed from the last 60 hours of undergraduate work and any graduate work completed.

International students must be eligible for full status admission. International students who receive a TOEFL score greater than 103 on the internet-based test, 257 on the computer-based test, or 613 on the paper test are eligible for full status admission. Students with these scores are exempt from the English as a Second Language Placement Test. The GRE is not required.

Faculty Research Interests

An extraordinary faculty of artists, researchers and scholars has gathered at Illinois, who are creating new paradigms for interactions between the professional arena and the academic training ground. Our group of professional artists includes Jan Erkert, Sara Hook, Philip Johnston, Linda Lehovec, Jennifer Monson, Kemal Nance, Rebecca Nettl-Fiol, Tere O'Connor, Cynthia Oliver, Kirstie Simson, Endalyn Taylor, John Toenjes, and Abby Zbikowski, all of whom share a commitment to teaching and preparing students for leadership roles in the field of dance.

Financial Aid

Two forms of financial aid are offered to graduate students by the Department of Dance:

- Teaching and administration assistantships are available to graduate students. Assistantships of 25% or greater qualify the student for a tuition waiver. All students are required to apply for Federal Work Study.
- A variety of Fellowships are available through The Graduate College each year, including: (A full listing of Fellowships can be found at: www.grad.illinois.edu/fellowships (http://www.grad.illinois.edu/fellowships/))
  - The Creative and Performing Arts Fellowship, which may include stipends up to a maximum of $6,000 for a student demonstrating outstanding choreographic and performance talent.
  - The Graduate College Fellowship for Underrepresented Students provides fellowships in the amount of $8,000 and are available to outstanding minority students.

Prospective MFA candidates are encouraged to apply for financial assistance through the Office of Student Financial Aid, 420 Student Services Bldg., University of Illinois at Urbana-Champaign, Champaign, IL 61820. (217) 333-0100.

for the degree of Master of Fine Arts in Dance

Code	Title	Hours
Physical Practice, at least 2 hours through DANC 560		6
Historical and Theoretical Studies		8

DANC 510	Grad Seminar/Special Topics	
DANC 541	Contemporary Directions I	
DANC 542	Contemporary Directions II	
Composition		4
DANC 462	Composition Workshop	
DANC 562	Graduate Composition II	
Performance		2
DANC 420	Perf Pract Student Works II	
DANC 421	Performance in Grad Thesis II	
DANC 422	Perf Pract November II	
DANC 423	Perf Pract February II	
DANC 424	Collaborative Performance	
Research/Project		8
DANC 598	Creative Thesis Project	
Graduate Synthesis Laboratory		8
DANC 520	Synthesis Laboratory	
Somatics in Dance Training		3
DANC 530	Somatics in Dance Training	
400/500 level elective course outside the Department of Dance in related area of research		4
Electives which may be taken in Dance or related areas of interest		17
Total Hours		60

Other Requirements [1]

Requirement
Other requirements may overlap
Course work taken to completed undergraduate deficiencies will not receive graduate credit.
Residency requirement of three years (six semesters)
Minimum GPA: 2.75

[1] *For additional details and requirements refer to the department's* MFA Handbook *(*http://dance.uiuc.edu/prospective-students/mfa/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Dance, MFA

Learning Outcomes for the degree of Master of Fine Arts in Dance

The Department of Dance expects MFA candidates to conduct in-depth creative inquiries that culminate in the development of a personal artistic process and mission that are evident in the following contexts:

1. **Choreographing:** Candidates will develop a distinctive choreographic research methodology and demonstrate skillful application in a performative context. This ideology must establish solid foundation for ongoing research and engagement that contributes to the global dialogue about dance and contemporary culture.
2. **Communicating:** Candidates will develop the ability to express their choreographic vision and process in verbal and written language that is clear, cogent, and convincing and demonstrates analytical skill, critical thinking, awareness of historical context, and knowledge of contemporary culture.
3. **Moving:** Candidates will demonstrate a commitment to movement investigation and practice that defines, advances, and sustains their choreographic vision.
4. **Teaching:** Candidates will apply their research vision in clear pedagogic principles while fostering a stimulating teaching/learning environment.
5. **Career Planning:** Candidates are assessed on their ability to develop innovative career strategies in order to advance their artistic mission in the field and demonstrate the capacity to implement these plans with professionalism in all the above contexts.

Early Childhood Education, EdM

for the degree of Master of Education in Early Childhood Education with teaching licensure

head of the department: Sarah McCarthey
director of graduate studies: Gloriana Gonzalez
graduate admissions information: Mitzi Koeberlein
overview of admissions & requirements: College of Education (https://education.illinois.edu/programs/grad/how-to-apply/?url=/programs/grad)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: http://education.illinois.edu/ci (http://education.illinois.edu/ci/)
program website: College of Education Programs (https://education.illinois.edu/faceted-search/programs/)
department faculty: Curriculum & Instruction Faculty (https://education.illinois.edu/faculty-finder/ci/)
college website: http://education.illinois.edu/
department office: 142 Education Building, 1310 South Sixth Street, Champaign, IL 61820
phone: (217) 244-3542
email: gradservices@education.illinois.edu

Graduate Degree Programs in Curriculum & Instruction

Curriculum and Instruction, EdM (p. 693) **(on campus, off-campus & online)**
- **optional concentrations:** Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)

Curriculum and Instruction, MA (p. 695)
- **optional concentrations:** Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)

Curriculum and Instruction, MS (p. 697)
- **optional concentrations:** Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)

Curriculum and Instruction, CAS (p. 689) **(on campus, off-campus & online)**
- **optional concentration:** Bilingual-Bicultural Education (p. 1076)

Curriculum and Instruction, EdD (p. 691) **(on campus, off-campus & online)**
- **optional concentrations:** Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)

Curriculum and Instruction, PhD (p. 699)
- **optional concentrations (PhD only):**
  - Digital Learning (p. 1093)|Second Language Acquisition and Teacher Education (http://www.slate.illinois.edu/)
  - Writing Studies (p. 1111)

Early Childhood Education, EdM (p. 703) **with teacher licensure**
- **optional concentrations:** Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)

Elementary Education, EdM (p. 742) **with teacher licensure**
- **optional concentrations:** Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)

Secondary Education, EdM (p. 994) **with teacher licensure**
- **concentrations:** English (p. 996)|Mathematics (p. 997)|Sciences (p. 997)|Social Science: History (p. 999)
- **optional concentrations:** Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)

Through the Master of Education and the Certificate of Advanced Study, experienced teachers are prepared to become more competent and better informed practitioners who serve as leaders for educational reform in local schools and school districts.

Also offered are master's degree programs leading to teacher licensure for individuals who have a degree in a field other than education and wish to become teachers. The three majors leading to licensure are Early Childhood Education (Birth - Grade 2), Elementary Education (Grades 1 - 6), and Secondary Education (Grades 9 - 12). In addition to completing the courses required for an Ed.M. degree, students in these programs follow the same sequence of professional education courses as undergraduate students.

Only master's students wishing to become licensed teachers in one of these three areas should apply to the Early Childhood Education, Elementary Education, or Secondary Education majors. Master's candidates who do not wish to become teachers, or are already teachers, should apply to the major in Curriculum and Instruction.

Two doctoral degree programs are offered. The Ph.D. program prepares degree candidates for careers involving research and scholarship, including those in colleges and universities where research is generally combined with teacher education. The Ed.D. Program prepares scholarly practitioners for leadership positions in teacher training institutions, state education agencies, and public school districts.

Length of time for a degree: an Ed.M. program can be completed in a calendar year, while the M.S. or M.A. often takes longer. The Ed.M. with licensure typically takes two years to complete. Doctoral programs usually require four to five years of full time study.

Admission

Interested applicants should start at http://education.illinois.edu/programs/grad (http://education.illinois.edu/programs/grad/). In addition to the application, the applicant is required to submit the following information: a statement of purpose, updated resume, official transcripts from all colleges attended, and three letters of recommendation. Graduate Record Examination (GRE) scores must be submitted for all doctoral applicants. A scholarly writing sample in English, such as a master's thesis, article, or paper, is required for application to a doctoral program. Note: The master's with teacher licensure program only admits students for the fall term.

International applicants must submit TOEFL scores. The Department of Curriculum and Instruction's TOEFL requirement for full status admission is greater than 102; the minimum score for limited status is 550 on the paper-based test, 79 on the internet-based test and 213 on the computer-based test. International applicants must also submit a Declaration and Certification of Finances. Please note: TOEFL or IELTS scores must be less than two years old from the first day of class at the proposed term of entry in order to be valid. In addition, individual academic programs may require a higher score, or evidence of spoken English language proficiency; contact your proposed program of study office (http://www.grad.illinois.edu/admissions/depts/) for the minimum TOEFL, TSE, or IELTS requirement for admission. For additional details, refer to the Graduate College Handbook www.grad.illinois.edu/admissions/instructions/04c (http://www.grad.illinois.edu/admissions/instructions/04c/).

Faculty Research Interests

For information about specific faculty research interests, current grants, and publications, please visit the Faculty Finder (https://education.illinois.edu/faculty-finder/).

Facilities and Resources

Departmental resources consist of cooperation with Children's Research Center, Center for Small Urban Communities, as well as other resources in the College. Students who are interested in second language acquisition can become a part of the SLATE program. The department is connected to the University of Illinois Writing Project and the following journals: *International Journal of Education & the Arts, Journal of Curriculum Studies*, and *American Educational Research Journal.* The department also has available resources and some workshops provided during the academic year. Program areas including DELTA, CREATE, Language & Literacy, and MSE offer discipline-specific resources.

The College of Education also has many resources to assist graduate students through their academic career. The Bureau of Educational Research works with students to secure research funding. The Council on Teacher Education (http://cote.illinois.edu/) entitles candidates seeking a Professional Educator License and provides accreditation of professional education programs. Each student completing a degree program is assigned a graduate adviser, who is available to assist the student with

planning the program of study and determining degree requirements, courses and timelines for degree completion.

Information on University resources can be found at http://www.grad.illinois.edu/current-students (http://www.grad.illinois.edu/current-students/).

Financial Aid

Financial aid in the form of assistantships, scholarships, fellowships, and tuition waivers can be found throughout the college (https://education.illinois.edu/current-students/graduate/financial-aid/) and campus. Campus opportunities can be found at the Graduate College (http://www.grad.illinois.edu/funding-jobs/) and the Office of Student Financial Aid (http://www.osfa.illinois.edu/). **Please note: Graduate students employed as Staff by the University of Illinois at Urbana-Champaign are not eligible for a College of Education Award or Scholarship.**

for the degree of Master of Education in Early Childhood Education with teaching licensure

Additional requirements can be found on the program's website, (https://education.illinois.edu/ci/programs-degrees/ec/) the College of Education Graduate Programs Handbook (https://education.illinois.edu/current-students/graduate/coe-graduate-handbook/), and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Students may select a concentration in Bilingual-Bicultural Education (http://catalog.illinois.edu/graduate/education/concentration/bilingual-bicultural-education/) or Digital Learning (http://catalog.illinois.edu/graduate/education/concentration/digital-learning/).

Code	Title	Hours
Psychological Foundations Courses in Educational Psychology		
Select one of the following:		4
EPSY 400	Psychology of Learning in Education	
EPSY 401	Child Language and Education	
EPSY 402	Sociocultural Influence on Learning	
EPSY 404	Adjustment in School Settings	
EPSY 405	Personality and Soc Dev	
EPSY 406	Psychology of Classroom Management	
EPSY 407	Adult Learning and Development	
EPSY 408	Learning and Human Development with Educational Technology	
EPSY 430	Early Adolescent Development	
EPSY 485	Assessing Student Performance	
EPSY 490	Developments in Educational Psychology	
EPSY 553	Global Issues in Learning	
Philosophical and Social Foundations Courses in Education Policy, Organization and Leadership		
Select one of the following:		4
EPOL 401	History of American Education	
EPOL 402	Asian American Education	
EPOL 403	Historical and Social Barriers	
EPOL 405	School and Society	
EPOL 406	Professional Ethics in Education	
EPOL 407	Critical Thinking in Education	
EPOL 408	Aesthetic Education	
EPOL 409	Sociology of Education	
EPOL 410	Racial and Ethnic Families	
EPOL 412	Politics of Education	
EPOL 413	Economics of Education	
EPOL 480	Technology and Educational Reform	
EPOL 539		
Elective Hours:		24
400/500-Level Hours Required: 12 hours (Independent Study included)		
500-Level Hours Required in Education:12 hours		
Research/Project/Independent Study Hours (min/max applied toward degree):		0-8
Total Hours		32

Other Requirements:

Requirement	Description
Field Placement Information	http://education.illinois.edu/sce (http://education.illinois.edu/sce/)
Minimum GPA	3.0

Learning Outcomes: Early Childhood Education, EdM

Learning Outcomes for the degree of Master of Education in Early Childhood Education with teaching licensure

1. Students will acquire deep knowledge of child development as it relates to the field of Education.
2. Students will effectively plan and implement relevant, culturally responsive and developmentally appropriate instruction children from infancy to age eight.
3. Students will use assessment data to drive decisions and solve problems in and out of the classroom.
4. Students will display the expectations of professionalism related to success in the field of education and beyond (fairness, commitment to collaboration, community, reflective practice, and attention to 21st century skills and practices)

East Asian Languages & Cultures, MA

for the degree of Master of Arts in East Asian Languages & Cultures

chair of department:
director of graduate studies:
overview of admissions & requirements: Graduate Degree Information East Asian Languages & Cultures (https://ealc.illinois.edu/academics/degree-programs/graduate/graduate-admissions/)
college website: LAS (https://www.las.illinois.edu/)
department website: Department of East Asian Languages & Cultures (https://ealc.illinois.edu/)
department faculty: East Asian Languages & Cultures Faculty (https://ealc.illinois.edu/directory/faculty-by-area/)
department office: 2090 Foreign Languages Building, 707 South Mathews, Urbana, IL 61801
phone: (217) 244-1432
email: ealc@illinois.edu

Graduate Degree Programs in East Asian Languages & Cultures

East Asian Languages & Cultures, MA (p. 705)
East Asian Languages and Cultures, PhD (p. 707)
optional concentrations:
Medieval Studies (p. 1101)|Second Language Acquisition & Teacher Education (p. 1106)

Admission

Applicants are expected to have a strong background in at least one East Asian language; normally, this means a minimum of two years of formal study. Applicants to the graduate program must submit an application for admission online (www.grad.illinois.edu/admissions/apply (http://www.grad.illinois.edu/admissions/apply/)) and submit a statement of purpose, three letters of reference completed by teachers, advisers, or recent employers, and a 10-20 page writing sample. Original transcripts (with English translations if applicable) showing all undergraduate and graduate work completed should be sent to:

SLCL Graduate Student Services
3070 Foreign Languages Bldg.
707 S. Mathews Ave.
Urbana, IL 61801

Graduate Record Examination (GRE) scores are required and should be submitted to institution code 1836. Applicants whose native language is not English are required to take the Test of English as a Foreign Language (TOEFL) and must score at least 103 on the internet-based test (iBT) for admission with full standing; they must also pass the speaking sub-section of the iBT with a minimum score of 24 (see www.grad.illinois.edu/Admissions/instructions/04c (http://www.grad.illinois.edu/Admissions/instructions/04c/)). Students with a B.A. or B.S. only should apply to the M.A. Applications are accepted for fall admission only. Application questions may be directed to SLCL Graduate Student Services at slclgradservices@illinois.edu. (slclgradservices@illinois.edu)

Medical Scholars Program

The Medical Scholars Program permits highly qualified students to integrate the study of medicine with study for a graduate degree in a second discipline, including East Asian Languages and Cultures. Students may apply to the Medical Scholars Program prior to beginning graduate school or while in the graduate program. Applicants to the Medical Scholars Program must meet the admissions standards for and be accepted into both the doctoral graduate program and the College of Medicine. Students in the dual degree program must meet the specific requirements for both the medical and graduate degrees. On average, students take eight years to complete both degrees. Further information on this program is available by contacting the Medical Scholars Program, 125 Medical Sciences Building, (217) 333-8146 or at https://www.med.illinois.edu/mdphd/.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program. Therefore, applicants are requested to include information on teaching background as part of the application, and students can normally be expected to teach at least one semester as part of their graduate experience. Non-native English speakers must first pass a test of their oral English ability.

www.grad.uiuc.edu/admissions/taengprof.htm (http://www.grad.uiuc.edu/admissions/taengprof.htm)

Financial Aid

The Department makes every effort to assist graduate students in securing financial aid. Financial aid packages usually combine some form of fellowship support with teaching or research assistantships in a manner that allows for both teaching experience and timely completion of the degree. In recent years, almost all EALC graduate students have received some form of financial support. Financial aid for graduate students in the Department of East Asian Languages and Cultures may include:

- University Fellowships
- Foreign Language and Area Studies (FLAS) Fellowships
- University Dissertation Completion Fellowships
- Minority Academic Partnership Plan (MAPP) Fellowships
- teaching assistantships
- research assistantships

All awards of financial aid are made following competitive application.

https://www.grad.illinois.edu/fellowship/

for the degree of Master of Arts East Asian Languages and Cultures

For additional details and requirements refer to the department's guide to Graduate Programs (http://www.ealc.illinois.edu/programs/graduate/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Thesis Option

Code	Title	Hours
Two 500-level courses in the major field including one course designated as a research seminar in which the student produces a research paper using Asian language sources.		8
EALC 500	Proseminar in EALC	4
Distribution requirements. a minimum of two (8 hours) 400- or 500-level courses that are: 1. outside the major field of interest. 2. in an East Asian culture other than the major areas of interest. 3. in a Second Period (modern or premodern)		8
Elective hours		8

Language Requirement: Candidates must demonstrate a knowledge of one East Asian language at the fourth-year level by satisfactory completion of appropriate (400-level) coursework or examination and passage of a written examination covering material studied while in residence.		
EALC 599	Thesis Research (min/max applied toward degree)	4
Total Hours		32

Other Requirements (may overlap)

Requirement	Description
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	2.75

Non-Thesis Option

Code	Title	Hours
Two 500-level courses in the major field including one course designated as a research seminar in which the student produces a research paper using Asian language sources.		8
EALC 500	Proseminar in EALC	4
Distribution requirements. a minimum of two (8 hours) 400- or 500-level courses that are: 1. outside the major field of interest. 2. in an East Asian culture other than the major areas of interest. 3. in a Second Period (modern or premodern)		8
Elective hours		12
Language Requirement: Candidates must demonstrate a knowledge of one East Asian language at the fourth-year level by satisfactory completion of appropriate (400-level) coursework or examination and passage of a written examination covering material studied while in residence.		
Total Hours		32

Other Requirements (may overlap)

Requirement	Description
Minimum 500-level Hours Required Overall:	12
M.A. Examination	
Minimum GPA:	2.75

Learning Outcomes: East Asian Languages & Cultures, MA

Learning Outcomes for the degree of Master of Arts in East Asian Languages & Cultures

1. **Learning goal in East Asian languages:** Language proficiency in two East Asian languages.
2. **Learning goal in East Asian disciplines:** Familiarity with a major field and at least one minor field outside of the student's focused area to broaden students' perspectives and ability to conduct interdisciplinary research and to teach general courses.
3. **Learning goal in East Asian periods:** Understanding of both modern and pre-modern periods of East Asian societies.
4. **Learning goal in teaching preparedness:** Proficiency in teaching methodologies to teach languages or to teach Gen-Ed courses.
5. **Learning goal in research:** Completion of MA thesis or qualifying exams in three fields for MA students. Three qualifying exams, oral exam, and the completion of the dissertation and defense for Ph.D. students.

East Asian Languages and Cultures, PhD

for the degree of Doctor of Philosophy Major in East Asian Languages & Cultures

chair of department:
director of graduate studies:
overview of admissions & requirements: Graduate Degree Information East Asian Languages & Cultures (https://ealc.illinois.edu/academics/degree-programs/graduate/graduate-admissions/)
college website: LAS (https://www.las.illinois.edu/)
department website: Department of East Asian Languages & Cultures (https://ealc.illinois.edu/)
department faculty: East Asian Languages & Cultures Faculty (https://ealc.illinois.edu/directory/faculty-by-area/)
department office: 2090 Foreign Languages Building, 707 South Mathews, Urbana, IL 61801
phone: (217) 244-1432
email: ealc@illinois.edu

Graduate Degree Programs in East Asian Languages & Cultures

East Asian Languages & Cultures, MA (p. 705)
East Asian Languages and Cultures, PhD (p. 707)
optional concentrations:
Medieval Studies (p. 1101)|Second Language Acquisition & Teacher Education (p. 1106)

Admission

Applicants to the PhD program normally must hold a master's degree in East Asian studies or a related discipline with an East Asian concentration.

Candidates for the PhD may specialize in culture (e.g., religion, literature, history, anthropology), language acquisition, or language pedagogy, with a major concentration in China, Japan, or Korea.

Other general requirements include: an annual review of progress, including an evaluation of research capability; a written and oral preliminary examination in the major and two minor fields (after completion of coursework); presentation of a dissertation proposal (often as part of the preliminary exam); **and completion and defense of the dissertation.**

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program. Therefore, applicants are requested to include information on teaching background as part of the application, and students can normally be expected to teach at least one semester as part of their graduate experience. Non-native English speakers must first pass a test of their oral English ability.

www.grad.uiuc.edu/admissions/taengprof.htm (http://www.grad.uiuc.edu/admissions/taengprof.htm)

Financial Aid

The Department makes every effort to assist graduate students in securing financial aid. Financial aid packages usually combine some form of fellowship support with teaching or research assistantships in a manner that allows for both teaching experience and timely completion of the degree. In recent years, almost all EALC graduate students have received some form of financial support. Financial aid for graduate students in the Department of East Asian Languages and Cultures may include:

- University Fellowships
- Foreign Language and Area Studies (FLAS) Fellowships
- University Dissertation Completion Fellowships
- Minority Academic Partnership Plan (MAPP) Fellowships
- teaching assistantships
- research assistantships

All awards of financial aid are made following competitive application.

https://www.grad.illinois.edu/fellowship/

for the degree of Doctor of Philosophy Major in East Asian Languages & Cultures

Entering with approved M.S./M.A. degree

Code	Title	Hours
Courses in the major field defined by culture and discipline (500-level)		16
Research seminars (500-level)		8
Elective 500-level courses		8
Two graduate courses in a second discipline and two in a second culture must be completed as part of the Ph.D. coursework		
Language Requirement:		
Candidates must demonstrate a knowledge of one East Asian language at the fourth-year level by satisfactory completion of appropriate (400-level) coursework or examination and passage of a written examination covering material studied while in residence.		
Demonstration of proficiency in a second language relevant to the student's course of study usually Chinese, Japanese, Korean evidenced by either a) completion of minimum of two years of an approved sequence courses; or b) by examination.		
EALC 599	Thesis Research (32 max applied toward degree)	0-32
Total Hours		64

Other Requirements [1]

Requirement	Description
Other Requirements may overlap	
In addition to the language requirements noted above, Ph.D. students whose primary focus is Japan are required to take one year of classical Japanese, and those whose primary focus is China are required to take one year of classical Chinese. These may be counted toward degree requirements.	
Qualifying Exam Required	No
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	2.75

[1] *For additional details and requirements refer to the department's guide to* Graduate Programs *(*http://www.ealc.illinois.edu/programs/graduate/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Entering with approved B.S./B.A. degree

Code	Title	Hours
EALC 500	Proseminar in EALC	4
Two 500-level courses in the major field including one course designated as a research seminar in which the student produces a research paper using Asian language sources.		8
Distribution requirements. a minimum of two (8 hours) 400- or 500-level courses that are: 1. outside the major field of interest. 2. in an East Asian culture other than the major areas of interest. 3. in a Second Period (modern or premodern)		8
Elective hours to earn MA equivalency		12
Courses in the major field defined by culture and discipline (500-level)		16
Research seminars (500-level)		8
Elective 500-level courses		8
EALC 599	Thesis Research (32 max applied toward degree)	32
Total Hours		96

Other Requirements [1]

Requirement	Description
Other Requirements may overlap	
In addition to the language requirements noted above, Ph.D. students whose primary focus is Japan are required to take one year of classical Japanese, and those whose primary focus is China are required to take one year of classical Chinese. These may be counted toward degree requirements.	
Qualifying Exam Required	No

Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	2.75

[1] *For additional details and requirements refer to the department's guide to* Graduate Programs *(*http://www.ealc.illinois.edu/programs/graduate/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: East Asian Languages & Cultures, PhD

Learning Outcomes for the degree of Doctor of Philosophy Major in East Asian Languages & Cultures

1. **Learning goal in East Asian languages:** Language proficiency in two East Asian languages.
2. **Learning goal in East Asian disciplines:** Familiarity with a major field and at least one minor field outside of the student's focused area to broaden students' perspectives and ability to conduct interdisciplinary research and to teach general courses.
3. **Learning goal in East Asian periods:** Understanding of both modern and pre-modern periods of East Asian societies.
4. **Learning goal in teaching preparedness:** Proficiency in teaching methodologies to teach languages or to teach Gen-Ed courses.
5. **Learning goal in research:** Completion of MA thesis or qualifying exams in three fields for MA students. Three qualifying exams, oral exam, and the completion of the dissertation and defense for Ph.D. students.

Ecology, Evolution, & Conservation Biology, MS

for the degree of Master of Science in Ecology, Evolution & Conservation Biology

head of department: Angela Kent
department website: https://peec.illinois.edu/ (http://sib.illinois.edu/peec/)
school website: School of Integrative Biology (http://sib.illinois.edu/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department office: 320 Morrill Hall, 505 South Goodwin Avenue, Urbana, IL 61801
email: PEEC-Support@illinois.edu
phone: (217) 333-2910

Graduate Degree Programs in Ecology, Evolution & Conservation Biology

Ecology, Evolution & Conservation Biology, MS (p. 709)
Ecology, Evolution & Conservation Biology, PhD (p. 710)

The Program in Ecology, Evolution and Conservation Biology (PEEC) is an interdepartmental program designed to provide individualized training in preparation for careers in these disciplines. Because of the breadth of fields covered by this program, there will be no fixed course requirements other than attendance at the program's seminar series and annual graduate student symposium. Courses taken by a student and the student's Advisory Committee generally will come from multiple departments. The goal of the program's regulations is to allow maximum flexibility while providing close supervision, with the outcome of producing scientists who are broadly educated and technically competent in ecology, evolutionary biology and associated disciplines. The program offers M.S. and Ph.D. degrees.

Admission

Prospective candidates must meet the requirements for admission set by the Graduate College of the University of Illinois at Urbana-Champaign. Only applicants who have graduated from an accredited college or university and who hold or will be granted a baccalaureate degree (or its equivalent) comparable in content and completed credit hours to that granted by the University of Illinois will be considered. Applicants must have a minimum grade-point average of 3.0 (A = 4.0) computed from the last two years of undergraduate (and any graduate) work completed. The program will give preference to candidates who hold a degree in biology or a closely related discipline and show promise of excellence in research and teaching. Typically, only students with strong letters of recommendation and a GPA well above the minimum stated above will be admitted. Demonstration of academic excellence by other means (e.g., extensive field or laboratory research experience) will also be considered. The Admissions Committee will make decisions concerning admission. For students whose native language is not English, the Program requires a minimum paper-based TOEFL score of 613 (257 on the computer-based test or 103-104 on the web-based test).

Financial Aid

Students admitted to the Program are typically offered two years of support for the M.S. degree and five years of support for the Ph.D. Support consists of fellowships, teaching assistantships or research assistantships. Such support typically comes with a waiver of tuition, service fees, or both. Continued offers of assistantships or fellowships each academic year will depend on an evaluation of satisfactory progress by the Director of the Program. Students who require more than two years to complete the M.S. degree or five years to complete the Ph.D. degree must submit a written petition to the Director of the Program, supported by their Advisor, to be considered for an additional year of support.

for the degree of Master of Science in Ecology, Evolution & Conservation Biology

All students must register for and attend the weekly PEEC seminar series (IB 546A) each semester in residence. An orientation seminar (IB 546B) must be taken the first fall semester in residence. Excuses because of conflicts must be approved by the Director of the Program. Graduation requires the completion of a thesis. Student research will be guided and approved by an Advisory Committee of three faculty from at least two departments, including the Major Advisor who will serve as chair. The director of the program must approve membership of the Masters Advisory Committee.

For additional details and requirements refer to the Program's graduate handbook *(*http://sib.illinois.edu/peec/current/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Requirements

Code	Title	Hours
IB 546	Topics in Ecology & Evolution (Section A to be taken each semester of enrollment. Section B if not taken in MS program)	5
Students must complete one course from each core area (p. 710)		
Ecology Core List		
Evolution Core List		
Conservation Biology Core List		
Thesis Hours Required (8 min applied toward degree) (Credit in rubrics other than BIOL, NRES, PBIO or ENT must be petitioned to apply.):		8
Total Hours		**32**

Other Requirements

Requirement	Description
Other requirements may overlap	
Course work in three core areas with grades no lower than B or S.	
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	3.0

for the degree of Master of Science in Ecology, Evolution & Conservation Biology

Code	Title	Hours
Ecology Core Area Course, choose one:		
IB 431	Behavioral Ecology	
IB 439	Biogeography	
IB 442	Evolution of Infectious Disease	
IB 443	Evolutionary Ecology	
IB 444	Insect Ecology	
IB 447	Field Ecology	
IB 450	Stream Ecology	
IB 452	Ecosystem Ecology	
IB 453	Community Ecology	
NRES 419	Env and Plant Ecosystems	
NRES 465	Landscape Ecology	
Evolution and Systematics Core Area Course, choose one:		
IB 405	Evolution of Traits and Genomes	
IB 416	Population Genetics	
IB 426	Env and Evol Physl of Animals	
IB 461	Ornithology	
IB 462	Mammalogy	
IB 463	Ichthyology	
IB 464	Herpetology	
IB 467	Principles of Systematics	
IB 468	Insect Classification and Evol	
IB 471	General Mycology	
MCB 435	Evolution of Infectious Disease	
PSYC 433	Evolutionary Neuroscience	
Conservation Biology Core Area Course, choose one:		
ANSC 406	Zoo Animal Conservation Sci	
CB 540	Wildlife Ecosystem Health	
IB 444	Insect Ecology	
IB 451	Conservation Biology	
NRES 407	Wildlife Population Ecology	
NRES 409	Fishery Ecol and Conservation	
NRES 420	Restoration Ecology	
NRES 423	Politics of International Conservation and Development	
NRES 429	Aquatic Ecosystem Conservation	
NRES 474	Soil and Water Conservation	

Learning Outcomes: Ecology, Evolution & Conservation Biology, MS

Learning outcomes for the degree of Master of Science in Ecology, Evolution & Conservation Biology

Since the subject matter of our Program is interdisciplinary and broad, there is no one set of subject-based learning outcomes that is suitable for the evaluation of our graduate students. Instead, we will focus on appropriate research and professional development skills.

1. Design and implement independent research and integrate and apply core knowledge related to their field in 3 core areas out of 6 (behavior, conservation biology, ecology, evolution, genetics/genomics, physiology/ anatomy).
2. Demonstrate effective oral and written communication skills
   a. Presentations
   b. Publications
   c. Grant writing
3. Apply rigorous statistics/analytical methods that typify their area of study
4. Professional skills
   a. Data management
   b. Citation management
   c. Mentoring
   d. Ethics
   e. Professionalism
   f. Networking
5. Teaching experience
   a. Lead Discussions/Lab Activities Effectively
   b. Effective in the presentation of information/lecture
   c. Consistent Grader with meaningful feedback to students
   d. Genuine concern for the learning outcomes of all students

Ecology, Evolution, & Conservation Biology, PhD

for the degree of Doctor of Philosophy in Ecology, Evolution & Conservation Biology

head of department: Angela Kent
department website: https://peec.illinois.edu/

school website: https://sib.illinois.edu/

overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department office: 320 Morrill Hall, 505 South Goodwin Avenue, Urbana, IL 61801
phone: (217) 333-2910
email: PEEC-Support@illinois.edu

Graduate Degree Programs in Ecology, Evolution & Conservation Biology

Ecology, Evolution & Conservation Biology, MS (p. 709)
Ecology, Evolution & Conservation Biology, PhD (p. 710)

The Program in Ecology, Evolution and Conservation Biology (PEEC) is an interdepartmental program designed to provide individualized training in preparation for careers in these disciplines. Because of the breadth of fields covered by this program, there will be no fixed course requirements other than attendance at the program's seminar series and annual graduate student symposium. Courses taken by a student and the student's Advisory Committee generally will come from multiple departments. The goal of the program's regulations is to allow maximum flexibility while providing close supervision, with the outcome of producing scientists who are broadly educated and technically competent in ecology, evolutionary biology and associated disciplines. The program offers M.S. and Ph.D. degrees.

Admission

Prospective candidates must meet the requirements for admission set by the Graduate College of the University of Illinois at Urbana-Champaign. Only applicants who have graduated from an accredited college or university and who hold or will be granted a baccalaureate degree (or its equivalent) comparable in content and completed credit hours to that granted by the University of Illinois will be considered. Applicants must have a minimum grade-point average of 3.0 (A = 4.0) computed from the last two years of undergraduate (and any graduate) work completed. The program will give preference to candidates who hold a degree in biology or a closely related discipline and show promise of excellence in research and teaching. Typically, only students with strong letters of recommendation and a GPA well above the minimum stated above will be admitted. Demonstration of academic excellence by other means (e.g., extensive field or laboratory research experience) will also be considered. The Admissions Committee will make decisions concerning admission. For students whose native language is not English, the Program requires a minimum paper-based TOEFL score of 613 (257 on the computer-based test or 103-104 on the web-based test).

Financial Aid

Students admitted to the Program are typically offered two years of support for the M.S. degree and five years of support for the Ph.D. Support consists of fellowships, teaching assistantships or research assistantships. Such support typically comes with a waiver of tuition, service fees, or both. Continued offers of assistantships or fellowships each academic year will depend on an evaluation of satisfactory progress by the Director of the Program. Students who require more than two years to complete the M.S. degree or five years to complete the Ph.D. degree must submit a written petition to the Director of the Program, supported by their Advisor, to be considered for an additional year of support.

for the degree of Doctor of Philosophy in Ecology, Evolution & Conservation Biology

All students must register for and attend the weekly PEEC seminar series (IB 546A) each semester in residence. The Director of the Program must approve excuses because of conflicts. An orientation seminar (IB 546B) must be taken the first fall semester in residence.

No later than their second semester in the program, the student in consultation with their Major Advisor will select members of the student's Doctoral Committee, which will meet annually with the student to plan coursework and research and to review and facilitate progress toward the degree.

The faculty constituting a student's Doctoral Committee must come from two or more departments, comprise a minimum of four members (including the Major Advisor), be familiar with the student's area of research interest, and be approved by the Director of the Program. The chair of the Doctoral Committee is typically the Major Advisor, provided that the advisor is both a member of the University's Graduate Faculty and the Program in Ecology, Evolutionary and Conservation Biology. If this is not the case, the Director of the Program will appoint a chairperson who fulfills these requirements from among the committee membership. The Doctoral Committee will be responsible for administering the necessary examinations. No later than their sixth semester in the program, and preferably in their fifth semester, doctoral students must take a Preliminary Examination. For this exam, a member of the Doctoral Committee other than the major advisor will be appointed chair by the Director of the Program. The first part of the three-hour oral exam will be general and cover the student's three core areas of emphasis. The second part of the exam will be a defense of the research proposal. Two weeks prior to the exam, the student must present to the Doctoral Committee a proposal describing the objectives of the research project, the experimental plan and rationale, the results of pilot studies, and a tentative timetable for its completion. The student will present evidence of feasibility and significance of the proposal along with any preliminary results, but the main research for the dissertation shall not have been performed prior to the Preliminary Examination. A detailed report of the exam and a copy of the research proposal shall be submitted to the Director of the Program. A passing evaluation qualifies the student as a Ph.D. candidate. A failing evaluation will require the student to take a second preliminary examination no later than the following semester. A second failure will result in dismissal from the program.

Upon completion of a dissertation and the other requirements of the program, the student shall be subject to a Final Examination, which shall consist of a defense of the dissertation. Copies of the completed dissertation, approved by the Major Advisor, should be submitted to the Doctoral Committee at least two weeks prior to the Final Examination. The dissertation will be judged in relation to published scholarly work in the field, and students are encouraged to begin publishing their results before taking their Final Examination. Passing this exam and presentation of the dissertation by the student at a public seminar sponsored by the program qualifies the student for the Ph.D. degree. Failure will require the student to conduct additional research and to repeat the Final Examination.

For additional details and requirements refer to the Program's graduate handbook *(*http://sib.illinois.edu/peec/current/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Entering with approved M.S./M.A. degree

Code	Title	Hours
IB 546	Topics in Ecology & Evolution (Section A to be taken each semester of enrollment. Section B if not taken in MS program)	6
Students must complete one course from each core area (p. 712)		
Ecology Core List		
Evolution Core List		
Conservation Biology Core List		
Thesis Hours Required (8 min applied toward degree) (Credit in rubrics other than BIOL, NRES, PBIO or ENT must be petitioned to apply.):		8
Total Hours		**64**

Other Requirements

Requirement	Description
Other requirements may overlap	
All students must complete at least two semesters of favorably evaluated teaching	
Course work in three core areas with grades no lower than B or S.	
Qualifying Exam Required:	No
Preliminary Exam Required:	Yes
Final Exam/Dissertation Defense Required:	Yes
Dissertation Deposit Required:	Yes
Minimum GPA:	3.0

Entering with B.S./B.A. degree

Code	Title	Hours
IB 546	Topics in Ecology & Evolution (Section A to be taken each semester of enrollment. Section B if not taken in MS program)	6
Students must complete one course from each core area (p. 712)		
Ecology Core List		
Evolution Core List		
Conservation Biology Core List		
Thesis Hours Required (8 min applied toward degree) (Credit in rubrics other than BIOL, NRES, PBIO or ENT must be petitioned to apply.):		8
Total Hours		**96**

Other Requirements

Requirement	Description
Other requirements may overlap	
All students must complete at least two semesters of favorably evaluated teaching	
Course work in three core areas with grades no lower than B or S.	
Masters Degree Required for Admission to PhD?	No, but Masters level requirements must be met (32 hours min)
Qualifying Exam Required:	No
Preliminary Exam Required:	Yes
Final Exam/Dissertation Defense Required:	Yes
Dissertation Deposit Required:	Yes
Minimum GPA:	3.0

Code	Title	Hours
Ecology Core Area Course, choose one:		
IB 431	Behavioral Ecology	
IB 439	Biogeography	
IB 442	Evolution of Infectious Disease	
IB 443	Evolutionary Ecology	
IB 444	Insect Ecology	
IB 447	Field Ecology	
IB 450	Stream Ecology	
IB 452	Ecosystem Ecology	
IB 453	Community Ecology	
NRES 419	Env and Plant Ecosystems	
NRES 465	Landscape Ecology	
Evolution and Systematics Core Area Course, choose one:		
IB 405	Evolution of Traits and Genomes	
IB 416	Population Genetics	
IB 426	Env and Evol Physl of Animals	
IB 461	Ornithology	
IB 462	Mammalogy	
IB 463	Ichthyology	
IB 464	Herpetology	
IB 467	Principles of Systematics	
IB 468	Insect Classification and Evol	
IB 471	General Mycology	
MCB 435	Evolution of Infectious Disease	
PSYC 433	Evolutionary Neuroscience	
Conservation Biology Core Area Course, choose one:		
ANSC 406	Zoo Animal Conservation Sci	
CB 540	Wildlife Ecosystem Health	
IB 444	Insect Ecology	
IB 451	Conservation Biology	
NRES 407	Wildlife Population Ecology	
NRES 409	Fishery Ecol and Conservation	
NRES 420	Restoration Ecology	
NRES 423	Politics of International Conservation and Development	
NRES 429	Aquatic Ecosystem Conservation	
NRES 474	Soil and Water Conservation	

Learning Outcomes: Ecology, Evolution & Conservation Biology, PhD

Learning outcomes for the degree of Doctor of Philosophy in Ecology, Evolution & Conservation Biology

Since the subject matter of our Program is interdisciplinary and broad, there is no one set of subject-based learning outcomes that is suitable for the evaluation of our graduate students. Instead, we will focus on appropriate research and professional development skills.

1. Design and implement independent research and integrate and apply core knowledge related to their field in 3 core areas out of 6 (behavior, conservation biology, ecology, evolution, genetics/ genomics, physiology/ anatomy).
2. Demonstrate effective oral and written communication skills
   a. Presentations
   b. Publications
   c. Grant writing
3. Apply rigorous statistics/analytical methods that typify their area of study
4. Professional skills
   a. Data management
   b. Citation management
   c. Mentoring
   d. Ethics
   e. Professionalism
   f. Networking
5. Teaching experience
   a. Lead Discussions/Lab Activities Effectively
   b. Effective in the presentation of information/lecture
   c. Consistent Grader with meaningful feedback to students
   d. Genuine concern for the learning outcomes of all students

Economics, MS

for the Master of Science in Economics

head of the department: George Deltas
associate head: Seung-Hyun Hong
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department website: http://www.economics.illinois.edu
department office: 214 David Kinley Hall, 1407 W. Gregory Dr., Urbana, IL 61801
phone: (217) 333-0120
fax: (217) 244-6571
email: econ@illinois.edu

Graduate Degree Programs in Economics

Economics, MS (p. 713)
concentration:
Economics: Policy Economics, MS (p. 714)
Economics, PhD (http://catalog.illinois.edu/graduate/las/graduate/las/economics-phd/)

Admission

Admission to the Ph.D. program is available only for the fall semester. In addition to the standard undergraduate preparation in economics, students are expected to have had at least two semesters of calculus and one of linear algebra to be admitted to the Ph.D. program. The results of the Graduate Record Examination (GRE) should accompany applications for admission. Graduate College admission requirements apply. In addition, international students must submit Test of English as a Foreign Language (TOEFL) or IELTS results; if they wish to apply for a teaching assistantship, the Test of Spoken English (TSE) or completion of the speaking section of the TOEFL-iBT or IELTS is also required.

Graduate Teaching Experience

Experience in teaching is considered an important part of the graduate program and is encouraged as part of the academic work of all Ph.D. candidates in this program.

Financial Aid

In recent years, the Department of Economics has been able to offer assistantships to most students who meet the standards for admission or continuation in the Ph.D. program. In order to qualify for a teaching assistantship, non-native speakers of English must pass a speaking proficiency test of the English language.

for the Master of Science in Economics

For additional details and requirements refer to the department's graduate programs (http://www.economics.uiuc.edu/programs/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
ECON 530	Microeconomic Theory I	4
ECON 533	Microeconomic Theory II	4
ECON 531	Macroeconomic Theory I	4
ECON 534	Macroeconomic Theory II	4
ECON 532	Econometric Analysis I	4
ECON 535	Econometric Analysis II	4
Four electives, at least two of which are in economics		16
Total Hours		40

Other Requirements

Requirement	Description
A concentration is not required.	
Minimum 500-level Hours Required Overall:	40
Minimum GPA:	3.0

Learning Outcomes: Economics, MS

Learning outcomes for the Master of Science in Economics

1. Research Skills: The main objective of the program is to train students to become independent researchers, who are able to produce high-quality research for both academic and non-academic settings. This requires students to learn how to identify interesting questions, find creative solutions, and learn how to present the results of their work to the scientific community.
2. Analytical Skills: We want to make sure that students have all the mathematical and statistical tools necessary for their future careers. This includes a solid foundation in the core areas of Economics: Microeconomics, Macroeconomics, and Econometrics.
3. Problem Solving Skills: We want to teach students how to solve complex problems, by applying the technical tools that they have acquired, and by identifying and correctly using data sources.

4. Expertise in a Student's Field of Research: Students need to acquire a solid foundation in their chosen field of research. They should be familiar with the key past and present contributions in their area.
5. Presentation and Writing Skills: To be successful in the program and their future career, students must successfully present their work both in seminars and in written form.

Economics: Policy Economics, MS

Master of Science in Economics, Policy Economics Concentration

head of the department: George Deltas
associate head: Seung-Hyun Hong
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
MSPE program website: https://economics.illinois.edu/msp (https://economics.illinois.edu/mspe/)**e**
college website: https://las.illinois.edu/
department website: https://economics.illinois.edu (https://economics.illinois.edu/)
department office: 214 David Kinley Hall, 1407 W. Gregory Dr., Urbana, IL 61801
phone: (217) 333-0120
fax: (217) 244-6571
email: econ@illinois.edu

This is a specially designed one- to two-year program to address the needs of two groups of students. One is promising young professionals and administrators who need additional training in the areas of economic analysis and quantitative techniques. The other is students who are potentially interested in pursuing a Ph.D. degree but require additional qualification to enable them to do so. While earning the master's degree and acquiring the necessary tools for further studies, they will learn if the pursuit of a Ph.D. degree is within their reach and suits their purposes.

Students enter the program only in the fall term.

The required coursework is further enriched through

1. academic advising wherein an academic advisor with an open-door policy allows the MSPE students to drop by his office at their convenience, discuss their academic questions with him, and re-optimize their program of study on a continual basis. The academic advisor also provides guidance on study plans beyond graduation and provides support in achieving them;
2. an orientation program that includes an intensive mathematics course; this course serves as a refresher for the math content to be utilized during the students' courses in the program;
3. opportunities to participate in field trips to observe the operation of financial institutions, modern industrial production facilities, federal and state government agencies, and international institutions;
4. scheduled lectures by outstanding, internationally known economists;
5. discussion groups and tutoring for participants who are having difficulty;
6. program staff assistance with visas, housing, and other nonacademic concerns; and
7. participation in social activities, including graduation dinners, holiday parties, picnics, and special luncheons.

This is a designated full-cost recovery program and no financial aid is available for the students in this program.

Please see https://economics.illinois.edu/mspe (https://economics.illinois.edu/mspe/) for detailed information on the MSPE Program.

Graduate Degree Programs in Economics

Economics, MS (http://catalog.illinois.edu/graduate/las/graduate/las/economics-ms/)
concentration:
Economics: Policy Economics, MS (p. 714)
Economics, PhD (p. 715)

Master of Science in Economics, Policy Economics Concentration

For additional details and requirements refer to the department's graduate programs (http://www.economics.uiuc.edu/programs/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
ECON 500	Microeconomics	4
ECON 501	Macroeconomics	4
ECON 502	Economic Statistics	4
ECON 503	Econometrics	4
Two graduate credit courses are to be completed in a selected specialization		8
Four electives, at least two of which are in economics		16
Total Hours		40

Other Requirements

Requirement	Description
The minimum length of stay in the Program is one year (fall and spring semesters plus one summer session).	
Minimum Hours Required Within the Unit:	32
Minimum 500-level Hours Required Overall:	32
Minimum GPA:	3.0

Learning Outcomes: Economics: Policy Economics, MS

Learning outcomes for the Master of Science in Economics, Policy Economics Concentration

1. **Basic Training Economics:** Develop in-depth competency in the core areas of economics: microeconomic theory, macroeconomic theory. Develop additional competency in one area of specialization through elective coursework and econometrics. Popular fields of specialization include advanced econometrics, development, international economics, monetary economics, public economics, and industrial organization.

2. **Quantitative Skills:** Provide solid training for statistical and econometrics skills. MSPE students will understand how to apply empirical evidence to economic arguments. Specifically, they will learn to obtain and/or collect data, develop empirical evidence using appropriate econometrics techniques, and interpret the results of such analyses.
3. **Preparation for Ph.D. programs:** The Ph.D. track option provides an opportunity for students to continue to the Ph.D. program in economics at UIUC. In addition, provides appropriate preparation for interested students to pursue a doctorate in economics.
4. **Critical Thinking:** MSPE students will apply economic analysis to everyday problems helping them to understand events, evaluate specific policy proposals, compare arguments with different conclusions to a specific issue or problem, and assess the role played by assumptions in arguments that reach different conclusions to a specific economic or policy problem.
5. **Social skills & cultural awareness:** Enrich the student experience through seminars featuring guest speakers, field trips, events like a picnic, holiday party, Thanksgiving lunch, and graduation dinners.

Economics, PhD

for the Doctor of Philosophy in Economics

head of the department: George Deltas
associate head: Seung-Hyun Hong
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college website: https://las.illinois.edu/
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phone: (217) 333-0120
fax: (217) 244-6571
email: econ@illinois.edu

Students must pass comprehensive qualifying examinations on Econometrics, Macroeconomics and Microeconomics. Those who fail the comprehensive examinations will have a 2nd chance in the start of the fall semester and a 3rd chance at the end of the fourth semester (in this 3rd chance they will take the exams with the first year students of the next cohort). Students who have failed the 3rd chance will not be allowed to register for the following year. Upon meeting course and GPA requirements, they will be eligible to receive a master's degree in Economics, provided they have not previously received such a degree from another institution.

Candidates must also successfully complete two fields through coursework and/or a written examination. A research paper must be submitted prior to the start of the third year and approved prior to the end of that year. Students who fail to meet these deadlines will have reduced financial support and be placed on academic probation. Unless they return to good standing by satisfying the requirement, they will be dropped from the program at the end of the following semester.

A dissertation is also required. In addition, candidates are required to give an oral defense of the dissertation proposal and pass an oral final examination covering the research. A student with an appropriate background who devotes full time to graduate work can complete the Ph.D. degree in four years beyond the bachelor's degree. An additional year or more is usually necessary, especially for those holding part-time assistantships. Students in the Ph.D. program may earn a master's degree as they work toward the Ph.D. degree.

The candidate for a Ph.D. may specialize in the following fields:

- **microeconomic theory**
- **public economics**
- **macroeconomic theory**
- **international economics**
- **labor economics**
- **development economics**
- **mathematical economics**
- **econometrics**
- **industrial organization**

Graduate Degree Programs in Economics

Economics, MS (p. 713)
concentration:
Economics: Policy Economics, MS (p. 714)
Economics, PhD (http://catalog.illinois.edu/graduate/las/graduate/las/economics-phd/)

Admission

Admission to the Ph.D. program is available only for the fall semester. In addition to the standard undergraduate preparation in economics, students are expected to have had at least two semesters of calculus and one of linear algebra to be admitted to the Ph.D. program. The results of the Graduate Record Examination (GRE) should accompany applications for admission. Graduate College admission requirements apply. In addition, international students must submit Test of English as a Foreign Language (TOEFL) or IELTS results; if they wish to apply for a teaching assistantship, the Test of Spoken English (TSE) or completion of the speaking section of the TOEFL-iBT or IELTS is also required.

Graduate Teaching Experience

Experience in teaching is considered an important part of the graduate program and is encouraged as part of the academic work of all Ph.D. candidates in this program.

Financial Aid

In recent years, the Department of Economics has been able to offer assistantships to most students who meet the standards for admission or continuation in the Ph.D. program. In order to qualify for a teaching assistantship, non-native speakers of English must pass a speaking proficiency test of the English language.

for the Doctor of Philosophy in Economics

Optional: A not-for-credit Math Camp after campus orientation, consisting of 12 hours of instruction. The aim of the Math Camp is to prepare students with no master's level coursework in mathematical economics for the program's first year classes. However, it will be open to all incoming students.

Additional information can be found at www.economics.illinois.edu/programs/phdprogram/ (http://www.economics.illinois.edu/programs/phdprogram/).

Entering with approved B.S./B.A. degree

Code	Title	Hours
Macroeconomic theory		8
Microeconomic theory		8
Statistics and econometrics		8
Field electives		24
Workshop and research seminar		16
ECON 599	Thesis Research (min/max applied toward degree)	32
Total Hours		96

Other Requirements [1]

Requirement	Description
Other Requirements may overlap	
Research paper must be submitted before the start of the third year of study and be approved by the end of the third year.	
Master's Degree Required for Admission to Ph.D.?	No
Qualifying Exam Required	Yes
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the department's* graduate programs *(*http://www.economics.uiuc.edu/programs/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Entering with approved M.S./M.A. degree

Code	Title	Hours
Field electives		24
Workshop and research seminar		16
ECON 599	Thesis Research (min/max applied toward degree)	32
Total Hours		72

Other Requirements [1]

Requirement	Description
Other Requirements may overlap	
Research paper must be submitted before the start of the third year of study and be approved by the end of the third year.	
Master's Degree Required for Admission to Ph.D.?	Yes
Qualifying Exam Required	Yes
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the department's* graduate programs *(*http://www.economics.uiuc.edu/programs/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Economics, PhD

Learning outcomes for the Doctor of Philosophy in Economics

1. Research Skills: The main objective of the program is to train students to become independent researchers, who are able to produce high-quality research for both academic and non-academic settings. This requires students to learn how to identify interesting questions, find creative solutions, and learn how to present the results of their work to the scientific community.
2. Analytical Skills: We want to make sure that students have all the mathematical and statistical tools necessary for their future careers. This includes a solid foundation in the core areas of Economics: Microeconomics, Macroeconomics, and Econometrics.
3. Problem Solving Skills: We want to teach students how to solve complex problems, by applying the technical tools that they have acquired, and by identifying and correctly using data sources.
4. Expertise in a Student's Field of Research: Students need to acquire a solid foundation in their chosen field of research. They should be familiar with the key past and present contributions in their area.
5. Presentation and Writing Skills: To be successful in the program and their future career, students must successfully present their work both in seminars and in written form.

Education Policy, Organization & Leadership, CAS

for the Certificate of Advanced Study in Education Policy, Organization & Leadership

head of the department: Yoon Pak
directors of graduate studies: Wen-Hao Huang, Mary Allison Witt
graduate admissions information: Linda Stimson (on campus) and Jena Pfoff (online/off-campus)
overview of admissions & requirements: College of Education (https://education.illinois.edu/programs/grad/how-to-apply/?url=/programs/grad)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://education.illinois.edu/epol (https://education.illinois.edu/epol/)
program website: College of Education Programs (https://education.illinois.edu/faceted-search/programs/)
department faculty: Education Policy, Organization & Leadership Faculty (https://education.illinois.edu/faculty-finder/epol/)
college website: http://education.illinois.edu/
department office: 142 Education Building, 1310 South Sixth Street, Champaign, IL 61820
phone: (217) 244-3542
email: gradservices@education.illinois.edu

Graduate Degree Programs in Education Policy, Organization & Leadership

Education Policy, Organization and Leadership, CAS (p. 716) **(on campus and off-campus)**
Education Policy, Organization and Leadership, EdD (p. 722) **(on campus, off-campus & online)**
optional concentrations: EPOL concentrations listed below| Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)|African American Studies (p. 1075)|Writing Studies (p. 1111)
Education Policy, Organization and Leadership, EdM (p. 718) **(on campus, off-campus & online)**
optional concentrations: EPOL concentrations listed below| Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)
Education Policy, Organization and Leadership, MA (p. 720) **(on campus)**
optional concentrations: EPOL concentrations listed below| Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)|African American Studies (p. 1075)
Education Policy, Organization and Leadership, PhD (p. 723) **(on campus)**
optional concentration: EPOL concentrations listed below| Digital Learning (p. 1093)|African American Studies (p. 1075)|Writing Studies (p. 1111)
EPOL concentrations: Diversity & Equity in Education (p. 1094), Educational Administration & Leadership (p. 1095), Global Studies in Education (p. 1098), Higher Education (p. 1098), History of Education (p. 1099), Human Resource Development (p. 1099), Learning Design & Leadership (p. 1101), Philosophy of Education (p. 1104), Social Sciences & Education Policy (p. 1108)
College Teaching Minor (p. 1129)
joint programs:
Education Policy, Organization and Leadership, EdM and Business Administration, MBA (p. 1158)
Education Policy, Organization and Leadership, MA and Business Administration, MBA (p. 1158)

Degree programs in the Department of Education Policy, Organization and Leadership are designed to meet the academic and professional interests of individuals preparing for careers as academic professionals, adult educators, college professors, corporate trainers, educational policy analysts, governmental administrators, instructional designers/technologists, non-profit representatives, organizational development specialists, and university administration leaders.

Admission

The Department of Education Policy, Organization and Leadership carefully considers all applicants for graduate study. Interested applicants should start at http://education.illinois.edu/programs/grad (http://education.illinois.edu/programs/grad/). The quality of the applicant's undergraduate and graduate training and grade point average are primary considerations. Other important factors evaluated include the three letters of recommendation and statement of purpose. International applicants must submit a TOEFL score.

Off-Campus Programs

The Education Policy, Organization and Leadership department offers selected off-campus programs in the Chicago region, through the use of a cohort model. The Ed.M. and C.A.S. degree options with General Administrative Endorsement are offered in the Chicago region. An Ed.D. degree cohort also is available in School Executive Leadership. Requirements for the off-campus Ed.M., C.A.S., and Ed.D. programs are identical to the on-campus degrees.

Facilities and Resources

The College of Education also has many resources to assist graduate students through their academic career. The Bureau of Educational Research works with students to secure research funding. The Council on Teacher Education (http://cote.illinois.edu/) entitles candidates seeking a Professional Educator License and provides accreditation of professional education programs. Each student completing a degree program is assigned a graduate adviser, who is available to assist the student with planning the program of study and determining degree requirements, courses and timelines for degree completion.

Information on University resources can be found at http://www.grad.illinois.edu/current-students (http://www.grad.illinois.edu/current-students/).

Financial Aid

Financial aid in the form of assistantships, scholarships, fellowships, and tuition waivers can be found throughout the college (https://education.illinois.edu/current-students/graduate/financial-aid/) and campus. Campus opportunities can be found at the Graduate College (http://www.grad.illinois.edu/funding-jobs/) and the Office of Student Financial Aid (http://www.osfa.illinois.edu/). **Please note: Graduate students employed as Staff by the University of Illinois at Urbana-Champaign are not eligible for a College of Education Award or Scholarship.**

for the Certificate of Advanced Study in Education Policy, Organization & Leadership

The Department of Education Policy, Organization & Leadership offers many programs leading to the degree of Certificate of Advanced Study (C.A.S.). A list of programs and additional requirements can be found on the program's website, (https://education.illinois.edu/faceted-search/programs/?degree=cas&department=epol)the College of Education

Graduate Programs Handbook (https://education.illinois.edu/current-students/graduate/coe-graduate-handbook/), and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Students may select a concentration in:

Diversity & Equity in Education (p. 1094), Educational Administration & Leadership (p. 1095), Global Studies in Education (p. 1098), Higher Education (p. 1098), History of Education (p. 1099), Human Resource Development (p. 1099), Learning Design & Leadership (p. 1101), Philosophy of Education (p. 1104), Social Sciences & Education Policy (p. 1108)

If the student does not have a Master's degree from the University of Illinois at Urbana-Champaign, the foundation courses listed below must be completed. The minimum GPA is 3.0.

Code	Title	Hours
Psychological Foundations Courses in Educational Psychology		**4**
Select one of the following:		
EPSY 400	Psychology of Learning in Education	
EPSY 401	Child Language and Education	
EPSY 402	Sociocultural Influence on Learning	
EPSY 404	Adjustment in School Settings	
EPSY 405	Personality and Soc Dev	
EPSY 406	Psychology of Classroom Management	
EPSY 407	Adult Learning and Development	
EPSY 408	Learning and Human Development with Educational Technology	
EPSY 430	Early Adolescent Development	
EPSY 485	Assessing Student Performance	
EPSY 490	Developments in Educational Psychology	
EPSY 553	Global Issues in Learning	
Philosophical and Social Foundations Courses in Education Policy, Organization and Leadership		**4**
Select one of the following:		
EPOL 401	History of American Education	
EPOL 402	Asian American Education	
EPOL 403	Historical and Social Barriers	
EPOL 405	School and Society	
EPOL 406	Professional Ethics in Education	
EPOL 407	Critical Thinking in Education	
EPOL 408	Aesthetic Education	
EPOL 409	Sociology of Education	
EPOL 410	Racial and Ethnic Families	
EPOL 412	Politics of Education	
EPOL 413	Economics of Education	
EPOL 480	Technology and Educational Reform	
EPOL 539		
500-Level Courses		16
400/500-Level Courses		16
Independent Study		0-8
(Optional) Concentration Courses. May overlap with other general coursework requirements		12-24
Total Hours		32

Education Policy, Organization & Leadership, EdM

for the degree of Master of Education in Education Policy, Organization & Leadership (on campus, off-campus & online)

head of the department: Yoon Pak
directors of graduate studies: Wen-Hao Huang, Mary Allison Witt
graduate admissions information: Linda Stimson (on campus) and Jena Pfoff (online/off-campus)
overview of admissions & requirements: College of Education (https://education.illinois.edu/programs/grad/how-to-apply/?url=/programs/grad)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://education.illinois.edu/epol (https://education.illinois.edu/epol/)
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Admission

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for the degree of Master of Education in Education Policy, Organization & Leadership (on campus, off-campus & online)

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Students may select a concentration in:

Bilingual-Bicultural Education (http://catalog.illinois.edu/graduate/education/concentration/bilingual-bicultural-education/), Digital Learning (http://catalog.illinois.edu/graduate/education/concentration/digital-learning/), Diversity & Equity in Education (p. 1094), Educational Administration & Leadership (p. 1095), Global Studies in Education (p. 1098), Higher Education (p. 1098), History of Education (p. 1099), Human Resource Development (p. 1099), Learning Design & Leadership (p. 1101), Philosophy of Education (p. 1104), Social Sciences & Education Policy (p. 1108), Writing Studies (p. 1111)

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EPSY 405	Personality and Soc Dev	
EPSY 406	Psychology of Classroom Management	
EPSY 407	Adult Learning and Development	
EPSY 408	Learning and Human Development with Educational Technology	
EPSY 430	Early Adolescent Development	
EPSY 485	Assessing Student Performance	
EPSY 490	Developments in Educational Psychology	
EPSY 553	Global Issues in Learning	
Philosophical and Social Foundations Courses in Education Policy, Organization and Leadership		**4**
Select one of the following:		
EPOL 401	History of American Education	
EPOL 402	Asian American Education	
EPOL 403	Historical and Social Barriers	
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EPOL 409	Sociology of Education	
EPOL 410	Racial and Ethnic Families	
EPOL 412	Politics of Education	
EPOL 413	Economics of Education	
EPOL 480	Technology and Educational Reform	
EPOL 539		
500-Level Courses Required in Education (Thesis Research Credit not included)		12
400/500-Level Courses approved by Advisor (Thesis Research Credit not included, up to 8 hours of Independent Study can be applied)		12
(Optional) Concentration Courses. May overlap with other coursework requirements		12-24
Total Hours		32

Other Requirements

Requirement	Description
Requirements may overlap.	
A concentration is not required.	
Minimum GPA	3.0

Education Policy, Organization & Leadership, MA

for the degree of Master of Arts in Education Policy, Organization & Leadership

head of the department: Yoon Pak
directors of graduate studies: Wen-Hao Huang, Mary Allison Witt
graduate admissions information: Linda Stimson (on campus) and Jena Pfoff (online/off-campus)
overview of admissions & requirements: College of Education (https://education.illinois.edu/programs/grad/how-to-apply/?url=/programs/grad)
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department website: https://education.illinois.edu/epol (https://education.illinois.edu/epol/)
program website: College of Education Programs (https://education.illinois.edu/faceted-search/programs/)
department faculty: Education Policy, Organization & Leadership Faculty (https://education.illinois.edu/faculty-finder/epol/)
college website: http://education.illinois.edu/
department office: 142 Education Building, 1310 South Sixth Street, Champaign, IL 61820
phone: (217) 244-3542
email: gradservices@education.illinois.edu

Graduate Degree Programs in Education Policy, Organization & Leadership

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Education Policy, Organization and Leadership, EdD (p. 722) **(on campus, off-campus & online)**
- **optional concentrations: EPOL concentrations listed below**| Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)|African American Studies (p. 1075)|Writing Studies (p. 1111)

Education Policy, Organization and Leadership, EdM (p. 718) **(on campus, off-campus & online)**
- **optional concentrations: EPOL concentrations listed below**| Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)

Education Policy, Organization and Leadership, MA (p. 720) **(on campus)**
- **optional concentrations: EPOL concentrations listed below**| Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)|African American Studies (p. 1075)

Education Policy, Organization and Leadership, PhD (p. 723) **(on campus)**
- **optional concentration: EPOL concentrations listed below**| Digital Learning (p. 1093)|African American Studies (p. 1075)|Writing Studies (p. 1111)

EPOL concentrations: Diversity & Equity in Education (p. 1094), Educational Administration & Leadership (p. 1095), Global Studies in Education (p. 1098), Higher Education (p. 1098), History of Education (p. 1099), Human Resource Development (p. 1099), Learning Design & Leadership (p. 1101), Philosophy of Education (p. 1104), Social Sciences & Education Policy (p. 1108)
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joint programs:
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The Department of Education Policy, Organization and Leadership carefully considers all applicants for graduate study. Interested applicants should start at http://education.illinois.edu/programs/grad (http://education.illinois.edu/programs/grad/). The quality of the applicant's undergraduate and graduate training and grade point average are primary considerations. Other important factors evaluated include the three letters of recommendation and statement of purpose. International applicants must submit a TOEFL score.

Off-Campus Programs

The Education Policy, Organization and Leadership department offers selected off-campus programs in the Chicago region, through the use of a cohort model. The Ed.M. and C.A.S. degree options with General Administrative Endorsement are offered in the Chicago region. An Ed.D. degree cohort also is available in School Executive Leadership. Requirements for the off-campus Ed.M., C.A.S., and Ed.D. programs are identical to the on-campus degrees.

Facilities and Resources

The College of Education also has many resources to assist graduate students through their academic career. The Bureau of Educational Research works with students to secure research funding. The Council on Teacher Education (http://cote.illinois.edu/) entitles candidates seeking a Professional Educator License and provides accreditation of professional education programs. Each student completing a degree program is assigned a graduate adviser, who is available to assist the student with planning the program of study and determining degree requirements, courses and timelines for degree completion.

Information on University resources can be found at http://www.grad.illinois.edu/current-students (http://www.grad.illinois.edu/current-students/).

Financial Aid

Financial aid in the form of assistantships, scholarships, fellowships, and tuition waivers can be found throughout the college (https://education.illinois.edu/current-students/graduate/financial-aid/) and campus. Campus opportunities can be found at the Graduate College (http://www.grad.illinois.edu/funding-jobs/) and the Office of Student Financial Aid (http://www.osfa.illinois.edu/). **Please note: Graduate students employed as Staff by the University of Illinois at Urbana-Champaign are not eligible for a College of Education Award or Scholarship.**

for the degree of Master of Arts in Education Policy, Organization & Leadership

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The Department of Education Policy, Organization & Leadership offers many programs leading to the degree of Master of Arts (M.A.). A list of programs and additional requirements can be found on the program's website, (https://education.illinois.edu/faceted-search/programs/?degree=cas&department=epol)the College of Education Graduate Programs Handbook (https://education.illinois.edu/current-students/graduate/coe-graduate-handbook/), and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Students may select a concentration in:

African American Studies (p. 1075), Bilingual-Bicultural Education (http://catalog.illinois.edu/graduate/education/concentration/bilingual-bicultural-education/), Digital Learning (http://catalog.illinois.edu/graduate/education/concentration/digital-learning/), Diversity & Equity in Education (p. 1094), Educational Administration & Leadership (p. 1095), Global Studies in Education (p. 1098), Higher Education (p. 1098), History of Education (p. 1099), Human Resource Development (p. 1099), Learning Design & Leadership (p. 1101), Philosophy of Education (p. 1104), Social Sciences & Education Policy (p. 1108), Writing Studies (p. 1111)

Code	Title	Hours
Psychological Foundations Courses in Educational Psychology		**4**
Select one of the following:		
EPSY 400	Psychology of Learning in Education	
EPSY 401	Child Language and Education	
EPSY 402	Sociocultural Influence on Learning	
EPSY 404	Adjustment in School Settings	
EPSY 405	Personality and Soc Dev	
EPSY 406	Psychology of Classroom Management	
EPSY 407	Adult Learning and Development	
EPSY 408	Learning and Human Development with Educational Technology	
EPSY 430	Early Adolescent Development	
EPSY 485	Assessing Student Performance	
EPSY 490	Developments in Educational Psychology	
EPSY 553	Global Issues in Learning	
Philosophical and Social Foundations Courses in Education Policy, Organization and Leadership		**4**
Select one of the following:		
EPOL 401	History of American Education	
EPOL 402	Asian American Education	
EPOL 403	Historical and Social Barriers	
EPOL 405	School and Society	
EPOL 406	Professional Ethics in Education	
EPOL 407	Critical Thinking in Education	
EPOL 408	Aesthetic Education	
EPOL 409	Sociology of Education	
EPOL 410	Racial and Ethnic Families	
EPOL 412	Politics of Education	
EPOL 413	Economics of Education	
EPOL 480	Technology and Educational Reform	
EPOL 539		
500-Level Courses Required in Education (Thesis Research Credit not included)		12
400/500-Level Courses approved by Advisor (Thesis Research Credit and Independent Study can be applied up to a maximum of 8 hours each)		12
Thesis Research Credit (min/max applied toward degree)		2-8

(Optional) Concentration Courses. May overlap with other coursework requirements	12-24
Total Hours	32

Other Requirements

Requirement	Description
Requirements may overlap.	
A concentration is not required.	
Minimum GPA	3.0

Education Policy, Organization & Leadership, EdD

for the Doctor of Education in Education Policy, Organization and Leadership
(on campus, off-campus & online)

head of the department: Yoon Pak
directors of graduate studies: Wen-Hao Huang, Mary Allison Witt
graduate admissions information: Linda Stimson (on campus) and Jena Pfoff (online/off-campus)
overview of admissions & requirements: College of Education (https://education.illinois.edu/programs/grad/how-to-apply/?url=/programs/grad)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://education.illinois.edu/epol (https://education.illinois.edu/epol/)
program website: College of Education Programs (https://education.illinois.edu/faceted-search/programs/)
department faculty: Education Policy, Organization & Leadership Faculty (https://education.illinois.edu/faculty-finder/epol/)
college website: http://education.illinois.edu/
department office: 142 Education Building, 1310 South Sixth Street, Champaign, IL 61820
phone: (217) 244-3542
email: gradservices@education.illinois.edu

Graduate Degree Programs in Education Policy, Organization & Leadership

Education Policy, Organization and Leadership, CAS (p. 716) **(on campus and off-campus)**
Education Policy, Organization and Leadership, EdD (p. 722) **(on campus, off-campus & online)**
- **optional concentrations: EPOL concentrations listed below**| Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)|African American Studies (p. 1075)|Writing Studies (p. 1111)

Education Policy, Organization and Leadership, EdM (p. 718) **(on campus, off-campus & online)**
- **optional concentrations: EPOL concentrations listed below**| Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)

Education Policy, Organization and Leadership, MA (p. 720) **(on campus)**
- **optional concentrations: EPOL concentrations listed below**| Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)|African American Studies (p. 1075)

Education Policy, Organization and Leadership, PhD (p. 723) **(on campus)**
- **optional concentration: EPOL concentrations listed below**| Digital Learning (p. 1093)|African American Studies (p. 1075)|Writing Studies (p. 1111)

EPOL concentrations: Diversity & Equity in Education (p. 1094), Educational Administration & Leadership (p. 1095), Global Studies in Education (p. 1098), Higher Education (p. 1098), History of Education (p. 1099), Human Resource Development (p. 1099), Learning Design & Leadership (p. 1101), Philosophy of Education (p. 1104), Social Sciences & Education Policy (p. 1108)
College Teaching Minor (p. 1129)
joint programs:
- Education Policy, Organization and Leadership, EdM and Business Administration, MBA (p. 1158)
- Education Policy, Organization and Leadership, MA and Business Administration, MBA (p. 1158)

Degree programs in the Department of Education Policy, Organization and Leadership are designed to meet the academic and professional interests of individuals preparing for careers as academic professionals, adult educators, college professors, corporate trainers, educational policy analysts, governmental administrators, instructional designers/technologists, non-profit representatives, organizational development specialists, and university administration leaders.

Admission

The Department of Education Policy, Organization and Leadership carefully considers all applicants for graduate study. Interested applicants should start at http://education.illinois.edu/programs/grad (http://education.illinois.edu/programs/grad/). The quality of the applicant's undergraduate and graduate training and grade point average are primary considerations. Other important factors evaluated include the three letters of recommendation and statement of purpose. International applicants must submit a TOEFL score.

Off-Campus Programs

The Education Policy, Organization and Leadership department offers selected off-campus programs in the Chicago region, through the use of a cohort model. The Ed.M. and C.A.S. degree options with General

Administrative Endorsement are offered in the Chicago region. An Ed.D. degree cohort also is available in School Executive Leadership. Requirements for the off-campus Ed.M., C.A.S., and Ed.D. programs are identical to the on-campus degrees.

Facilities and Resources

The College of Education also has many resources to assist graduate students through their academic career. The Bureau of Educational Research works with students to secure research funding. The Council on Teacher Education (http://cote.illinois.edu/) entitles candidates seeking a Professional Educator License and provides accreditation of professional education programs. Each student completing a degree program is assigned a graduate adviser, who is available to assist the student with planning the program of study and determining degree requirements, courses and timelines for degree completion.

Information on University resources can be found at http://www.grad.illinois.edu/current-students (http://www.grad.illinois.edu/current-students/).

Financial Aid

Financial aid in the form of assistantships, scholarships, fellowships, and tuition waivers can be found throughout the college (https://education.illinois.edu/current-students/graduate/financial-aid/) and campus. Campus opportunities can be found at the Graduate College (http://www.grad.illinois.edu/funding-jobs/) and the Office of Student Financial Aid (http://www.osfa.illinois.edu/). **Please note: Graduate students employed as Staff by the University of Illinois at Urbana-Champaign are not eligible for a College of Education Award or Scholarship.**

for the Doctor of Education in Education Policy, Organization and Leadership (on campus, off-campus & online)

A list of programs and additional requirements can be found on the program's website (https://education.illinois.edu/faceted-search/programs/?degree=edd&department=epol), the College of Education Graduate Programs Handbook (https://education.illinois.edu/current-students/graduate/coe-graduate-handbook/), and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Students may select a concentration in:

African American Studies (p. 1075), Bilingual-Bicultural Education (http://catalog.illinois.edu/graduate/education/concentration/bilingual-bicultural-education/), Digital Learning (http://catalog.illinois.edu/graduate/education/concentration/digital-learning/), Diversity & Equity in Education (p. 1094), Educational Administration & Leadership (p. 1095), Global Studies in Education (p. 1098), Higher Education (p. 1098), History of Education (p. 1099), Human Resource Development (p. 1099), Learning Design & Leadership (p. 1101), Philosophy of Education (p. 1104), Social Sciences & Education Policy (p. 1108), Writing Studies (p. 1111)

This degree program can be completed either on campus or online; the requirements are listed below:

Required Courses:	Required Hours
Major subject coursework (includes concentration courses)	12
Research methods	12
Elective hours (includes 0-12 hours of independent study)	36
Dissertation research hours required (min/max applied toward degree)	4-16
Total minimum hours	64

Other Requirements

Requirement	Description
Other Requirements may overlap	
A concentration is not required	
Masters degree required for admission to Ed. D.	
Residency:	16 hours over 4 consecutive semesters of study
Qualifying exams	
Human subjects approval	
Preliminary exam	
Final exam/dissertation defense	
Dissertation deposit	
Minimum GPA:	3.0

Education Policy, Organization & Leadership, PhD

for the Doctor of Philosophy in Education Policy, Organization & Leadership

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head of the department: Yoon Pak
directors of graduate studies: Wen-Hao Huang, Mary Allison Witt
graduate admissions information: Linda Stimson (on campus) and Jena Pfoff (online/off-campus)
overview of admissions & requirements: College of Education (https://education.illinois.edu/programs/grad/how-to-apply/?url=/programs/grad)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://education.illinois.edu/epol (https://education.illinois.edu/epol/)
program website: College of Education Programs (https://education.illinois.edu/faceted-search/programs/)
department faculty: Education Policy, Organization & Leadership Faculty (https://education.illinois.edu/faculty-finder/epol/)
college website: http://education.illinois.edu/
department office: 142 Education Building, 1310 South Sixth Street, Champaign, IL 61820
phone: (217) 244-3542
email: gradservices@education.illinois.edu

Graduate Degree Programs in Education Policy, Organization & Leadership

Education Policy, Organization and Leadership, CAS (p. 716) **(on campus and off-campus)**
Education Policy, Organization and Leadership, EdD (p. 722) **(on campus, off-campus & online)**
optional concentrations: EPOL concentrations listed below| Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)|African American Studies (p. 1075)|Writing Studies (p. 1111)
Education Policy, Organization and Leadership, EdM (p. 718) **(on campus, off-campus & online)**
optional concentrations: EPOL concentrations listed below| Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)
Education Policy, Organization and Leadership, MA (p. 720) **(on campus)**
optional concentrations: EPOL concentrations listed below| Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)|African American Studies (p. 1075)
Education Policy, Organization and Leadership, PhD (p. 723) **(on campus)**
optional concentration: EPOL concentrations listed below| Digital Learning (p. 1093)|African American Studies (p. 1075)|Writing Studies (p. 1111)
EPOL concentrations: Diversity & Equity in Education (p. 1094), Educational Administration & Leadership (p. 1095), Global Studies in Education (p. 1098), Higher Education (p. 1098), History of Education (p. 1099), Human Resource Development (p. 1099), Learning Design & Leadership (p. 1101), Philosophy of Education (p. 1104), Social Sciences & Education Policy (p. 1108)
College Teaching Minor (p. 1129)
joint programs:
Education Policy, Organization and Leadership, EdM and Business Administration, MBA (p. 1158)
Education Policy, Organization and Leadership, MA and Business Administration, MBA (p. 1158)

Degree programs in the Department of Education Policy, Organization and Leadership are designed to meet the academic and professional interests of individuals preparing for careers as academic professionals, adult educators, college professors, corporate trainers, educational policy analysts, governmental administrators, instructional designers/technologists, non-profit representatives, organizational development specialists, and university administration leaders.

Admission

The Department of Education Policy, Organization and Leadership carefully considers all applicants for graduate study. Interested applicants should start at http://education.illinois.edu/programs/grad (http://education.illinois.edu/programs/grad/). The quality of the applicant's undergraduate and graduate training and grade point average are primary considerations. Other important factors evaluated include the three letters of recommendation and statement of purpose. International applicants must submit a TOEFL score.

Off-Campus Programs

The Education Policy, Organization and Leadership department offers selected off-campus programs in the Chicago region, through the use of a cohort model. The Ed.M. and C.A.S. degree options with General Administrative Endorsement are offered in the Chicago region. An Ed.D. degree cohort also is available in School Executive Leadership. Requirements for the off-campus Ed.M., C.A.S., and Ed.D. programs are identical to the on-campus degrees.

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Information on University resources can be found at http://www.grad.illinois.edu/current-students (http://www.grad.illinois.edu/current-students/).

Financial Aid

Financial aid in the form of assistantships, scholarships, fellowships, and tuition waivers can be found throughout the college (https://education.illinois.edu/current-students/graduate/financial-aid/) and campus. Campus opportunities can be found at the Graduate College (http://www.grad.illinois.edu/funding-jobs/) and the Office of Student Financial Aid (http://www.osfa.illinois.edu/). **Please note: Graduate students employed as Staff by the University of Illinois at Urbana-Champaign are not eligible for a College of Education Award or Scholarship.**

for the Doctor of Philosophy in Education Policy, Organization & Leadership

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The Department of Education Policy, Organization & Leadership offers many programs leading to the degree of Doctor of Philosophy (Ph.D.). A list of programs and additional requirements can be found on the program's website, (https://education.illinois.edu/faceted-search/programs/?degree=cas&department=epol)the College of Education Graduate Programs Handbook (https://education.illinois.edu/current-students/graduate/coe-graduate-handbook/), and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Students may select a concentration in:

African American Studies (p. 1075), Digital Learning (http://catalog.illinois.edu/graduate/education/concentration/digital-learning/), Diversity & Equity in Education (p. 1094), Educational Administration & Leadership (p. 1095), Global Studies in Education (p. 1098), Higher Education (p. 1098), History of Education (p. 1099), Human Resource Development (p. 1099), Learning Design & Leadership (p. 1101), Philosophy of Education (p. 1104), Social Sciences & Education Policy (p. 1108), Writing Studies (p. 1111)

Code	Title	Hours
Completion of at least 64 hours beyond the master's degree including:		
Major Subject Coursework (minimum)		32
Dissertation Research (min/max applied toward degree)		4-20
Independent Study (min/max applied toward degree)		0-12
Research Coursework [1]		16-20

(Optional) Concentration Courses. May overlap with other coursework requirements	12-24
Total Hours	64

Other requirements

Requirement	Description
A concentration is not required	
Minimum GPA:	3.0
Master's degree required for admission to Ph. D.	
Residency requirement:	2 consecutive full-time (12 hours) semesters of study on campus
Early research requirement	
Qualifying exams	
Human subjects approval	
Preliminary exam	
Final exam/dissertation defense	
Dissertation deposit	

[1] *All students will take a minimum of 16-20 credit hours, depending on area of methodology focus, in approved* research methods courses *(*https://education.illinois.edu/current-students/graduate/coe-graduate-handbook/phd/#PhDResearch*).*

Educational Psychology, EdM

for the degree of Master of Education in Educational Psychology

chair of the department: Kiel Christianson
director of graduate studies: Jinming Zhang
graduate admissions information: Mitzi Koeberlein
overview of admissions & requirements: College of Education (https://education.illinois.edu/programs/grad/how-to-apply/?url=/programs/grad)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: http://education.illinois.edu/edpsy (http://education.illinois.edu/edpsy/)
program website: College of Education Programs (https://education.illinois.edu/faceted-search/programs/)
department faculty: Educational Psychology Faculty (https://education.illinois.edu/faculty-finder/edpsy/)
college website: http://education.illinois.edu/
department office: 142 Education Building, 1310 South Sixth Street, Champaign, IL 61820
phone: (217) 244-3542
email: gradservices@education.illinois.edu

Graduate Degree Programs in Educational Psychology

Educational Psychology, EdM (p. 725) **(on campus & online)**
optional concentrations: Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)
Educational Psychology, MA (p. 728)
optional concentrations: Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)
Educational Psychology, MS (p. 731)
optional concentrations: Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)
Educational Psychology, PhD (p. 734)
optional concentration: Digital Learning (p. 1093)
Mental Health Counseling, MS (p. 875)
optional concentrations:
African American Studies (p. 1075) **(available to all on campus degrees)**
Second Language Acquisition and Teacher Education (http://www.slate.illinois.edu/) (PhD only)

Admission

Students entering a Ph.D. program without a master's degree must first complete the requirements for a Master of Science (including a master's thesis).

The Department offers admission to two terminal on-campus Master of Science (M.S.) degrees focusing on Quantitative and Qualitative Methodology, Measurement, and Evaluation (QUERIES) and Mental Health Counseling. There is no admission to terminal masters degrees in Cognitive Science of Teaching and Learning (CSTL), Developmental Sciences, or Counseling Psychology areas of specialization.

The department accepts applications for the Ph.D. degree, from both applicants who have completed their bachelor's degrees and those who have a master's degree. Students who enter the program without a prior master's incorporate their master's class work and research into their doctoral program, and earn a master's degree as the first step toward their Ph.D (satisfying the "Early Research Project" requirement). The department does not accept applications for master's degrees in CSTL, Developmental Sciences, or Counseling Psychology.

Applications

Applicants must submit a complete application for university admission, including three letters of reference, transcripts from all schools where undergraduate and graduate degrees were awarded or expect to be awarded prior to the application enrollment term, and other items listed in the department Web site (http://www.education.illinois.edu/edpsy/). Applicants to our doctoral program and M.S. in Mental Health Counseling apply for Fall enrollment. Current deadlines are posted on our department Web site (http://www.education.illinois.edu/edpsy/).

Doctoral candidates are admitted into one of four divisions: CSTL, Developmental Sciences, QUERIES and Counseling Psychology. When making admission decisions, division committees consider academic performance (e.g., grade-point average, GPA), GRE scores (optional), letters of recommendation, and statement of purpose. Preference is given to those with research experience and research interests that are aligned with existing research programs in the Department.

Master's candidates are admitted into QUERIES and Mental Health Counseling.

Grade Point Average

The preferred department standard for grade point average is 3.0 on a 4.0 scale. The University calculates undergraduate GPAs on the last two years of grades for degreed applicants and in the last one year for students who have not yet completed their bachelor's degree. Graduate GPAs are calculated on the total of all graduate level courses taken beyond the undergraduate degree.

Test of English as a Foreign Language (TOEFL)

International applicants must demonstrate English Language Proficiency for admission. Please see https://grad.illinois.edu/admissions/instructions/04c (https://grad.illinois.edu/admissions/instructions/04c/) for additional information on this requirement.

Area of Study Affiliation

All applicants to the Educational Psychology doctoral program must specify one of four areas in which they wish to study:

- Cognitive Science of Teaching and Learning (CSTL)
- Counseling Psychology (Counseling);
- Developmental Sciences
- Studies in Interpretive, Statistical Measurement, and Evaluative Methodologies for Research (QUERIES)

Detailed information about each area and about the research interests of the faculty can be found on the department Web site (http://www.education.illinois.edu/edpsy/).

Although all Ph.D. students are admitted to a specific area of study, the actual coursework, research, and faculty often overlap area boundaries. Departmental policy makes it possible for a student to change advisers and affiliation from one area to another when interests and research foci become more clearly defined or change. Many faculty members are affiliated with more than one area of study.

Mental Health Counseling M.S. students must choose one of three areas of study for their practicum experience:

- Mental Health Counseling
- Career Counseling
- Counseling and Developmental Sciences

Faculty Research Interests

The faculty's research agendas span a wide range of topics related to the study and application of psychological principles to develop and inform educational interventions and facilitate human development across the life span. Faculty conduct basic and translational research that explores the cognitive, life-span developmental, social-emotional, and socio-cultural factors that affect behavior, learning, and achievement in educational, clinical, and community contexts. They also engage in research on approaches to educational inquiry and the development of quantitative, qualitative and evaluative methodologies that underpin the development of evidence-based, policy-relevant studies. For information about specific faculty research interests, current grants, and publications, please visit the Faculty Finder (https://education.illinois.edu/faculty-finder/).

Center, Programs, and Institutes

Department faculty are affiliated with both research centers and institutes in the College of Education and the university more broadly, including the Adult Learning Lab, the Center for Education in Small Urban Communities, the Center for Advanced Study, the Beckman Institute, the Center for the Study of Reading, the Social Development Consortium, and others.

Facilities and Resources

The Department of Educational Psychology puts a high priority on working with its graduate students to secure fellowships and other awards.

The College of Education also has many resources to assist graduate students through their academic career. The Bureau of Educational Research works with students to secure research funding. The Council on Teacher Education (http://cote.illinois.edu/) entitles candidates seeking a Professional Educator License and provides accreditation of professional education programs. Each student completing a degree program is assigned a graduate adviser, who is available to assist the student with planning the program of study and determining degree requirements, courses and timelines for degree completion.

Information on University resources can be found at http://www.grad.illinois.edu/current-students (http://www.grad.illinois.edu/current-students/).

Financial Aid

Financial aid in the form of assistantships, scholarships, fellowships, and tuition waivers can be found throughout the college (https://education.illinois.edu/current-students/graduate/financial-aid/) and campus. Campus opportunities can be found at the Graduate College (http://www.grad.illinois.edu/funding-jobs/) and the Office of Student Financial Aid (http://www.osfa.illinois.edu/). **Please note: Graduate students employed as Staff by the University of Illinois at Urbana-Champaign are not eligible for a College of Education Award or Scholarship.**

The department does not require a separate financial aid application.

for the degree of Master of Education in Educational Psychology

The Department of Educational Psychology offers many programs leading to the degree of Master of Education (Ed.M.). A list of programs and additional requirements can be found on the program's website, (https://education.illinois.edu/faceted-search/programs/?degree=edm&department=edpsy) the College of Education Graduate Programs Handbook (https://education.illinois.edu/current-students/graduate/coe-graduate-handbook/), and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

The online Ed.M. program is not currently accepting applications.

Students may select a concentration in Bilingual-Bicultural Education (http://catalog.illinois.edu/graduate/education/concentration/bilingual-bicultural-education/) or Digital Learning (http://catalog.illinois.edu/graduate/education/concentration/digital-learning/).

Code	Title	Hours
Psychological Foundations Courses in Educational Psychology		
Select one of the following:		4
EPSY 400	Psychology of Learning in Education	
EPSY 401	Child Language and Education	
EPSY 402	Sociocultural Influence on Learning	

EPSY 404	Adjustment in School Settings	
EPSY 405	Personality and Soc Dev	
EPSY 406	Psychology of Classroom Management	
EPSY 407	Adult Learning and Development	
EPSY 408	Learning and Human Development with Educational Technology	
EPSY 430	Early Adolescent Development	
EPSY 485	Assessing Student Performance	
EPSY 490	Developments in Educational Psychology	
EPSY 553	Global Issues in Learning	
Philosophical and Social Foundations Courses in Education Policy, Organization and Leadership		
Select one of the following:		4
EPOL 401	History of American Education	
EPOL 402	Asian American Education	
EPOL 403	Historical and Social Barriers	
EPOL 405	School and Society	
EPOL 406	Professional Ethics in Education	
EPOL 407	Critical Thinking in Education	
EPOL 408	Aesthetic Education	
EPOL 409	Sociology of Education	
EPOL 410	Racial and Ethnic Families	
EPOL 412	Politics of Education	
EPOL 413	Economics of Education	
EPOL 480	Technology and Educational Reform	
EPOL 539		
Elective Hours: [1]		24
400/500-Level Hours Required: 12 hours (Independent Study included)		
500-Level Hours Required in Education: 12 hours		
Research/Project/Independent Study Hours (min/max applied toward degree):		0-8
Total Hours		32

Other Requirements:

Requirement	Description
Minimum GPA	3.0

[1] *Students pursuing the* Concentration in African American Studies *(*http://catalog.illinois.edu/graduate/graduate-majors/african-amer-studies/#concentrationconcentrationtext*) are required to take 24 hours of Concentration courses, for a total of 56 hours.*

Learning Outcomes: Educational Psychology, EdM

Learning Outcomes for the degree of Master of Education in Educational Psychology

Counseling Psychology Division

1. Counseling Psychology students will possess a broad knowledge of the core areas of psychology.
2. Counseling Psychology students will have an understanding of the basic statistical analytical methods, research designs, measurement models, and research approaches.3
3. Counseling Psychology students will demonstrate skills at independently designing, conducting, writing, and presenting research studies.
4. Counseling Psychology students will be skilled in psychological assessment in all aspects (design, psychometric evaluation, administering, and communicating results) as well as in a variety of contexts (e.g., both environmental and individual assessment).
5. Counseling Psychology students will have the ability to conceptualize clients from a variety of theoretical and scientifically-informed frameworks, present such a conceptualization to others and establish means and methods to evaluate its accuracy
6. Counseling Psychology students will possess theoretical and scientific knowledge regarding skills in the provision of interventions.
7. Counseling Psychology students will value and develop competence in aspects of diversity and individual differences.
8. Counseling Psychology students will have knowledge and appreciation of the ethical issues involved in being a psychologist.
9. Counseling Psychology students will adopt a critical, scientific approach to professional activities.

Developmental Sciences Division

1. Developmental Sciences students will obtain a broad knowledge of the core areas of developmental research across the lifespan.This includes but is not limited to: a) social and emotional development; b) language and mathematical development; c) academic motivation and future planning/orientation; d) bullying and peer harassment; and e) identity formation with respect to gender, race, and ethnicity.
2. Developmental Sciences students will develop a deep expertise in a relevant specialized topic within or across these core areas. This includes mastering research findings in a topic area selected by the student, understanding the relevant theoretical perspectives related to this topic and learning about the appropriate methodological approaches to understanding the core area.
3. Developmental Sciences students will obtain a sophisticated knowledge base of research approaches and analytic tools necessary for contribution to scholarly literature in Developmental Sciences broadly and their specialized topic in particular. Specifically, they will develop skills to independently design, conduct, write, and present/publish research studies related to their area of focus/career path.

Cognitive Science of Teaching and Learning (CSTL) Division

1. CSTL students will obtain a broad knowledge of the core areas related to the cognitive science of teaching and learning. This includes knowledge of theoretical perspectives, methodological approaches, and key research findings in the core areas of (a) cognition and learning across the lifespan, (b) learning and the psychology of language, (c) multimodal information processing, and (d) sociocultural dimensions of learning.
2. CSTL students will obtain a deep expertise in a relevant topic within or cutting across these core areas. This involves mastering theoretical perspectives, methodological approaches, and key research findings in a topic selected by the student. In addition, they will develop skills at independently designing, conducting, writing, and presenting/publishing research studies.
3. CSTL students will obtain a sophisticated knowledge base of research approaches and analytic tools necessary for contribution

to the professional literature and their chosen professional identity/career path. This involves understanding the basic statistical analytical methods, research designs, measurement models, and research approaches.

Studies in Interpretive, Statistical, Measurement, and Evaluative Methodologies for Education (QUERIES) Division

1. QUERIES students will obtain a broad basic knowledge of the core areas of educational research methodologies, quantitative, qualitative, and evaluative research methods.
2. QUERIES students will obtain a sophisticated knowledge base of quantitative and/or qualitative research approaches and analytic tools necessary for contribution to the professional literature.
3. QUERIES students in Measurement will become skilled in the development and use of techniques for collecting and analyzing 'test' data through the study of measurement methods.
4. QUERIES students in Statistics will be skilled in traditional and modern quantitative analytic methods.
5. QUERIES students in Evaluation will have the skills required for Evaluation scholars –in education, social welfare, health services, community development, human resource development, and other domains.

Educational Psychology, MA

for the degree of Master of Arts in Educational Psychology

chair of the department: Kiel Christianson
director of graduate studies: Jinming Zhang
graduate admissions information: Mitzi Koeberlein
overview of admissions & requirements: College of Education (https://education.illinois.edu/programs/grad/how-to-apply/?url=/programs/grad)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: http://education.illinois.edu/edpsy (http://education.illinois.edu/edpsy/)
program website: College of Education Programs (https://education.illinois.edu/faceted-search/programs/)
department faculty: Educational Psychology Faculty (https://education.illinois.edu/faculty-finder/edpsy/)
college website: http://education.illinois.edu/
department office: 142 Education Building, 1310 South Sixth Street, Champaign, IL 61820
phone: (217) 244-3542
email: gradservices@education.illinois.edu

Graduate Degree Programs in Educational Psychology

Educational Psychology, EdM (p. 725) **(on campus & online)**
optional concentrations: Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)
Educational Psychology, MA (p. 728)
optional concentrations: Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)
Educational Psychology, MS (p. 731)
optional concentrations: Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)
Educational Psychology, PhD (p. 734)
optional concentration: Digital Learning (p. 1093)
Mental Health Counseling, MS (p. 875)
optional concentrations:
African American Studies (p. 1075) **(available to all on campus degrees)**
Second Language Acquisition and Teacher Education (http://www.slate.illinois.edu/) (PhD only)

Admission

Students entering a Ph.D. program without a master's degree must first complete the requirements for a Master of Science (including a master's thesis).

The Department offers admission to two terminal on-campus Master of Science (M.S.) degrees focusing on Quantitative and Qualitative Methodology, Measurement, and Evaluation (QUERIES) and Mental Health Counseling. There is no admission to terminal masters degrees in Cognitive Science of Teaching and Learning (CSTL), Developmental Sciences, or Counseling Psychology areas of specialization.

The department accepts applications for the Ph.D. degree, from both applicants who have completed their bachelor's degrees and those who have a master's degree. Students who enter the program without a prior master's incorporate their master's class work and research into their doctoral program, and earn a master's degree as the first step toward their Ph.D (satisfying the "Early Research Project" requirement). The department does not accept applications for master's degrees in CSTL, Developmental Sciences, or Counseling Psychology.

Applications

Applicants must submit a complete application for university admission, including three letters of reference, transcripts from all schools where undergraduate and graduate degrees were awarded or expect to be awarded prior to the application enrollment term, and other items listed in the department Web site (http://www.education.illinois.edu/edpsy/). Applicants to our doctoral program and M.S. in Mental Health Counseling apply for Fall enrollment. Current deadlines are posted on our department Web site (http://www.education.illinois.edu/edpsy/).

Doctoral candidates are admitted into one of four divisions: CSTL, Developmental Sciences, QUERIES and Counseling Psychology. When making admission decisions, division committees consider academic performance (e.g., grade-point average, GPA), GRE scores (optional), letters of recommendation, and statement of purpose. Preference is given to those with research experience and research interests that are aligned with existing research programs in the Department.

Master's candidates are admitted into QUERIES and Mental Health Counseling.

Grade Point Average

The preferred department standard for grade point average is 3.0 on a 4.0 scale. The University calculates undergraduate GPAs on the last two years of grades for degreed applicants and in the last one year for students who have not yet completed their bachelor's degree. Graduate GPAs are calculated on the total of all graduate level courses taken beyond the undergraduate degree.

Test of English as a Foreign Language (TOEFL)

International applicants must demonstrate English Language Proficiency for admission. Please see https://grad.illinois.edu/admissions/instructions/04c (https://grad.illinois.edu/admissions/instructions/04c/) for additional information on this requirement.

Area of Study Affiliation

All applicants to the Educational Psychology doctoral program must specify one of four areas in which they wish to study:

- Cognitive Science of Teaching and Learning (CSTL)
- Counseling Psychology (Counseling);
- Developmental Sciences
- Studies in Interpretive, Statistical Measurement, and Evaluative Methodologies for Research (QUERIES)

Detailed information about each area and about the research interests of the faculty can be found on the department Web site (http://www.education.illinois.edu/edpsy/).

Although all Ph.D. students are admitted to a specific area of study, the actual coursework, research, and faculty often overlap area boundaries. Departmental policy makes it possible for a student to change advisers and affiliation from one area to another when interests and research foci become more clearly defined or change. Many faculty members are affiliated with more than one area of study.

Mental Health Counseling M.S. students must choose one of three areas of study for their practicum experience:

- Mental Health Counseling
- Career Counseling
- Counseling and Developmental Sciences

Faculty Research Interests

The faculty's research agendas span a wide range of topics related to the study and application of psychological principles to develop and inform educational interventions and facilitate human development across the life span. Faculty conduct basic and translational research that explores the cognitive, life-span developmental, social-emotional, and socio-cultural factors that affect behavior, learning, and achievement in educational, clinical, and community contexts. They also engage in research on approaches to educational inquiry and the development of quantitative, qualitative and evaluative methodologies that underpin the development of evidence-based, policy-relevant studies. For information about specific faculty research interests, current grants, and publications, please visit the Faculty Finder (https://education.illinois.edu/faculty-finder/).

Center, Programs, and Institutes

Department faculty are affiliated with both research centers and institutes in the College of Education and the university more broadly, including the Adult Learning Lab, the Center for Education in Small Urban Communities, the Center for Advanced Study, the Beckman Institute, the Center for the Study of Reading, the Social Development Consortium, and others.

Facilities and Resources

The Department of Educational Psychology puts a high priority on working with its graduate students to secure fellowships and other awards.

The College of Education also has many resources to assist graduate students through their academic career. The Bureau of Educational Research works with students to secure research funding. The Council on Teacher Education (http://cote.illinois.edu/) entitles candidates seeking a Professional Educator License and provides accreditation of professional education programs. Each student completing a degree program is assigned a graduate adviser, who is available to assist the student with planning the program of study and determining degree requirements, courses and timelines for degree completion.

Information on University resources can be found at http://www.grad.illinois.edu/current-students (http://www.grad.illinois.edu/current-students/).

Financial Aid

Financial aid in the form of assistantships, scholarships, fellowships, and tuition waivers can be found throughout the college (https://education.illinois.edu/current-students/graduate/financial-aid/) and campus. Campus opportunities can be found at the Graduate College (http://www.grad.illinois.edu/funding-jobs/) and the Office of Student Financial Aid (http://www.osfa.illinois.edu/). **Please note: Graduate students employed as Staff by the University of Illinois at Urbana-Champaign are not eligible for a College of Education Award or Scholarship.**

The department does not require a separate financial aid application.

for the degree of Master of Arts in Educational Psychology

The Department of Educational Psychology offers many programs leading to the degree of Master of Arts (M.A.). A list of programs and additional requirements can be found on the program's website, (https://education.illinois.edu/faceted-search/programs/?degree=edm&department=edpsy) the College of Education Graduate Programs Handbook (https://education.illinois.edu/current-students/graduate/coe-graduate-handbook/), and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Students may select a concentration in Bilingual-Bicultural Education (http://catalog.illinois.edu/graduate/education/concentration/bilingual-bicultural-education/) or Digital Learning (http://catalog.illinois.edu/graduate/education/concentration/digital-learning/).

Code	Title	Hours
Psychological Foundations Courses in Educational Psychology		
Select one of the following:		4
EPSY 400	Psychology of Learning in Education	
EPSY 401	Child Language and Education	
EPSY 402	Sociocultural Influence on Learning	
EPSY 404	Adjustment in School Settings	
EPSY 405	Personality and Soc Dev	

EPSY 406	Psychology of Classroom Management	
EPSY 407	Adult Learning and Development	
EPSY 408	Learning and Human Development with Educational Technology	
EPSY 430	Early Adolescent Development	
EPSY 485	Assessing Student Performance	
EPSY 490	Developments in Educational Psychology	
EPSY 553	Global Issues in Learning	
Philosophical and Social Foundations Courses in Education Policy, Organization and Leadership		
Select one of the following:		4
EPOL 401	History of American Education	
EPOL 402	Asian American Education	
EPOL 403	Historical and Social Barriers	
EPOL 405	School and Society	
EPOL 406	Professional Ethics in Education	
EPOL 407	Critical Thinking in Education	
EPOL 408	Aesthetic Education	
EPOL 409	Sociology of Education	
EPOL 410	Racial and Ethnic Families	
EPOL 412	Politics of Education	
EPOL 413	Economics of Education	
EPOL 480	Technology and Educational Reform	
EPOL 539		
Elective Hours: [1]		24
400/500-Level Hours Required: 12 hours (Independent Study and Thesis Hours included)		
500-Level Hours Required in Education: 12 hours		
Research/Project/Independent Study Hours (min/max applied toward degree):		0-8
EPSY 599	Thesis Research (min/max applied toward degree)	2-8
Total Hours		32

Other Requirements

Requirement	Description
Human Subjects Approval	
Minimum GPA	3.0

[1] *Students pursuing the* Concentration in African American Studies (http://catalog.illinois.edu/graduate/graduate-majors/african-amer-studies/#concentrationconcentrationtext) *are required to take 24 hours of Concentration courses, for a total of 56 hours.*

Learning Outcomes: Educational Psychology, MA

Learning Outcomes for the degree of Master of Arts in Educational Psychology

Counseling Psychology Division

1. Counseling Psychology students will possess a broad knowledge of the core areas of psychology.
2. Counseling Psychology students will have an understanding of the basic statistical analytical methods, research designs, measurement models, and research approaches.3
3. Counseling Psychology students will demonstrate skills at independently designing, conducting, writing, and presenting research studies.
4. Counseling Psychology students will be skilled in psychological assessment in all aspects (design, psychometric evaluation, administering, and communicating results) as well as in a variety of contexts (e.g., both environmental and individual assessment).
5. Counseling Psychology students will have the ability to conceptualize clients from a variety of theoretical and scientifically-informed frameworks, present such a conceptualization to others and establish means and methods to evaluate its accuracy
6. Counseling Psychology students will possess theoretical and scientific knowledge regarding skills in the provision of interventions.
7. Counseling Psychology students will value and develop competence in aspects of diversity and individual differences.
8. Counseling Psychology students will have knowledge and appreciation of the ethical issues involved in being a psychologist.
9. Counseling Psychology students will adopt a critical, scientific approach to professional activities.

Developmental Sciences Division

1. Developmental Sciences students will obtain a broad knowledge of the core areas of developmental research across the lifespan.This includes but is not limited to: a) social and emotional development; b) language and mathematical development; c) academic motivation and future planning/orientation; d) bullying and peer harassment; and e) identity formation with respect to gender, race, and ethnicity.
2. Developmental Sciences students will develop a deep expertise in a relevant specialized topic within or across these core areas. This includes mastering research findings in a topic area selected by the student, understanding the relevant theoretical perspectives related to this topic and learning about the appropriate methodological approaches to understanding the core area.
3. Developmental Sciences students will obtain a sophisticated knowledge base of research approaches and analytic tools necessary for contribution to scholarly literature in Developmental Sciences broadly and their specialized topic in particular. Specifically, they will develop skills to independently design, conduct, write, and present/publish research studies related to their area of focus/career path.

Cognitive Science of Teaching and Learning (CSTL) Division

1. CSTL students will obtain a broad knowledge of the core areas related to the cognitive science of teaching and learning. This includes knowledge of theoretical perspectives, methodological approaches, and key research findings in the core areas of (a) cognition and learning across the lifespan, (b) learning and the psychology of language, (c) multimodal information processing, and (d) sociocultural dimensions of learning.
2. CSTL students will obtain a deep expertise in a relevant topic within or cutting across these core areas. This involves mastering theoretical perspectives, methodological approaches, and key research findings in a topic selected by the student. In addition, they will develop skills at independently designing, conducting, writing, and presenting/publishing research studies.
3. CSTL students will obtain a sophisticated knowledge base of research approaches and analytic tools necessary for contribution

to the professional literature and their chosen professional identity/career path. This involves understanding the basic statistical analytical methods, research designs, measurement models, and research approaches.

Studies in Interpretive, Statistical, Measurement, and Evaluative Methodologies for Education (QUERIES) Division

1. QUERIES students will obtain a broad basic knowledge of the core areas of educational research methodologies, quantitative, qualitative, and evaluative research methods.
2. QUERIES students will obtain a sophisticated knowledge base of quantitative and/or qualitative research approaches and analytic tools necessary for contribution to the professional literature.
3. QUERIES students in Measurement will become skilled in the development and use of techniques for collecting and analyzing 'test' data through the study of measurement methods.
4. QUERIES students in Statistics will be skilled in traditional and modern quantitative analytic methods.
5. QUERIES students in Evaluation will have the skills required for Evaluation scholars –in education, social welfare, health services, community development, human resource development, and other domains.

Educational Psychology, MS

for the degree of Master of Science in Educational Psychology

chair of the department: Kiel Christianson
director of graduate studies: Jinming Zhang
graduate admissions information: Mitzi Koeberlein
overview of admissions & requirements: College of Education (https://education.illinois.edu/programs/grad/how-to-apply/?url=/programs/grad)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: http://education.illinois.edu/edpsy (http://education.illinois.edu/edpsy/)
program website: College of Education Programs (https://education.illinois.edu/faceted-search/programs/)
department faculty: Educational Psychology Faculty (https://education.illinois.edu/faculty-finder/edpsy/)
college website: http://education.illinois.edu/
department office: 142 Education Building, 1310 South Sixth Street, Champaign, IL 61820
phone: (217) 244-3542
email: gradservices@education.illinois.edu

Graduate Degree Programs in Educational Psychology

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optional concentration: Digital Learning (p. 1093)
Mental Health Counseling, MS (p. 875)
optional concentrations:
African American Studies (p. 1075) **(available to all on campus degrees)**
Second Language Acquisition and Teacher Education (http://www.slate.illinois.edu/) (PhD only)

Admission

Students entering a Ph.D. program without a master's degree must first complete the requirements for a Master of Science (including a master's thesis).

The Department offers admission to two terminal on-campus Master of Science (M.S.) degrees focusing on Quantitative and Qualitative Methodology, Measurement, and Evaluation (QUERIES) and Mental Health Counseling. There is no admission to terminal masters degrees in Cognitive Science of Teaching and Learning (CSTL), Developmental Sciences, or Counseling Psychology areas of specialization.

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Applications

Applicants must submit a complete application for university admission, including three letters of reference, transcripts from all schools where undergraduate and graduate degrees were awarded or expect to be awarded prior to the application enrollment term, and other items listed in the department Web site (http://www.education.illinois.edu/edpsy/). Applicants to our doctoral program and M.S. in Mental Health Counseling apply for Fall enrollment. Current deadlines are posted on our department Web site (http://www.education.illinois.edu/edpsy/).

Doctoral candidates are admitted into one of four divisions: CSTL, Developmental Sciences, QUERIES and Counseling Psychology. When making admission decisions, division committees consider academic performance (e.g., grade-point average, GPA), GRE scores (optional), letters of recommendation, and statement of purpose. Preference is given to those with research experience and research interests that are aligned with existing research programs in the Department.

Master's candidates are admitted into QUERIES and Mental Health Counseling.

Grade Point Average

The preferred department standard for grade point average is 3.0 on a 4.0 scale. The University calculates undergraduate GPAs on the last two years of grades for degreed applicants and in the last one year for students who have not yet completed their bachelor's degree. Graduate GPAs are calculated on the total of all graduate level courses taken beyond the undergraduate degree.

Test of English as a Foreign Language (TOEFL)

International applicants must demonstrate English Language Proficiency for admission. Please see https://grad.illinois.edu/admissions/instructions/04c (https://grad.illinois.edu/admissions/instructions/04c/) for additional information on this requirement.

Area of Study Affiliation

All applicants to the Educational Psychology doctoral program must specify one of four areas in which they wish to study:

- Cognitive Science of Teaching and Learning (CSTL)
- Counseling Psychology (Counseling);
- Developmental Sciences
- Studies in Interpretive, Statistical Measurement, and Evaluative Methodologies for Research (QUERIES)

Detailed information about each area and about the research interests of the faculty can be found on the department Web site (http://www.education.illinois.edu/edpsy/).

Although all Ph.D. students are admitted to a specific area of study, the actual coursework, research, and faculty often overlap area boundaries. Departmental policy makes it possible for a student to change advisers and affiliation from one area to another when interests and research foci become more clearly defined or change. Many faculty members are affiliated with more than one area of study.

Mental Health Counseling M.S. students must choose one of three areas of study for their practicum experience:

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- Career Counseling
- Counseling and Developmental Sciences

Faculty Research Interests

The faculty's research agendas span a wide range of topics related to the study and application of psychological principles to develop and inform educational interventions and facilitate human development across the life span. Faculty conduct basic and translational research that explores the cognitive, life-span developmental, social-emotional, and socio-cultural factors that affect behavior, learning, and achievement in educational, clinical, and community contexts. They also engage in research on approaches to educational inquiry and the development of quantitative, qualitative and evaluative methodologies that underpin the development of evidence-based, policy-relevant studies. For information about specific faculty research interests, current grants, and publications, please visit the Faculty Finder (https://education.illinois.edu/faculty-finder/).

Center, Programs, and Institutes

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Facilities and Resources

The Department of Educational Psychology puts a high priority on working with its graduate students to secure fellowships and other awards.

The College of Education also has many resources to assist graduate students through their academic career. The Bureau of Educational Research works with students to secure research funding. The Council on Teacher Education (http://cote.illinois.edu/) entitles candidates seeking a Professional Educator License and provides accreditation of professional education programs. Each student completing a degree program is assigned a graduate adviser, who is available to assist the student with planning the program of study and determining degree requirements, courses and timelines for degree completion.

Information on University resources can be found at http://www.grad.illinois.edu/current-students (http://www.grad.illinois.edu/current-students/).

Financial Aid

Financial aid in the form of assistantships, scholarships, fellowships, and tuition waivers can be found throughout the college (https://education.illinois.edu/current-students/graduate/financial-aid/) and campus. Campus opportunities can be found at the Graduate College (http://www.grad.illinois.edu/funding-jobs/) and the Office of Student Financial Aid (http://www.osfa.illinois.edu/). **Please note: Graduate students employed as Staff by the University of Illinois at Urbana-Champaign are not eligible for a College of Education Award or Scholarship.**

The department does not require a separate financial aid application.

for the degree of Master of Science in Educational Psychology

The Department of Educational Psychology offers many programs leading to the degree of Master of Science (M.S.). A list of programs and additional requirements can be found on the program's website, (https://education.illinois.edu/faceted-search/programs/?degree=edm&department=edpsy) the College of Education Graduate Programs Handbook (https://education.illinois.edu/current-students/graduate/coe-graduate-handbook/), and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Students may select a concentration in Bilingual-Bicultural Education (http://catalog.illinois.edu/graduate/education/concentration/bilingual-bicultural-education/) or Digital Learning (http://catalog.illinois.edu/graduate/education/concentration/digital-learning/).

Code	Title	Hours
Psychological Foundations Courses In Educational Psychology		
Select one of the following:		4
EPSY 400	Psychology of Learning in Education	
EPSY 401	Child Language and Education	
EPSY 402	Sociocultural Influence on Learning	
EPSY 404	Adjustment in School Settings	
EPSY 405	Personality and Soc Dev	

EPSY 406	Psychology of Classroom Management	
EPSY 407	Adult Learning and Development	
EPSY 408	Learning and Human Development with Educational Technology	
EPSY 430	Early Adolescent Development	
EPSY 485	Assessing Student Performance	
EPSY 490	Developments in Educational Psychology	
EPSY 553	Global Issues in Learning	
Philosophical and Social Foundations in Education Policy, Organization and Leadership		
Select one of the following:		4
EPOL 401	History of American Education	
EPOL 402	Asian American Education	
EPOL 403	Historical and Social Barriers	
EPOL 405	School and Society	
EPOL 406	Professional Ethics in Education	
EPOL 407	Critical Thinking in Education	
EPOL 408	Aesthetic Education	
EPOL 409	Sociology of Education	
EPOL 410	Racial and Ethnic Families	
EPOL 412	Politics of Education	
EPOL 413	Economics of Education	
EPOL 480	Technology and Educational Reform	
EPOL 539		
Elective Hours: [1]		24
400/500-Level Hours Required: 12 hours (Independent Study and Thesis Hours included)		
500-Level Hours Required in Education: 12 hours		
Research/Project/Independent Study Hours (min/max applied toward degree):		0-8
EPSY 599	Thesis Research (min/max applied toward degree)	2-8
Total Hours		**32**

Other Requirements

Requirement	Description
Human Subjects Approval	
Minimum GPA	3.0

[1] *Students pursuing the* Concentration in African American Studies *(*http://catalog.illinois.edu/graduate/graduate-majors/african-amer-studies/#concentrationconcentrationtext*) are required to take 24 hours of Concentration courses, for a total of 56 hours.*

Learning Outcomes: Educational Psychology, MS

Learning Outcomes for the degree of Master of Science in Educational Psychology

Counseling Psychology Division

1. Counseling Psychology students will possess a broad knowledge of the core areas of psychology.
2. Counseling Psychology students will have an understanding of the basic statistical analytical methods, research designs, measurement models, and research approaches.3
3. Counseling Psychology students will demonstrate skills at independently designing, conducting, writing, and presenting research studies.
4. Counseling Psychology students will be skilled in psychological assessment in all aspects (design, psychometric evaluation, administering, and communicating results) as well as in a variety of contexts (e.g., both environmental and individual assessment).
5. Counseling Psychology students will have the ability to conceptualize clients from a variety of theoretical and scientifically-informed frameworks, present such a conceptualization to others and establish means and methods to evaluate its accuracy
6. Counseling Psychology students will possess theoretical and scientific knowledge regarding skills in the provision of interventions.
7. Counseling Psychology students will value and develop competence in aspects of diversity and individual differences.
8. Counseling Psychology students will have knowledge and appreciation of the ethical issues involved in being a psychologist.
9. Counseling Psychology students will adopt a critical, scientific approach to professional activities.

Developmental Sciences Division

1. Developmental Sciences students will obtain a broad knowledge of the core areas of developmental research across the lifespan.This includes but is not limited to: a) social and emotional development; b) language and mathematical development; c) academic motivation and future planning/orientation; d) bullying and peer harassment; and e) identity formation with respect to gender, race, and ethnicity.
2. Developmental Sciences students will develop a deep expertise in a relevant specialized topic within or across these core areas. This includes mastering research findings in a topic area selected by the student, understanding the relevant theoretical perspectives related to this topic and learning about the appropriate methodological approaches to understanding the core area.
3. Developmental Sciences students will obtain a sophisticated knowledge base of research approaches and analytic tools necessary for contribution to scholarly literature in Developmental Sciences broadly and their specialized topic in particular. Specifically, they will develop skills to independently design, conduct, write, and present/publish research studies related to their area of focus/career path.

Cognitive Science of Teaching and Learning (CSTL) Division

1. CSTL students will obtain a broad knowledge of the core areas related to the cognitive science of teaching and learning. This includes knowledge of theoretical perspectives, methodological approaches, and key research findings in the core areas of (a) cognition and learning across the lifespan, (b) learning and the psychology of language, (c) multimodal information processing, and (d) sociocultural dimensions of learning.
2. CSTL students will obtain a deep expertise in a relevant topic within or cutting across these core areas. This involves mastering theoretical perspectives, methodological approaches, and key research findings in a topic selected by the student. In addition, they will develop skills at independently designing, conducting, writing, and presenting/publishing research studies.
3. CSTL students will obtain a sophisticated knowledge base of research approaches and analytic tools necessary for contribution

to the professional literature and their chosen professional identity/career path. This involves understanding the basic statistical analytical methods, research designs, measurement models, and research approaches.

Studies in Interpretive, Statistical, Measurement, and Evaluative Methodologies for Education (QUERIES) Division

1. QUERIES students will obtain a broad basic knowledge of the core areas of educational research methodologies, quantitative, qualitative, and evaluative research methods.
2. QUERIES students will obtain a sophisticated knowledge base of quantitative and/or qualitative research approaches and analytic tools necessary for contribution to the professional literature.
3. QUERIES students in Measurement will become skilled in the development and use of techniques for collecting and analyzing 'test' data through the study of measurement methods.
4. QUERIES students in Statistics will be skilled in traditional and modern quantitative analytic methods.
5. QUERIES students in Evaluation will have the skills required for Evaluation scholars –in education, social welfare, health services, community development, human resource development, and other domains.

Educational Psychology, PhD

for the degree of Doctor of Philosophy in Educational Psychology

chair of the department: Kiel Christianson
director of graduate studies: Jinming Zhang
graduate admissions information: Mitzi Koeberlein
overview of admissions & requirements: College of Education (https://education.illinois.edu/programs/grad/how-to-apply/?url=/programs/grad)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: http://education.illinois.edu/edpsy (http://education.illinois.edu/edpsy/)
program website: College of Education Programs (https://education.illinois.edu/faceted-search/programs/)
department faculty: Educational Psychology Faculty (https://education.illinois.edu/faculty-finder/edpsy/)
college website: http://education.illinois.edu/
department office: 142 Education Building, 1310 South Sixth Street, Champaign, IL 61820
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Graduate Degree Programs in Educational Psychology

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Educational Psychology, MS (p. 731)
optional concentrations: Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)
Educational Psychology, PhD (p. 734)
optional concentration: Digital Learning (p. 1093)
Mental Health Counseling, MS (p. 875)
optional concentrations:
African American Studies (p. 1075) **(available to all on campus degrees)**
Second Language Acquisition and Teacher Education (http://www.slate.illinois.edu/) (PhD only)

Admission

Students entering a Ph.D. program without a master's degree must first complete the requirements for a Master of Science (including a master's thesis).

The Department offers admission to two terminal on-campus Master of Science (M.S.) degrees focusing on Quantitative and Qualitative Methodology, Measurement, and Evaluation (QUERIES) and Mental Health Counseling. There is no admission to terminal masters degrees in Cognitive Science of Teaching and Learning (CSTL), Developmental Sciences, or Counseling Psychology areas of specialization.

The department accepts applications for the Ph.D. degree, from both applicants who have completed their bachelor's degrees and those who have a master's degree. Students who enter the program without a prior master's incorporate their master's class work and research into their doctoral program, and earn a master's degree as the first step toward their Ph.D (satisfying the "Early Research Project" requirement). The department does not accept applications for master's degrees in CSTL, Developmental Sciences, or Counseling Psychology.

Applications

Applicants must submit a complete application for university admission, including three letters of reference, transcripts from all schools where undergraduate and graduate degrees were awarded or expect to be awarded prior to the application enrollment term, and other items listed in the department Web site (http://www.education.illinois.edu/edpsy/). Applicants to our doctoral program and M.S. in Mental Health Counseling apply for Fall enrollment. Current deadlines are posted on our department Web site (http://www.education.illinois.edu/edpsy/).

Doctoral candidates are admitted into one of four divisions: CSTL, Developmental Sciences, QUERIES and Counseling Psychology. When making admission decisions, division committees consider academic performance (e.g., grade-point average, GPA), GRE scores (optional), letters of recommendation, and statement of purpose. Preference is given to those with research experience and research interests that are aligned with existing research programs in the Department.

Master's candidates are admitted into QUERIES and Mental Health Counseling.

Grade Point Average

The preferred department standard for grade point average is 3.0 on a 4.0 scale. The University calculates undergraduate GPAs on the last two years of grades for degreed applicants and in the last one year for students who have not yet completed their bachelor's degree. Graduate GPAs are calculated on the total of all graduate level courses taken beyond the undergraduate degree.

Test of English as a Foreign Language (TOEFL)

International applicants must demonstrate English Language Proficiency for admission. Please see https://grad.illinois.edu/admissions/instructions/04c (https://grad.illinois.edu/admissions/instructions/04c/) for additional information on this requirement.

Area of Study Affiliation

All applicants to the Educational Psychology doctoral program must specify one of four areas in which they wish to study:

- Cognitive Science of Teaching and Learning (CSTL)
- Counseling Psychology (Counseling);
- Developmental Sciences
- Studies in Interpretive, Statistical Measurement, and Evaluative Methodologies for Research (QUERIES)

Detailed information about each area and about the research interests of the faculty can be found on the department Web site (http://www.education.illinois.edu/edpsy/).

Although all Ph.D. students are admitted to a specific area of study, the actual coursework, research, and faculty often overlap area boundaries. Departmental policy makes it possible for a student to change advisers and affiliation from one area to another when interests and research foci become more clearly defined or change. Many faculty members are affiliated with more than one area of study.

Mental Health Counseling M.S. students must choose one of three areas of study for their practicum experience:

- Mental Health Counseling
- Career Counseling
- Counseling and Developmental Sciences

Faculty Research Interests

The faculty's research agendas span a wide range of topics related to the study and application of psychological principles to develop and inform educational interventions and facilitate human development across the life span. Faculty conduct basic and translational research that explores the cognitive, life-span developmental, social-emotional, and socio-cultural factors that affect behavior, learning, and achievement in educational, clinical, and community contexts. They also engage in research on approaches to educational inquiry and the development of quantitative, qualitative and evaluative methodologies that underpin the development of evidence-based, policy-relevant studies. For information about specific faculty research interests, current grants, and publications, please visit the Faculty Finder (https://education.illinois.edu/faculty-finder/).

Center, Programs, and Institutes

Department faculty are affiliated with both research centers and institutes in the College of Education and the university more broadly, including the Adult Learning Lab, the Center for Education in Small Urban Communities, the Center for Advanced Study, the Beckman Institute, the Center for the Study of Reading, the Social Development Consortium, and others.

Facilities and Resources

The Department of Educational Psychology puts a high priority on working with its graduate students to secure fellowships and other awards.

The College of Education also has many resources to assist graduate students through their academic career. The Bureau of Educational Research works with students to secure research funding. The Council on Teacher Education (http://cote.illinois.edu/) entitles candidates seeking a Professional Educator License and provides accreditation of professional education programs. Each student completing a degree program is assigned a graduate adviser, who is available to assist the student with planning the program of study and determining degree requirements, courses and timelines for degree completion.

Information on University resources can be found at http://www.grad.illinois.edu/current-students (http://www.grad.illinois.edu/current-students/).

Financial Aid

Financial aid in the form of assistantships, scholarships, fellowships, and tuition waivers can be found throughout the college (https://education.illinois.edu/current-students/graduate/financial-aid/) and campus. Campus opportunities can be found at the Graduate College (http://www.grad.illinois.edu/funding-jobs/) and the Office of Student Financial Aid (http://www.osfa.illinois.edu/). **Please note: Graduate students employed as Staff by the University of Illinois at Urbana-Champaign are not eligible for a College of Education Award or Scholarship.**

The department does not require a separate financial aid application.

for the degree of Doctor of Philosophy in Educational Psychology

The Department of Educational Psychology offers many programs leading to the degree of Doctor of Philosophy (Ph.D.). A list of programs and additional requirements can be found on the program's website, (https://education.illinois.edu/faceted-search/programs/?degree=edd&department=edpsy) the College of Education Graduate Programs Handbook (https://education.illinois.edu/current-students/graduate/coe-graduate-handbook/), and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Students may select a concentration in Digital Learning (http://catalog.illinois.edu/graduate/education/concentration/digital-learning/).

Code	Title	Hours
Completion of at least 64 hours beyond the master's degree including:		
Major Subject Coursework (minimum)		32
EPSY 599	Thesis Research (min/max applied toward degree)	4-20
Independent Study (min/max applied toward degree)		0-12
Research Coursework [1]		16-20
Total Hours [2]		**64**

Other Requirements

Requirement	Description
Master's degree is not required for admission to the Ph.D. but is required for completion.	
Minimum GPA	3.0
Residency	2 consecutive full-time (12 hours) semesters of study on campus
Early Research Requirement	
Qualifying Exams	
Human Subjects Approval	
Preliminary Exam	
Final Exam/Dissertation Defense	
Dissertation Deposit	

[1] *All students will take a minimum of 16-20 credit hours, depending on area of methodology focus, in approved* research methods courses *(*https://education.illinois.edu/current-students/graduate/coe-graduate-handbook/phd/#PhDResearch*).*

[2] *Students pursuing the* Concentration in African American Studies *(*http://catalog.illinois.edu/graduate/graduate-majors/african-amer-studies/#concentrationconcentrationtext*) are required to take 24 hours of Concentration courses, for a total of 88 hours.*

Learning Outcomes: Educational Psychology, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Educational Psychology

Counseling Psychology Division

1. Counseling Psychology students will possess a broad knowledge of the core areas of psychology.
2. Counseling Psychology students will have an understanding of the basic statistical analytical methods, research designs, measurement models, and research approaches.3
3. Counseling Psychology students will demonstrate skills at independently designing, conducting, writing, and presenting research studies.
4. Counseling Psychology students will be skilled in psychological assessment in all aspects (design, psychometric evaluation, administering, and communicating results) as well as in a variety of contexts (e.g., both environmental and individual assessment).
5. Counseling Psychology students will have the ability to conceptualize clients from a variety of theoretical and scientifically-informed frameworks, present such a conceptualization to others and establish means and methods to evaluate its accuracy
6. Counseling Psychology students will possess theoretical and scientific knowledge regarding skills in the provision of interventions.
7. Counseling Psychology students will value and develop competence in aspects of diversity and individual differences.
8. Counseling Psychology students will have knowledge and appreciation of the ethical issues involved in being a psychologist.
9. Counseling Psychology students will adopt a critical, scientific approach to professional activities.

Developmental Sciences Division

1. Developmental Sciences students will obtain a broad knowledge of the core areas of developmental research across the lifespan.This includes but is not limited to: a) social and emotional development; b) language and mathematical development; c) academic motivation and future planning/orientation; d) bullying and peer harassment; and e) identity formation with respect to gender, race, and ethnicity.
2. Developmental Sciences students will develop a deep expertise in a relevant specialized topic within or across these core areas. This includes mastering research findings in a topic area selected by the student, understanding the relevant theoretical perspectives related to this topic and learning about the appropriate methodological approaches to understanding the core area.
3. Developmental Sciences students will obtain a sophisticated knowledge base of research approaches and analytic tools necessary for contribution to scholarly literature in Developmental Sciences broadly and their specialized topic in particular. Specifically, they will develop skills to independently design, conduct, write, and present/publish research studies related to their area of focus/career path.

Cognitive Science of Teaching and Learning (CSTL) Division

1. CSTL students will obtain a broad knowledge of the core areas related to the cognitive science of teaching and learning. This includes knowledge of theoretical perspectives, methodological approaches, and key research findings in the core areas of (a) cognition and learning across the lifespan, (b) learning and the psychology of language, (c) multimodal information processing, and (d) sociocultural dimensions of learning.
2. CSTL students will obtain a deep expertise in a relevant topic within or cutting across these core areas. This involves mastering theoretical perspectives, methodological approaches, and key research findings in a topic selected by the student. In addition, they will develop skills at independently designing, conducting, writing, and presenting/publishing research studies.
3. CSTL students will obtain a sophisticated knowledge base of research approaches and analytic tools necessary for contribution to the professional literature and their chosen professional identity/career path. This involves understanding the basic statistical analytical methods, research designs, measurement models, and research approaches.

Studies in Interpretive, Statistical, Measurement, and Evaluative Methodologies for Education (QUERIES) Division

1. QUERIES students will obtain a broad basic knowledge of the core areas of educational research methodologies, quantitative, qualitative, and evaluative research methods.
2. QUERIES students will obtain a sophisticated knowledge base of quantitative and/or qualitative research approaches and analytic tools necessary for contribution to the professional literature.
3. QUERIES students in Measurement will become skilled in the development and use of techniques for collecting and analyzing 'test' data through the study of measurement methods.
4. QUERIES students in Statistics will be skilled in traditional and modern quantitative analytic methods.
5. QUERIES students in Evaluation will have the skills required for Evaluation scholars –in education, social welfare, health services, community development, human resource development, and other domains.

Electrical & Computer Engineering, MENG

for the degree of Master of Engineering in Electrical & Computer Engineering

department head: Bruce Hajek (b-hajek@illinois.edu)
director of graduate studies: Michael L Oelze (oelze@illinois.edu)
overview of admissions & requirements: https://ece.illinois.edu/admissions/graduate/admissions-requirements-and-process.asp
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: http://ece.illinois.edu
program website: https://ece.illinois.edu/academics/grad/overview/meng.asp
college website: https://grainger.illinois.edu/
contact: Stacy Walker (slwalker@illinois.edu)
address: 2096 Electrical and Computer Engineering Bldg, 306 N Wright St, Urbana, IL 61801
phone: (217) 300-3209
email: ece-meng-advisor@illinois.edu (ece-grad-apps@illinois.edu)

The MEng in Electrical & Computer Engineering is a professionally-oriented degree intended for students interested in extending the depth and/or breadth of their technical knowledge in Electrical and Computer Engineering or in a subfield thereof and is most appropriate for students who intend to enter the professional workforce after completing the degree.

Admission Requirements

Applicants must have completed an electrical engineering curriculum or a computer engineering curriculum substantially equivalent to those of the University of Illinois at Urbana-Champaign. Graduates of curricula in the physical sciences, mathematics, and computer science may be admitted if they are judged to have the necessary background to profit from graduate work in electrical and computer engineering. A minimum grade point average of 3.00 (A = 4.00) for the last two years of undergraduate study is required. However, due to space limitations, applicants with GPAs below 3.50 are less likely to be admitted. All applicants must submit scores from the general test of the Graduate Record Examination (GRE) (http://www.ets.org/).

All applicants whose native language is not English are required to submit TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) scores as evidence of English proficiency. Minimum admission requirements (https://grad.illinois.edu/admissions/instructions/04c/) are set by the Graduate College.

Financial Aid

Students in the MEng in Electrical and Computer Engineering program are not eligible for Board of Trustees (BOT) tuition-waiver generating assistantships at the University of Illinois.

Other Graduate Programs in the Department of Electrical & Computer Engineering

degrees:

E lectrical & Computer Engineering, MS (p. 738)
optional concentrations:
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)|Computational Science and Engineering (p. 1089)
E lectrical & Computer Engineering, PhD (p. 740)
optional concentrations:
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)|Computational Science and Engineering (p. 1089)

The Department of Electrical & Computer Engineering (ECE) offers graduate programs leading to the degrees of Master of Science and Doctor of Philosophy in Electrical & Computer Engineering and a Master of Engineering in Electrical & Computer Engineering. Virtually every specialty within electrical and computer engineering is represented with courses and research opportunities in the following areas: applied computational theory; bioengineering, acoustics, and biomedical imaging; communications; computer-aided design and testing; computer systems, computer vision and robotics; decision and control; electromagnetic fields; optics, lasers, and plasmas; integrated circuits; microelectro-mechanical systems; mobile computing and communication; optoelectronics; power and energy systems; power electronics; remote sensing and propagation; semiconductor materials and devices, semiconductor physics and computational electronics; signal, image, and speech processing.

Opportunity also exists for specializing in energy and sustainability engineering via the

Energy and Sustainability Engineering (EaSE) Graduate Certificate Option (http://ease.illinois.edu/)

for the degree of Master of Engineering in Electrical & Computer Engineering

For additional details and requirements refer to the department's Graduate Study Manual *(*https://ece.illinois.edu/academics/grad/overview/meng-manual.asp*)and the* Graduate College Handbook *(*http://grad.illinois.edu/gradhandbook/*).*

This degree program can be completed either on campus or online; the requirements are listed below:

Required Courses:	Required Hours
ECE 500-registration (0 hours) every term while in residence	0
500-level courses, including 8 hours of ECE 500-level courses and up to 4 hours of non-ECE 500-level courses (subject to Other Requirements and Conditions below)	12
Professional Development: ECE 596 Master's Project supervised by ECE (or affiliate) graduate faculty or course(s) in leadership, entrepreneurship, or other business-related topic approved by ECE Director of Graduate Studies	4

Elective courses (subject to Other Requirements and Conditions below)	16
Total credit hours for the degree	32

Other Requirements and Conditions (may overlap)

Requirement	Description
A minimum of 12 credit hours of coursework at the 500-level must be applied toward the degree, including at least 8 hours of ECE coursework. Up to 4 hours of ECE 596 and/or ECE 597 (or other individual study) may be applied toward this degree requirement. Up to 4 hours of non-ECE 500-level course(s) from approved list or as approved by the ECE Director of Graduate Studies may be applied toward this degree requirement.	
Coursework must include at least 18 credit hours of ECE courses; 15 of these hours must be from no more than 3 different focus areas. The ECE Graduate Committee maintains the focus area course lists.	
Credit in ECE 415, 445, 590, PHYS 404, 405, 435, 436, and STAT 400 do not count toward the degree.	
No course used to fulfill any degree requirement may be taken using the "Credit/No Credit" option.	
This degree option is non-thesis only.	
Minimum program GPA:	3.0

Learning Outcomes: Electrical & Computer Engineering, MENG

Learning Outcomes for the degree of Master of Engineering in Electrical & Computer Engineering

We expect each graduate student to achieve at least five of the following outcomes:

1. To be able to identify technical challenges, and formulate problems in Electrical and Computer Engineering.
2. To be able to apply theoretical and/or experimental methods to solve problems in Electrical and Computer Engineering.
3. To have in-depth knowledge of at least one sub-area within Electrical and Computer Engineering.
4. To be able to effectively communicate findings to peers in written and oral form.
5. To be able to teach topics in Electrical and Computer Engineering at the university level.
6. To have broad understanding of the scope of research in Electrical and Computer Engineering.
7. To be able to function as an engineer.

Electrical & Computer Engineering, MS

for the degree of Master of Science in Electrical and Computer Engineering

department head: Bruce Hajek (b-hajek@illinois.edu)
director of graduate studies: Michael L Oelze (oelze@illinois.edu)
overview of admissions & requirements: https://ece.illinois.edu/admissions/graduate/admissions-requirements-and-process.asp
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: http://ece.illinois.edu
program website: https://ece.illinois.edu/academics/grad/overview/ms.asp
department faculty: https://ece.illinois.edu/directory/faculty.asp
college website: https://grainger.illinois.edu/
contact: Jennifer Merry (merry@illinois.edu)
address: 2120 Electrical and Computer Engineering Bldg, 306 N Wright St, Urbana, IL 61801
phone: (217) 300-2414
email: ece-grad-apps@illinois.edu

Applicants with a bachelor's degree may apply to the MS program or to the direct PhD (p. 740) program.

Opportunity exists for specializing in i) biomechanics via the Biomechanics (p. 1085) optional graduate concentration, ii) cancer nanotechnology via the Cancer Nanotechnology (p. 1088) optional graduate concentration, and iii) computational science and engineering via the Computational Science & Engineering (p. 1089) optional graduate concentration.

Admission Requirements

Admission for the spring semester is possible, in addition to the usual fall semester admissions.

Applicants must have completed an electrical engineering curriculum or a computer engineering curriculum substantially equivalent to those of the University of Illinois at Urbana-Champaign. Graduates of curricula in the physical sciences, mathematics, and computer science may be admitted if they are judged to have the necessary background to profit from graduate work in electrical and computer engineering. A minimum grade point average of 3.00 (A = 4.00) for the last two years of undergraduate study is required. However, because of space limitations, applicants with GPAs below 3.50 are rarely admitted. All applicants must submit scores from the general test of the Graduate Record Examination (GRE) (http://www.ets.org/).

All applicants whose native language is not English are required to submit TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) scores as evidence of English proficiency. Minimum admission requirements (https://grad.illinois.edu/admissions/instructions/04c/) are set by the Graduate College.

Financial Aid

Fellowships, research assistantships, and teaching assistantships (all of which include tuition and partial fee waivers) are available for the majority of students who are admitted to the MS and PhD programs. International applicants generally are not awarded teaching assistantships, but are eligible for the other forms of financial aid.

All applicants, regardless of US citizenship, whose native language is not English and who wish to be considered for teaching assistantships must demonstrate spoken English language proficiency (http://grad.illinois.edu/admissions/taengprof.htm) by achieving a minimum score of 24 on the speaking subsection of the TOEFL iBT or 8 on the speaking subsection of the IELTS. For students who are unable to take the iBT or IELTS, a minimum score of 5 is required on the EPI test (http://cte.illinois.edu/testing/oral_eng/epi_overview.html), offered on campus. All new teaching assistants are required to participate in the Graduate Academy for College Teaching (https://citl.illinois.edu/citl-101/teaching-learning/grad-academy-for-college-teaching/) conducted prior to the start of the semester and register for ECE 590TL.

Department Research

Research interests of the Electrical and Computer Engineering faculty include the broad areas of study described in the graduate programs section and more. Many faculty members hold affiliate status with other departments, and a number of faculty members from other departments hold affiliate status with the department. In addition, some faculty hold appointments in the Beckman Institute for Advanced Science and Technology, the Coordinated Science Laboratory, the Materials Research Laboratory, and the Micro and Nanotechnology Laboratory. All these affiliations provide opportunities for graduate student appointments to conduct research. For a detailed list of current research interests of the faculty, visit the department's research website (https://ece.illinois.edu/research/).

There are numerous interdisciplinary programs, laboratories, and centers for research within the department. These are described at the department's research centers website (https://ece.illinois.edu/research/centers.asp).

Other Graduate Programs in the Department of Electrical & Computer Engineering

degrees:

Electrical & Computer Engineering, MEng (p. 737)
Electrical & Computer Engineering, PhD (p. 740)
optional concentrations:
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)|Computational Science and Engineering (p. 1089)

The Department of Electrical & Computer Engineering (ECE) offers graduate programs leading to the degrees of Master of Science and Doctor of Philosophy in Electrical & Computer Engineering and a Master of Engineering in Electrical & Computer Engineering. Virtually every specialty within electrical and computer engineering is represented with courses and research opportunities in the following areas: applied computational theory; bioengineering, acoustics, and biomedical imaging; communications; computer-aided design and testing; computer systems, computer vision and robotics; decision and control; electromagnetic fields; optics, lasers, and plasmas; integrated circuits; microelectro-mechanical systems; mobile computing and communication; optoelectronics; power and energy systems; power electronics; remote sensing and propagation; semiconductor materials and devices, semiconductor physics and computational electronics; signal, image, and speech processing.

Opportunity also exists for specializing in energy and sustainability engineering via the

Energy and Sustainability Engineering (EaSE) Graduate Certificate Option (http://ease.illinois.edu/)

for the degree of Master of Science in Electrical and Computer Engineering

For additional details and requirements refer to the department's Graduate Study Manual *(*https://ece.illinois.edu/academics/grad/overview/msphd-manual.asp*)and the* Graduate College Handbook *(*http://grad.illinois.edu/gradhandbook/*).*

Required Courses:	Required Hours
Thesis research -- ECE 599 (min/max applied toward degree)	8
ECE Colloquium -- ECE 500 (registration for 0 hours every term while in residence)	0
Elective courses (subject to Other Requirements and Conditions below)	24
Total hours	32

Other Requirements and Conditions

Requirement	Description
Credit in ECE 415, ECE 445, ECE 590, ECE 596, PHYS 404, PHYS 435, PHYS 436, and STAT 400 does not count toward the degree.	
12 credit hours must be 500-level ECE courses other than ECE 590, ECE 596, ECE 597, and ECE 599.	
No course used to fulfill any degree requirement may be taken using the "Credit/No Credit" option.	
A maximum of 4 hours of ECE 597 (or other individual study) may be applied toward the elective coursework requirement.	
There is no final examination for the M.S. degree.	
M.S. thesis deposit	
Minimum GPA:	3.0

Learning Outcomes: Electrical & Computer Engineering, MS

Learning Outcomes for the degree of Master of Science in Electrical and Computer Engineering

We expect each graduate student to achieve at least five of the following outcomes:

1. To be able to identify technical challenges, and formulate problems in Electrical and Computer Engineering.
2. To be able to apply theoretical and/or experimental methods to solve problems in Electrical and Computer Engineering.
3. To have in-depth knowledge of at least one sub-area within Electrical and Computer Engineering.
4. To be able to effectively communicate findings to peers in written and oral form.
5. To be able to teach topics in Electrical and Computer Engineering at the university level.
6. To have broad understanding of the scope of research in Electrical and Computer Engineering.
7. To be able to function as an engineer.

Electrical & Computer Engineering, PhD

for the degree of Doctor of Philosophy in Electrical & Computer Engineering

department head: Bruce Hajek (b-hajek@illinois.edu)
director of graduate studies: Michael L Oelze (oelze@illinois.edu)
overview of admissions & requirements: https://ece.illinois.edu/admissions/graduate/admissions-requirements-and-process.asp
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: http://ece.illinois.edu
program website: https://ece.illinois.edu/academics/grad/overview/phd.asp
department faculty: https://ece.illinois.edu/directory/faculty.asp
college website: https://grainger.illinois.edu/
contact: Jennifer Merry (merry@illinois.edu)
address: 2120 Electrical and Computer Engineering Bldg, 306 N Wright St, Urbana, IL 61801
phone: (217) 300-2414
email: ece-grad-apps@illinois.edu

The Department of Electrical & Computer Engineering offers both a traditional doctoral program (for students with a previous master's degree) and a direct doctoral program (for students with only a bachelor's degree). Applicants with master's degrees are admitted only if a faculty member is willing to serve as the PhD thesis advisor. Accordingly, such applicants should write, call, or e-mail prospective PhD advisors and discuss their research interests and potential PhD thesis topics well in advance of application deadlines.

Opportunity exists for specializing in i) biomechanics via the Biomechanics (p. 1085) optional graduate concentration, ii) cancer nanotechnology via the Cancer Nanotechnology (p. 1088) optional graduate concentration, and iii) computational science and engineering via the Computational Science & Engineering (p. 1089) optional graduate concentration.

Admission Requirements

Admission for the spring semester is possible, in addition to the usual fall semester admissions.

Applicants must have completed an electrical engineering curriculum or a computer engineering curriculum substantially equivalent to those of the University of Illinois at Urbana-Champaign. Graduates of curricula in the physical sciences, mathematics, and computer science may be admitted if they are judged to have the necessary background to profit from graduate work in electrical and computer engineering. A minimum grade point average of 3.00 (A = 4.00) for the last two years of undergraduate study is required. However, because of space limitations, applicants with GPAs below 3.50 are rarely admitted. All applicants must submit scores from the general test of the Graduate Record Examination (GRE) (http://www.ets.org/).

All applicants whose native language is not English are required to submit TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) scores as evidence of English proficiency. Minimum admission requirements (https://grad.illinois.edu/admissions/instructions/04c/) are set by the Graduate College.

Financial Aid

Fellowships, research assistantships, and teaching assistantships (all of which include tuition and partial fee waivers) are available for the majority of students who are admitted to the MS and PhD programs. Starting in Fall 2020, Grainger Engineering PhD students in their first five years of enrollment who meet the minimum eligibility requirements (https://grainger.illinois.edu/academics/graduate/phd-funding-guarantee/) are guaranteed a funded appointment for fall and spring that includes a full tuition waiver, a partial fee waiver, and a stipend. International applicants generally are not awarded teaching assistantships, but are eligible for the other forms of financial aid.

All applicants, regardless of US citizenship, whose native language is not English and who wish to be considered for teaching assistantships must demonstrate spoken English language proficiency (http://grad.illinois.edu/admissions/taengprof.htm) by achieving a minimum score of 24 on the speaking subsection of the TOEFL iBT or 8 on the speaking subsection of the IELTS. For students who are unable to take the iBT or IELTS, a minimum score of 5 is required on the EPI test (http://cte.illinois.edu/testing/oral_eng/epi_overview.html), offered on campus. All new teaching assistants are required to participate in the Graduate Academy for College Teaching (https://citl.illinois.edu/citl-101/teaching-learning/grad-academy-for-college-teaching/) conducted prior to the start of the semester and register for ECE 590TL.

Department Research

Research interests of the Electrical and Computer Engineering faculty include the broad areas of study described in the graduate programs section and more. Many faculty members hold affiliate status with other departments, and a number of faculty members from other departments hold affiliate status with the department. In addition, some faculty hold appointments in the Beckman Institute for Advanced Science and Technology, the Coordinated Science Laboratory, the Materials Research Laboratory, and the Micro and Nanotechnology Laboratory. All these affiliations provide opportunities for graduate student appointments to conduct research. For a detailed list of current research interests of the faculty, visit the department's research Web site (http://ece.illinois.edu/research/).

There are numerous interdisciplinary programs, laboratories, and centers for research within the department. These are described at the department's research centers Web site (https://ece.illinois.edu/research/centers.asp).

Other Graduate Programs in the Department of Electrical & Computer Engineering

degrees:

Electrical & Computer Engineering, MEng (p. 737)
E lectrical & Computer Engineering, MS (p. 738)
optional concentrations:
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)|Computational Science and Engineering (p. 1089)

The Department of Electrical & Computer Engineering (ECE) offers graduate programs leading to the degrees of Master of Science and Doctor of Philosophy in Electrical & Computer Engineering and a Master of Engineering in Electrical & Computer Engineering. Virtually every specialty within electrical and computer engineering is represented with courses and research opportunities in the following areas: applied computational theory; bioengineering, acoustics, and biomedical imaging; communications; computer-aided design and testing; computer systems, computer vision and robotics; decision and control; electromagnetic fields; optics, lasers, and plasmas; integrated circuits; microelectro-mechanical systems; mobile computing and communication; optoelectronics; power and energy systems; power electronics; remote sensing and propagation; semiconductor materials and devices, semiconductor physics and computational electronics; signal, image, and speech processing.

Opportunity also exists for specializing in energy and sustainability engineering via the

Energy and Sustainability Engineering (EaSE) Graduate Certificate Option (http://ease.illinois.edu/)

for the degree of Doctor of Philosophy in Electrical and Computer Engineering

For additional details and requirements refer to the department's Graduate Study Manual *(*https://ece.illinois.edu/academics/grad/overview/msphd-manual.asp*)and the* Graduate College Handbook *(*http://grad.illinois.edu/gradhandbook/*).*

Entering with an approved Master's Degree:

Code	Title	Hours
ECE 599	Thesis Research (min-max applied toward degree)	32-40
ECE 500	ECE Colloquium (registration for 0 hours every term while in residence)	0
3 permanent 500-level courses in 3 different Ph.D. Breadth Requirement areas (http://www.ece.illinois.edu/students/grad/overview/#breadth)		12
Elective courses (subject to Other Requirements and Conditions below)		12-20
Total Hours		64

Other Requirements and Conditions (may overlap)

Requirement	Description
Up to 4 credit hours of ECE 590 (Seminar) can be applied towards Elective courses.	
Up to 12 credit hours of ECE 597 (Independent Study) can be applied towards Elective courses.	
Credit in ECE 415, ECE 445, ECE 596, PHYS 404, PHYS 435, PHYS 436, STAT 400 does not count toward the degree.	
At least one ECE 500-level course must be taken other than ECE 590, ECE 597, and ECE 599.	
No course used to fulfill any degree requirement may be taken using the "Credit/No Credit" option.	
A Masters degree is required for admission to this Ph.D. program.	
Ph.D. exam and dissertation requirements:	
Qualifying exam[1]	
Preliminary exam	
Final exam or dissertation defense	
Dissertation deposit	
Minimum GPA:	3.0

Entering with an approved Baccalaureate Degree:

Code	Title	Hours
ECE 599	Thesis Research (min-max applied toward degree)	40-48
ECE 500	ECE Colloquium (registration for 0 hours every term while in residence)	0
3 permanent 500-level courses in 3 different Ph.D. Breadth Requirement areas (http://www.ece.illinois.edu/students/grad/overview/#breadth)		12
Elective courses (subject to Other Requirements and Conditions below)		36-44
Total Hours		96

Other Requirements and Conditions (may overlap)

Requirement	Description
Up to 4 credit hours of ECE 590 (Seminar) can be applied towards Elective courses.	
Up to 16 credit hours of ECE 597 (Independent Study) can be applied towards Elective courses.	
Credit in ECE 415, ECE 445, ECE 596, PHYS 404, PHYS 435, PHYS 436, STAT 400 does not count toward the degree.	
16-credit hours must be ECE 500-level course must be taken other than ECE 590, ECE 597, and ECE 599.	
No course used to fulfill any degree requirement may be taken using the "Credit/No Credit" option.	
Ph.D. exam and dissertation requirements:	

Qualifying exam[1]	
Preliminary exam	
Final exam or dissertation defense	
Dissertation deposit	
Minimum GPA:	3.0

[1] Qualifying Exam information (http://www.ece.illinois.edu/students/grad/QualExams/qual.html)

Learning Outcomes: Electrical & Computer Engineering, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Electrical & Computer Engineering

We expect each graduate student to achieve at least five of the following outcomes:

1. To be able to identify technical challenges, and formulate problems in Electrical and Computer Engineering.
2. To be able to apply theoretical and/or experimental methods to solve problems in Electrical and Computer Engineering.
3. To have in-depth knowledge of at least one sub-area within Electrical and Computer Engineering.
4. To be able to effectively communicate findings to peers in written and oral form.
5. To be able to teach topics in Electrical and Computer Engineering at the university level.
6. To have broad understanding of the scope of research in Electrical and Computer Engineering.
7. To be able to function as an engineer.

Elementary Education, EdM

for the degree of Master of Education in Elementary Education with teaching licensure

head of the department: Sarah McCarthey
director of graduate studies: Gloriana Gonzalez
graduate admissions information: Mitzi Koeberlein
overview of admissions & requirements: College of Education (https://education.illinois.edu/programs/grad/how-to-apply/?url=/programs/grad)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: http://education.illinois.edu/ci (http://education.illinois.edu/ci/)
program website: College of Education Programs (https://education.illinois.edu/faceted-search/programs/)
department faculty: Curriculum & Instruction Faculty (https://education.illinois.edu/faculty-finder/ci/)
college website: http://education.illinois.edu/
department office: 142 Education Building, 1310 South Sixth Street, Champaign, IL 61820
phone: (217) 244-3542
email: gradservices@education.illinois.edu

Graduate Degree Programs in Curriculum & Instruction

Curriculum and Instruction, EdM (p. 693) **(on campus, off-campus & online)**
- **optional concentrations:** Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)

Curriculum and Instruction, MA (p. 695)
- **optional concentrations:** Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)

Curriculum and Instruction, MS (p. 697)
- **optional concentrations:** Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)

Curriculum and Instruction, CAS (p. 689) **(on campus, off-campus & online)**
- **optional concentration:** Bilingual-Bicultural Education (p. 1076)

Curriculum and Instruction, EdD (p. 691) **(on campus, off-campus & online)**
- **optional concentrations:** Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)

Curriculum and Instruction, PhD (p. 699)
- **optional concentrations (PhD only):**
  - Digital Learning (p. 1093)|Second Language Acquisition and Teacher Education (http://www.slate.illinois.edu/)
  - Writing Studies (p. 1111)

Early Childhood Education, EdM (p. 703) **with teacher licensure**
- **optional concentrations:** Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)

Elementary Education, EdM (p. 742) **with teacher licensure**
- **optional concentrations:** Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)

Secondary Education, EdM (p. 994) **with teacher licensure**
- **concentrations:** English (p. 996)|Mathematics (p. 997)|Sciences (p. 997)|Social Science: History (p. 999)
- **optional concentrations:** Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)

Through the Master of Education and the Certificate of Advanced Study, experienced teachers are prepared to become more competent and better informed practitioners who serve as leaders for educational reform in local schools and school districts.

Also offered are master's degree programs leading to teacher licensure for individuals who have a degree in a field other than education and wish to become teachers. The three majors leading to licensure are Early Childhood Education (Birth - Grade 2), Elementary Education (Grades 1 - 6), and Secondary Education (Grades 9 - 12). In addition to completing the courses required for an Ed.M. degree, students in these programs follow the same sequence of professional education courses as undergraduate students.

Only master's students wishing to become licensed teachers in one of these three areas should apply to the Early Childhood Education, Elementary Education, or Secondary Education majors. Master's candidates who do not wish to become teachers, or are already teachers, should apply to the major in Curriculum and Instruction.

Two doctoral degree programs are offered. The Ph.D. program prepares degree candidates for careers involving research and scholarship, including those in colleges and universities where research is generally

combined with teacher education. The Ed.D. Program prepares scholarly practitioners for leadership positions in teacher training institutions, state education agencies, and public school districts.

Length of time for a degree: an Ed.M. program can be completed in a calendar year, while the M.S. or M.A. often takes longer. The Ed.M. with licensure typically takes two years to complete. Doctoral programs usually require four to five years of full time study.

Admission

Interested applicants should start at http://education.illinois.edu/programs/grad (http://education.illinois.edu/programs/grad/). In addition to the application, the applicant is required to submit the following information: a statement of purpose, updated resume, official transcripts from all colleges attended, and three letters of recommendation. Graduate Record Examination (GRE) scores must be submitted for all doctoral applicants. A scholarly writing sample in English, such as a master's thesis, article, or paper, is required for application to a doctoral program. Note: The master's with teacher licensure program only admits students for the fall term.

International applicants must submit TOEFL scores. The Department of Curriculum and Instruction's TOEFL requirement for full status admission is greater than 102; the minimum score for limited status is 550 on the paper-based test, 79 on the internet-based test and 213 on the computer-based test. International applicants must also submit a Declaration and Certification of Finances. Please note: TOEFL or IELTS scores must be less than two years old from the first day of class at the proposed term of entry in order to be valid. In addition, individual academic programs may require a higher score, or evidence of spoken English language proficiency; contact your proposed program of study office (http://www.grad.illinois.edu/admissions/depts/) for the minimum TOEFL, TSE, or IELTS requirement for admission. For additional details, refer to the Graduate College Handbook www.grad.illinois.edu/admissions/instructions/04c (http://www.grad.illinois.edu/admissions/instructions/04c/).

Faculty Research Interests

For information about specific faculty research interests, current grants, and publications, please visit the Faculty Finder (https://education.illinois.edu/faculty-finder/).

Facilities and Resources

Departmental resources consist of cooperation with Children's Research Center, Center for Small Urban Communities, as well as other resources in the College. Students who are interested in second language acquisition can become a part of the SLATE program. The department is connected to the University of Illinois Writing Project and the following journals: *International Journal of Education & the Arts, Journal of Curriculum Studies*, and *American Educational Research Journal.* The department also has available resources and some workshops provided during the academic year. Program areas including DELTA, CREATE, Language & Literacy, and MSE offer discipline-specific resources.

The College of Education also has many resources to assist graduate students through their academic career. The Bureau of Educational Research works with students to secure research funding. The Council on Teacher Education (http://cote.illinois.edu/) entitles candidates seeking a Professional Educator License and provides accreditation of professional education programs. Each student completing a degree program is assigned a graduate adviser, who is available to assist the student with planning the program of study and determining degree requirements, courses and timelines for degree completion.

Information on University resources can be found at http://www.grad.illinois.edu/current-students (http://www.grad.illinois.edu/current-students/).

Financial Aid

Financial aid in the form of assistantships, scholarships, fellowships, and tuition waivers can be found throughout the college (https://education.illinois.edu/current-students/graduate/financial-aid/) and campus. Campus opportunities can be found at the Graduate College (http://www.grad.illinois.edu/funding-jobs/) and the Office of Student Financial Aid (http://www.osfa.illinois.edu/). **Please note: Graduate students employed as Staff by the University of Illinois at Urbana-Champaign are not eligible for a College of Education Award or Scholarship.**

for the degree of Master of Education in Elementary Education with teaching licensure

Students may select a concentration in Bilingual-Bicultural Education (http://catalog.illinois.edu/graduate/education/concentration/bilingual-bicultural-education/) **or** Digital Learning (http://catalog.illinois.edu/graduate/education/concentration/digital-learning/)**.**
Additional requirements can be found on the program's website, (https://education.illinois.edu/ci/programs-degrees/ele/) **the** College of Education Graduate Programs Handbook (https://education.illinois.edu/current-students/graduate/coe-graduate-handbook/)**, and the** Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/)**.**

Code	Title	Hours
Psychological Foundations Courses in Educational Psychology		
Select one of the following:		4
EPSY 400	Psychology of Learning in Education	
EPSY 401	Child Language and Education	
EPSY 402	Sociocultural Influence on Learning	
EPSY 404	Adjustment in School Settings	
EPSY 405	Personality and Soc Dev	
EPSY 406	Psychology of Classroom Management	
EPSY 407	Adult Learning and Development	
EPSY 408	Learning and Human Development with Educational Technology	
EPSY 430	Early Adolescent Development	
EPSY 485	Assessing Student Performance	
EPSY 490	Developments in Educational Psychology	
EPSY 553	Global Issues in Learning	
Philosophical and Social Foundations Courses in Education Policy, Organization and Leadership		
Select one of the following:		4
EPOL 401	History of American Education	
EPOL 402	Asian American Education	
EPOL 403	Historical and Social Barriers	
EPOL 405	School and Society	
EPOL 406	Professional Ethics in Education	
EPOL 407	Critical Thinking in Education	

EPOL 408	Aesthetic Education	
EPOL 409	Sociology of Education	
EPOL 410	Racial and Ethnic Families	
EPOL 412	Politics of Education	
EPOL 413	Economics of Education	
EPOL 480	Technology and Educational Reform	
EPOL 539		
Elective Hours:		24
400/500-Level Hours Required: 12 hours (Independent Study included)		
500-Level Hours Required in Education:12 hours		
Research/Project/Independent Study Hours (min/max applied toward degree):		0-8
Total Hours		32

Other Requirements:

Requirement	Description
Field Placement Information	http://education.illinois.edu/sce (http://education.illinois.edu/sce/)
Minimum GPA	3.0

Learning Outcomes: Elementary Education, EdM

Learning Outcomes for the degree of Master of Education in Elementary Education with teaching licensure

1. Students will acquire deep knowledge of content in the field of Education.
2. Students will effectively plan and implement relevant, culturally responsive and developmentally appropriate instruction for elementary students, grades 1-6.
3. Students will use data to drive decisions and solve problems in and out of the classroom.
4. Students will display the expectations of professionalism related to success in the field of education and beyond (fairness, commitment to collaboration, community, reflective practice, and attention to 21st century skills and practices).
5. Students will display a deep understanding of educational philosophy and reflective practice.

Epidemiology, MPH

for the Master of Public Health in Epidemiology

Department Head: Kim Graber
Director of Graduate Studies: John Kosciulek
Director of Program: Justine Kaplan
MPH Admissions Questions: mph-admissions@ahs.illinois.edu
Graduate Office: Julie Jenkins
Graduate Office Address: 906 South Goodwin Ave, 112 Freer Hall MC-052, Urbana, IL 61801
Graduate Phone: (217) 333-1083
Graduate Email: jjenkns@illinois.edu
Program Website: https://ahs.illinois.edu/mph-home

Joint Programs:
Public Health, MPH & Community Health, PhD (p. 1162)
Public Health, MPH & Food Science & Human Nutrition, PhD (p. 1152)
Public Health, MPH & Human Development & Family Studies, PhD (p. 1154)
Public Health, MPH & Kinesiology, PhD (p. 1162)
Public Health, MPH & Nutritional Science, PhD (http://catalog.illinois.edu/graduate/aces_ahs/nutritional-science-phd-public-health-mph/)
Public Health, MPH & Social Work, PhD (p. 1163)
Public Health, MPH & Urban Planning, MUP (p. 1164)

Admissions: https://ahs.illinois.edu/application-requirements (https://ahs.illinois.edu/application-requirements/)

How to Apply for MPH: https://ahs.illinois.edu/how-to-apply (https://ahs.illinois.edu/how-to-apply/)

How to Apply for BS-MPH: https://ahs.illinois.edu/how-to-apply-bs-mph (https://ahs.illinois.edu/how-to-apply-bs-mph/)

for the Master of Public Health in Epidemiology

The MPH in Epidemiology degree program requires a minimum of 48 hours. The program includes:
1. Five required core courses in basic content areas of public health
2. Four required courses in the Epidemiology focus area
3. An Applied Practice Experience (practicum)
4. An Integrative Learning Experience (capstone)
5. Seminars and electives
MPH students must complete all core coursework before enrolling in the MPH Applied Practice Experience. It is highly preferable for the applied practice experience to occur during summer term. The Integrative Learning Experience must be completed in the last term of study. There is no thesis requirement. Applicants to the epidemiology program should demonstrate strong quantitative skills. Applications for the Master of Public Health (MPH) in Epidemiology are only accepted for Fall admission. The program generally takes 1.5 to 2 years to complete. University of Illinois undergraduate students who major in Kinesiology, Community Health, or Interdisciplinary Health Sciences are eligible to apply for a 5.5 year joint BS-MPH degree program after their 3rd (junior) year of undergraduate study. Students in the BS-MPH program begin some MPH coursework in their 4th (senior) year of undergraduate study, and begin graduate status in the MPH coursework in their 5th year of study.

Degree Requirements

Code	Title	Hours
CHLH 410	Public Health Practice	4
CHLH 469	Environmental Health	3 or 4
CHLH 550	Health Policy: United States	4
CHLH 568	Computer Packages in Health Research	2
CHLH 572	Principles of Epidemiology	4
CHLH 573	Biostatistics in Public Health	4
CHLH 576	Analytical Epidemiology	4
CHLH 578	Applied Epidemiology	4
CHLH 581	Professionalism in Public Health (2 semesters)	2

CHLH 582	Advanced Biostatistics	4
CHLH 587	MPH Applied Practice Experience	4
CHLH 589	MPH Integrative Learning Experience	2
Electives	**2 courses, 3-4 hours each**	**8**
Total Hours	**(minimum required)**	**48**

Other Requirements

Required Courses:	Required Hours
Minimum 500-level hours Required Overall:	12 (8 within the unit)
Minimum GPA	3.0

Engineering, MEng

for the degree of Master of Engineering in Engineering

associate dean for graduate, professional and online programs :
overview of admissions & requirements: https://grainger.illinois.edu/academics/graduate (https://grainger.illinois.edu/academics/graduate/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://grainger.illinois.edu/
address: 402 Engineering Hall, 1308 W Green St, Urbana, Illinois 61801
phone: (217) 244-2745
email: engr-gpp@illinois.edu

The Grainger College of Engineering offers a Master of Engineering (MEng) degree program for students whose primary intent is a professional career in industry or government. This degree differs from the Master of Science (MS) degree in that it is a professionally-oriented master's degree that is not a pathway to a doctoral program. The Major in Engineering for the M.Eng. degree requires the selection of an interdisciplinary concentration, which must be identified at the time of application. Available concentrations are:

- Aerospace Systems Engineering (p. 745)
- Energy Systems (p. 749)
- Plasma Engineering (p. 748)
- Railway Engineering (p. 750)
- Autonomy and Robotics (p. 747)

Admission

Students with bachelor's or master's degrees in engineering or related sciences will be considered for admission if they have a grade point average of at least 3.00 (A = 4.00) for the last two years of undergraduate study. Admission is possible for the both the fall and spring semesters. Full details of admission requirements are on the Web page of the department offering the concentration.

All applicants whose native language is not English are required to submit TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) scores as evidence of English proficiency. Minimum admission requirements (https://grad.illinois.edu/admissions/instructions/04c/) are set by the Graduate College. Higher requirements may be imposed by specific concentrations.

Financial Aid

Students in concentrations under the MEng in Engineering major are not eligible for Board of Trustees (BOT) tuition-waiver generating assistantships at the University of Illinois.

for the degree of Master of Engineering in Engineering

Students pursuing this major must select one of four concentrations:

Aerospace Systems Engineering (p. 745)
Autonomy & Robotics (http://catalog.illinois.edu/graduate/engineering/engineering-meng/autonomy-robotics/)
Energy Systems (p. 749)
Plasma Engineering (p. 748)
Railway Engineering (p. 750) **(36 credit hours)**

For additional details and requirements, please refer to the Web page of the concentration's home unit and the Graduate College Handbook *(*http://grad.illinois.edu/gradhandbook/*).*

Code	Title	Hours
Professional Development (an internship with a company, laboratory, or agency with a subsequent archiveable report; a design project; or business-oriented or leadership courses)		4
Concentration hours		**28**
	Technical course work in primary area and one course from outside the primary area (12-20 hours)	
	Elective courses 0-8 hours chosen in consultation with advisor.	
Total Hours		32

Other Requirements and Conditions

Requirement	Description
Other Requirements and Conditions may overlap	
A concentration is required.	
A minimum of 12 500-level credit hours with a minimum of 8 500-level credit hours applied toward the concentration.	
A minimum of 8 hours must be in ENG or the home unit of the concentration.	
Minimum program GPA:	3.0

Engineering: Aerospace Systems Engineering, MEng

for the degree of Master of Engineering in Engineering, Aerospace Systems Engineering Concentration (on campus & online)

department head: Jonathan Freund (jbfreund@illinois.edu)
director of graduate studies: Daniel J Bodony (bodony@illinois.edu)
director of MEng program: Jason Merret (merret@illinois.edu)
overview of admissions & requirements: https://aerospacesystemsmeng.engineering.illinois.edu/admissions/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://aerospace.illinois.edu/
program website: https://aerospacesystemsmeng.engineering.illinois.edu/
college website: https://grainger.illinois.edu/
contact: Jenna Russell (jennar@illinois.edu)
address: 403 A-2 Engineering Hall, 1308 W Green St, Urbana, IL 61801
phone: (217) 300-9774
email: aero-meng@illinois.edu

The MEng in Engineering, Aerospace Systems Engineering Concentration is a professionally-oriented degree program for students whose primary intent is a career in industry or government. This degree differs from the Master of Science degree in that it is a terminal degree and not a pathway to a doctoral program. The Aerospace Systems Engineering Concentration is available on campus and online. Other concentrations under the MEng in Engineering major include Autonomy and Robotics (p. 747), Energy Systems (p. 749), Plasma Engineering (p. 748), and Railway Engineering (p. 750).

Admission Requirements

Students with bachelor's or master's degrees in engineering or related fields will be considered for admission if they have a grade point average of at least 3.00 (A = 4.00) for the last two years of undergraduate study. Admission is possible for the spring term, but most admissions are for the fall term. Full details of admission requirements are on the Aerospace Systems Engineering Concentration website (https://aerospacesystemsmeng.engineering.illinois.edu/).

All applicants whose native language is not English are required to submit the results of the TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) as evidence of meeting the English proficiency requirements for full admission status (http://grad.illinois.edu/admissions/instructions/04c/). Under certain circumstances applicants may be exempt (https://grad.illinois.edu/admissions/instructions/04c/) from the TOELF/IELTS requirement.

Financial Aid

Students in concentrations under the MEng in Engineering major are not eligible for Board of Trustees (BOT) tuition-waiver generating assistantships at the University of Illinois.

Other Graduate Programs in the Department of Aerospace Engineering

degrees:

Aerospace Engineering, MS (p. 550)
optional concentrations:
Computational Science & Engineering (p. 1089)
Aerospace Engineering, PhD (p. 553)
optional concentrations:
Computational Science & Engineering (p. 1089)
Aerospace Engineering, Direct PhD (https://aerospace.illinois.edu/academics/graduate/phd-program/phd-student-status-and-requirements/direct-phd/)
optional concentrations:
Computational Science & Engineering (p. 1089)

The Department of Aerospace Engineering (AE) offers graduate programs leading to the degrees of Master of Science and Doctor of Philosophy in Aerospace Engineering and a Master of Engineering in Engineering degree with a concentration in Aerospace Systems Engineering. The AE graduate program provides students with a strong background in engineering and applied science while placing emphasis on aircraft and spaceflight engineering. Students may major in one of the following general areas: aerodynamics, astrodynamics, combustion and propulsion, control systems, dynamical systems, fluid mechanics, structural mechanics, materials, and space systems.

Opportunity also exists for specializing in energy and sustainability engineering via the

Energy and Sustainability Engineering (EaSE) Graduate Certificate Option (https://energysystemsmeng.engineering.illinois.edu/graduate-certificate-option/)

for the degree of Master of Engineering, Major in Engineering, Aerospace Systems Engineering Concentration (on campus & online)

For additional details and requirements, refer to the department's Website (http://aerospace.illinois.edu/) and the Graduate College Handbook (https://grad.illinois.edu/gradhandbook/).

Code	Title	Hours
Core Coursework		**16**
AE 542	Aerospace Syst Engineering I	4
AE 543	Aerospace Syst Engineering II	4
Select two additional courses from approved list		8
Additional Coursework		
Elective coursework selected from an approved list in the following areas: optimization, design, reliability, data analysis, human interfaces, and networks		8
Professional Development coursework selected from approved lists - 4 hours from List A and 4 hours from List B		8
Total Hours		**32**
Other Requirements and Conditions (may overlap):		
A minimum of 20 credit hours must be taken from the University of Illinois Urbana-Champaign campus.		
A minimum of 12 500-level credit hours, with a minimum of 8 hours of 500-level coursework in AE.		
No courses used to fulfill any degree requirement may be taken using the "Credit/No Credit" option.		
Minimum GPA:		3.0

Engineering: Autonomy and Robotics, MEng

for the degree of Master of Engineering in Engineering, Autonomy and Robotics Concentration

program director: Geir E. Dullerud
overview of admissions & requirements: https://autonomyandrobotics.grainger.illinois.edu/admissions (https://autonomyandrobotics.grainger.illinois.edu/admissions/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://autonomy.illinois.edu/
program website: https://autonomyandrobotics.grainger.illinois.edu
college website: https://grainger.illinois.edu/
contact: Amy McCullough (http://catalog.illinois.edu/graduate/engineering/engineering-meng/autonomy-robotics/amccul2@illinois.edu)
address: 402 Engineering Hall, 1308 W Green St, Urbana, Illinois 61801
phone: (217) 300-2378
email: amccul2@illinois.edu (http://catalog.illinois.edu/graduate/engineering/engineering-meng/autonomy-robotics/amccul2@illinois.edu)

The Master of Engineering (MEng) in Engineering, Autonomy and Robotics Concentration is a professionally-oriented degree program for students whose primary intent is a career in industry or government. This degree differs from the Master of Science (MS) degree in that it is a professionally-oriented master's degree that is not a pathway to a doctoral program. The Major in Engineering for the M.Eng. degree requires the selection of an interdisciplinary concentration, which must be identified at the time of application.

Available concentrations are: Aerospace Systems Engineering (p. 745), Autonomy and Robotics (p. 747), Energy Systems (http://catalog.illinois.edu/graduate/engineering/engineering-meng/energy-systems/), Plasma Engineering (p. 748), and Railway Engineering (p. 750).

Admission

Students with bachelor's or master's degrees in engineering or related fields will be considered for admission if they have a grade point average of at least 3.00 (A = 4.00) for the last two years of undergraduate study. Admission is possible for the spring term, but most admissions are for the fall term. Full details of admission requirements are on the Autonomy and Robotics (https://autonomyandrobotics.dev.engr.illinois.edu) concentration website.

All applicants whose native language is not English are required to submit TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) scores as evidence of English proficiency. Minimum admission requirements (https://grad.illinois.edu/admissions/instructions/04c/) are set by the Graduate College.

Financial Aid

Students in concentrations under the MEng in Engineering major are not eligible for Board of Trustees (BOT) tuition-waiver generating assistantships at the University of Illinois.

for the degree of Master of Engineering in Engineering, Autonomy and Robotics Concentration

For additional details and requirements, refer to the department's website (https://autonomyandrobotics.grainger.illinois.edu/) and the Graduate College Handbook (https://grad.illinois.edu/gradhandbook/).

Concentration Requirements

Code	Title	Hours
Core Coursework		**12**
ME 445	Introduction to Robotics	
ECE 484	Principles of Safe Autonomy	
CS 588	Autonomous Vehicle System Engineering	
Select one of the following:		4
Control and Dynamics		
ECE 486	Control Systems	
SE 422	Robot Dynamics and Control	
Optimization		
AE 504	Optimal Aerospace Systems	
ECE 490	Introduction to Optimization	
Hardware Systems		
ME 451	Computer-Aided Mfg Systems	
Artificial Intelligence and Perception		
CS 440	Artificial Intelligence	
CS 543	Computer Vision	
ECE 544	Topics in Signal Processing	
Design and Applications		
CS 465	User Interface Design	
Professional Development Course		**4**
ENG 573	Capstone Project	
Additional Coursework		
Electives may be selected from the course list, with advisor approval. This list includes courses in Control and Dynamics, Optimization, Hardware Systems, Artificial Intelligence and Perception, Design and Applications.		12
Total Hours		32

Other Requirements and Conditions (may overlap)

Requirement	Description
A minimum of 20 credit hours must be taken from the University of Illinois Urbana-Champaign campus.	
A minimum of 12 500-level credit hours.	
No courses used to fulfill any degree requirement may be taken using the "Credit/No Credit" option.	
Minimum GPA: 3.0	

Engineering: Plasma Engineering, MEng

for the degree of Master of Engineering in Engineering, Plasma Engineering Concentration (on campus & online)

department head: Rizwan Uddin (rizwan@illinois.edu)
overview of admissions & requirements: https://plasmameng.engineering.illinois.edu/admissions/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: http://npre.illinois.edu (https://npre.illinois.edu/)
program website: https://plasmameng.engineering.illinois.edu/
college website: https://grainger.illinois.edu/
contact: Amy McCullough (amccul2@illinois.edu)
address: 403 A-2 Engineering Hall, 1308 W Green St, Urbana, IL 61801
phone: (217) 300-2378
email: plasma-meng@illinois.edu

The MEng in Engineering, Plasma Engineering Concentration is a professionally-oriented degree program for students whose primary intent is a career in industry or government. This degree differs from the Master of Science degree in that it is a terminal degree and not a pathway to a doctoral program. Other concentrations under the MEng in Engineering major include Aerospace Systems Engineering (p. 745), Autonomy and Robotics (p. 747), Energy Systems (p. 749), and Railway Engineering (p. 750).

Admission Requirements

Students with bachelor's or master's degrees in engineering or related fields will be considered for admission if they have a grade point average of at least 3.00 (A = 4.00) for the last two years of undergraduate study. Admission is possible for the spring term, but most admissions are for the fall term. Full details of admission requirements are on the Plasma Engineering Concentration website (https://plasmameng.engineering.illinois.edu/).

All applicants whose native language is not English are required to submit TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) scores as evidence of English proficiency. Minimum admission requirements (https://grad.illinois.edu/admissions/instructions/04c/) are set by the Graduate College.

Financial Aid

Students in concentrations under the MEng in Engineering major are not eligible for Board of Trustees (BOT) tuition-waiver generating assistantships at the University of Illinois.

Other Graduate Programs in the Department of Nuclear, Plasma & Radiological Engineering

degrees:

Nuclear, Plasma, & Radiological Engineering, MS (p. 949)
optional concentrations:
Computational Science & Engineering (p. 1089)
Nuclear, Plasma, & Radiological Engineering, PhD (p. 951)
optional concentrations:
Computational Science & Engineering (p. 1089)

concentrations:

Energy Systems (p. 749)
available for:
Engineering, MENG (p. 745)

The Department of Nuclear, Plasma & Radiological Engineering (NPRE) offers programs leading to degrees of Master of Science and Doctor of Philosophy in Nuclear, Plasma & Radiological Engineering, as well as Master of Engineering in Engineering with a Concentration in Energy Systems or a Concentration in Plasma Engineering. The Master of Science and Doctor of Philosophy degree programs are centered around three theme areas:

- nuclear power engineering
- fusion and plasma science and engineering
- radiological engineering and medical physics

Advanced course work and active research programs are offered in all of these areas.

Opportunity also exists for specializing in energy and sustainability engineering via the

Energy and Sustainability Engineering (EaSE) Graduate Certificate Option (https://energysystemsmeng.engineering.illinois.edu/graduate-certificate-option/)

for the degree of Master of Engineering, Major in Engineering, Plasma Engineering Concentration (on campus & online)

Code	Title	Hours
Core Coursework		**16**
NPRE 421	Plasma and Fusion Science	3
NPRE 423	Plasma Laboratory	2
NPRE 429	Plasma Engineering	3
NPRE 527	Plasma Technology of Gaseous Electronics	4
Must complete one of the following courses:		
NPRE 481	Writing on Technol & Security	3 or 4
ENG 573	Capstone Project	1 to 8
NPRE 523, Plasma Waves		
NPRE 526, Plasma-Materials Interactions		
Additional Coursework		
Elective Courses to be selected with approval of an advisor		12
Professional Development Courses from approved list		4
Total Hours		**32**
Other Requirements and Conditions (may overlap):		
A minimum of 20 credit hours must be taken from the University of Illinois Urbana-Champaign campus.		
A minimum of 12 500-level credit hours, with a minimum of 8 hours of NPRE 500-level coursework.		

No courses used to fulfill any degree requirements may be taken using the "Credit/No Credit" option	
Minumum GPA:	3.0

Engineering: Energy Systems, MEng

for the degree of Master of Engineering in Engineering, Energy Systems Concentration

department head: Rizwan Uddin (rizwan@illinois.edu)
overview of admissions & requirements: https://energysystemsmeng.engineering.illinois.edu/admissions/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: http://npre.illinois.edu (https://npre.illinois.edu/)
program website: https://energysystemsmeng.engineering.illinois.edu/
college website: https://grainger.illinois.edu/
contact: Amy McCullough (amccul2@illinois.edu)
address: 403 A-2 Engineering Hall, 1308 W Green St, Urbana, IL 61801
phone: (217) 300-2378
email: meng-es@illinois.edu

The MEng in Engineering, Energy Systems Concentration is a professionally-oriented degree program for students whose primary intent is a career in industry or government. This degree differs from the Master of Science degree in that it is a terminal degree and not a pathway to a doctoral program. Other concentrations under the MEng in Engineering major include Aerospace Systems Engineering (p. 745), Autonomy and Robotics (p. 747), Plasma Engineering (p. 748), and Railway Engineering (p. 750).

Admission

Students with bachelor's or master's degrees in engineering or related fields will be considered for admission if they have a grade point average of at least 3.00 (A = 4.00) for the last two years of undergraduate study. Admission is possible for the spring term, but most admissions are for the fall term. Full details of admission requirements are on the Energy Systems Concentration website (https://energysystemsmeng.engineering.illinois.edu/).

All applicants whose native language is not English are required to submit TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) scores as evidence of English proficiency. Minimum admission requirements (https://grad.illinois.edu/admissions/instructions/04c/) are set by the Graduate College.

Financial Aid

Students in concentrations under the MEng in Engineering major are not eligible for Board of Trustees (BOT) tuition-waiver generating assistantships at the University of Illinois.

Other Graduate Programs in the Department of Nuclear, Plasma & Radiological Engineering

degrees:

Nuclear, Plasma, & Radiological Engineering, MS (p. 949)
optional concentrations:
Computational Science & Engineering (p. 1089)
Nuclear, Plasma, & Radiological Engineering, PhD (p. 951)
optional concentrations:
Computational Science & Engineering (p. 1089)

concentrations:

Plasma Engineering (p. 748)
available for:
Engineering, MENG (p. 745)

The Department of Nuclear, Plasma & Radiological Engineering (NPRE) offers programs leading to degrees of Master of Science and Doctor of Philosophy in Nuclear, Plasma & Radiological Engineering, as well as Master of Engineering in Engineering with a Concentration in Energy Systems or a Concentration in Plasma Engineering. The Master of Science and Doctor of Philosophy degree programs are centered around three theme areas:

- nuclear power engineering
- fusion and plasma science and engineering
- radiological engineering and medical physics

Advanced course work and active research programs are offered in all of these areas.

Opportunity also exists for specializing in energy and sustainability engineering via the

Energy and Sustainability Engineering (EaSE) Graduate Certificate Option (https://energysystemsmeng.engineering.illinois.edu/graduate-certificate-option/)

for the degree of Master of Engineering, Major in Engineering, Energy Systems Concentration

For additional details and requirements refer to the program's Website *(*https://energysystemsmeng.engineering.illinois.edu/curriculum/*) and the* Graduate College Handbook *(*http://grad.illinois.edu/gradhandbook/*).*

This degree program can be completed either on campus or online; the requirements are listed below:

Requirements

Code	Title	Hours
Core Courses		**12**
ENG 471	Seminar Energy & Sustain Engrg	
ENG 571	Theory Energy & Sustain Engrg	
ABE 436	Renewable Energy Systems	
NPRE 480	Energy and Security	
or NPRE 481	Writing on Technol & Security	
Electives (approved by academic advisor)		**16**
Professional Development (choose from these 3 options):		**4**
ENG 572	Professional Practicum (4 hours)	

ENG 573	Capstone Project (4 hours)	
• Select a different course with professional development components in consultation with advisor		
Total Hours		**32**

Other Requirements

Requirement	Description
Other requirements may overlap	
A minimum of 20 credit hours must be taken from the University of Illinois Urbana-Champaign campus.	
A minimum of 12 500-level credit hours, with a minimum of 8 hours of ENG or NPRE 500-level coursework.	
A maximum of one 1-credit-hour course may be applied toward the minimum 12 500-level credit-hour requirement.	
No courses used to fulfill any degree requirement may be taken using the "Credit/No Credit" option.	
Minimum GPA:	3.0

Learning Outcomes: Energy Systems Concentration

Learning Outcomes for the degree of Master of Engineering in Engineering, Energy Systems Concentration

1. Develop an ability to analyze energy systems at a holistic level and perform lifecycle assessment.
2. Obtain an understanding (at the graduate level) of fundamental limits to energy production, transmission, storage and consumption due to physics and chemistry constraints.
3. Understand the concepts of engineering and economic optimization, and learn their application.
4. Develop an interdisciplinary breadth of understanding of the variety of approaches to development, deployment and sustainability of global energy resources.
5. Develop an understanding of the broader policy and decision-making context in which development of and deployment of energy systems takes place.
6. Complete a study of a particular problem relevant to energy systems in a manner analogous to a professional career assignment.

Engineering: Railway Engineering, MEng

for the Master of Engineering in Engineering, Railway Engineering Concentration

head of department: Ana Barros (https://cee.illinois.edu/directory/staff/office-department-head/)
director of graduate studies: Jeffery R Roesler (jroesler@illinois.edu)
overview of admissions & requirements: https://railwaymeng.engineering.illinois.edu/admissions/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://cee.illinois.edu/
program website: https://railwaymeng.engineering.illinois.edu/
department faculty: https://cee.illinois.edu/directory/faculty (https://cee.illinois.edu/directory/faculty/)
college website: https://grainger.illinois.edu/
contact: Meg C Griffin (mgriffn@illinois.edu)
address: 1108 Newmark Civil Engineering Lab, 205 N Mathews Ave, Urbana, IL 61801
phone: (217) 333-3921
email: meng-railway@illinois.edu

The MEng in Engineering, Railway Engineering Concentration is a professionally-oriented degree program for students whose primary intent is a career in industry or government. This degree differs from the Master of Science degree in that it is a terminal degree and not a pathway to a doctoral program. Other concentrations under the MEng in Engineering major include Aerospace Systems Engineering (p. 745), Autonomy and Robotics (p. 747), Energy Systems (p. 749), and Plasma Engineering (p. 748).

This program is a collaborative effort between the Rail Transportation of Engineering Center (RailTEC) and the Railway Group at KTH Royal Institute of Technology in Stockholm, Sweden.

Admission Requirements

The Department of Civil & Environmental Engineering accepts applications for admission to the graduate program for both fall and spring semesters.

Applicants must hold a bachelor's or master's degree in engineering or related fields equivalent to those granted by the University of Illinois at Urbana-Champaign with cumulative grade point average of at least 3.00 (A = 4.00). The Graduate Record Examination (GRE) (http://www.ets.org/portal/site/ets/menuitem.fab2360b1645a1de9b3a0779f1751509/?vgnextoid=b195e3b5f64f4010VgnVCM10000022f95190RCRD) is required.

Full details of admission requirements are on the Railway Engineering Concentration website (http://railwaymeng.engineering.illinois.edu/).

All applicants whose native language is not English are required to submit TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) scores as evidence of English proficiency. Minimum admission requirements (https://grad.illinois.edu/admissions/instructions/04c/) are set by the Graduate College.

Financial Aid

Students in concentrations under the MEng in Engineering major are not eligible for Board of Trustees (BOT) tuition-waiver generating assistantships at the University of Illinois.

Other Graduate Programs in the Department of Civil & Environmental Engineering

degrees:

Civil Engineering, MS (p. 660)
optional concentrations:
Computational Science and Engineering (p. 1089)
Civil Engineering, PhD (p. 662)
optional concentrations:
Computational Science and Engineering (p. 1089)
Environmental Engineering in Civil Engineering, MS (p. 757)
optional concentrations:
Computational Science and Engineering (p. 1089)
Environmental Engineering in Civil Engineering, PhD (p. 759)
optional concentrations:
Computational Science and Engineering (p. 1089)

joint programs:

Civil Engineering, MS & Architecture, MARCH (p. 1150), **(Construction Management or Structures)**
Civil Engineering, MS & Urban Planning, MS (p. 1168)

Opportunity also exists for specializing in energy and sustainability engineering via the

Energy and Sustainability Engineering (EaSE) Graduate Certificate Option (http://ease.illinois.edu/)

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for the Master of Engineering in Engineering Railway Engineering Concentration

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For additional details and requirements, please refer to the concentration's website (http://railwaymeng.engineering.illinois.edu/) and the Graduate College Handbook (http://grad.illinois.edu/gradhandbook/).

Concentration Requirements

Code	Title	Hours
Core Courses from Illinois		**6**
CEE 409	Railroad Track Engineering	
CEE 412	High-Speed Rail Engineering	
Alternate Illinois course from approved list for students who have completed one or both of the required courses in previous degree		
Core Courses from KTH		**12**
CEE 498	Special Topics (RTV, KTH SD2307, Rail Vehicle Technology)	
CEE 498	Special Topics (TMS, KTH AK2036, Theory and Methodology of Science with Applications)	
CEE 598	Special Topics (ET, KTH EJ2400, Electric Traction)	
CEE 598	Special Topics (RVD, KTH SD2313, Rail Vehicle Dynamics)	
Elective Courses from Illinois		**14**
Railway Elective Courses from Approved List A, minimum 6 hours		
Engineering Elective Courses from Approved List B, minimum 6 hours		
Professional Development courses from approved list		**4**
Total Hours		36

Other Requirements and Conditions (may overlap)

Requirement	Description
Minimum of 20 credit hours must be taken at the University of Illinois at Urbana-Champaign campus	
Minimum of 12 500-level credit hours in the concentration with at least 8 credit hours in the core concentration	
No courses used to filfill any degree requirement may be taken using the Credit/No Credit option.	
Minimum program GPA	3.0

English, MA

for the degree of Master of Arts in English

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head of department: Bob Markley
director of graduate studies: Justine Murison
overview of graduate college admissions & requirements: Graduate Admissions (https://grad.illinois.edu/admissions/apply/)
overview of department admissions & requirements: https://english.illinois.edu/admissions/graduate-admission (https://english.illinois.edu/admissions/graduate-admission/)
department website: http://www.english.illinois.edu
college website: https://las.illinois.edu/
department office: 210 English Building, 608 South Wright Street, Urbana, IL 61801
phone: (217) 333-3646
email: engl_resources@ad.uiuc.edu (http://catalog.illinois.edu/graduate/las/english-ma/engl_resources@ad.uiuc.edu)

The Department of English offers programs of study leading to the Master of Arts and the Doctor of Philosophy degrees. We welcome qualified students who wish to pursue their interests in English, American, and Anglophone language, literature and film beyond the undergraduate level. The Ph.D. program is, in general, designed to educate and train teacher-scholars who will take positions in colleges and universities throughout the country. We consider the Master of Arts program to be the first step toward the Ph.D. degree; we expect students admitted to the M.A. program to receive the M.A. and go on to complete a Ph.D. We therefore do not offer a formal terminal M.A. program.

Both the M.A. and Ph.D. may be earned with a specialization in Writing Studies. Also, doctoral students specializing in other fields may earn a graduate concentration in Writing Studies.

Graduate Degree Programs in English

English, MA (p. 751)
concentration: Medieval Studies (p. 1101)
English, PhD (p. 753)
concentration: Medieval Studies (p. 1101)|Writing Studies (p. 1111)

for information on the Master of Fine Arts (M.F.A.) program in Creative Writing, see Creative Writing (p. 684)**.**

Affiliated Programs offering certificates or minors:

- **Department of African American Studies**
- **Asian American Studies Program**
- **American Indian Studies**
- **Center for Latin American and Caribbean Studies**
- **Gender and Women's Studies Program**
- **The Holocaust, Genocide, and Memory Studies Initiative**
- **Illinois Program for Research in the Humanities**
- **Latina-Latino Studies Program**
- **The Program in Jewish Culture and Society**
- **Unit for Cinema Studies**
- **Unit for Criticism and Theory**

Admission

A student who wishes to be considered for admission to graduate studies in English must present the equivalent of at least 20 semester hours of undergraduate work in English and American literature, excluding required work in rhetoric or composition. Graduate Record Examination (GRE) scores are required for those applying for the Literary Studies and Writing Studies programs. The GRE subject test for literature in English is not required. **For the 2020-2021 application season, the English Department is not requiring the GRE general test, and such scores will not be considered by the readers of applications in their deliberations.** All applicants whose native language is not English are required to submit Test of English as a Foreign Language (TOEFL) scores. Currently, a minimum score of 550 on the paper-based test (213 on the computer-based test) is required. Before a teaching assistantship involving classroom instruction or student consultation can be awarded to a non-native speaker of English, the applicant must take the Test of Spoken English (TSE) and achieve a score of 50 or higher (230 or higher before 1996). Because applications for admission usually far exceed capacity, in recent years undergraduate grade point averages of students admitted have been significantly higher than the 3.0 (A = 4.0) required by the Graduate College. The committee on admissions tends to select those applicants who have a solid array of undergraduate courses, knowledge of a foreign language, strong recommendations, and a compelling writing sample: in short, an academic record that shows promise of doing outstanding work in the field and earning degrees within a reasonable time. We do not admit part-time students. Applicants are considered only in spring for fall admission, and the deadline for submitting applications is noon on December 2nd.

Graduate Teaching Experience

Experience in teaching is considered a vital part of the graduate program and all M.A. and Ph.D. candidates will have ample opportunity to teach undergraduate writing classes.

Financial Aid

Financial aid is available to students in the form of fellowships, teaching assistantships, research assistantships, and waivers of tuition and service fees. For complete information about the program, prospective applicants should consult our website at https://english.illinois.edu/admissions/graduate-admission (https://english.illinois.edu/admissions/graduate-admission/) or write to the above address.

for the degree of Master of Arts in English

A full-time student can complete this program in two academic years. Students must choose to complete a specialization in Literature or Writing Studies.

Code	Title	Hours
Virtually every student will teach rhetoric classes, and is required to enroll in a teaching proseminar (ENGL 593).		4
Course work selected from list below in consultation with advisor		
Language Requirement: Students must demonstrate a reading knowledge of at least one foreign language.		
Total Hours		32

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
At least two semesters or the equivalent in residence	
Minimum Hours Overall Required Within the Unit:	24 (12 at 500-level)
Minimum 500-level Hours Required Overall:	16
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the department's* Graduate Studies in English *(*http://www.english.illinois.edu/graduate/*) Website and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Course work listing for M.A. requirements for the Literature Specialization:

Eight semester-long courses in British and American Literature and Critical Theory.

Courses (worth four hours of credit each) must be taken in six of the following nine areas:

- Medieval British Literature (beginning to 1485)
- Renaissance British Literature (1485-1660)
- Restoration/Eighteenth-Century British Literature (1660-1800)
- Nineteenth-Century British Literature (1800-1900
- Twentieth-Century British Literature (1900-2000)
- Early American Literature (beginning to Civil War)
- Later American Literature(Civil War to present)
- Anglophone Literature (other than British and American)
- Critical Theory

Candidates may substitute another area (such as film) for one on the above list with the permission of the Director of English Graduate Studies. However, all students must take at least one course in a period before 1660, and one course in either Early or Later American Literature.

At least four of the eight courses must be in 500-level graduate seminars (limited to 14-18 students). The others may (but need not) be in 400-level

courses (limited to 36 students) in which graduate students complete work beyond that expected of undergraduates.

In their first year of teaching, students are required to complete a Professional Seminar in the teaching of composition or business and technical writing for four hours of credit. (ENGL 593)

The Foreign Language Requirement may be satisfied by demonstrating a reading knowledge of an appropriate foreign language in one of the following three ways:

1. By completing the equivalent of three full years of undergraduate work
2. By passing a proficiency exam administered by a UIUC foreign language department
3. By passing a non-credit 501 language course with a grade of B or better

Course work listing for M.A. requirements for the Writing Specialization:

Eight semester-long courses in Writing Studies, Literature, and Theory.

Courses (worth four hours each) must be taken as follows:

At least 16 of the 32 required hours must be in 500-level courses. Eight of the 16 hours must be ENGL 505 and 1 course from the following list: ENGL 582, ENGL 583, ENGL 584. In addition, students must take two courses in Literature or Theory and four courses approved by the Writing Studies advisor.

At least four of the eight courses must be 500-level graduate seminars (limited to 14-18 students). The others may (but need not) be 400-level courses (limited to 36 students) in which graduate students complete work in addition to that expected of undergraduates.

In their first year of teaching, students are required to complete a Professional Seminar (ENGL 593) in the teaching of composition or the teaching of business and technical writing for four hours of credit.

The Foreign Language Requirement may be satisfied by demonstrating a reading knowledge of an appropriate foreign language in one of the following three ways:

1. By completing the equivalent of three full years of undergraduate work
2. By passing a proficiency exam administered by a University of Illinois foreign language department
3. By passing a non-credit 501 language course with a grade of B or better.

English, PhD

for the degree of Doctor of Philosophy in English

head of department: Bob Markley
director of graduate studies: Justine Murison
overview of graduate college admissions & requirements: Graduate Admissions (https://grad.illinois.edu/admissions/apply/)
overview of department admissions & requirements: https://english.illinois.edu/admissions/graduate-admission (https://english.illinois.edu/admissions/graduate-admission/)
department website: http://www.english.illinois.edu
college website: https://las.illinois.edu/
department office: 210 English Building, 608 South Wright Street, Urbana, IL 61801
phone: (217) 333-3646
email: shockey@illinois.edu

The Department of English offers programs of study leading to the Master of Arts and the Doctor of Philosophy degrees. We welcome qualified students who wish to pursue their interests in English, American, and Anglophone language, literature and film beyond the undergraduate level. The Ph.D. program is, in general, designed to educate and train teacher-scholars who will take positions in colleges and universities throughout the country. We consider the Master of Arts program to be the first step toward the Ph.D. degree; we expect students admitted to the M.A. program to receive the M.A. and go on to complete a Ph.D. We therefore do not offer a formal terminal M.A. program.

Both the M.A. and Ph.D. may be earned with a specialization in Writing Studies. Also, doctoral students specializing in other fields may earn a graduate concentration in Writing Studies.

Graduate Degree Programs in English

English, MA (p. 751)
concentration: Medieval Studies (p. 1101)
English, PhD (p. 753)
concentration: Medieval Studies (p. 1101)|Writing Studies (p. 1111)

for information on the Master of Fine Arts (M.F.A.) program in Creative Writing, see Creative Writing (p. 684)**.**

Affiliated Programs offering certificates or minors:

- **Department of African American Studies**
- **Asian American Studies Program**
- **American Indian Studies**
- **Center for Latin American and Caribbean Studies**
- **Gender and Women's Studies Program**
- **The Holocaust, Genocide, and Memory Studies Initiative**
- **Illinois Program for Research in the Humanities**
- **Latina-Latino Studies Program**
- **The Program in Jewish Culture and Society**
- **Unit for Cinema Studies**
- **Unit for Criticism and Theory**

Admission

A student who wishes to be considered for admission to graduate studies in English must present the equivalent of at least 20 semester hours of undergraduate work in English and American literature, excluding required work in rhetoric or composition. Graduate Record Examination (GRE) scores are required for those applying for the Literary Studies and Writing Studies programs. The GRE subject test for literature in English is not required. **For the 2020-2021 application season, the English Department is not requiring the GRE general test, and such**

scores will not be considered by the readers of applications in their deliberations. All applicants whose native language is not English are required to submit Test of English as a Foreign Language (TOEFL) scores. Currently, a minimum score of 550 on the paper-based test (213 on the computer-based test) is required. Before a teaching assistantship involving classroom instruction or student consultation can be awarded to a non-native speaker of English, the applicant must take the Test of Spoken English (TSE) and achieve a score of 50 or higher (230 or higher before 1996). Because applications for admission usually far exceed capacity, in recent years undergraduate grade point averages of students admitted have been significantly higher than the 3.0 (A = 4.0) required by the Graduate College. The committee on admissions tends to select those applicants who have a solid array of undergraduate courses, knowledge of a foreign language, strong recommendations, and a compelling writing sample: in short, an academic record that shows promise of doing outstanding work in the field and earning degrees within a reasonable time. We do not admit part-time students. Applicants are considered only in spring for fall admission, and the deadline for submitting applications is noon on December 2nd.

Graduate Teaching Experience

Experience in teaching is considered a vital part of the graduate program and all M.A. and Ph.D. candidates will have ample opportunity to teach undergraduate writing classes.

Financial Aid

Financial aid is available to students in the form of fellowships, teaching assistantships, research assistantships, and waivers of tuition and service fees. For complete information about the program, prospective applicants should consult our website at https://english.illinois.edu/admissions/graduate-admission (https://english.illinois.edu/admissions/graduate-admission/) or write to the above address.

for the degree of Doctor of Philosophy in English

Students in the program who have earned their master's degrees must apply formally to the Ph.D. program. Applicants who have completed their master's degrees elsewhere may also apply. Seldom are applicants accepted with graduate grade point averages below 3.5. Students must choose to complete a specialization in Literature or Writing Studies. In addition, students may choose to complete the graduate concentration in Writing Studies (http://catalog.illinois.edu/graduate/graduate-majors/writing-studies/).

Interdisciplinary work is encouraged. Students may take courses outside of English. The special field examination is taken as the student completes coursework and prepares to write the thesis. The student then goes on to complete and defend the thesis under the direction of a committee composed of four professors. A full-time student can complete this program in four years beyond the master's degree.

Code	Title	Hours
Virtually every student will teach rhetoric classes, and is required to enroll in a teaching proseminar (ENGL 593) if s/he has not taken such a class at the Master's level.		
Elective hours selected from the list below in consultation with advisor, to bring total course work hours to 32		32
Language Requirement: Students must demostrate knowledge of one foreign language in a level equivalent to that required of master's candidates in the English Department's program.		
ENGL 599	Thesis Research (32 max applied toward degree)	32
Total Hours		64

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
The special field examination is taken as the student completes coursework and prepares to write the thesis.	
Masters Degree Required for Admission to PhD?	Yes
Qualifying Exam Required	No
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the department's* Graduate Studies in English *(*http://www.english.illinois.edu/graduate/*) Website and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Course work listing for Ph.D. requirements for the Literature Specialization:

- Eight additional semester-long courses at the 400 and 500 level. These, selected in consultation with a faculty advisor, either focus on the proposed field of specialization and allied fields--in English or in other disciplines--or fill gaps in the student's background.
- Doctoral students in literature will either take a Professional Seminar in the teaching of literature or film or act as a teaching assistant for two semesters in a large lecture course before they teach literature courses. They are expected to teach at least one literature course during their Ph.D. work.
- The Foreign Language Requirement (if not already satisfied at the M.A. level) may be satisfied by demonstrating a reading knowledge of an appropriate foreign language in one of the following three ways: By completing the equivalent of three full years of undergraduate work; By passing a proficiency exam administered by a UIUC foreign language department; By passing a non-credit 501 language course with a grade of B or better.
- Completion of a Special Field Examination (oral, written, or both). The exam, administered by a committee of four faculty members selected by the student, is based upon the student's approved Special Field list of primary and secondary sources, including a discussion of its rationale and relation to the proposed dissertation topic. Approved fields include historical periods, genres, film, and critical theory.
- Completion and two-hour oral defense of a dissertation. Students working on their dissertations are eligible for fellowship support or released time from teaching. All students in good standing and making good progress will ordinarily receive at least one semester free from teaching. A few students receive a year or more of fellowship aid to work full-time on their dissertations.

Course work listing for Ph.D. requirements for the Writing Studies Specialization:

- Eight additional semester-long courses at the 400 and 500 level. These selected in consultation with a faculty advisor, focus on the proposed field of specialization and allied fields--in English or in other disciplines--or fill gaps in the student's background and include ENGL 505 and 2 methodology courses (at least one of which is an ENGL 582; the second methodology course should be approved by the advisor and typically will be approved by the Center for Writing Studies for the methodology requirement in its Writing Studies Graduate Concentration). In addition, students must take one course in Literature or Theory. Specific courses taken at the MA level (ENGL 505 and ENGL 582) are counted as fulfilling those specific requirements at the PhD level.
- Students who enter the Ph.D. program with an M.A. from another institution must show demonstrated reading knowledge of a foreign language.
- Completion of a Special Field Examination (oral, written, or both). This exam, administered by a committee of four faculty members selected by the student, is based upon the student's approved special field list--which includes a discussion of its rationale and relation to the proposed dissertation topic. Lists are representative of the field of Writing Studies and include two or three concentrations within it. Approved fields include: Cognition and Composition, Computers and Composition Studies, Classical Rhetoric, Critical Theory, Discourse Processes, Gender and Writing, Literacy Studies, Technical Communication, Writing Across the Curriculum, Writing in the Disciplines, and Writing Assessment. Other combinations of fields are possible, including those that combine disciplines (e.g. African-American Studies, women's studies, and literacy).
- Completion and two-hour oral defense of a dissertation. Students working on their dissertations are eligible for fellowship support or released time from teaching. All students in good standing and making good progress will ordinarily receive at least one semester free from teaching. A few students receive a year or more of fellowship aid to work full-time on their dissertations.

Entomology, MS

for the degree of Master of Science in Entomology

chair of department: May R. Berenbaum
co-directors of graduate studies: Alexandra Harmon-Threatt and Adam Dolezal
overview of department admissions & requirements: https://sib.illinois.edu/entomology/graduate_admissions/
overview of graduate college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://sib.illinois.edu/entomology/
department faculty: https://sib.illinois.edu/entomology/faculty (https://sib.illinois.edu/entomology/faculty/)
college website: Liberal Arts & Sciences: https://las.illinois.edu/
department office: 320 Morrill Hall, 505 South Goodwin Avenue, Urbana, IL 61801
phone: (217) 333-2910
email: entowork@life.illinois.edu

The Department of Entomology offers graduate programs leading to the Master of Science and Doctor of Philosophy degrees. The program is designed to accommodate incoming students with a wide range of entomological expertise. The goal of the program is to provide students with a strong background in basic biology as it relates to insects and to equip them with the specialized intellectual and technical skills to pursue a career in research, teaching, and service in entomology and related biological disciplines.

Major areas of specialization within the department include systematics, evolutionary biology, molecular genetics, genomics, chemical ecology, disease ecology, invasion biology, toxicology, pollinator health, social insect biology, insect-microbe interactions, conservation biology, and integrated pest management.

Graduate Degree Programs in Entomology

Entomology, MS (p. 755)
concentration: Computational Science & Engineering (p. 1089)
Entomology, PhD (p. 756)
concentration: Computational Science & Engineering (p. 1089)

Admission

The Graduate Record Examination (GRE) general test scores are not required by our Department but can be submitted if they will support your application. A minimum Test of English as a Foreign Language (TOEFL) score of 550 (paper-based test), 213 (computer-based test), or 79 (internet-based test), or an International English Language Testing System (IELTS) score of 6.5, is required. Previous training in entomology is unnecessary. It is recommended that students who intend to study for advanced degrees in entomology gain a thorough grounding in the physical and biological sciences, mathematics, and the liberal arts. Spring admission is possible for special circumstances.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program and serving as a teaching assistant for at least two semesters is required.

Financial Aid

Graduate student awards are available, including teaching and research assistantships. In addition, fellowships and traineeships are offered by the Graduate College and the School of Integrative Biology. A single application to the department is sufficient for consideration for all awards currently available.

for the degree of Master of Science in Entomology

A candidate for the M.S. degree is expected to become knowledgeable in entomology through coursework and independent research and to complete a research thesis in an area of interest chosen in consultation with an adviser.

For additional details and requirements refer to the department's Graduate Handbook (http://www.life.illinois.edu/entomology/handbook.html) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
Select four of the following:		14
IB 427	Insect Physiology	

IB 444	Insect Ecology	
IB 468	Insect Classification and Evol	
IB 482	Insect Pest Management	
IB 504	Genomic Analysis of Insects	
ENT 599	Thesis Research (12 max applied toward degree)	12
Total Hours		32

Other Requirements

Requirement	Description
Other requirements may overlap	
Prescription Exam Required (administered upon entrance into program)	Yes
Masters Thesis Defense Required	Yes
Masters Thesis Deposit Required	Yes
Minimum 500-level Hours Required	12
Overall:	
The grade point average required for degree certification is 3.0 (A = 4.0).	
Minimum GPA:	3.0

Learning Outcomes: Entomology, MS

Learning outcomes for the degree of Master of Science in Entomology

1. Synthesize and apply core knowledge related to the field of Entomology, particularly from the areas covered in the core courses and the advanced topic seminars.
2. Design and implement independent research, with the overarching goal to obtain mastery of relevant approaches for their area of research
3. Apply rigorous statistical/analytical methods that typify their area of study
4. Demonstrate effective communication skills
   a. Presentations
   b. Publications
5. Obtain teaching experience
6. Learn grant and fellowship application writing
7. Acquire other professional skills
   a. Data management
   b. Citation management
   c. Public Outreach/Science Communication
   d. Research and Professional Ethics

Entomology, PhD

for the degree of Doctor of Philosophy in Entomology

chair of department: May R. Berenbaum
co-directors of graduate studies: Alexandra Harmon-Threatt and Adam Dolezal
overview of department admissions & requirements: https://sib.illinois.edu/entomology/graduate_admissions/
overview of graduate college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://sib.illinois.edu/entomology/
department faculty: https://sib.illinois.edu/entomology/faculty (https://sib.illinois.edu/entomology/faculty/)
college website: Liberal Arts & Sciences: https://las.illinois.edu/
department office: 320 Morrill Hall, 505 South Goodwin Avenue, Urbana, IL 61801
phone: (217) 333-2910
email: entowork@life.illinois.edu

The Department of Entomology offers graduate programs leading to the Master of Science and Doctor of Philosophy degrees. The program is designed to accommodate incoming students with a wide range of entomological expertise. The goal of the program is to provide students with a strong background in basic biology as it relates to insects and to equip them with the specialized intellectual and technical skills to pursue a career in research, teaching, and service in entomology and related biological disciplines.

Major areas of specialization within the department include systematics, evolutionary biology, molecular genetics, genomics, chemical ecology, disease ecology, invasion biology, toxicology, pollinator health, social insect biology, insect-microbe interactions, conservation biology, and integrated pest management.

Graduate Degree Programs in Entomology

Entomology, MS (p. 755)
concentration: Computational Science & Engineering (p. 1089)
Entomology, PhD (p. 756)
concentration: Computational Science & Engineering (p. 1089)

Admission

The Graduate Record Examination (GRE) general test scores are not required by our Department but can be submitted if they will support your application. A minimum Test of English as a Foreign Language (TOEFL) score of 550 (paper-based test), 213 (computer-based test), or 79 (internet-based test), or an International English Language Testing System (IELTS) score of 6.5, is required. Previous training in entomology is unnecessary. It is recommended that students who intend to study for advanced degrees in entomology gain a thorough grounding in the physical and biological sciences, mathematics, and the liberal arts. Spring admission is possible for special circumstances.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program and serving as a teaching assistant for at least two semesters is required.

Financial Aid

Graduate student awards are available, including teaching and research assistantships. In addition, fellowships, and traineeships are offered by the Graduate College and the School of Integrative Biology. A single application to the department is sufficient for consideration for all awards currently available.

for the degree of Doctor of Philosophy in Entomology

A candidate for the Ph.D. degree should be conversant with entomological aspects of ecology, genetics, systematics, physiology, and integrated pest management. The candidate must demonstrate professional competence in a specialized area by presenting an acceptable thesis based on original research designed in consultation with a faculty adviser and approved by a graduate faculty thesis committee.

For additional details and requirements refer to the department's Graduate Handbook (http://www.life.illinois.edu/entomology/handbook.html) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Entering with approved M.S./M.A. degree

Code	Title	Hours
Select 0-20 hours from the following:		0-20
IB 427	Insect Physiology	
IB 444	Insect Ecology	
IB 468	Insect Classification and Evol	
IB 482	Insect Pest Management	
IB 504	Genomic Analysis of Insects	
IB 526	Seminar in Entomology (Special Topics)	3
Statistics course		4
ENT 599	Thesis Research (0 min applied toward degree)	0
Total Hours		64

Other Requirements

Requirement	Description
Other requirements may overlap	
Prescription Exam Required (administered upon entrance into program)	Yes
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
The grade point average required for degree certification is 3.0 (A = 4.0).	
Minimum GPA:	3.0

Entering with approved B.S./B.A. degree

Code	Title	Hours
Select 20 hours from the following:		20
IB 427	Insect Physiology	
IB 444	Insect Ecology	
IB 468	Insect Classification and Evol	
IB 482	Insect Pest Management	
IB 504	Genomic Analysis of Insects	
IB 526	Seminar in Entomology (Special Topics)	3
Statistics course		4
ENT 599	Thesis Research (0 min applied toward degree)	0
Total Hours		96

Other Requirements

Requirement	Description
Other requirements may overlap	
Prescription Exam Required (administered upon entrance into program)	Yes
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
The grade point average required for degree certification is 3.0 (A = 4.0).	
Minimum GPA:	3.0

Learning Outcomes: Entomology, PhD

Learning outcomes for the degree of Doctor of Philosophy in Entomology

1. Synthesize and apply core knowledge related to the field of Entomology, particularly from the areas covered in the core courses and the advanced topic seminars.
2. Design and implement independent research, with the overarching goal to obtain mastery of relevant approaches for their area of research
3. Apply rigorous statistical/analytical methods that typify their area of study
4. Demonstrate effective communication skills
   a. Presentations
   b. Publications
5. Obtain teaching experience
6. Learn grant and fellowship application writing
7. Acquire other professional skills
   a. Data management
   b. Citation management
   c. Public Outreach/Science Communication
   d. Research and Professional Ethics

Environmental Engineering in Civil Engineering, MS

for the degree of Master of Science in Environmental Engineering in Civil Engineering (on campus & non-thesis online)

head of department: Ana Barros (https://cee.illinois.edu/directory/staff/office-department-head/)
director of graduate studies: Jeffery R Roesler (jroesler@illinois.edu)
overview of admissions & requirements: https://cee.illinois.edu/admissions/graduate/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://cee.illinois.edu/ **and** https://cee.illinois.edu/environmental (https://cee.illinois.edu/environmental/)
program website: https://cee.illinois.edu/academics/graduate-programs/ms-degree-and-curriculum (https://cee.illinois.edu/academics/graduate-programs/ms-degree-and-curriculum/)
department faculty: https://cee.illinois.edu/directory/faculty (https://cee.illinois.edu/directory/faculty/)
college website: https://grainger.illinois.edu/
contact: Joan Christian (jchristn@illinois.edu)
address: 1108 Newmark Civil Engineering Lab, 205 N Mathews Ave, Urbana, IL 61801
phone: (217) 265-4496
email: civil@illinois.edu

The Department of Civil and Environmental Engineering, consistently ranked as having one of the best graduate programs in the country, offers graduate work leading to master's and doctoral degrees. These are in a variety of specialized areas through departmental programs which are described on this page.

Opportunity exists for specializing in computational science and engineering via the Computational Science & Engineering (p. 1089) optional graduate concentration.

Admission Requirements

The Department of Civil & Environmental Engineering accepts applications for admission to the graduate program for both fall and spring semesters.

Admission to the Graduate College with full status in environmental engineering in civil engineering is granted to graduates of accredited institutions whose requirements for the bachelor's degree are substantially equivalent to those of the University of Illinois and his or her cumulative grade point average is at least 3.00 (A = 4.00). The Graduate Record Examination (GRE) (http://www.ets.org/portal/site/ets/menuitem.fab2360b1645a1de9b3a0779f1751509/?vgnextoid=b195e3b5f64f4010VgnVCM10000022f95190RCRD) is required.

All applicants whose native language is not English are required to submit TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) scores as evidence of English proficiency. Minimum admission requirements (https://grad.illinois.edu/admissions/instructions/04c/) are set by the Graduate College. Students applying to the online program must satisfy the full status admissions requirement.

Financial Aid

Financial aid is available in the form of fellowships and research and teaching assistantships. All applicants, regardless of U.S. citizenship, whose native language is not English and who wish to be considered for teaching assistantships must demonstrate spoken English language proficiency (http://www.grad.illinois.edu/admissions/taengprof.htm) by achieving a minimum score of 50 or 24 on the speaking subsection of the TOEFL iBT or 8 on the speaking subsection of the IELTS. For students who are unable to take the iBT or IELTS, a minimum score of 4CP is required on the EPI test (http://cte.illinois.edu/testing/oral_eng/epi_overview.html), offered on campus. All new teaching assistants are required to participate in the Graduate Academy for College Teaching (https://citl.illinois.edu/citl-101/teaching-learning/grad-academy-for-college-teaching/) conducted prior to the start of the semester.

Department Research

Areas of study and research pursued by our world-renowned faculty are focused in the following ten specializations:

•construction management	•environmental engineering and science	•environmental hydrology and hydraulic engineering	•geotechnical engineering	•materials
•structural engineering	•transportation engineering	•sustainable and resilient infrastructure systems	•energy-water-environment sustainability	•societal risk and hazard mitigation

More information about these specialized areas may be found at the department's research Web site (https://cee.illinois.edu/areas/).

Through the research centers based in the department, CEE students participate in a wide range of groundbreaking research projects with immediate relevance to real-world engineering applications. For more information, see the department's research centers Web site (https://cee.illinois.edu/research/research-centers/).

CEE at Illinois is one of the nation's best-equipped programs, with a broad range of facilities for civil and environmental engineering education and research. For more information, see the department's research facilities Web site (https://cee.illinois.edu/research/research-facilities/).

Other Graduate Programs in the Department of Civil & Environmental Engineering

degrees:

Environmental Engineering in Civil Engineering, PhD (p. 759)
optional concentrations:
Computational Science and Engineering (p. 1089)
Civil Engineering, MS (p. 660)
optional concentrations:
Computational Science and Engineering (p. 1089)
Civil Engineering, PhD (p. 662)
optional concentrations:
Computational Science and Engineering (p. 1089)

concentrations:

Railway Engineering (p. 750)
available for:
Engineering, MENG (p. 745)

joint programs:

Civil Engineering, MS & Architecture, MARCH (p. 1150), **(Construction Management or Structures)**
Civil Engineering, MS & Urban Planning, MS (p. 1168)

Opportunity also exists for specializing in energy and sustainability engineering via the

Energy and Sustainability Engineering (EaSE) Graduate Certificate Option (http://ease.illinois.edu/)

for the degree of Master of Science in Environmental Engineering in Civil Engineering (on campus & non-thesis online)

The degree requirements for the online programs are the same as for the on-campus non-thesis MS program—36 hours of course work—and the degree awarded to online students is the same degree awarded to resident students. Online students have five years to complete the program.

The MS degree in Environmental Engineering offered online includes five core courses in Environmental Engineering and electives chosen in Environmental Engineering, Hydrology and Hydraulic Engineering, or other areas of Civil Engineering to fulfill the degree requirements.

This degree program can be completed either on campus or online; with or without a thesis, the requirements are listed below:

Code	Title	Hours
Non-Thesis Option		
Elective courses	36 hours subject to Other Requirements and Conditions below	
Total Hours	**Non-Thesis Option**	**36**
Thesis Option		
CEE 599	Thesis Research (4 to 12 hours)	
Elective courses	20-28 hours subject to Other Requirements and Conditions below	
Total Hours	**Thesis Option**	**32**

Other Requirements

Requirement	Description
Other Requirements may overlap	
Individual programs are developed by the students in consultation with their academic advisors.	
A minimum of 16 hours of credit within the major field with 8 graded and at the 500 level.	
A minimum of 12 hours at the 500-level overall.	
A maximum of 8 hours of CEE 597 (or other independent study) may be applied toward the elective course work requirement.	
At least half of the minimum hours required for the degree must be in Illinois courses meeting on the Urbana-Champaign campus or in courses meeting in other locations approved by the Graduate College for residency credit for the degree.	
Minimum program GPA	2.75

Learning Outcomes: Environmental Engineering, MS

Learning Outcomes for the degree of Master of Science in Environmental Engineering in Civil Engineering (on campus & non-thesis online)

1. Ability to identify and utilize advanced mathematical, computational, design and/or experimental skills to solve complex problems in civil and environmental engineering
2. Demonstrate technical knowledge and depth in at least one or more CEE subject areas and breadth of knowledge in at least one additional area.
3. Demonstrate the ability to communicate effectively (written, oral presentation, and other media) technical ideas, design concepts, or research results.
4. Understanding of the student's professional and scientific ethical responsibilities;
5. Propose, plan, and execute original research idea that target current or future societal challenges related to civil and environmental engineering.
6. Demonstrate skills to teach technical subjects in CEE at the university level

Environmental Engineering in Civil Engineering, PhD

for the degree of Doctor of Philosophy in Environmental Engineering in Civil Engineering

head of department: Ana Barros (https://cee.illinois.edu/directory/staff/office-department-head/)
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department website: https://cee.illinois.edu/ **and** https://cee.illinois.edu/environmental (https://cee.illinois.edu/environmental/)
program website: https://cee.illinois.edu/academics/graduate-programs/phd-degree-and-curriculum (https://cee.illinois.edu/academics/graduate-programs/phd-degree-and-curriculum/)
department faculty: https://cee.illinois.edu/directory/faculty (https://cee.illinois.edu/directory/faculty/)
college website: https://grainger.illinois.edu/
contact: Joan Christian (jchristn@illinois.edu)
address: 1108 Newmark Civil Engineering Lab, 205 N Mathews Ave, Urbana, IL 61801
phone: (217) 265-4496
email: civil@illinois.edu

The Department of Civil and Environmental Engineering, consistently ranked as having one of the best graduate programs in the country, offers graduate work leading to master's and doctoral degrees. These are in a

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Opportunity exists for specializing in computational science and engineering via the Computational Science & Engineering (p. 1089) optional graduate concentration.

Admission Requirements

The Department of Civil & Environmental Engineering accepts applications for admission to the graduate program for both fall and spring semesters.

Admission to the Graduate College with full status in environmental engineering in civil engineering is granted to graduates of accredited institutions whose requirements for the master's degree are substantially equivalent to those of the University of Illinois, provided the applicant's preparation is appropriate for advanced study in his or her chosen major field and his or her cumulative grade point average is at least 3.00 (A = 4.00). The Graduate Record Examination (GRE) (http://www.ets.org/portal/site/ets/menuitem.fab2360b1645a1de9b3a0779f1751509/?vgnextoid=b195e3b5f64f4010VgnVCM10000022f95190RCRD) is required. For additional information, see the departmental Web site (http://cee.illinois.edu/programs/Grad/GradApps/).

All applicants whose native language is not English are required to submit TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) scores as evidence of English proficiency. Minimum admission requirements (https://grad.illinois.edu/admissions/instructions/04c/) are set by the Graduate College.

Financial Aid

Financial aid is available in the form of fellowships and research and teaching assistantships. Starting in Fall 2020, Grainger Engineering PhD students in their first five years of enrollment who meet the minimum eligibility requirements (https://grainger.illinois.edu/academics/graduate/phd-funding-guarantee/) are guaranteed a funded appointment for fall and spring that includes a full tuition waiver, a partial fee waiver, and a stipend.

All applicants, regardless of US citizenship, whose native language is not English and who wish to be considered for teaching assistantships must demonstrate spoken English language proficiency (http://www.grad.illinois.edu/admissions/taengprof.htm) by achieving a minimum score of 50 or 24 on the speaking subsection of the TOEFL iBT or 8 on the speaking subsection of the IELTS. For students who are unable to take the iBT or IELTS, a minimum score of 4CP is required on the EPI test (http://cte.illinois.edu/testing/oral_eng/epi_overview.html), offered on campus. All new teaching assistants are required to participate in the Graduate Academy for College Teaching (https://citl.illinois.edu/citl-101/teaching-learning/grad-academy-for-college-teaching/) conducted prior to the start of the semester.

Department Research

Areas of study and research pursued by our world-renowned faculty are focused in the following ten specializations:

- construction management
- environmental engineering and science
- environmental hydrology and hydraulic engineering
- geotechnical engineering
- materials
- structural engineering
- transportation engineering
- sustainable and resilient infrastructure systems
- energy-water-environment sustainability
- societal risk and hazard mitigation

More information about these specialized areas may be found at the department's research Web site (https://cee.illinois.edu/areas/).

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Other Graduate Programs in the Department of Civil & Environmental Engineering

degrees:

Environmental Engineering in Civil Engineering, MS (p. 757)
optional concentrations:
Computational Science and Engineering (p. 1089)
Civil Engineering, MS (p. 660)
optional concentrations:
Computational Science and Engineering (p. 1089)
Civil Engineering, PhD (p. 662)
optional concentrations:
Computational Science and Engineering (p. 1089)

concentrations:

Railway Engineering (p. 750)
available for:
Engineering, MENG (p. 745)

joint programs:

Civil Engineering, MS & Architecture, MARCH (p. 1150), **(Construction Management or Structures)**
Civil Engineering, MS & Urban Planning, MS (p. 1168)

Opportunity also exists for specializing in energy and sustainability engineering via the

Energy and Sustainability Engineering (EaSE) Graduate Certificate Option (http://ease.illinois.edu/)

for the degree of Doctor of Philosophy in Environmental Engineering in Civil Engineering

The degree of Doctor of Philosophy, primarily a research degree, requires from three to four years of graduate study beyond the master's degree. The major area of specialization encompasses courses and research that are closely related, but the courses need not be offered by a single major department. Candidates must demonstrate a capacity for independent research by preparing an original thesis on a topic within the major field of study, must meet the qualifying requirements or examination in the area of specialization, and must pass both preliminary and final examinations.

For additional details and requirements refer to the department's Graduate Handbook *(*https://ws.engr.illinois.edu/sitemanager/getfile.asp?id=3334*) and the* Graduate College Handbook *(*http://grad.illinois.edu/gradhandbook/*).*

Entering with an approved Master's Degree:

Code	Title	Hours
CEE 599	Thesis Research (min-max applied toward degree)	32
Elective courses (subject to Other Requirements and Conditions below)		32
Total Hours		64

Other Requirements

Requirement	Description
Other Requirements and Conditions may overlap	
A maximum of 8 hours of CEE 597 (or other independent study) may be applied toward the elective course work requirement; approval required.	
There is no department-wide foreign language requirement. However, the faculties of some areas of specialization may require foreign language proficiency if essential to the conduct of research in that area.	
64 graduate hours must be completed in residence.	
A Masters degree is required for admission to the Ph.D. program.	
Ph.D. exam and dissertation requirements:	
Qualifying exam[1]	
Preliminary exam	
Final exam or dissertation defense	
Dissertation deposit	
The minimum program GPA is 2.75.	

[1] Qualifying Exam Information *(*http://cee.illinois.edu/academics/graduate-programs/phd-degree-and-curriculum/*)*

Entering with an approved Baccalaureate Degree:

Code	Title	Hours
CEE 599	Thesis Research	32-40
Elective Courses (subject to other requirements and conditions below)		56-64
Total Hours		96

Other Requirements

Requirement	Description
Other Requirements and Conditions may overlap	
A maximum of 8 hours of CEE 597 (or other independent study) may be applied toward the elective course work requirement; approval required.	
There is no department-wide foreign language requirement. However, the faculties of some areas of specialization may require foreign language proficiency if essential to the conduct of research in that area.	
64 graduate hours must be completed in residence.	
24 credit hours must be in major field. 24 credit hours of elective coursework must be at the 500-level, with at least 12 hours in major field.	
Ph.D. exam and dissertation requirements:	
Qualifying exam[1]	
Preliminary exam	
Final exam or dissertation defense	
Dissertation deposit	
The minimum program GPA is 2.75.	

[1] Qualifying Exam Information *(*http://cee.illinois.edu/academics/graduate-programs/phd-degree-and-curriculum/*)*

Learning Outcomes: Environmental Engineering, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Environmental Engineering in Civil Engineering

1. Ability to identify and utilize advanced mathematical, computational, design and/or experimental skills to solve complex problems in civil and environmental engineering
2. Demonstrate technical knowledge and depth in at least one or more CEE subject areas and breadth of knowledge in at least one additional area.
3. Demonstrate the ability to communicate effectively (written, oral presentation, and other media) technical ideas, design concepts, or research results.
4. Understanding of the student's professional and scientific ethical responsibilities;
5. Propose, plan, and execute original research idea that target current or future societal challenges related to civil and environmental engineering.
6. Demonstrate skills to teach technical subjects in CEE at the university level

European Union Studies, MA

for the degree of Master of Arts in European Union Studies

center director: Emanuel Rota
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
center website: European Union Center (http://europe.illinois.edu/)
college website: College of Liberal Arts & Sciences (https://las.illinois.edu/)
department office: European Union Center, 328 International Studies Building, MC-429, 910 S. Fifth Street Champaign, IL 61820
phone: (217) 265-7515
email: eucenter@illinois.edu

The European Union Center administers an interdisciplinary program of language and area courses leading to a Master of Arts degree or a graduate minor open to students in other graduate programs across the university. The program is intended to serve three constituencies of students: those seeking to supplement their studies in another discipline with expertise in EU Studies; those proceeding to disciplinary-based doctoral work; and those seeking a stand-alone, applied degree with particular emphasis on European institutions and governance, combined with language and cultural studies.

Graduate Degree Programs in European Union Studies

European Union Studies, MA (p. 762)
European Union Studies Minor (p. 1132)

Admission

Applicants for admission to the Master of Arts program should have completed at least two years of a language of the European Union and hold a bachelor's degree from an accredited institution of higher education. The Graduate Record Examination (GRE), or another post-secondary examination such as the LSAT, GMAT, MCAT, is recommended but not required, and international students are required to take the Test of English as a Foreign Language (TOEFL), with minimum scores set by the Graduate College. All admission requirements of the Graduate College also apply.

Applicants must submit the Graduate College application for admission, certified transcripts of all undergraduate and graduate work, a writing sample, and three letters of reference. Applicants must also submit to the European Union Center a statement of purpose showing how the MA degree in European Union Studies fits into their educational and career plans. This statement must show that the interdisciplinary nature of the MA in EU Studies will serve the student better than a disciplinary degree. Graduate Record Examination (GRE) scores (verbal, quantitative, and written) or other post-secondary examination scores are considered but not required. Admission is ordinarily limited to the fall semester, but exceptions are made for spring and summer admission.

for the degree of Master of Arts in European Union Studies

Students pursuing the thesis option are required to conduct an oral thesis defense before an MA thesis committee. The thesis committee must consist of at least two individuals, with a minimum of one individual drawn from the EU Center Executive Staff. The thesis advisor must be a member of the Graduate Faculty.

For additional details and requirements refer to the department's graduate degree requirements (http://euc.illinois.edu/academic/degree.html) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Thesis Option

Code	Title	Hours
EURO 501 & EURO 502	EU Institutions and Governance and The EU in a Global Context	8
Language Requirement: A candidate must demonstrate proficiency in a language relevant to the study of Europe and the European Union other than English, at the advanced (third-year) level. Up to seven hours of advanced language (third or fourth-year) course work may be used toward the MA total hours. (Max 7)		7
EURO 599	Thesis Research (min/max applied toward degree)	0-8
Total Hours		36

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required overall:	12
Coursework must come from at least three different academic units	
Up to twelve hours may be credited for MA-equivalent study abroad courses or eight hours for internship placement	
Up to twelve hours may be credited from graduate level courses taken as an undergraduate enrolled in participating partner departments at the University of Illinois Urbana Champaign as part of the European Union Center's 5-year BA/MA program	
Minimum GPA:	2.75

Non-Thesis Option

Code	Title	Hours
EURO 501 & EURO 502	EU Institutions and Governance and The EU in a Global Context	8
Language Requirement: A candidate must demonstrate proficiency in a language relevant to the study of Europe and the European Union other than English, at the advanced (third-year) level. Up to seven hours of advanced language (third or fourth-year) course work may be used toward the MA total hours. (Max 7)		7
Total Hours		36

Other Requirements

Requirement	Description
Other Requirements may overlap	
Minimum 500-level Hours Required overall:	12

At least two substantial research papers (seminar length of 25-30 pages each) on European Union topics as part of course work, when relevant to the candidate's professional orientation, are required.	
Coursework must come from at least three different academic units	
Up to twelve hours may be credited for MA-equivalent study abroad courses or eight hours for internship placement	
Up to twelve hours may be credited from graduate level courses taken as an undergraduate enrolled in participating partner departments at the University of Illinois Urbana Champaign as part of the European Union Center's 5-year BA/MA program	
Minimum GPA:	2.75

Learning Outcomes: European Union Studies, MA

Learning Outcomes for the degree of Master of Arts in European Union Studies

1. Knowledge of the primary institutions, history, and contemporary challenges of the European Union, as well as the predominant theories that scholars have developed and employed in research on topics found in EU Studies.
2. Understanding of the European Union's historical and contemporary relationships with other countries and regions of the world.
3. Application of thorough knowledge of appropriate research methods and the craft of argument toward the evaluation of the work of others and completion of a thesis (if applicable).
4. Practice of a working command of at least one non-English language relevant to European studies.
5. Ability to assess current events in regards to appropriate historical and theoretical frameworks.

Finance, MS

for the Master of Science in Finance

chair of department: Louis Chan
director of graduate studies: Martin Widdicks (MSF); George Pennacchi (PhD)
email: grad@business.illinois.edu
department website: https://giesbusiness.illinois.edu/msf (https://giesbusiness.illinois.edu/msf/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://giesbusiness.illinois.edu/
department office: 340 Wohlers Hall, 1206 S. Sixth Street, Champaign, IL 61820
phone: (217) 244-2239

Graduate Degree Programs in Finance

Majors

- Finance, MS (p. 763)
  - **optional concentrations for the Finance, MS:** Accountancy (p. 1073), Business & Public Policy (p. 1087), Corporate Governance & International Business (p. 1090), Data Analytics in Finance (p. 1092), Information Technology & Control (p. 1100)
- Financial Engineering, MS (p. 765) (**administered by** Finance and Industrial & Enterprise Systems Engineering (https://msfe.illinois.edu/))
  - **optional concentration for the Financial Engineering, MS:** Data Analytics in Finance (p. 1092)
- Finance, PhD (p. 764)

Minors

- Finance (p. 1133)

Concentrations

- Data Analytics in Finance (p. 1092)
- Finance (p. 1096)
- Business & Public Policy (p. 1087)
- Real Estate (p. 1105)

Terminal masters: The Master of Science in Finance (terminal master's) is a 15 month program designed primarily for practitioners in finance-related positions. The program is designed to be completed in 15 months, beginning in August.

Admission requirements and other details about the program can be found at https://giesbusiness.illinois.edu/msf (https://giesbusiness.illinois.edu/msf/).

Admission

The minimum required grade point average for admission is 3.0 (A = 4.0). To be admitted without deficiencies, the applicant should have completed one undergraduate course each in computer science, financial accounting, managerial accounting, and principles of economics as well as two courses each in calculus, probability and statistics, and financial management. Courses to remove deficiencies may be taken after beginning the program, but such courses will not count toward the departmental requirements for graduation. All applicants are required to submit Graduate Management Admission Test (GMAT) or GRE scores. Most international applicants are also required to submit Test of English as a Foreign Language (TOEFL) IELTS or iBT scores. The test scores will be used by the Admissions Committee, along with other information, in evaluating the applicant's qualifications for graduate study.

for the Master of Science in Finance

Terminal masters: The Master of Science in Finance (terminal master's) is a 15 month program designed primarily for practitioners in finance-related positions. The program is designed to be completed in 15 months, beginning in August.

Admission requirements and other details about the program can be found at https://giesbusiness.illinois.edu/msf/program/.

For additional details and requirements refer to the department's graduate programs *(*https://giesbusiness.illinois.edu/graduate-hub/graduate/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Code	Title	Hours
Core courses		16
Graduate level finance courses		12
Elective graduate coursework		12
Total Hours		40

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall	12
Minimum GPA:	3.0

Ph.D. only option

For Ph.D. students: A Master of Science degree is available for students in the Ph.D. program. Ph.D. students may earn a masters degree as they work toward the Ph.D. degree. Students interested in a terminal masters degree are not admitted to the Ph.D. program. Options available at this University for a terminal masters degree in finance include the M.S. in Finance (terminal masters) described above, and the MBA with a track in finance as described under the section on Business Administration - MBA.

Code	Title	Hours
Total Hours		**32**

Other Requirements

Requirement	Description
Other Requirements may overlap	
Minimum 500-level Hours Required Overall	12
Minimum GPA:	3.0

Finance, PhD

for the Doctor of Philosophy in Finance

chair of department: Louis Chan
director of graduate studies: Martin Widdicks (MSF); George Pennacchi (PhD)
email: phdfinance@business.illinois.edu
department website: https://giesbusiness.illinois.edu/graduate-hub/doctoral/finance (https://giesbusiness.illinois.edu/graduate-hub/doctoral/finance/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://giesbusiness.illinois.edu/
department office: 340 Wohlers Hall, 1206 S. Sixth Street, Champaign, IL 61820
phone: (217) 244-2239

Graduate Degree Programs in Finance

Majors

- Finance, MS (p. 763)
  - **optional concentrations for the Finance, MS:** Accountancy (p. 1073), Business & Public Policy (p. 1087), Corporate Governance & International Business (p. 1090), Data Analytics in Finance (p. 1092), Information Technology & Control (p. 1100)
- Financial Engineering, MS (p. 765) (**administered by** Finance and Industrial & Enterprise Systems Engineering (https://msfe.illinois.edu/))
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Minors

- Finance (p. 1133)

Concentrations

- Data Analytics in Finance (p. 1092)
- Finance (p. 1096)
- Business & Public Policy (p. 1087)
- Real Estate (p. 1105)

The first stage toward the degree of Doctor of Philosophy ends when the candidate completes certain minimum coursework, fulfillment of other departmental requirements, and successful passing of a qualifying examination. The second stage requires successful completion and presentation of an initial research paper. The third stage includes research and preparation of the dissertation. Completion of this stage requires an oral preliminary thesis proposal defense and an oral final dissertation defense.

The minimum number of graduate hours required for all stages combined is 64. A student plans courses and research with his or her advisor. Consideration is given to previous academic training, career objective and the general requirements of the Graduate College and the Department. The student should become familiar with these requirements and satisfy them as soon as possible.

The Doctor of Philosophy is primarily a research degree, and the candidate must demonstrate the capacity for independent research by producing an original thesis on a topic within his or her major field of study. The subject of the thesis must be reported to the doctoral committee and to the Graduate College at the time of the preliminary examination (proposal defense). The candidate is admitted to the final oral examination by the dean of the Graduate College upon completion of the dissertation and the recommendation of the department.

The doctoral program generally begins in the fall semester. The application period typically runs October 1 through February 15.

Additional details on the program may be found at https://giesbusiness.illinois.edu/programs/doctoral/finance

Admission

The minimum required grade point average for admission is 3.0 (A = 4.0). All applicants are required to submit Graduate Management Admission Test (GMAT) or GRE scores. Most international applicants are also required to submit Test of English as a Foreign Language (TOEFL) IELTS or iBT scores. The test scores will be used by the Admissions Committee, along with other information, in evaluating the applicant's qualifications for graduate study.

for the Doctor of Philosophy in Finance

For additional details and requirements refer to the department's graduate programs (http://www.business.illinois.edu/finance/program.aspx) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
ECON 502	Economic Statistics (and prerequisites if required (ECON 500, ECON 501, ECON 506)	4-16
MATH 464	Statistics and Probability II (4 min)	3,4
ECON 507	Computable G E Modeling	4
At least two doctoral level courses beyond the minimum course requirements in econometrics and statistics, with a minimum grade of B in each		8
FIN 590	Individual Study and Research	4
FIN 591	Theory of Finance	4
FIN 592	Empirical Analysis in Finance	2-4
FIN 594	Seminar in Corporate Finance	4
FIN 593	Seminar in Investments	4
Research Seminars in Finance (16 min)		16
FIN 599	Thesis Research (min/max applied toward degree 0 min)	0
Total Hours		96

Other Requirement

Requirement	Description
Other requirements may overlap	
Students who do not already hold a Master's degree or its equivalent prior to enrollment must also take additional finance courses to complete the requirements of the MS Finance degree	
Teaching experience	
Second-year paper	
Masters Degree Required for Admission to PhD?	No, earned during Ph.D.
Qualifying Exam Required	Yes
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

Financial Engineering, MS

for the degree of Master of Science in Financial Engineering

department head (Industrial & Enterprise Systems Engineering): Jeff Shamma
department head (Finance): Louis Chan
program director: Morton Lane
overview of admissions requirements: https://msfe.illinois.edu/admissions/requirements.aspx
overview of grad college admissions requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
program website: http://msfe.illinois.edu
program faculty: https://msfe.illinois.edu/faculty/
college websites: https://grainger.illinois.edu (https://grainger.illinois.edu/) **and** https://giesbusiness.illinois.edu
contact: Application Inquiries (msfe-apply@illinois.edu)
address: 3252 Digital Computer Lab, 1304 W Springfield Ave, Urbana, IL 61801
phone: (217) 333-3284
email: msfe@illinois.edu

Financial Engineering (FE) is the application of quantitative methods to the analysis of financial markets and financial products. The quantitative techniques may include Mathematics, Statistics, Computer Science, Machine Learning, Neural Nets, and generalized Data Analytics. The applications include searching for opportunities as well as deriving solutions to financial problems. All financial markets are a subject for FE, from public exchanges to private over-the-counter markets. Similarly, all financial products, from equities, bonds and derivatives to bitcoins are candidates for quantification. An overarching theme for FE involves balancing reward against techniques for the measurement, management, and mitigation of risk.

Graduate Degree Programs in Financial Engineering

The Master of Science in Financial Engineering (MSFE) degree program is jointly sponsored by the Department of Industrial and Enterprise Systems Engineering (ISE) (https://ise.illinois.edu) in The Grainger College of Engineering and the Department of Finance (https://giesbusiness.illinois.edu/finance/) in the Gies College of Business. Graduates from this program receive the MSFE degree awarded by the Graduate College. The MSFE program complements other graduate programs offered by the sponsoring departments. The Master of Science in Financial Engineering (terminal master's) can be completed in 15 or 24 months, beginning in August each year. The second and subsequent semesters allow students the flexibility to pursue specialized tracks within the program, such as data analytics and electronic trading. A corporate-sponsored "practicum", provides students opportunities to address real world financial modeling problems and provides access to state-of-the-art analytic tools and software products.

Concentrations

Advanced Analytics in Industrial & Enterprise Systems Engineering (p. 1074)
Data Analytics in Finance (p. 1092)

Admission

Applicants to the MSFE Program will have a Bachelor's degree with one year of calculus, one semester of linear algebra and differential equations, one semester of programming (preferably in C/C++), and one semester of probability and statistics. Knowledge of basic finance and economics is helpful but not necessary. Given its technical emphasis, applicants to this program typically will have completed a Bachelor's degree in an engineering field, mathematics, physics, computer science, or economics that provides sufficient preparation to facilitate a fast-paced, in-depth learning environment.

All applicants are expected to have a minimum grade point average of at least 3.25 (A=4.00) for the last two years of undergraduate study and a 3.50 for any previous graduate work completed. Scores on the Graduate Record Examination (GRE) (http://www.ets.org/) general test are required of all applicants. GMAT (https://www.gmac.com/gmat-other-assessments/about-the-gmat-exam/the-gmat-advantage/) scores will also be considered.

All applicants whose native language is not English are required to submit TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) scores as evidence of English proficiency. Minimum admission requirements (https://grad.illinois.edu/admissions/instructions/04c/) are set by the Graduate College. Under certain circumstances applicants may be exempt (https://grad.illinois.edu/admissions/instructions/04c/) from the TOEFL/IELTS requirement.

for the degree of Master of Science in Financial Engineering

Covering topics in finance, economics, numerical methods, stochastic calculus, and computer programming, the MSFE is a rigorous, three-semester, 48-credit, resident degree program with a summer internship opportunity. Twelve courses each of 4 graduate credits are required for graduation; they are expected to be taken in sequence in the respective semesters.

For additional details and requirements refer to the program's Web site (http://msfe.illinois.edu/academics/curriculum.aspx) and the Graduate (http://www.grad.illinois.edu/gradhandbook/) College (http://www.grad.illinois.edu/gradhandbook/) Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
Core Coursework		**28**
FIN 500	Introduction to Finance	4
FIN 512	Financial Derivatives	4
FIN 516	Term Structure Models (Course revision from 4 to 2 credit hours)	2
FIN 553	Machine Learning in Finance	2
IE 522	Statistical Methods in Finance	4
IE 523	Financial Computing	4
IE 524	Optimization in Finance	2
IE 525	Stochastic Calculus & Numerical Models in Finance	4
IE 517	Machine Learning in Finance Lab	2
Elective Coursework (approved by academic advisor)		**16**
Professional Development (choose from the following)		**4**
FIN 583	Practicum	2
IE 597	Independent Study	2
Other independent study/internship with approval of advisor.		
Total Hours		**48**

Other Requirements

Requirement
A minimum of 36 credit hours must be taken from the University of Illinois Urbana-Champaign campus.
Minimum GPA: 2.75

Learning Outcomes: Financial Engineering, MS

Learning Outcomes for the degree of Master of Science in Financial Engineering

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1. Comprehension of common financial engineering techniques (toolkit)
2. Ability to identify and apply the appropriate techniques (tools) to real financial engineering opportunities and problems
3. Ability to minimally code to analysis
4. Awareness & knowledge of the financial environment
5. Ability to assess & articulate results to non-technical peers

Food Science and Human Nutrition, MS

for the Master of Science in Food Science and Human Nutrition (on campus & online)

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department head: Nicki Engeseth
associate head of graduate programs: Michael Miller (mille216@illinois.edu)
overview of admissions & requirements: https://fshn.illinois.edu/graduate/apply (https://fshn.illinois.edu/graduate/apply/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://fshn.illinois.edu/
program website: https://fshn.illinois.edu/graduate/program-overview (https://fshn.illinois.edu/graduate/program-overview/)
department faculty: https://fshn.illinois.edu/directory/faculty/
college website: https://aces.illinois.edu/
address: 260 Bevier Hall, 905 South Goodwin Avenue, Urbana, IL 61801
phone: (217) 244-4498
email: FSHNGradAdmissions@illinois.edu (fshngradadmissions@illinois.edu)

On Campus: Master of Science in Food Science and Human Nutrition, students are required to select a concentration:
Food Science (p. 768)
Human Nutrition (p. 770)
Online: The focus of the online Master of Science in Food Science and Human Nutrition (https://fshn.illinois.edu/online/) **is Food Science. Students are not required to select a concentration.**

Graduate Degree Programs in Food Science & Human Nutrition

Graduate Majors:

Food Science & Human Nutrition, MS (p. 766) **(on campus & online)**

concentrations:

Food Science (p. 768)

Human Nutrition (p. 770)

Food Science and Human Nutrition, MS – Professional Science Master's (p. 773)

Food Science and Human Nutrition, PhD (p. 775)

concentrations:

Food Science (p. 776)

Human Nutrition (p. 779)

Joint Degree Program:

Food Science & Human Nutrition, PhD and Master of Public Health, MPH (p. 1152)

Research Areas

In addition to receiving training in the general field of food science or human nutrition, students have the opportunity to conduct research in the following areas of specialization:

- **Food processing, engineering, and biotechnology**
- **Food ingredients, properties, and interactions**
- **Food microstructures, micro-carriers, and nanotechnology**
- **Food chemistry**
- **Food microbiology and biomass conversion**
- **Food safety and security**
- **Sensory sciences**
- **Dietary quality and food and nutrition patterns for optimal health**
- **Nutrition and disease interactions, including cancer, metabolic disorders, and gastrointestinal health**
- **Nutrition across the life span**
- **Biochemical and molecular nutrition**
- **Clinical nutrition**
- **Community nutrition**

For additional information go to fshn.illinois.edu/graduate (http://fshn.illinois.edu/graduate/).

The PSM involves rigorous scientific training in the area of food science and/or human nutrition; additionally, instruction is provided in applied business knowledge and skills. This program is designed for those who seek careers in a science-based setting with significant managerial and leadership responsibilities. For additional information go to psm.illinois.edu/prospectivestudents/programs/foodscience.htm (http://psm.illinois.edu/prospectivestudents/programs/foodscience.htm).

Admission

In addition to meeting the Graduate College admission requirements, a student planning to pursue a graduate degree in the department should have a baccalaureate degree in a recognized field of biological, physical, agricultural, or engineering science. Background deficiencies may be removed with graduate credit courses designed for this purpose. Graduate Record Examination (GRE) scores are required of all applicants, and those whose native language is not English are required to submit the results of the TOEFL or IELTS as evidence of English proficiency. Minimum TOEFL and IELTS scores can be found at grad.illinois.edu/admissions/instructions/04c (http://www.grad.illinois.edu/admissions/instructions/04c/). Students can be admitted to start in fall, spring, or summer semesters except for the PSM concentration, which admits fall semester only. For information on the role faculty have in the admissions process go to fshn.illinois.edu/graduate/applying (http://www.fshn.illinois.edu/graduate/applying/).

Internship in Dietetics

The Department of Food Science and Human Nutrition offers a dietetic internship for master's and doctoral students specializing in human nutrition. Completion of the degree and the internship qualifies the student to take the Academy of Nutrition and Dietetics registration examination administered by the Commission on Dietetic Registration. For information on our dietetic internship program please contact Ms. Jessica Madson (jamadson@illinois.edu).

Online Program

A non-thesis Master of Science in Food Science program is offered via live, synchronous online sessions using distance education technology. The program ensures the same degree of excellence, and courses are instructed by the same faculty, as the on-campus non-thesis program. Courses are typically offered in the evening. For requirements and additional information, please contact Dr. Dawn Bohn at dbrehart@illinois.edu.

Graduate Teaching Experience

Teaching is neither a Graduate College nor a FSHN requirement. A limited number of teaching assistantships are available to FSHN graduate students. Students are selected to be Graduate Teaching Assistants by the Department Head in consultation with the course instructor.

Financial Aid

Illinois PSM students may not hold assistantships or other tuition and fee waiver-generating appointments; statutory waivers and tuition scholarships are accepted. Financial aid for non-PSM graduate students is available in the form of fellowships, teaching and research assistantships, and tuition and partial fee waivers. Qualified candidates are considered for financial support upon application. Additional information on financial aid for graduate students can be found at fshn.illinois.edu/graduate/financial-assistance (http://fshn.illinois.edu/graduate/financial-assistance/).

for the Master of Science in Food Science and Human Nutrition - Online Program

Online: Students in online program do not complete a graduate concentration, requirements are shown below.
On Campus: Students in the on campus Master of Science in Food Science and Human Nutrition are required to select a concentration:

Food Science Degree Requirements (p. 768)

Human Nutrition Degree Requirements (p. 770)

For additional details and requirements refer to the department's graduate handbook (http://fshn.illinois.edu/graduate/student-handbook/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Online Requirements

Food Science and Human Nutrition, MS – Online

Code	Title	Hours
FSHN 414	Food Chemistry	3
FSHN 461		4
FSHN 471	Food & Industrial Microbiology	3
Electives from departmental list (http://fshn.illinois.edu/online/course-offerings/)		22
Total Hours		32

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum Hours Required Within the Unit:	8
Minimum 500-level Hours Required Overall	12
Additional courses may be required beyond the minimums listed above.	
Final Exam Required	Yes
Minimum GPA:	3.0

Learning Outcomes: Food Science & Human Nutrition, MS

Learning Outcomes for the Master of Science in Food Science and Human Nutrition (on campus & online)

A FSHN graduate student:

1. Demonstrates knowledge in at least three areas of expertise (based upon required coursework; see FSHN graduate handbook for areas).
2. Displays effective and relevant written and oral communication skills.
3. Conducts methodical and logical research that addresses key issues in food science and/or human nutrition.
4. Displays professional ethics in scholarly achievements.

Food Science & Human Nutrition: Food Science, MS

for the Master of Science in Food Science and Human Nutrition: Food Science Concentration

department head: Nicki Engeseth
associate head of graduate programs: Michael Miller (mille216@illinois.edu)
overview of admissions & requirements: https://fshn.illinois.edu/graduate/apply (https://fshn.illinois.edu/graduate/apply/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://fshn.illinois.edu/
program website: https://fshn.illinois.edu/graduate/food-science (https://fshn.illinois.edu/graduate/food-science/)
department faculty: https://fshn.illinois.edu/directory/faculty/
college website: https://aces.illinois.edu/
address: 260 Bevier Hall, 905 South Goodwin Avenue, Urbana, IL 61801
phone: (217) 244-4498
email: FSHNGradAdmissions@illinois.edu (fshngradadmissions@illinois.edu)

On Campus: Master of Science in Food Science and Human Nutrition, students are required to select a concentration:
- Food Science (p. 768)
- Human Nutrition (p. 770)

Online: The focus of the online Master of Science in Food Science and Human Nutrition (https://fshn.illinois.edu/online/) **is Food Science. Students are not required to select a concentration.**

Graduate Degree Programs in Food Science & Human Nutrition

Graduate Majors:
- Food Science & Human Nutrition, MS (p. 766) **(on campus & online)**
  - **concentrations:**
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  - **concentrations:**
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    - Human Nutrition (p. 779)

Joint Degree Program:
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Research Areas

In addition to receiving training in the general field of food science or human nutrition, students have the opportunity to conduct research in the following areas of specialization:

- **Food processing, engineering, and biotechnology**
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Admission

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Graduate Teaching Experience

Teaching is neither a Graduate College nor a FSHN requirement. A limited number of teaching assistantships are available to FSHN graduate students. Students are selected to be Graduate Teaching Assistants by the Department Head in consultation with the course instructor.

Financial Aid

Illinois PSM students may not hold assistantships or other tuition and fee waiver-generating appointments; statutory waivers and tuition scholarships are accepted. Financial aid for non-PSM graduate students is available in the form of fellowships, teaching and research assistantships, and tuition and partial fee waivers. Qualified candidates are considered for financial support upon application. Additional information on financial aid for graduate students can be found at fshn.illinois.edu/graduate/financial-assistance (http://fshn.illinois.edu/graduate/financial-assistance/).

for the Master of Science in Food Science and Human Nutrition: Food Science Concentration

Undergraduate training must include statistics (ACE 261, CPSC 241, ECON 202, MATH 161, PSYC 235, SOC 280, or STAT 100), nutrition (equivalent to FSHN 220), and systemic physiology (equivalent to MCB 246). These undergraduate courses are not required for admission, but must be completed early in the graduate program and do not count toward concentration requirements. M.S. degrees require at least 12 hours of 500-level course work (including thesis research), and at least 8 of these 12 hours must be in the major field for graduation.

Additional courses may be required beyond the concentration minimum, per Advisory Committee recommendations, depending upon student/advisor learning objectives. A student whose prior education includes course work with identical or similar content to those specified above will be guided by their advisor and Advisory Committee regarding the selection of additional course work needed to meet the minimum hours of the HN concentration.

Students are encouraged to take new courses, rather than retake required courses they have already taken. If you have already taken a required course at the University of Illinois, it is highly recommended that you do not retake it. No petition is required. If you have taken a very similar course at another university, you are strongly encouraged to petition for acceptance of that course in lieu of the required course. Courses should be selected to expand and strengthen your knowledge in core and related disciplines, and/or to increase your research capabilities. Retaking a course does not meet that objective. For additional advice on this topic, contact your advisor and faculty advisory committee.

Students are required to enroll in another seminar course if they have a conflict that precludes their enrollment in FSHN 597 or NUTR 500. The seminar course may be offered by another department.

Course selection is flexible beyond this list if decided in consultation with advisor/advisory committee.

For additional details and requirements refer to the department's graduate handbook *(*http://fshn.illinois.edu/graduate/student-handbook/*)*

and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/*).*

This degree program can be completed with or without a thesis.

Code	Title	Hours
Thesis Option		
Required Concentration Hours		26-27
FSHN 597	Graduate Seminar	0 to 1
or NUTR 500	Nutritional Sciences Seminar	
FSHN 599	Thesis Research (6 hours)	6
Total Hours Thesis Option		**32**
Non-Thesis Option		
Required Concentration Hours		26-27
FSHN 597	Graduate Seminar	0 to 1
or NUTR 500	Nutritional Sciences Seminar	
Total Hours Non-Thesis Option		**32**

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum Hours Required Within the Unit:	8
Minimum 500-level Hours Required Overall	12
Additional courses may be required beyond the concentration minimum per Advisory Committee recommendation	
Oral Final Exam	Non-Thesis Only
Final Exam/Thesis Defense Required	Thesis Only
Thesis Deposit Required	Thesis Only
Minimum GPA:	3.0

Food Science Concentration Requirements

Code	Title	Hours
Total Hours for Concentration in Food Science		**26-27**
Required Courses:		**16-17**
FSHN 481	Food Processing Unit Operations I	2
FSHN 483	Food Processing Unit Operations II	2
FSHN 514	Advanced Food Chemistry	3
FSHN 573	Advanced Food Microbiology	3
FSHN 593	Seminar in Foods and Nutrition	2
FSHN 595	Advanced Topics in Food Science and Human Nutrition (Section: Nutrition for Food Scientists)	4
FSHN 597	Graduate Seminar	0-1
or NUTR 500	Nutritional Sciences Seminar	
Electives:		
Food Processing and Engineering		
ABE 498	Special Topics (Section: Engineering Application of Nano-scale Biology)	1 to 4
FSHN 460	Food Processing Engineering	3
FSHN 482	Food Processing Unit Operations I Lab	1
FSHN 484	Food Processing Unit Operations II Lab	1
FSHN 595	Advanced Topics in Food Science and Human Nutrition (Section: Advanced Food Processing)	1 to 4
Food Chemistry		
FSHN 416	Food Chemistry Laboratory	3
FSHN 517	Fermented &Distilled Beverages	2
FSHN 518	Chemistry of Lipids in Foods	3
FSHN 519	Flavor Chemistry and Analysis	4
FSHN 595	Advanced Topics in Food Science and Human Nutrition (Section: Transport in Food Biopolymers)	1 to 4
FSHN 595	Advanced Topics in Food Science and Human Nutrition (Section: Water Relations in Foods)	1 to 4
Food Microbiology		
FSHN 574	Value Added Biotransformation	3
FSHN 595	Advanced Topics in Food Science and Human Nutrition (Section: Food Safety for Global Food Security)	1 to 4
Others (of interest to many)		
FSHN 424	Biopsychology of Ingestive Behavior	3
FSHN 440	Applied Statistical Methods I	4
FSHN 502	Advanced Sensory Science	3
FSHN 592	Graduate Internship Experience	2
FSHN 598	Advanced Special Problems [1]	1-8
or NUTR 593	Individual Topics in Nutrition	
CPSC 541	Regression Analysis	4
CPSC 542		5
NUTR 550	Grantsmanship and Ethics	3

[1] Up to 2 hours for thesis degrees; up to 6 hour for non-thesis M.S. degree.

Food Science & Human Nutrition: Human Nutrition, MS

for the Master of Science in Food Science and Human Nutrition Human: Human Nutrition Concentration

department head: Nicki Engeseth
associate head of graduate programs: Michael Miller (mille216@illinois.edu)
overview of admissions & requirements: https://fshn.illinois.edu/graduate/apply (https://fshn.illinois.edu/graduate/apply/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://fshn.illinois.edu/
program website: https://fshn.illinois.edu/graduate/human-nutrition (https://fshn.illinois.edu/graduate/human-nutrition/)
department faculty: https://fshn.illinois.edu/directory/faculty/
college website: https://aces.illinois.edu/
address: 260 Bevier Hall, 905 South Goodwin Avenue, Urbana, IL 61801
phone: (217) 244-4498
email: FSHNGradAdmissions@illinois.edu (fshngradadmissions@illinois.edu)

On Campus: Master of Science in Food Science and Human Nutrition, students are required to select a concentration:
Food Science (p. 768)
Human Nutrition (p. 770)
Online: The focus of the online Master of Science in Food Science and Human Nutrition (https://fshn.illinois.edu/online/) **is Food Science. Students are not required to select a concentration.**

Graduate Degree Programs in Food Science & Human Nutrition

Graduate Majors:
Food Science & Human Nutrition, MS (p. 766) **(on campus & online)**
concentrations:
Food Science (p. 768)
Human Nutrition (p. 770)
Food Science and Human Nutrition, MS – Professional Science Master's (p. 773)
Food Science and Human Nutrition, PhD (p. 775)
concentrations:
Food Science (p. 776)
Human Nutrition (p. 779)
Joint Degree Program:
Food Science & Human Nutrition, PhD and Master of Public Health, MPH (p. 1152)

Research Areas

In addition to receiving training in the general field of food science or human nutrition, students have the opportunity to conduct research in the following areas of specialization:

- **Food processing, engineering, and biotechnology**
- **Food ingredients, properties, and interactions**
- **Food microstructures, micro-carriers, and nanotechnology**
- **Food chemistry**
- **Food microbiology and biomass conversion**
- **Food safety and security**
- **Sensory sciences**
- **Dietary quality and food and nutrition patterns for optimal health**
- **Nutrition and disease interactions, including cancer, metabolic disorders, and gastrointestinal health**
- **Nutrition across the life span**
- **Biochemical and molecular nutrition**
- **Clinical nutrition**
- **Community nutrition**

For additional information go to fshn.illinois.edu/graduate (http://fshn.illinois.edu/graduate/).

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Admission

In addition to meeting the Graduate College admission requirements, a student planning to pursue a graduate degree in the department should have a baccalaureate degree in a recognized field of biological, physical, agricultural, or engineering science. Background deficiencies may be removed with graduate credit courses designed for this purpose. Graduate Record Examination (GRE) scores are required of all applicants, and those whose native language is not English are required to submit the results of the TOEFL or IELTS as evidence of English proficiency. Minimum TOEFL and IELTS scores can be found at grad.illinois.edu/admissions/instructions/04c (http://www.grad.illinois.edu/admissions/instructions/04c/). Students can be admitted to start in fall, spring, or summer semesters except for the PSM concentration, which admits fall semester only. For information on the role faculty have in the admissions process go to fshn.illinois.edu/graduate/applying (http://www.fshn.illinois.edu/graduate/applying/).

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The Department of Food Science and Human Nutrition offers a dietetic internship for master's and doctoral students specializing in human nutrition. Completion of the degree and the internship qualifies the student to take the Academy of Nutrition and Dietetics registration examination administered by the Commission on Dietetic Registration. For information on our dietetic internship program please contact Ms. Jessica Madson (jamadson@illinois.edu).

Online Program

A non-thesis Master of Science in Food Science program is offered via live, synchronous online sessions using distance education technology. The program ensures the same degree of excellence, and courses are instructed by the same faculty, as the on-campus non-thesis program. Courses are typically offered in the evening. For

requirements and additional information, please contact Dr. Dawn Bohn at dbrehart@illinois.edu.

Graduate Teaching Experience

Teaching is neither a Graduate College nor a FSHN requirement. A limited number of teaching assistantships are available to FSHN graduate students. Students are selected to be Graduate Teaching Assistants by the Department Head in consultation with the course instructor.

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for the Master of Science in Food Science and Human Nutrition: Human Nutrition Concentration

Undergraduate training must include statistics (ACE 261, CPSC 241, ECON 202, MATH 161, PSYC 235, SOC 280, or STAT 100), nutrition (equivalent to FSHN 220), and systemic physiology (equivalent to MCB 246). These undergraduate courses are not required for admission, but must be completed early in the graduate program and do not count toward concentration requirements. M.S. degrees require at least 12 hours of 500-level course work (including thesis research), and at least 8 of these 12 hours must be in the major field for graduation.

Additional courses may be required beyond the concentration minimum, per Advisory Committee recommendations, depending upon student/advisor learning objectives. A student whose prior education includes course work with identical or similar content to those specified above will be guided by their advisor and Advisory Committee regarding the selection of additional course work needed to meet the minimum hours of the HN concentration.

Students are encouraged to take new courses, rather than retake required courses they have already taken. If you have already taken a required course at the University of Illinois, it is highly recommended that you do not retake it. No petition is required. If you have taken a very similar course at another university, you are strongly encouraged to petition for acceptance of that course in lieu of the required course. Courses should be selected to expand and strengthen your knowledge in core and related disciplines, and/or to increase your research capabilities. Retaking a course does not meet that objective. For additional advice on this topic, contact your advisor and faculty advisory committee.

Students are required to enroll in another seminar course if they have a conflict that precludes their enrollment in FSHN 597 or NUTR 500. The seminar course may be offered by another department.

Course selection is flexible beyond this list if decided in consultation with advisor/advisory committee.

For additional details and requirements refer to the department's graduate handbook *(*http://fshn.illinois.edu/graduate/student-handbook/*)* *and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

This degree program can be completed with or without a thesis.

Code	Title	Hours
Thesis Option		
Required Concentration Hours		26-27
FSHN 597	Graduate Seminar	0 to 1
or NUTR 500	Nutritional Sciences Seminar	
FSHN 599	Thesis Research (6 hours)	6
Total Hours Thesis Option		**32**
Non-Thesis Option		
Required Concentration Hours		26-27
FSHN 597	Graduate Seminar	0 to 1
or NUTR 500	Nutritional Sciences Seminar	
Total Hours Non-Thesis Option		**32**

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum Hours Required Within the Unit:	8
Minimum 500-level Hours Required Overall	12
Additional courses may be required beyond the concentration minimum per Advisory Committee recommendation	
Oral Final Exam	Non-Thesis Only
Final Exam/Thesis Defense Required	Thesis Only
Thesis Deposit Required	Thesis Only
Minimum GPA:	3.0

Concentration Requirements

Requirements for Thesis Degree:

Code	Title	Hours
Total Hours for Concentration in Human Nutrition		**26-27**
Required Courses:		**17-19**
MCB 450	Introductory Biochemistry (or higher)	3
FSHN 420	Nutritional Aspects of Disease	3
FSHN 426	Biochemical Nutrition I	3
FSHN 427	Biochemical Nutrition II	3
FSHN 465	Principles of Food Technology	3
FSHN 593	Seminar in Foods and Nutrition	2
Electives:		
To meet 26-27 hours minimum, of which at least 3 (thesis MS) or 6 (non-thesis MS) hours need to be graded courses at the 500-level.		
FSHN 421	Pediatric Clinical Nutrition	3
FSHN 424	Biopsychology of Ingestive Behavior	3
FSHN 428	Community Nutrition	3
FSHN 429	Nutrition Assessment & Therapy	3
FSHN 440	Applied Statistical Methods I	4

FSHN 480	Basic Toxicology	3
FSHN 510	Topics in Nutrition Research (Up to 4 hours count toward degree)	1 to 3
FSHN 520	Advanced Clinical Nutrition (up to 6 hours count toward degree)	2
FSHN 590	Dietetic Internship I (Restricted to dietetics internship students only.) [1]	5
FSHN 592	Graduate Internship Experience (Up to 2 hours count toward degree)	0-2
FSHN 598	Advanced Special Problems	1-8
or NUTR 593	Individual Topics in Nutrition	
NUTR 511	Regulation of Metabolism	4
NUTR 550	Grantsmanship and Ethics	3
NUTR 590	Disciplinary Seminar (Up to 2 hours count toward degree)	0 to 2
ANSC 421	Minerals and Vitamins	3
ANSC 520	Protein and Energy Nutrition	3
ANSC 524	Nonruminant Nutrition Concepts	2

Requirements for Non-Thesis Degree:

Code	Title	Hours
Total Hours for Concentration in Human Nutrition		**26-27**
Required Courses:		**17-19**
MCB 450	Introductory Biochemistry (or higher)	3
FSHN 465	Principles of Food Technology	3
FSHN 440	Applied Statistical Methods I	4
FSHN 521	Molecular Basis of Metabolic Syndrome and Weight Management	2
FSHN 522	Function and Metabolism of Essential Fatty Acids and Cholesterol	1
FSHN 527	Advanced Vitamins and Minerals: Regulations of Metabolism	3
FSHN 593	Seminar in Foods and Nutrition	2
FSHN 597	Graduate Seminar (required for every semester)	0-1
or NUTR 500	Nutritional Sciences Seminar	
Electives:		
To meet 26-27 hours minimum, of which at least 3 (thesis MS) or 6 (non-thesis MS) hours need to be graded courses at the 500-level.		
FSHN 421	Pediatric Clinical Nutrition	3
FSHN 428	Community Nutrition	3
FSHN 429	Nutrition Assessment & Therapy	3
FSHN 480	Basic Toxicology	3
FSHN 510	Topics in Nutrition Research (may take multiple modules)	1 to 3
FSHN/NUTR 511	Regulation of Metabolism	4
FSHN 520	Advanced Clinical Nutrition (up to 6 hours count toward degree)	2
ANSC 520	Protein and Energy Nutrition	3
FSHN 595	Advanced Topics in Food Science and Human Nutrition (may take multiple modules)	1 to 4
ANSC 524	Nonruminant Nutrition Concepts	2
Internship:	**up to 8 hours (10 for dietectics)**	**8-10**
FSHN 590	Dietetic Internship I (Restricted to dietetics internship students only.) [1]	5
or FSHN 591	Dietetic Internship II	
FSHN 592	Graduate Internship Experience (Up to 2 hours count toward degree)	0-2
FSHN 598	Advanced Special Problems	1-8
or NUTR 593	Individual Topics in Nutrition	

[1] Students enrolled in the Graduate Dietetic Internship may count up to 5 hours of FSHN 590 or FSHN 591 towards 500-level course requirements.

Food Science and Human Nutrition, MS - Professional Science Master's

for the Master of Science in Food Science and Human Nutrition: Professional Science Master's Concentration

department head: Nicki Engeseth
associate head of graduate programs: Michael Miller (mille216@illinois.edu)
overview of admissions & requirements: https://fshn.illinois.edu/graduate/apply (https://fshn.illinois.edu/graduate/apply/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://fshn.illinois.edu/
program website: https://psm.illinois.edu/food-science-human-nutrition (https://psm.illinois.edu/food-science-human-nutrition/)
department faculty: https://fshn.illinois.edu/directory/faculty/
college website: https://aces.illinois.edu/
address: 260 Bevier Hall, 905 South Goodwin Avenue, Urbana, IL 61801
phone: (217) 244-4498
email: FSHNGradAdmissions@illinois.edu (fshngradadmissions@illinois.edu)

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Graduate Degree Programs in Food Science & Human Nutrition

Graduate Majors:

Food Science & Human Nutrition, MS (p. 766) **(on campus & online)**

concentrations:

Food Science (p. 768)

Human Nutrition (p. 770)

Food Science and Human Nutrition, MS – Professional Science Master's (p. 773)

Food Science and Human Nutrition, PhD (p. 775)

concentrations:

Food Science (p. 776)

Human Nutrition (p. 779)

Joint Degree Program:

Food Science & Human Nutrition, PhD and Master of Public Health, MPH (p. 1152)

Research Areas

In addition to receiving training in the general field of food science or human nutrition, students have the opportunity to conduct research in the following areas of specialization:

- **Food processing, engineering, and biotechnology**
- **Food ingredients, properties, and interactions**
- **Food microstructures, micro-carriers, and nanotechnology**
- **Food chemistry**
- **Food microbiology and biomass conversion**
- **Food safety and security**
- **Sensory sciences**
- **Dietary quality and food and nutrition patterns for optimal health**
- **Nutrition and disease interactions, including cancer, metabolic disorders, and gastrointestinal health**
- **Nutrition across the life span**
- **Biochemical and molecular nutrition**
- **Clinical nutrition**
- **Community nutrition**

For additional information go to fshn.illinois.edu/graduate (http://fshn.illinois.edu/graduate/).

Admission

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Internship in Dietetics

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Online Program

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for the Master of Science in Food Science and Human Nutrition Professional Science Master's Concentration

For additional details and requirements refer to the department's graduate handbook (http://fshn.illinois.edu/graduate/student-handbook/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
Business courses prescribed by the Illinois PSM program		**10**
PSM 501	PSM Industry Seminar I	0
PSM 502	PSM Industry Seminar II	0
PSM 503	PSM Industry Seminar III	0
PSM 555	PSM Internship	0

Code	Title	Hours
See PSM concentration-specific course work (http://psm.illinois.edu/food-science-human-nutrition/science-curriculum/)		24
FSHN 598	Advanced Special Problems	1 to 8

or NUTR 593	Individual Topics in Nutrition
Total Hours	**42**

Other Requirements

Requirement	Description
Other requirements may overlap	
The PSM concentration is required.	
Minimum Hours Required Within the Unit:	8
Minimum 500-level Hours Required Overall:	12
A non-thesis degree requires an adivser.	
Additional courses may be required beyone the concentration minimum.	
Minimum GPA:	3.0

Food Science & Human Nutrition, PhD

Doctor of Philosophy in Food Science and Human Nutrition

department head: Nicki Engeseth
associate head of graduate programs: Michael Miller (mille216@illinois.edu)
overview of admissions & requirements: https://fshn.illinois.edu/graduate/apply (https://fshn.illinois.edu/graduate/apply/)
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department website: https://fshn.illinois.edu/
program website: https://fshn.illinois.edu/graduate/program-overview (https://fshn.illinois.edu/graduate/program-overview/)
department faculty: https://fshn.illinois.edu/directory/faculty/
college website: https://aces.illinois.edu/
address: 260 Bevier Hall, 905 South Goodwin Avenue, Urbana, IL 61801
phone: (217) 244-4498
email: FSHNGradAdmissions@illinois.edu (fshngradadmissions@illinois.edu)

For the Doctor of Philosophy in Food Science and Human Nutrition, students are required to select a concentration:

Food Science (p. 776)
Human Nutrition (p. 779)

Graduate Degree Programs in Food Science & Human Nutrition

Graduate Majors:

Food Science & Human Nutrition, MS (p. 766) **(on campus & online)**
concentrations:
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concentrations:
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Human Nutrition (p. 779)

Joint Degree Program:

Food Science & Human Nutrition, PhD and Master of Public Health, MPH (p. 1152)

Research Areas

In addition to receiving training in the general field of food science or human nutrition, students have the opportunity to conduct research in the following areas of specialization:

- **Food processing, engineering, and biotechnology**
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- **Food chemistry**
- **Food microbiology and biomass conversion**
- **Food safety and security**
- **Sensory sciences**
- **Dietary quality and food and nutrition patterns for optimal health**
- **Nutrition and disease interactions, including cancer, metabolic disorders, and gastrointestinal health**
- **Nutrition across the life span**
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Doctor of Philosophy in Food Science and Human Nutrition

For the Doctor of Philosophy in Food Science and Human Nutrition, students are required to select a concentration:

Food Science Degree Requirements (p. 777)
Human Nutrition Degree Requirements (p. 780)

Learning Outcomes: Food Science & Human Nutrition, PhD

Learning Outcomes Doctor of Philosophy in Food Science and Human Nutrition

A FSHN graduate student:

1. Demonstrates knowledge in at least three areas of expertise (based upon required coursework; see FSHN graduate handbook for areas).
2. Displays effective and relevant written and oral communication skills.
3. Conducts methodical and logical research that addresses key issues in food science and/or human nutrition.
4. Displays professional ethics in scholarly achievements.

Food Science & Human Nutrition: Food Science, PhD

Doctor of Philosophy in Food Science and Human Nutrition: Food Science Concentration

department head: Nicki Engeseth
associate head of graduate programs: Michael Miller (mille216@illinois.edu)
overview of admissions & requirements: https://fshn.illinois.edu/graduate/apply (https://fshn.illinois.edu/graduate/apply/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://fshn.illinois.edu/
program website: https://fshn.illinois.edu/graduate/food-science (https://fshn.illinois.edu/graduate/food-science/)
department faculty: https://fshn.illinois.edu/directory/faculty/
college website: https://aces.illinois.edu/
address: 260 Bevier Hall, 905 South Goodwin Avenue, Urbana, IL 61801
phone: (217) 244-4498
email: FSHNGradAdmissions@illinois.edu (fshngradadmissions@illinois.edu)

For the Doctor of Philosophy in Food Science and Human Nutrition, students are required to select a concentration:

Food Science (p. 776)
Human Nutrition (p. 779)

Graduate Degree Programs in Food Science & Human Nutrition

Graduate Majors:

Food Science & Human Nutrition, MS (p. 766) **(on campus & online)**
concentrations:
Food Science (p. 768)
Human Nutrition (p. 770)
Food Science and Human Nutrition, MS – Professional Science Master's (p. 773)
Food Science and Human Nutrition, PhD (p. 775)
concentrations:
Food Science (p. 776)
Human Nutrition (p. 779)

Joint Degree Program:

Food Science & Human Nutrition, PhD and Master of Public Health, MPH (p. 1152)

Research Areas

In addition to receiving training in the general field of food science or human nutrition, students have the opportunity to conduct research in the following areas of specialization:

- **Food processing, engineering, and biotechnology**
- **Food ingredients, properties, and interactions**
- **Food microstructures, micro-carriers, and nanotechnology**
- **Food chemistry**
- **Food microbiology and biomass conversion**
- **Food safety and security**
- **Sensory sciences**
- **Dietary quality and food and nutrition patterns for optimal health**
- **Nutrition and disease interactions, including cancer, metabolic disorders, and gastrointestinal health**
- **Nutrition across the life span**
- **Biochemical and molecular nutrition**
- **Clinical nutrition**
- **Community nutrition**

For additional information go to fshn.illinois.edu/graduate (http://fshn.illinois.edu/graduate/).

The PSM involves rigorous scientific training in the area of food science and/or human nutrition; additionally, instruction is provided in applied business knowledge and skills. This program is designed for those who seek careers in a science-based setting with significant managerial and leadership responsibilities. For additional information go to psm.illinois.edu/prospectivestudents/programs/foodscience.htm (http://psm.illinois.edu/prospectivestudents/programs/foodscience.htm).

Admission

In addition to meeting the Graduate College admission requirements, a student planning to pursue a graduate degree in the department should have a baccalaureate degree in a recognized field of biological, physical, agricultural, or engineering science. Background deficiencies may be removed with graduate credit courses designed for this purpose. Graduate Record Examination (GRE) scores are required of all applicants, and those whose native language is not English are required to submit the results of the TOEFL or IELTS as evidence of English proficiency. Minimum TOEFL and IELTS scores can be found at grad.illinois.edu/admissions/instructions/04c (http://www.grad.illinois.edu/admissions/instructions/04c/). Students can be admitted to start in fall, spring, or summer semesters except for the PSM concentration, which admits fall semester only. For information on the role faculty have in the admissions process go to fshn.illinois.edu/graduate/applying (http://www.fshn.illinois.edu/graduate/applying/).

Internship in Dietetics

The Department of Food Science and Human Nutrition offers a dietetic internship for master's and doctoral students specializing in human nutrition. Completion of the degree and the internship qualifies the student to take the Academy of Nutrition and Dietetics registration examination administered by the Commission on Dietetic Registration. For information on our dietetic internship program please contact Ms. Jessica Madson (jamadson@illinois.edu).

Online Program

A non-thesis Master of Science in Food Science program is offered via live, synchronous online sessions using distance education technology. The program ensures the same degree of excellence, and courses are instructed by the same faculty, as the on-campus non-thesis program. Courses are typically offered in the evening. For requirements and additional information, please contact Dr. Dawn Bohn at dbrehart@illinois.edu.

Graduate Teaching Experience

Teaching is neither a Graduate College nor a FSHN requirement. A limited number of teaching assistantships are available to FSHN graduate students. Students are selected to be Graduate Teaching Assistants by the Department Head in consultation with the course instructor.

Financial Aid

Illinois PSM students may not hold assistantships or other tuition and fee waiver-generating appointments; statutory waivers and tuition scholarships are accepted. Financial aid for non-PSM graduate students is available in the form of fellowships, teaching and research assistantships, and tuition and partial fee waivers. Qualified candidates are considered for financial support upon application. Additional information on financial aid for graduate students can be found at fshn.illinois.edu/graduate/financial-assistance (http://fshn.illinois.edu/graduate/financial-assistance/).

Doctor of Philosophy in Food Science and Human Nutrition, Food Science Concentration

If a candidate has a master's degree in a related area, a minimum of 64 graduate hours, including up to 38 graduate hours of thesis research, must be completed. In consultation with the adviser and advisory committee, the remainder of the 64 graduate hours required for the degree consists of courses selected from inside or outside the department that are appropriate for training in the student's field of specialization. Upon completion of all necessary formal courses and special options, the student is required to take an oral preliminary examination. After passage of the preliminary examination, the student's activities are primarily devoted to thesis research. Upon submission of the dissertation, the candidate is required to pass a final oral examination before a graduate faculty committee.

Undergraduate training must include statistics (ACE 261, CPSC 241, ECON 202, MATH 161, PSYC 235, SOC 280, or STAT 100), nutrition (equivalent to FSHN 220), and systemic physiology (equivalent to MCB 246). These undergraduate courses are not required for admission, but must be completed early in the graduate program and do not count toward concentration requirements. M.S. degrees require at least 12 hours of 500-level course work (including thesis research), and at least 8 of these 12 hours must be in the major field for graduation.

Additional courses may be required beyond the concentration minimum, per Advisory Committee recommendations, depending upon student/advisor learning objectives. A student whose prior education includes course work with identical or similar content to those specified above will be guided by their advisor and Advisory Committee regarding the selection of additional course work needed to meet the minimum hours of the HN concentration.

Students are encouraged to take new courses, rather than retake required courses they have already taken. If you have already taken a required course at the University of Illinois, it is highly recommended that you do not retake it. No petition is required. If you have taken a very similar course at another university, you are strongly encouraged to petition for acceptance of that course in lieu of the required course. Courses should be selected to expand and strengthen your knowledge in core and related disciplines, and/or to increase your research capabilities. Retaking a course does not meet that objective. For additional advice on this topic, contact your advisor and faculty advisory committee.

Students are required to enroll in another seminar course if they have a conflict that precludes their enrollment in FSHN 597 or NUTR 500. The seminar course may be offered by another department.

Course selection is flexible beyond this list if decided in consultation with advisor/advisory committee.

For additional details and requirements refer to the department's graduate handbook *(*http://fshn.illinois.edu/graduate/student-handbook/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Entering with approved M.S./M.A. degree

Code	Title	Hours
Concentration-specific coursework selected in consultation with advisor		26
FSHN 599	Thesis Research (max applied toward degree)	0 to 16
Total Hours in residence		**64**

Entering with approved B.S./B.A. degree

Code	Title	Hours
Concentration-specific coursework selected in consultation with advisor		26
FSHN 599	Thesis Research (max applied toward degree)	70
Total Hours		**96**

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum Hours Required Within the Unit:	8
Minimum 500-level Hours Required Overall	12
Additional courses may be required beyond the concentration minimum per Advisory Committee recommendation	
Qualifying Exam Required	Yes
Preliminary Exam Required	Yes
Final Exam/Thesis Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

Code	Title	Hours
Total Hours for Concentration in Food Science		**26-27**
Required Courses:		**16-17**
FSHN 481	Food Processing Unit Operations I	2
FSHN 483	Food Processing Unit Operations II	2
FSHN 514	Advanced Food Chemistry	3
FSHN 573	Advanced Food Microbiology	3
FSHN 593	Seminar in Foods and Nutrition	2
FSHN 595	Advanced Topics in Food Science and Human Nutrition (Section: Nutrition for Food Scientists)	4
FSHN 597	Graduate Seminar	0-1
or NUTR 500	Nutritional Sciences Seminar	
Electives:		
Food Processing and Engineering		
ABE 498	Special Topics (Section: Engineering Application of Nano-scale Biology)	1 to 4
FSHN 460	Food Processing Engineering	3
FSHN 482	Food Processing Unit Operations I Lab	1
FSHN 484	Food Processing Unit Operations II Lab	1
Food Chemistry		
FSHN 595	Advanced Topics in Food Science and Human Nutrition (Section: Advanced Food Processing)	1 to 4
FSHN 416	Food Chemistry Laboratory	3
FSHN 517	Fermented &Distilled Beverages	2
FSHN 518	Chemistry of Lipids in Foods	3
FSHN 519	Flavor Chemistry and Analysis	4
FSHN 595	Advanced Topics in Food Science and Human Nutrition (Section: Transport in Food Biopolymers)	1 to 4
FSHN 595	Advanced Topics in Food Science and Human Nutrition (Section: Water Relations in Foods)	1 to 4
Food Microbiology		
FSHN 574	Value Added Biotransformation	3
FSHN 595	Advanced Topics in Food Science and Human Nutrition (Section: Food Safety for Global Food Security)	1 to 4
Others (of interest to many)		
FSHN 424	Biopsychology of Ingestive Behavior	3
FSHN 440	Applied Statistical Methods I	4
FSHN 502	Advanced Sensory Science	3
FSHN 592	Graduate Internship Experience	2
FSHN 598	Advanced Special Problems [1]	1-8
or NUTR 593	Individual Topics in Nutrition	
CPSC 541	Regression Analysis	4
CPSC 542		5
NUTR 550	Grantsmanship and Ethics	3

[1] Up to 2 hours for thesis degrees.

Food Science & Human Nutrition: Human Nutrition, PhD

Doctor of Philosophy in Food Science and Human Nutrition: Human Nutrition Concentration

department head: Nicki Engeseth
associate head of graduate programs: Michael Miller (mille216@illinois.edu)
overview of admissions & requirements: https://fshn.illinois.edu/graduate/apply (https://fshn.illinois.edu/graduate/apply/)
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department website: https://fshn.illinois.edu/
program website: https://fshn.illinois.edu/graduate/human-nutrition (https://fshn.illinois.edu/graduate/human-nutrition/)
department faculty: https://fshn.illinois.edu/directory/faculty/
college website: https://aces.illinois.edu/
address: 260 Bevier Hall, 905 South Goodwin Avenue, Urbana, IL 61801
phone: (217) 244-4498
email: FSHNGradAdmissions@illinois.edu (fshngradadmissions@illinois.edu)

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Joint Degree Program:

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Research Areas

In addition to receiving training in the general field of food science or human nutrition, students have the opportunity to conduct research in the following areas of specialization:

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requirements and additional information, please contact Dr. Dawn Bohn at dbrehart@illinois.edu.

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Doctor of Philosophy in Food Science and Human Nutrition: Human Nutrition Concentration

If a candidate has a master's degree in a related area, a minimum of 64 graduate hours, including up to 38 graduate hours of thesis research, must be completed. In consultation with the adviser and advisory committee, the remainder of the 64 graduate hours required for the degree consists of courses selected from inside or outside the department that are appropriate for training in the student's field of specialization. Upon completion of all necessary formal courses and special options, the student is required to take an oral preliminary examination. After passage of the preliminary examination, the student's activities are primarily devoted to thesis research. Upon submission of the dissertation, the candidate is required to pass a final oral examination before a graduate faculty committee.

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Entering with approved M.S./M.A. degree

Code	Title	Hours
Concentration-specific coursework selected in consultation with advisor		26
FSHN 599	Thesis Research (max applied toward degree)	0 to 16
Total Hours in residence		**64**

Entering with approved B.S./B.A. degree

Code	Title	Hours
Concentration-specific coursework selected in consultation with advisor		26
FSHN 599	Thesis Research (max applied toward degree)	70
Total Hours		**96**

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum Hours Required Within the Unit:	8
Minimum 500-level Hours Required Overall	12
Additional courses may be required beyond the concentration minimum per Advisory Committee recommendation	
Qualifying Exam Required	Yes
Preliminary Exam Required	Yes
Final Exam/Thesis Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

Code	Title	Hours
Total Hours for Concentration in Human Nutrition		**26**
Required Courses:		**17-19**
MCB 450	Introductory Biochemistry (or higher)	3
FSHN 420	Nutritional Aspects of Disease	3
FSHN 426	Biochemical Nutrition I	3
FSHN 427	Biochemical Nutrition II	3
FSHN 465	Principles of Food Technology	3
FSHN 593	Seminar in Foods and Nutrition	2
Electives:		
To meet 26-27 hours minimum, of which at least 3 (thesis MS) or 6 (non-thesis MS) hours need to be graded courses at the 500-level.		
FSHN 421	Pediatric Clinical Nutrition	3
FSHN 424	Biopsychology of Ingestive Behavior	3
FSHN 428	Community Nutrition	3
FSHN 429	Nutrition Assessment & Therapy	3
FSHN 440	Applied Statistical Methods I	4
FSHN 480	Basic Toxicology	3
FSHN 510	Topics in Nutrition Research (Up to 4 hours count toward degree)	1 to 3
FSHN 520	Advanced Clinical Nutrition (up to 6 hours count toward degree)	2
FSHN 590	Dietetic Internship I (Restricted to dietetics internship students only.) [1]	5
or FSHN 591	Dietetic Internship II	
FSHN 592	Graduate Internship Experience (Up to 2 hours count toward degree)	0-2
FSHN 598	Advanced Special Problems	1-8
or NUTR 593	Individual Topics in Nutrition	
NUTR 511	Regulation of Metabolism	4
NUTR 550	Grantsmanship and Ethics	3
NUTR 590	Disciplinary Seminar (Up to 2 hours count toward degree)	0 to 2
ANSC 421	Minerals and Vitamins	3

ANSC 520	Protein and Energy Nutrition	3
ANSC 524	Nonruminant Nutrition Concepts	2

[1] Students enrolled in the Graduate Dietetic Internship may count up to 5 hours of FSHN 590 or FSHN 591 towards 500-level course requirements.

French, MA

for the degree of Master of Arts in French

head of department: Zsuzsanna Fagyal
director of graduate studies: François Proulx
department website: http://www.frit.illinois.edu/
college website: https://las.illinois.edu/
overview of graduate college admissions & requirements: Graduate Admissions (https://grad.illinois.edu/admissions/apply/)
overview of college admissions & requirements: https://frit.illinois.edu/admissions/french-graduate-admissions (https://frit.illinois.edu/admissions/french-graduate-admissions/)
department office: 2090 Foreign Languages Building, 707 South Mathews Avenue, Urbana, IL 61801
phone: (217) 333-2020
email: french-italian@illinois.edu

The Department of French and Italian offers graduate programs leading to the Master of Arts and the Doctor of Philosophy degrees in French and in Italian. Candidates for the master's degree may specialize in French Studies, French Linguistics, French Language Learning, or Italian. Candidates for the doctoral degree in French may choose one of three specializations: French Studies, French Linguistics, or Second Language Acquisition and Teacher Education (SLATE).

The following minors and certificates may be pursued: Cinema Studies (p. 1128), Gender & Women's Studies (p. 1134), Translation Studies (http://www.translation.illinois.edu), Criticism and Interpretive Theory (https://criticism.english.illinois.edu)

Graduate Degree Programs in French & Italian

French, MA (p. 676)
concentration:
Medieval Studies (p. 1101)
French, PhD (p. 783)
concentration:
Medieval Studies (p. 1101)|Romance Linguistics (p. 1106)|Second Language Acquisition & Teacher Education (p. 1106)
Italian, MA (p. 824)
concentration:
Medieval Studies (p. 1101)
Italian, PhD (p. 826)
concentration:
Medieval Studies (p. 1101)|Romance Linguistics (p. 1106)|Second Language Acquisition & Teacher Education (p. 1106)

Admission

French

Students considering admission to the master's program should usually have had a college major in French. Applicants should apply online (www.grad.illinois.edu/admissions/apply (http://www.grad.illinois.edu/admissions/apply/)) and submit an academic statement of purpose (maximum 1000 words), a personal statement (maximum 500 words), three letters of recommendation, and two writing samples (5-10 pages each), at least one of which must be in French. Original transcripts showing all undergraduate and graduate work completed should be sent to SLCL Graduate Student Services. Graduate Record Examination (GRE) scores are required of all domestic applicants and should be submitted to institution code 1836. International applicants who have taken the GRE are encouraged to submit their scores as well. Applicants whose native language is not English are required to take the Test of English as a Foreign Language (TOEFL) and must score at least 79 on the internet-based test (iBT); they must also pass the speaking sub-section of the iBT with a minimum score of 24 (http://www.grad.illinois.edu/Admissions/instructions/04c.cfm). Admission for the spring semester is rare. Students seeking admission to the Ph.D. program with a Master of Arts degree earned elsewhere are expected to have a minimum 3.5 grade point average in graduate coursework. The master's degree should be in French literature, French studies, or French linguistics. Candidates seeking admission to the Ph.D. specialization in Second Language Acquisition and Teacher Education may hold a Master of Arts in Teaching degree instead.

For more information about how to apply, see https://frit.illinois.edu/admissions/french-graduate-admissions (https://frit.illinois.edu/admissions/french-graduate-admissions/). Application questions may be directed to SLCL Graduate Student Services at slclgradservices@illinois.edu.

Italian

The normal prerequisite for a graduate major is an undergraduate major in Italian or consent of the department. Students doing graduate work for any advanced degree in Italian must possess a command of the language. Applicants should apply online (www.grad.illinois.edu/admissions/apply (http://www.grad.illinois.edu/admissions/apply/)) and submit an academic statement of purpose (maximum 1000 words), a personal statement (maximum 500 words), three letters of recommendation, and a writing sample of approximately 10-20 pages in the form of one or two papers. Original transcripts (with English translations if applicable) showing all undergraduate and graduate work completed should also be uploaded. Graduate Record Examination (GRE) scores are required of all domestic applicants and should be submitted to institution code 1836. International applicants who have taken the GRE are encouraged to submit their scores as well. Applicants whose native language is not English are required to take the Test of English as a Foreign Language (TOEFL) and must score at least 79 on the internet-based test (iBT); they must also pass the speaking sub-section of the iBT with a minimum score of 24 (see www.grad.illinois.edu/Admissions/instructions/04c (http://www.grad.illinois.edu/Admissions/instructions/04c/)). Applications are accepted for fall admission only. Application questions may be directed to SLCL Graduate Student Services at slclgradservices@illinois.edu.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, the department requires Ph.D. candidates to do some teaching as part of their academic work because such experience is considered a vital part of graduate training and professionalization. Non-native English speakers must first pass a test of their oral English ability. See www.grad.illinois.edu/admissions/taengprof.htm (http://www.grad.illinois.edu/admissions/taengprof.htm).

Teaching Assistants in French and Italian are required to take FR 505 or ITAL 505 respectively (4 hours) as part of their contractual obligation. The course does not count toward the graduate degrees.

Faculty Research Interests

Our faculty (https://frit.illinois.edu/directory/faculty/) possess strengths in literary interpretation, critical theory, the study of civilization, cinema, theoretical and applied linguistics, and computer-assisted teaching. Members of the faculty have received national and international recognition; graduates serve on the faculties of numerous colleges and universities both in this country and abroad. See also the faculty's areas of research (https://frit.illinois.edu/research/research-areas/).

Centers, Programs, and Institutes

Our faculty hold appointments with the Departments of African American Studies, Gender and Women's Studies, Linguistics, Media and Cinema Studies, as well as the European Union Center and the Center for South Asian and Middle Eastern Studies, the Program in Comparative and World Literature, the Program in Jewish Culture and Society, the Program in Medieval Studies, and the Unit for Criticism and Interpretive Theory, broadening opportunities for interdisciplinary work.

Facilities and Resources

A language learning lab provides computer-based access to resources and audio-video services. The phonetics lab contains state-of-the-art equipment available to graduate student researchers. The Kolb-Proust Archive for Research, a unit of the Library, houses a wealth of information about Marcel Proust and his time, including the important collection of notes and materials assembled by Philip Kolb, who was a professor in the Department. Documents from the collection are accessible on the World-Wide Web through a searchable SGML-encoded Virtual Archive (www.library.illinois.edu/kolbp) (http://www.library.illinois.edu/kolbp/).

Financial Aid

All students who apply for admission are considered for financial aid. Subject to budgetary conditions, and assuming satisfactory academic and teaching performance, the Department offers two years of financial aid toward the M.A. degree and an additional four years of support toward completion of the Ph.D.

Teaching Assistantships are the most common form of graduate student support. The usual appointment requires teaching three courses during the academic year.

Research Assistantships require the recipient to assist with a faculty member's research for a specific number of hours per week. A research assistantship may be combined with a teaching assistantship.

Fellowships are offered for new and continuing students. No separate application form is required.

Tuition and Fee Waivers are included in waiver-generating fellowship, teaching assistantship, and research assistantship awards.

Graduate students in French may spend the academic year abroad under exchange agreements with universities in France, Belgium, and Canada, employed as teaching assistants.

for the degree of Master of Arts in French

Candidates in French Studies must take an examination based on a reading list covering the fields of French literature and culture. The written and oral examination in French linguistics is based on a list of readings in linguistics and in literature and/or civilization. The written exam in French linguistics may be substituted by an extended research paper. The examination in French language learning/teaching includes readings in second-language acquisition and teaching methods in addition to selected readings in French literature and/or civilization. Candidates in all programs are required to demonstrate, at the time of the master's examination, an ability to communicate effectively in both written and oral French.

For additional details and requirements refer to the department's graduate programs (http://www.french.illinois.edu/grad/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
Course work dependent on specialization area		32
Total Hours		32

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall	12
Comprehensive exam	
Minimum GPA:	2.75

Learning Outcomes: French, MA

Learning Outcomes for the degree of Master of Arts in French

French Studies Concentration

1. **Language:** high level of proficiency in written and oral French. Strong command of written and spoken academic French.
2. **French Studies:** Acquisition of broad knowledge of French and francophone literature and cultures across several centuries. Development of research and interpretive skills. Familiarity with major research questions within the field and with different approaches to those issues. Introduction to major contemporary works of history, philosophy and/or cultural theory in French.
3. **Training in theory and methodologies:** Introduction to a variety of methodologies and theoretical approaches to texts and their interpretation in English and in French.
4. **Teaching:** Ability to teach the French language at the beginning and intermediate levels. Effective communication in French to groups of students with various abilities in the language. Work with faculty to design syllabi and appropriate assessment tools.
5. **The Profession:** Awareness and development of professional skills, including the ability to write and deliver academic conference presentations, generate syllabi, rework seminar papers, write fellowship applications; awareness of issues in the academic job market in French studies.

French Language Learning Concentration

1. **Language:** Students display an Advanced Mid to Advanced High proficiency in reading, writing, listening, and speaking in French, as per ACTFL (American Council on the Teaching of Foreign Languages) guidelines.

2. **Knowledge of Applied Linguistics:** Students can recall, relate, and explain facts and theories about the structure and the teaching and learning of French.
3. **Research theories and methodologies:** Students can understand, recall, relate, and explain foundational research theories and methodologies used in the field of applied linguistics.
4. **Teaching:** Students are able to comfortably teach elementary levels of French language courses and have basic skills teaching intermediate levels of French language courses, aligning with a communicative approach to teaching and learning, grounded in basic principles of proficiency-oriented curriculum and assessment design.
5. **Professionalism:** Students demonstrate awareness and development of ethical and professional skills relevant to research, teaching, and learning in the field of applied linguistics, including communicative skills for the profession, collegiate demeanor, participation in professional organizations or events, evaluation of standards, issues, and resources used in the field. Work with faculty to design syllabi and appropriate assessment tools.

French Linguistics Concentration

1. **Language:** Students display Advanced Mid to Advanced High proficiency in reading, writing, listening, and speaking in French, as per ACTFL (American Council on the Teaching of Foreign Languages) guidelines.
2. **French Linguistics:** Students acquire broad theoretical and factual knowledge of the structure, history, and contemporary usage of the French language in francophone societies. They learn to establish interdisciplinary connections to literature, film, and the teaching of French and show familiarity with major research questions and methodologies in the field. Among students' applied skills are: the ability to conduct research, translate, and interpret in French.
3. **Research theories and methods:** Students can understand, recall, relate, and explain in English and in French foundational research theories and methodologies used in the field of theoretical and applied linguistics.
4. **Teaching:** Students are able to comfortably teach elementary levels of French language courses and have basic skills teaching intermediate levels of French language courses, aligning with a communicative approach to teaching and learning and a proficiency-oriented curriculum and assessment design. Work with faculty to design syllabi and appropriate assessment tools.
5. **The Profession:** Awareness and development of professional skills, including ability to write and deliver academic conference presentations, generate syllabi, rework seminar papers, write fellowship applications; awareness of issues in the academic job market in French Linguistics and Language Learning/Teaching. Students demonstrate awareness and development of ethical and professional skills relevant to their field, including communicative skills for the profession, collegiate demeanor and participation in professional organizations or events.

French, PhD

for the degree of Doctor of Philosophy in French

head of department: Zsuzsanna Fagyal
director of graduate studies: François Proulx
department website: http://www.frit.illinois.edu/
college website: https://las.illinois.edu/
overview of graduate college admissions & requirements: Graduate Admissions (https://grad.illinois.edu/admissions/apply/)
overview of college admissions & requirements: https://frit.illinois.edu/admissions/french-graduate-admissions (https://frit.illinois.edu/admissions/french-graduate-admissions/)
department office: 2090 Foreign Languages Building, 707 South Mathews Avenue, Urbana, IL 61801
phone: (217) 333-2020
email: french-italian@illinois.edu

The Department of French and Italian offers graduate programs leading to the Master of Arts and the Doctor of Philosophy degrees in French and in Italian. Candidates for the master's degree may specialize in French Studies, French Linguistics, French Language Learning, or Italian. Candidates for the doctoral degree in French may choose one of three specializations: French Studies, French Linguistics, or Second Language Acquisition and Teacher Education (SLATE).

The following minors and certificates may be pursued: Cinema Studies (p. 1128), Gender & Women's Studies (p. 1134), Translation Studies (http://www.translation.illinois.edu), Criticism and Interpretive Theory (https://criticism.english.illinois.edu)

Graduate Degree Programs in French & Italian

French, MA (p. 676)
concentration:
Medieval Studies (p. 1101)
French, PhD (p. 783)
concentration:
Medieval Studies (p. 1101)|Romance Linguistics (p. 1106)|Second Language Acquisition & Teacher Education (p. 1106)
Italian, MA (p. 824)
concentration:
Medieval Studies (p. 1101)
Italian, PhD (p. 826)
concentration:
Medieval Studies (p. 1101)|Romance Linguistics (p. 1106)|Second Language Acquisition & Teacher Education (p. 1106)

Admission

French

Students considering admission to the master's program should usually have had a college major in French. Applicants should apply online (www.grad.illinois.edu/admissions/apply (http://www.grad.illinois.edu/admissions/apply/)) and submit an academic statement of purpose (maximum 1000 words), a personal statement (maximum 500 words), three letters of recommendation, and two writing samples (5-10 pages each), at least one of which must be in French. Original transcripts showing all undergraduate and graduate work completed should be sent to SLCL Graduate Student Services. Graduate Record Examination (GRE) scores are required of all domestic applicants and should be submitted to institution code 1836. International applicants who have taken the GRE are encouraged to submit their scores as well. Applicants whose native language is not English are required to take the Test of English as a Foreign Language (TOEFL) and must score at least 79 on the

internet-based test (iBT); they must also pass the speaking sub-section of the iBT with a minimum score of 24 (http://www.grad.illinois.edu/Admissions/instructions/04c.cfm). Admission for the spring semester is rare. Students seeking admission to the Ph.D. program with a Master of Arts degree earned elsewhere are expected to have a minimum 3.5 grade point average in graduate coursework. The master's degree should be in French literature, French studies, or French linguistics. Candidates seeking admission to the Ph.D. specialization in Second Language Acquisition and Teacher Education may hold a Master of Arts in Teaching degree instead.

For more information about how to apply, see https://frit.illinois.edu/admissions/french-graduate-admissions (https://frit.illinois.edu/admissions/french-graduate-admissions/). Application questions may be directed to SLCL Graduate Student Services at slclgradservices@illinois.edu.

Italian

The normal prerequisite for a graduate major is an undergraduate major in Italian or consent of the department. Students doing graduate work for any advanced degree in Italian must possess a command of the language. Applicants should apply online (www.grad.illinois.edu/admissions/apply (http://www.grad.illinois.edu/admissions/apply/)) and submit an academic statement of purpose (maximum 1000 words), a personal statement (maximum 500 words), three letters of recommendation, and a writing sample of approximately 10-20 pages in the form of one or two papers. Original transcripts (with English translations if applicable) showing all undergraduate and graduate work completed should also be uploaded. Graduate Record Examination (GRE) scores are required of all domestic applicants and should be submitted to institution code 1836. International applicants who have taken the GRE are encouraged to submit their scores as well. Applicants whose native language is not English are required to take the Test of English as a Foreign Language (TOEFL) and must score at least 79 on the internet-based test (iBT); they must also pass the speaking sub-section of the iBT with a minimum score of 24 (see www.grad.illinois.edu/Admissions/instructions/04c (http://www.grad.illinois.edu/Admissions/instructions/04c/)). Applications are accepted for fall admission only. Application questions may be directed to SLCL Graduate Student Services at slclgradservices@illinois.edu.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, the department requires Ph.D. candidates to do some teaching as part of their academic work because such experience is considered a vital part of graduate training and professionalization. Non-native English speakers must first pass a test of their oral English ability. See www.grad.illinois.edu/admissions/taengprof.htm (http://www.grad.illinois.edu/admissions/taengprof.htm).

Teaching Assistants in French and Italian are required to take FR 505 or ITAL 505 respectively (4 hours) as part of their contractual obligation. The course does not count toward the graduate degrees.

Faculty Research Interests

Our faculty possess strengths in literary interpretation, critical theory, the study of civilization, cinema, theoretical and applied linguistics, and computer-assisted teaching. Members of the faculty have received national and international recognition; graduates serve on the faculties of numerous colleges and universities both in this country and abroad. See also the faculty's areas of research (https://frit.illinois.edu/research/research-areas/).

Centers, Programs, and Institutes

Our faculty hold appointments with the Departments of African American Studies, Gender and Women's Studies, Linguistics, Media and Cinema Studies, as well as the European Union Center and the Center for South Asian and Middle Eastern Studies, the Program in Comparative and World Literature, the Program in Jewish Culture and Society, the Program in Medieval Studies, and the Unit for Criticism and Interpretive Theory, broadening opportunities for interdisciplinary work.

Facilities and Resources

A language learning lab provides computer-based access to resources and audio-video services. The phonetics lab contains state-of-the-art equipment available to graduate student researchers. The Kolb-Proust Archive for Research, a unit of the Library, houses a wealth of information about Marcel Proust and his time, including the important collection of notes and materials assembled by Philip Kolb, who was a professor in the Department. Documents from the collection are accessible on the World-Wide Web through a searchable SGML-encoded Virtual Archive (www.library.illinois.edu/kolbp) (http://www.library.illinois.edu/kolbp/).

Financial Aid

All students who apply for admission are considered for financial aid. Subject to budgetary conditions, and assuming satisfactory academic and teaching performance, the Department offers two years of financial aid toward the M.A. degree and an additional four years of support toward completion of the Ph.D.

Teaching Assistantships are the most common form of graduate student support. The usual appointment requires teaching three courses during the academic year.

Research Assistantships require the recipient to assist with a faculty member's research for a specific number of hours per week. A research assistantship may be combined with a teaching assistantship.

Fellowships are offered for new and continuing students. No separate application form is required.

Tuition and Fee Waivers are included in waiver-generating fellowship, teaching assistantship, and research assistantship awards.

Graduate students in French may spend the academic year abroad under exchange agreements with universities in France, Belgium, and Canada, employed as teaching assistants.

for the degree of Doctor of Philosophy in French

For additional details and requirements refer to the department's graduate programs (http://www.french.illinois.edu/grad/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
Coursework should be selected in consultation with advisor.		32
Language Requirement: depends on specialization area		
FR 599	Thesis Research (min/max applied toward degree)	32
Total Hours		64

Other Requirements

Requirement	Description
Other requirements may overlap	
Masters Degree Required for Admission to PhD?	Yes
Qualifying Exam Required	No
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	2.75

Specialization in French Studies

The doctoral program in French Studies is designed to prepare specialists in literature and culture. Candidates are required to include courses in textual criticism, linguistics or linguistically oriented textual theory, and French/Francophone literature and culture. Students are expected to demonstrate reading proficiency in one modern foreign language (other than French or English). They may fulfill this requirement by passing a fourth-semester reading course with a grade of B or better or by demonstrating an equivalent ability by examination. Students may choose to complete a minor in Cinema Studies, Gender and Women's Studies, or to obtain a certificate in Medieval Studies, Translation Studies or in Criticism, and Interpretive Theory.

Specialization in French Linguistics

The Ph.D. curriculum in linguistics offers training in French and Romance linguistics in cooperation with the Department of Spanish and Portuguese and the Department of Linguistics. Candidates selecting this option are required to complete course work in linguistic theory, advanced study of French language and culture, and French and Romance linguistics beyond the requirements of the M.A. in French Linguistics. Advanced course work related to the candidate's research area is chosen from courses offered by participating departments in consultation with the advisors in French and Romance Linguistics. Students are expected to demonstrate proficiency in at least one other Romance language and may select a concentration in Romance Linguistics.

Specialization in French Second Language Acquisition and Teacher Education (SLATE)

This Ph.D. curriculum in French SLATE combines advanced studies in French with a research focus on some aspect of second language learning and teaching. It is an inter-disciplinary Ph.D. concentration that offers training in a wide range of disciplines related to second language learning and teaching, with a focus on bilingualism, foreign, second, and heritage language teaching and learning. Courses are offered in collaboration with multiple departments and units in the School of Literatures, Cultures, and Linguistics, the College of Liberal Arts and Sciences, and the College of Education. Candidates in French selecting this option are required to complete course work in theories of language teaching and acquisition, linguistic theory, and French language and culture beyond the requirements of the M.A. in Language Learning. Advanced course work related to the candidate's research area is chosen in consultation with the French SLATE advisor.

Learning Outcomes: French, PhD

Learning Outcomes for the degree of Doctor of Philosophy in French

French Studies Concentration

1. **Language:** Near native written and oral proficiency in French. Mastery of written and spoken academic French and English.
2. **French Studies:** Acquisition of broad knowledge of French and francophone literature and cultures across the centuries, with particular expertise in one area or more. Ability to evaluate the field of French Studies, assess the major issues of concern within the field, and evaluate different approaches to those issues. Familiarity with major contemporary works of history, philosophy and/or cultural theory in French.
3. **Training in theory and methodologies:** Strong command of a variety of methodologies and theoretical approaches to texts and their interpretation in English and in French.
4. **Teaching:** Ability to teach French language, literature and culture in a wide variety of undergraduate courses, from beginning to advanced, with broad historical, cultural and linguistic understanding. Effective communication in French to groups of students with various abilities in the language. Work with faculty to design syllabi and appropriate assessment tools.
5. **The Profession:** mastery of professional skills, including ability to write and deliver academic conference presentations, generate syllabi, rework and submit seminar papers for publication as articles, write book reviews and fellowship applications; readiness for academic job market in French studies, including ability to identify successful strategies and evaluate different types of institutions and their teaching and research needs.

French Linguistics Concentration

1. **Language:** Students display an Advanced High to Superior proficiency, as well as native likeness in reading, writing, listening, and speaking in both French and English (American Council on the Teaching of Foreign Languages) guidelines.
2. **French Linguistics:** Students can recall, relate, explain, discuss, and utilize theories in the field of French Linguistics to generate research. They acquire broad specialized knowledge in their subfield of specialization.
3. **Research theories and methods:** Students can understand, recall, relate, and explain in English and in French advanced research theories and methodologies used in the field of linguistics.
4. **Teaching:** Students are able to expertly teach a variety of French language and content courses in their field, grounded in principles of proficiency-oriented curriculum and assessment design, as well as in programmatic sequencing.
5. **Professionalism:** Students demonstrate knowledge and application of ethical and professional skills relevant to research, teaching, and learning in the field of applied linguistics, including communicative skills for the profession, collegiate demeanor, participation in professional organizations or events, evaluation of standards, issues, and resources used in the field, readiness for the job market, research publications, and presentations at nationally and internationally recognized research conferences.

Second Language Acquisition Concentration

1. **Language:** Students display an Advanced High to Superior proficiency, as well as native likeness in reading, writing, listening, and speaking in both French and English (American Council on the Teaching of Foreign Languages) guidelines.

2. **Expert knowledge in applied linguistics:** Students can recall, relate, explain, discuss, and utilize theories in the field of applied linguistics to generate research.
3. **Research theories and methodologies:** Students can understand, relate, explain, discuss, and defend their use of advanced and updated research theories and methodologies consistent with research in the field of applied linguistics.
4. **Teaching:** Students are able to expertly teach a variety of French language and content courses, aligning with a communicative approach to teaching and learning, as well as with the specificity of a major in French, grounded in principles of proficiency-oriented curriculum and assessment design, as well as in programmatic sequencing.
5. **Professionalism:** Students demonstrate knowledge and application of ethical and professional skills relevant to research, teaching, and learning in the field of applied linguistics, including communicative skills for the profession, collegiate demeanor, participation in professional organizations or events, evaluation of standards, issues, and resources used in the field, readiness for the job market, research publications, and presentations at nationally and internationally recognized research conferences.

Geography, MA

for the degree of Master of Arts in Geography

Department Head: Dr. Shaowen Wang
Director of Graduate Studies: Dr. Brian Jefferson
website: ggis.illinois.edu (http://www.geog.illinois.edu/)
email: geography@illinois.edu
phone: (217) 333-1880
Office address:
2044 Natural History Building
1301 W. Green Street
Urbana, IL 61801

College of LAS website (https://LAS.illinois.edu/)
Graduate College Admissions (https://grad.illinois.edu/admissions/apply/)

Graduate Degree Programs in Geography & Geographic Information Science

Geography, MA (p. 786)
Geography, MS (p. 787)
concentrations:
Geographic Information Science - Professional Science Master's (p. 789)
Computational Science & Engineering (p. 1089)
Geography, PhD (p. 790)
concentration:
Computational Science & Engineering (p. 1089)

We offer a program leading to the Master of Arts in geography with the following specialization:

- **Cities, Space, and Society**
  Urban health and quality of life; Urban governance and politics; Race, class, and city policing; Critical studies of urban transportation and mobilities; Global north and south; Neoliberalization

Admission

Students applying for admission to the master's program are expected to have a strong undergraduate background in geography and/or related disciplines. In addition to other Graduate College admission requirements, a grade point average of at least 3.0 (A = 4.0) in the undergraduate major is required. GRE scores are not required or evaluated for admission to our graduate programs.

Assistantships and Fellowships

Geography graduate students are usually supported and receive tuition/fee waivers through teaching assistantships, research assistantships, or fellowships.

Graduate Teaching Experience

Although previous teaching experience is not a Graduate College requirement, it is considered an important part of the graduate experience in this program. We have implemented a professionalization program in our department, where graduate students work with faculty members to receive advice and gain first-hand experience in teaching undergraduate courses. Several graduate students have also served as lead instructor for several of our introductory undergraduate courses.

Map and Geography Library

The University Library has a substantial collection of geography books and journals. Most of the new and more recent books are located in the Social Sciences, Health, and Education Library (SSHEL); nearly all geography journals are available full-text through the University Library's website. The Map Library holds a collection of over 626,000 maps and aerial photographs. Additionally, the Map Library houses an extensive collection of books on cartography and geographic information science and the University Library's Scholarly Commons can help students locate and collect geospatial data.

for the degree of Master of Arts in Geography

For additional details and requirements refer to the department's Graduate Programs (http://www.geog.illinois.edu/students/grad/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Thesis Option

Code	Title	Hours
At least one course on geographic information systems (GIS) and related geospatial techniques		
GEOG 471	Recent Trends in Geog Thought	4
GEOG 491	Research in Geography	2
Each student must also fulfill program requirements specific to his/her specialty area		
GEOG 599	Thesis Research (8 max applied toward degree)	8
Total Hours		32

Other Requirements

Requirement	Description
Other requirements may overlap	
A maximum of 2 elective courses may be taken CR/NC.	
Minimum Hours Overall Required Within the Unit:	16

Minimum 500-level Hours Required Overall:	12 (8 in Geog)
Minimum GPA:	3.0

Non-Thesis Option

Code	Title	Hours
At least one course on geographic information systems (GIS) and related geospatial techniques		
GEOG 471	Recent Trends in Geog Thought	4
GEOG 491	Research in Geography	2
Each student must also fulfill program requirements specific to his/her specialty area		
Total Hours		32

Other Requirements

Requirement	Description
Other requirements may overlap	
Some Geography program options do not allow the non-thesis Master's degree option. Contact the department for further details.	
Two written research papers which address substantive research questions are required along with a comprehensive examination.	
A maximum of 2 elective courses may be taken CR/NC.	
Minimum Hours Overall Required Within the Unit:	16
Minimum 500-level Hours Required Overall:	12 (8 in Geog)
Minimum GPA:	3.0

Learning Outcomes: Geography,MA

Learning Outcomes for the degree of Master of Arts in Geography

1. All graduate students will have a fundamental understanding of the history and philosophies of geography in all its diversity and breadth.
2. All graduate students will have knowledge of the latest trends and developments in geography as social science, a discipline increasingly rooted in geographic information science, and physical science.
3. All graduate students will have a deep and nuanced comprehension of the latest conceptual developments in their selected research areas.
4. All graduate students will have the ability to formulate a research problem, know the proper conceptual tools and methods to appropriately address it, and properly place it in evolving, relevant literature.
5. All graduate students will have a strong knowledge of proper ethical conduct in the performance and completion of advanced research.

Geography, MS

for the degree of Master of Science in Geography

Department Head: Dr. Shaowen Wang
Director of Graduate Studies: Dr. Brian Jefferson
website: ggis.illinois.edu (http://www.geog.illinois.edu/)
email: geography@illinois.edu
phone: (217) 333-1880
Office address:
2044 Natural History Building
1301 W. Green Street
Urbana, IL 61801

College of LAS website (https://LAS.illinois.edu/)
Graduate College Admissions (https://grad.illinois.edu/admissions/apply/)

Successful degree candidates with backgrounds in physical geography or GIS are recommended for a Master of Science; others receive a Master of Arts.

Graduate Degree Programs in Geography & Geographic Information Science

Geography, MA (p. 786)
Geography, MS (p. 787)
concentrations:
Geographic Information Science - Professional Science Master's (p. 789)
Computational Science & Engineering (p. 1089)
Geography, PhD (p. 790)
concentration:
Computational Science & Engineering (p. 1089)

We offer a program leading to the Master of Science degree in geography with the following specializations:

- **Cities, Space, and Society**
  Urban health and quality of life; Urban governance and politics; Race, class, and city policing; Critical studies of urban transportation and mobilities; Global north and south; Neoliberalization
- **Geographic Information Science**
  Geographic information systems; Dynamic modeling of ecological and social systems; Geocomputation and CyberGIS; Aerial photo analysis; Remote sensing; Inter-regional input-output modeling; Regional science; Spatial analysis
- **River, Watershed, and Landscape Dynamics**
  Fluvial geomorphology; Watershed science and management; Aerial photo analysis; Ecosystem dynamics

Admission

Students applying for admission to the master's program are expected to have a strong undergraduate background in geography and/or related disciplines. In addition to other Graduate College admission requirements, a grade point average of at least 3.0 (A = 4.0) in the undergraduate major is required. PhD candidates are generally expected to have at least a 3.5 average in previous graduate work. GRE scores are not required or evaluated for admission to our graduate programs.

Assistantships and Fellowships

Geography graduate students are usually supported and receive tuition/fee waivers through teaching assistantships, research assistantships, or fellowships.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program. We have implemented a professionalization program in our department, where graduate students work with faculty members to receive advice and gain first-hand experience in teaching undergraduate courses. Several of our graduate students have also had the opportunity to lead introductory Geography & GIS courses.

Facilities and Resources

The department also includes several state-of-the-art research laboratories maintained by individual faculty members. The CyberInfrastructure and Geospatial Information (CIGI) Lab (https://cigi.illinois.edu/), housed in the department, researches and develops cutting-edge cyberinfrastructure to advance geospatial science and technologies. The department also sponsors the CyberGIS Center for Advanced Digital & Spatial Studies (https://cybergis.illinois.edu/) whose mission is to empower advanced digital and spatial studies through innovation of CyberGIS technologies and applications. The lab houses several high performance computers and servers for performing computationally intensive geographic analysis and problem solving in various research, education, and outreach contexts.

Map and Geography Library

The University Library has a substantial collection of geography books and journals. Most of the new and more recent books are located in the Social Sciences, Health, and Education Library (SSHEL) (https://www.library.illinois.edu/sshel/); nearly all geography journals are available full-text through the University Library's website. The Map Library holds a collection of over 626,000 maps and aerial photographs. Additionally, the Map Library houses an extensive collection of books on cartography and geographic information science. Map Library and University Library Scholarly Commons (https://www.library.illinois.edu/sc/) staff can also help students locate geospatial data.

for the degree of Master of Science in Geography

For additional details and requirements refer to the department's Graduate Programs (http://www.geog.illinois.edu/students/grad/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Thesis Option

Code	Title	Hours
At least one course on geographic information systems (GIS) and related geospatial techniques		
GEOG 471	Recent Trends in Geog Thought	4
GEOG 491	Research in Geography	2
Each student must also fulfill program requirements specific to his/her specialty area		
GEOG 599	Thesis Research (8 max applied toward degree)	8
Total Hours		32

Other Requirements

Requirement	Description
Other requirements may overlap	
A maximum of 2 elective courses may be taken CR/NC.	
Minimum Hours Overall Required Within the Unit:	16
Minimum 500-level Hours Required Overall:	12 (8 in Geog)
Minimum GPA:	3.0

Non-Thesis Option

Code	Title	Hours
At least one course on geographic information systems (GIS) and related geospatial techniques		
GEOG 471	Recent Trends in Geog Thought	4
GEOG 491	Research in Geography	2
Each student must also fulfill program requirements specific to his/her specialty area		
Total Hours		32

Other Requirements

Requirement	Description
Other requirements may overlap	
Some Geography program options do not allow the non-thesis Master's degree option. Contact the department for further details.	
Two written research papers which address substantive research questions are required along with a comprehensive examination.	
A maximum of 2 elective courses may be taken CR/NC.	
Minimum Hours Overall Required Within the Unit:	16
Minimum 500-level Hours Required Overall:	12 (8 in Geog)
Minimum GPA:	3.0

Learning Outcomes: Geography, MS

Learning Outcomes for the degree of Master of Science in Geography

1. All graduate students will have a fundamental understanding of the history and philosophies of geography in all its diversity and breadth.
2. All graduate students will have knowledge of the latest trends and developments in geography as social science, a discipline increasingly rooted in geographic information science, and physical science.
3. All graduate students will have a deep and nuanced comprehension of the latest conceptual developments in their selected research areas.
4. All graduate students will have the ability to formulate a research problem, know the proper conceptual tools and methods to appropriately address it, and properly place it in evolving, relevant literature.
5. All graduate students will have a strong knowledge of proper ethical conduct in the performance and completion of advanced research.

Geography: Geographic Information Science - Professional Science Master's, MS

For the degree of Master of Science (MS) in Geography, with Professional Science Master's in Geographic Information Science Concentration

Department Head: Dr. Shaowen Wang
Faculty Advisor: Dr. Michael Minn

website: ggis.illinois.edu (http://www.geog.illinois.edu/)
email: geography@illinois.edu
phone: (217) 333-1880
Office address:
2044 Natural History Building
1301 W. Green Street
Urbana, IL 61801

College of LAS website
Graduate College Admissions
Illinois Professional Science Master's

This program is designed for careers in business management using geospatial technologies. Students build a flexible, cross-disciplinary expertise around a strong Geographic Information Science core, while acquiring business knowledge and professional skills. The business curriculum includes technology management, marketing, entrepreneurship, finance, project and/or process management. PSM students typically complete the program in 18 months consisting of 3 full-time, on-campus semesters and a summer internship. Graduates are awarded a master's degree in geography with the Professional Science Master's in GIS concentration.

Admission

Candidates for admission must have a bachelor's degree from an accredited U.S. institution, or comparable degree from a recognized institution abroad with a GPA or 3.0 (4.0 scale) for the last 60 hours of undergraduate or graduate coursework. Application requirements include: three letters of recommendation, proof of funding, and TOEFL or IELTS scores for non-native English speakers. Transfer credit from Illinois or other institutions is not permitted. Please visit the "Graduate College Admissions" link above for complete application details. ***GRE scores are not required or evaluated for admission to this program.***

Financial Aid

Illinois PSM students may not hold assistantships or other tuition/fee waiver-generating appointments, but may be eligible for student loans and graduate hourly appointments. Statutory waivers and tuition scholarships are accepted.

for the degree of Master of Science in Geography, Geographic Information Science – Professional Science Master's

For additional details and requirements for all degrees, please refer to the program's Graduate Degree Requirements (https://psm.illinois.edu/gis/*) and the* Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/*).*

Code	Title	Hours
Business courses prescribed by the Illinois PSM program		**10**
PSM 501	PSM Industry Seminar I	0
PSM 502	PSM Industry Seminar II	0
PSM 503	PSM Industry Seminar III	0
PSM 555	PSM Internship	0

Code	Title	Hours
Choose from following list in consultation with the faculty coordinator. [1]		
GEOG 412	Geospatial Tech & Society	
GEOG 421	Earth Systems Modeling	
GEOG 440	Business Applications of GIS	
GEOG 439	Health Applications of GIS	
GEOG 460	Aerial Photo Analysis	
GEOG 473	Digital Cartography & Map Design	
GEOG 476	Applied GIS to Environ Studies	
GEOG 477	Introduction to Remote Sensing	
GEOG 478	Techniques of Remote Sensing	
GEOG 479	Advanced Topics in GIS	
GEOG 480	Principles of GIS	
GEOG 489	Programming for GIS	
GEOG 560	Spatial Epidemiology	
GEOG 570	Advanced Spatial Analysis	
GEOG 595	Advanced Studies in Geography	
Other GIS-related coures may be substituted with permission of the GIS-PSM Director.		
Total Hours for GIS concentration:		**32**

Other Requirements

Code	Title	Hours
Other requirements may overlap.		
The PSM concentration is required.		
Minimum hours required within the unit:		16
Minimum 500-level credit hours (8 in GEOG):		12
Evaulation conducted by the GIS-PSM Director and/or members of the GIS-PSM committee		
Full-time enrollment (12 credit hours or higher) is required in fall and spring semesters; summer enrollment is required for the internship.		
Minimum GPA:		3.0

[1] *Students with no previous experience in GIS are required to take a graduate-level GIS course.*

Learning Outcomes: Geography, PSM

Learning Outcomes for the degree of Master of Science (MS) in Geography, with Professional Science Master's in Geographic Information Science Concentration

1. All PSM graduate students will have a firm understanding of the theories and applications of geographic information science and all its diversity and development trends.
2. All PSM graduate students will have proficiency in at least one GIS toolbox and will have the technical skills for data manipulation, editing, and geospatial data visualization.
3. All PSM graduate students will be able to effectively apply critical geospatial thinking to address real-world problems.
4. All PSM graduate students will acquire foundational business knowledge and professional skills to work as a geospatial analyst in a pertinent professional team environment.
5. All PSM graduate students will have a strong knowledge of proper ethical conduct in the context of developing and executing geospatial solutions.

Geography, PhD

for the degree of Doctor of Philosophy in Geography

Department Head: Dr. Shaowen Wang
Director of Graduate Studies: Dr. Brian Jefferson
website: ggis.illinois.edu (http://www.geog.illinois.edu/)
email: geography@illinois.edu
phone: (217) 333-1880
Office address:
2044 Natural History Building
1301 W. Green Street
Urbana, IL 61801

College of LAS website (https://LAS.illinois.edu/)
Graduate College Admissions (https://grad.illinois.edu/admissions/apply/)

Students must complete the course requirements as determined by their individually planned program, initiate and complete research projects, and qualify for candidacy by passing the departmental qualifying and preliminary examinations. Although we don't have a foreign language requirement, students may study a foreign language as a research tool.

Graduate Degree Programs in Geography & Geographic Information Science

Geography, MA (p. 786)
Geography, MS (p. 787)
concentrations:
Geographic Information Science - Professional Science Master's (p. 789)
Computational Science & Engineering (p. 1089)
Geography, PhD (p. 790)
concentration:
Computational Science & Engineering (p. 1089)

We offer a program leading to the Doctor of Philosophy degree in geography with the following specializations:

- **Cities, Space, and Society**
  Urban health and quality of life; Urban governance and politics; Race, class, and city policing; Critical studies of urban transportation and mobilities; Global north and south; Neoliberalization
- **Geographic Information Science**
  Geographic information systems; Dynamic modeling of ecological and social systems; Geocomputation and CyberGIS; Aerial photo analysis; Remote sensing; Inter-regional input-output modeling; Regional science; Spatial analysis
- **River, Watershed, and Landscape Dynamics**
  Fluvial geomorphology; Watershed science and management; Aerial photo analysis; Ecosystem dynamics

Admission

Students applying for admission to the master's program are expected to have a strong undergraduate background in geography and/or related disciplines. In addition to other Graduate College admission requirements, a grade point average of at least 3.0 (A = 4.0) in the undergraduate major is required. PhD candidates are generally expected to have at least a 3.5 average in previous graduate work. GRE scores are not required or evaluated for admission to our graduate programs.

Assistantships and Fellowships

Geography graduate students are usually supported and receive tuition/fee waivers through teaching assistantships, research assistantships, or fellowships.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program. We have implemented a professionalization program in our department, where graduate students work with faculty members to receive advice and gain first-hand experience in teaching undergraduate courses. Several of our graduate students have also had the opportunity to lead introductory Geography & GIS courses.

Facilities and Resources

The department also includes several state-of-the-art research laboratories maintained by individual faculty members. The CyberInfrastructure and Geospatial Information (CIGI) Lab (https://cigi.illinois.edu/), housed in the department, researches and develops cutting-edge cyberinfrastructure to advance geospatial science and technologies. The department also sponsors the CyberGIS Center for Advanced Digital & Spatial Studies (https://cybergis.illinois.edu/) whose mission is to empower advanced digital and spatial studies through innovation of CyberGIS technologies and applications. The lab houses several high performance computers and servers for performing computationally intensive geographic analysis and problem solving in various research, education, and outreach contexts.

Map and Geography Library

The University Library has a substantial collection of geography books and journals. Most of the new and more recent books are located in the Social Sciences, Health, and Education Library (SSHEL) (https://www.library.illinois.edu/sshel/); nearly all geography journals are available full-text through the University Library's website. The Map Library holds a collection of over 626,000 maps and aerial photographs. Additionally, the Map Library houses an extensive collection of books on cartography and geographic information science. Map Library and University Library Scholarly Commons (https://www.library.illinois.edu/sc/) staff can also help students locate geospatial data.

for the degree of Doctor of Philosophy in Geography

For additional details and requirements refer to the department's Graduate Programs (http://www.geog.illinois.edu/

grad/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Entering with approved M.S./M.A. degree

Code	Title	Hours
GEOG 471	Recent Trends in Geog Thought	4
GEOG 491	Research in Geography	2
Doctoral students are required to demonstrate competence in a specific research technique		
Students must fulfill program requirements specific to his/her specialty area		
GEOG 599	Thesis Research (4 min applied toward degree)	4
Total Hours		64

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum Hours Overall Required Within the Unit:	24
Qualifying Exam Required	Yes
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

Entering with approved B.S./B.A. degree

Code	Title	Hours
At least two graduate-level courses on analytical research methods (At least one of these courses must be in geographic information systems (GIS) or related geospatial techniques)		
GEOG 471	Recent Trends in Geog Thought	4
GEOG 491	Research in Geography	2
Doctoral students are required to demonstrate competence in a specific research technique		
Students must fulfill program requirements specific to his/her specialty area		
GEOG 599	Thesis Research (4 min applied toward degree)	4
Total Hours		96

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall:	12 (8 in Geog)
Must complete a major research paper of publishable quality approved by the student's advisory committee.	
Qualifying Exam Required	Yes
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

Learning Outcomes: Geography, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Geography

1. All graduate students will have a fundamental understanding of the history and philosophies of geography in all its diversity and breadth.
2. All graduate students will have knowledge of the latest trends and developments in geography as social science, a discipline increasingly rooted in geographic information science, and physical science.
3. All graduate students will have a deep and nuanced comprehension of the latest conceptual developments in their selected research areas.
4. All graduate students will have the ability to formulate a research problem, know the proper conceptual tools and methods to appropriately address it, and properly place it in evolving, relevant literature.
5. All graduate students will have a strong knowledge of proper ethical conduct in the performance and completion of advanced research.

Geology, MS

for the degree of Master of Science in Geology

head of department: Thomas Johnson
director of graduate studies: Lijun Liu
department website: https://www.geology.illinois.edu/ (http://www.geology.illinois.edu/)
college website: https://las.illinois.edu/
overview of graduate college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department contact: Lana Holben
department office: 3028 Natural History Building, 1301 W. Green Street, Urbana, IL 61801
phone: (217) 333-3540
email: holben@illinois.edu

Students in the Master of Science program can follow the "standard" (or thesis) option or the "applied geology" (or non-thesis) option. The non-thesis option is intended as a terminal degree for students preparing for professional work in environmental and engineering geology or in applied geophysics and who have already been admitted to the program. We do not currently accept new students for the non-thesis master's degree. Admitted students must declare their intent to pursue the non-thesis option at least one semester prior to completing degree requirements.

Graduate Degree Programs in Geology

Geology, MS (p. 791)
Geology, PhD (p. 793)

The Department of Geology offers programs leading to the Master of Science in Geology and the Doctor of Philosophy in Geology. Students have a wide variety of choices in their courses and research programs. Departmental research programs include many aspects of geology, geochemistry, and geophysics.

Admission

The admission requirements of the Graduate College apply. In addition, scores for the aptitude test of the Graduate Record Examination (GRE) are required for admission to graduate work in geology, as well as completion of at least one year each of study in college-level calculus, chemistry, and physics. For more information, write to the department contact. Under special circumstances, students can be admitted at the beginning of the spring term.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program.

Financial Aid

Candidates for graduate degrees are usually supported through fellowships, research assistantships, teaching assistantships, or work-study programs. Fellowships and assistantships include tuition and service fee waivers. Awards for financial assistance are based principally on a candidate's academic record, statement of plans, and letters of reference. Continuation of financial aid depends on student performance and, in the case of teaching assistants, on the receipt of good evaluations. Some assistants are appointed by the State Geological Survey located on campus.

for the degree of Master of Science in Geology

Students in the Master of Science program can follow the "standard" (or thesis) option or the "applied geology" (or non-thesis) option. The non-thesis option is intended as a terminal degree for students preparing for professional work in environmental and engineering geology or in applied geophysics and who have already been admitted to the program. We do not currently accept new students for the non-thesis master's degree. Admitted students must declare their intent to pursue the non-thesis option at least one semester prior to completing degree requirements.

For additional details and requirements refer to the department's Graduate Degree Programs (http://www.geology.illinois.edu/grad/programs/)and the Graduate College Handbook (http://www.grad.uiuc.edu/gradhandbook/).

Thesis Option

Code	Title	Hours
Formal coursework (24 min)		24
GEOL 599	Thesis Research (8 max applied toward degree)	8
Total Hours		32

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum Hours Overall Required Within the Unit:	12
Minimum 500-level Hours Required Overall:	12
Each student must present a colloquium on the thesis research	
All students must maintain a minimum grade point average (GPA) of 3.0 (A = 4.0). If the GPA falls below this minimum after 12 or more graduate hours of graded coursework, it must be raised to 3.0 or above after the completion of 12 additional graduate hours of graded coursework and must be maintained at or above the minimum thereafter.	

Non-Thesis Option

Code	Title	Hours
Formal coursework (32 min)		32
Research/Project Hours (4 min applied toward degree)		4
Total Hours		40

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum Hours Overall Required Within the Unit:	12
Minimum 500-level Hours Required Overall:	12
Requires a written report	
400 level coursework is limited to 8 hours required in any of the options of the undergraduate curriculum in geology and geophysics at Urbana-Champaign	
All students must maintain a minimum grade point average (GPA) of 3.0 (A = 4.0). If the GPA falls below this minimum after 12 or more graduate hours of graded coursework, it must be raised to 3.0 or above after the completion of 12 additional graduate hours of graded coursework and must be maintained at or above the minimum thereafter.	

Learning Outcomes: Geology, MS

Learning Outcomes for the degree of Master of Science in Geology

1. All graduate students will have a broad understanding of basic foundational theories and phenomena that describe the makeup and functioning of the Earth, across the fields of geology and geophysics. Students should have mastered all areas at the level of GEOL 107 and 208, and should have mastered areas close to their area of specialty at the level of the core classes (e.g., 400-level) of our undergraduate curriculum.
2. All graduate students will have a high level of expertise(beyond the level of our undergraduate program)in their specialized research area within geoscience and any related sciences, and the ability to apply this expertise, along with theoretical and technical skills, to address new scientific questions in that area.

3. All graduate students will have knowledge of the recent development of their specialized area of research and current major research directions and questions.
4. Ph.D. students will have mastery of their specialized area of research and the ability to identify new research directions that will advance the area of research.
5. All graduate students will have the ability to work independently to develop a research project and creatively answer the questions central to the project.
6. Ph.D. students will have the ability to identify and formulate a research problem, demonstrate the value of its solution in advancing knowledge, and develop a creative approach toward solving that problem.
7. All graduate students will have ethically responsible and effective communication skills, written and verbal, at a professional scientific level.

Geology, PhD

for the degree of Doctor of Philosophy in Geology

head of department: Thomas Johnson
director of graduate studies: Lijun Liu
department website: https://www.geology.illinois.edu/ (http://www.geology.illinois.edu/)
college website: https://las.illinois.edu/
overview of graduate college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department contact: Lana Holben
department office: 3028 Natural History Building, 1301 W. Green Street, Urbana, IL 61801
phone: (217) 333-3540
email: holben@illinois.edu

Ph.D. students are evaluated by three oral examinations: a qualifying examination, a preliminary examination, and a final examination. The qualifying examination tests breadth of knowledge as well as the ability to define and defend a research proposal in a specialized field at an early stage of graduate study. The preliminary examination tests advanced knowledge in a specialized field and the ability to define and defend a Ph.D. dissertation proposal. The final examination tests the ability to complete and defend Ph.D. dissertation research.

Graduate Degree Programs in Geology

Geology, MS (p. 791)
Geology, PhD (p. 793)

The Department of Geology offers programs leading to the Master of Science in Geology and the Doctor of Philosophy in Geology. Students have a wide variety of choices in their courses and research programs. Departmental research programs include many aspects of geology, geochemistry, and geophysics.

Admission

The admission requirements of the Graduate College apply. In addition, scores for the aptitude test of the Graduate Record Examination (GRE) are required for admission to graduate work in geology, as well as completion of at least one year each of study in college-level calculus, chemistry, and physics. For more information, write to the graduate secretary. Under special circumstances, students can be admitted at the beginning of the spring term.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program.

Financial Aid

Candidates for graduate degrees are usually supported through fellowships, research assistantships, teaching assistantships, or work-study programs. Fellowships and assistantships include tuition and service fee waivers. Awards for financial assistance are based principally on a candidate's academic record, statement of plans, and letters of reference. Continuation of financial aid depends on student performance and, in the case of teaching assistants, on the receipt of good evaluations. Some assistants are appointed by the State Geological Survey located on campus.

for the degree of Doctor of Philosophy in Geology

Ph.D. students are evaluated by three oral examinations: a qualifying examination, a preliminary examination, and a final examination. The qualifying examination tests breadth of knowledge as well as the ability to define and defend a research proposal in a specialized field at an early stage of graduate study. The preliminary examination tests advanced knowledge in a specialized field and the ability to define and defend a Ph.D. dissertation proposal. The final examination tests the ability to complete and defend Ph.D. dissertation research. For additional details and requirements refer to the department's Graduate Degree Programs (http://www.geology.illinois.edu/grad/programs/)and the Graduate College Handbook (http://www.grad.uiuc.edu/gradhandbook/).

Entering with approved M.S. degree

Code	Title	Hours
Formal Coursework (must include 4 hours of electives outside Geology)		32
GEOL 599	Thesis Research (32 min applied toward degree)	32
Total Hours		64

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum Hours Overall Required Within the Unit:	12
Minimum 500-level Hours Required Overall:	20
Each student must present a colloquium on the dissertation research	
Qualifying Exam Required	Yes
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes

All students must maintain a minimum grade point average (GPA) of 3.0 (A = 4.0). If the GPA falls below this minimum after 12 or more graduate hours of graded coursework, it must be raised to 3.0 or above after the completion of 12 additional graduate hours of graded coursework and must be maintained at or above the minimum thereafter.

Entering with approved B.S. degree

Code	Title	Hours
Formal Coursework (must include 4 hours of electives outside Geology)		40
GEOL 599	Thesis Research (32 min applied toward degree)	32
Total Hours		96

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum Hours Overall Required Within the Unit:	12
Minimum 500-level Hours Required Overall:	20
Each student must present a colloquium on the dissertation research	
Qualifying Exam Required	Yes
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
All students must maintain a minimum grade point average (GPA) of 3.0 (A = 4.0). If the GPA falls below this minimum after 12 or more graduate hours of graded coursework, it must be raised to 3.0 or above after the completion of 12 additional graduate hours of graded coursework and must be maintained at or above the minimum thereafter.	

Learning Outcomes: Geology, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Geology

1. All graduate students will have a broad understanding of basic foundational theories and phenomena that describe the makeup and functioning of the Earth, across the fields of geology and geophysics. Students should have mastered all areas at the level of GEOL 107 and 208, and should have mastered areas close to their area of specialty at the level of the core classes (e.g., 400-level) of our undergraduate curriculum.
2. All graduate students will have a high level of expertise(beyond the level of our undergraduate program)in their specialized research area within geoscience and any related sciences, and the ability to apply this expertise, along with theoretical and technical skills, to address new scientific questions in that area.
3. All graduate students will have knowledge of the recent development of their specialized area of research and current major research directions and questions.
4. Ph.D. students will have mastery of their specialized area of research and the ability to identify new research directions that will advance the area of research.
5. All graduate students will have the ability to work independently to develop a research project and creatively answer the questions central to the project.
6. Ph.D. students will have the ability to identify and formulate a research problem, demonstrate the value of its solution in advancing knowledge, and develop a creative approach toward solving that problem.
7. All graduate students will have ethically responsible and effective communication skills, written and verbal, at a professional scientific level.

German, MA

for the degree of Master of Arts in German

acting head of department: Carl Niekerk
director of graduate studies: Anke Pinkert
department website: http://www.germanic.illinois.edu
college website: https://las.illinois.edu/
overview of graduate college admissions & requirements: Graduate Admissions (https://grad.illinois.edu/admissions/apply/)
overview of college admissions & requirements:
department office: 2090 Foreign Languages Building, 707 South Mathews Avenue, Urbana, IL 61801
phone: (217) 333-2020
email: germanic@illinois.edu

Graduate Degree Programs in Germanic Languages & Literatures

German, MA (p. 794)
concentration:
Medieval Studies (p. 1101)
German, PhD (p. 796)
concentration:
Medieval Studies (p. 1101)|Second Language Acquisition & Teacher Education (p. 1106)

The Department of Germanic Languages and Literatures offers graduate programs leading to the degrees of Master of Arts in German, and Doctor of Philosophy in German. Students in the department may choose an additional specialization in Cultural Studies and Interpretive Research (http://www.germanic.illinois.edu/graduate/) or a concentration in Medieval Studies. Candidates for the Ph.D. in German may additionally obtain a certificate in Second Language Acquisition and Teacher Education (http://www.slate.uiuc.edu/) (SLATE Certificate).

Admission

Applicants should apply online (www.grad.illinois.edu/admissions/apply/ (http://www.grad.illinois.edu/admissions/apply/)) and submit a

statement of purpose, three letters of recommendation and a sample of their written work in English or German or both. For admission to the Master of Arts program, the writing sample might be a term paper, and for admission to the doctoral level, a master's thesis or seminar paper. Original transcripts (with English translations if applicable) showing all undergraduate and graduate work completed should be sent to:

SLCL Graduate Student Services
3070 Foreign Languages Bldg.
707 S. Mathews Ave.
Urbana, IL 61801

Graduate Record Examination (GRE) scores are required. The applicant should ask the ETS to submit scores to institution 1836. Applicants whose native language is not English are required to take the Test of English as a Foreign Language (TOEFL) and must score at least 79 on the internet-based test (iBT); they must also pass the speaking sub-section of the iBT with a minimum score of 24 (see www.grad.illinois.edu/Admissions/instructions/04c (http://www.grad.illinois.edu/Admissions/instructions/04c/)).

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program, and all students teach. Non-native English speakers must first pass a test of their oral English ability (see www.grad.illinois.edu/admissions/taengprof.htm (http://www.grad.illinois.edu/admissions/taengprof.htm)).

Research Interests

The department faculty includes nationally and internationally recognized scholars in all areas of research within the field, from older and modern German language, literature, and culture to Scandinavian languages, literatures and cultures. Some of the current research areas of faculty encompass (but are not limited to) Arctic Studies, Literature and Music, Literature and Medicine, Migration and Multilingualism, Film and Visual Studies, Digital Humanities, Memory Studies, and Intersectional Studies of Race, Gender, and Sexuality. We offer courses on topics in German and Scandinavian languages, literatures, and cultures across all periods, including historical and synchronic Germanic linguistics, and German language pedagogy. The University Library has one of the nation's outstanding collections of works pertaining to study and research in Germanic literatures of all periods and in Germanic and general linguistics.

Financial Aid

All students accepted into the program have financial support, usually in the form of a Teaching Assistantship (see www.grad.illinois.edu/admissions/taengprof.htm (http://www.grad.illinois.edu/admissions/taengprof.htm)).

The department has contacts with a variety of universities and institutions in German-speaking countries; these cooperative endeavors also include arrangements for graduate students to study and teach abroad.

For continuing graduate students, the awarding of financial aid of all types is contingent upon making satisfactory progress toward a degree.

for the degree of Master of Arts in German

Applicants should have completed undergraduate studies similar to the concentration in German at the University of Illinois at Urbana-Champaign, have a grade point average of 3.0 (A = 4.0) for the last 60 hours of undergraduate coursework, and be able to follow lectures in the German language. Acquaintance with German history and culture in their relation to the general European background is desirable. Admission to the program is on a competitive basis.

Candidates for the Master of Arts degree may emphasize either German literature or linguistics. All candidates must take courses in both literature and linguistics.

Thesis Option

Code	Title	Hours
GER 510	Introduction to Graduate Study	4
GER 515	Middle High German	4
or GER 520	History of the German Language	
A 500 level course (not including GER 593) in German literature before 1800		4
A 500 level course (not including GER 593) in German literature after 1800		4
Electives within or outside of the department with advisor's approval		12
Language Requirement: proficiency in reading one language other than English and German.		
GER 599	Thesis Research	4
Total Hours		32

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum Hours Overall Required Within the Unit:	24
Minimum 500-level Hours Required Overall:	12
Deficiencies in undergraduate preparation may necessitate more than 32 graduate hours to meet the requirements	
Written and oral examinations	
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the* department's Website *(*http://www.germanic.illinois.edu/graduate/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Non-Thesis Option

Code	Title	Hours
GER 510	Introduction to Graduate Study	4
GER 515	Middle High German	4
or GER 520	History of the German Language	
A 500 level course (not including GER 593) in German literature before 1800		4
A 500 level course (not including GER 593) in German literature after 1800		4
Electives within or outside of the department with advisor's approval		16

Language Requirement: proficiency in reading one language other than English and German.	
Total Hours	32

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum Hours Overall Required Within the Unit:	24
Minimum 500-level Hours Required Overall:	12
Deficiencies in undergraduate preparation may necessitate more than 32 graduate hours to meet the requirements	
Written and oral examinations	
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the* department's Website *(*http://www.germanic.illinois.edu/graduate/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: German, MA

Learning Outcomes for the degree of Master of Arts in German

1. **Disciplinary knowledge, both factual and analytical.** Ours is a very comprehensive graduate program in literature and culture of all periods, visual studies, and linguistics, in which we apply theoretical, digital, and historiographic methods and approaches. We require that students situate their disciplinary knowledge within an interdisciplinary and multicultural context. Graduates will have comprehensive factual knowledge of German literary-cultural periods, movements, authors, and linguistics, as well as the ability to use contemporary tools of analysis. They are able to position themselves within scholarly discourses: broadly at the M.A. level, and, at the Ph.D. level, within their specialties. They express this ability in writing and oral presentation (see outcomes #2 and #4). The program's foundational course (GER 510) covers learning to conduct research in a tier-one research library, techniques of literary analysis and critical approaches, conventions of scholarly writing, use of bibliographic tools, and learning about the profession. Each subsequent course in the program deepens this knowledge and is designed for students to familiarize themselves with methods of systematic literary study that can yield original findings and practice oral and written scholarly communication.
2. **Research and writing expertise.** Students are familiar with fundamental research tools in the humanities as well as tools specific to the study of German literature, culture, and linguistics. They can sustain a nuanced argument in academic writing and can produce well-written academic texts in English and in German. In their writing, they display an awareness of the audience and an understanding of how textual choices reflect coherent argumentation. Students know how to conduct research and understand the value of multiple-draft writing. They know how to use proper citation, how to evaluate print and online sources, and they understand and avoid plagiarism. Our students are thoroughly trained in theoretical, historical, and comparative methodologies of research and writing. From the start, students learn scholarly conventions, especially for footnotes and bibliography, including intensive library workshops to become acquainted with key research resources. Students learn and model critical approaches to a literary text through close readings, analysis, and interpretation of key passages in online posts, class presentations, and informal and formal writing; and students learn to develop several possible approaches to literary interpretation and criticism.
3. **Teaching preparedness and praxis.** Our graduate students participate in a thorough teacher-training program that includes a graduate seminar on teaching methodologies and approaches(GER 582), which trains students in pedagogical best practices as well as in current topics of interest in the field. Students receive ongoing, consistent mentorship from the Director of the Basic Language Program as well as from all faculty members, through a structured system of classroom observations and discussions. They teach across the curriculum, in German, and in English; they teach language as well as literature/culture courses. Students are acquainted with leading language teaching and learning theories, and consider the relationship of those theories to pedagogy. They understand the curricular and institutional contexts within which teaching and learning take place. Their German skills are at a near-native level, commensurate with the demands of the language classroom; in courses taught in English, our students are able to teach writing and argumentation at a very advanced level. Students leave our program ready to teach in any type of German curriculum or institutional context.
4. **Professional development.** Our students are able to submit and present conference papers successfully; they receive guidance in essential conference behavior, including acting as a respondent and handling question-answer sessions. They gain experience in presenting research by participating in our department lecture forum. They can write abstracts, apply for grants, and are aware of the relevant professional organizations and the advantages of membership. They receive training in professional ethics. They are mentored in preparation for the academic and non-academic job market and in interviewing for a variety of positions. Their German and English language skills are excellent. Ability in German is supported by participation in departmental exchange programs and help with grant applications to spend time researching and/or teaching in German-speaking countries. In the program's foundational course GER 510, students study the ethics of the profession, and they learn about the profession by writing a professional email, web page content, a CV, MA/PhD reading lists, a grant application, and a conference abstract.
5. **Mobility and academic exchange.** Students all have substantial experience abroad. They gain this experience by participating in one of our departmental exchanges with German universities and/or by spending time in a German-speaking country conducting research with the support of an external grant (e.g., Fulbright, German Academic Exchange Service). The faculty mentors students through the process of writing grant applications. Our exchanges are bidirectional—we host students here and send them abroad, which means that the graduate students here in Illinois have consistent opportunities to interact with German-speaking visitors.

German, PhD

for the degree of Doctor of Philosophy in German

acting head of department: Carl Niekerk
director of graduate studies: Anke Pinkert
department website: http://www.germanic.illinois.edu
college website: https://las.illinois.edu/
overview of graduate college admissions & requirements: Graduate Admissions (https://grad.illinois.edu/admissions/apply/)
overview of college admissions & requirements:
department office: 2090 Foreign Languages Building, 707 South Mathews Avenue, Urbana, IL 61801
phone: (217) 333-2020
email: germanic@illinois.edu

Graduate Degree Programs in Germanic Languages & Literatures

German, MA (p. 794)
concentration:
Medieval Studies (p. 1101)
German, PhD (p. 796)
concentration:
Medieval Studies (p. 1101)|Second Language Acquisition & Teacher Education (p. 1106)

The Department of Germanic Languages and Literatures offers graduate programs leading to the degrees of Master of Arts in German, and Doctor of Philosophy in German. Students in the department may choose an additional specialization in Cultural Studies and Interpretive Research (http://www.germanic.illinois.edu/graduate/) or a concentration in Medieval Studies. Candidates for the Ph.D. in German may additionally obtain a certificate in Second Language Acquisition and Teacher Education (http://www.slate.uiuc.edu/) (SLATE Certificate).

Admission

Applicants should apply online (www.grad.illinois.edu/admissions/apply/ (http://www.grad.illinois.edu/admissions/apply/)) and submit a statement of purpose, three letters of recommendation and a sample of their written work in English or German or both. For admission to the Master of Arts program, the writing sample might be a term paper, and for admission to the doctoral level, a master's thesis or seminar paper. Original transcripts (with English translations if applicable) showing all undergraduate and graduate work completed should be sent to:

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Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program, and all students teach. Non-native English speakers must first pass a test of their oral English ability (see www.grad.illinois.edu/admissions/taengprof.htm (http://www.grad.illinois.edu/admissions/taengprof.htm)).

Research Interests

The department faculty includes nationally and internationally recognized scholars in all areas of research within the field, from older and modern German language, literature, and culture to Scandinavian languages, literatures and cultures. Some of the current research areas of faculty encompass (but are not limited to) Arctic Studies, Literature and Music, Literature and Medicine, Migration and Multilingualism, Film and Visual Studies, Digital Humanities, Memory Studies, and Intersectional Studies of Race, Gender, and Sexuality. We offer courses on topics in German and Scandinavian languages, literatures, and cultures across all periods, including historical and synchronic Germanic linguistics, and German language pedagogy. The University Library has one of the nation's outstanding collections of works pertaining to study and research in Germanic literatures of all periods and in Germanic and general linguistics.

Financial Aid

All students accepted into the program have financial support, usually in the form of a Teaching Assistantship (see www.grad.illinois.edu/admissions/taengprof.htm (http://www.grad.illinois.edu/admissions/taengprof.htm)).

The department has contacts with a variety of universities and institutions in German-speaking countries; these cooperative endeavors also include arrangements for graduate students to study and teach abroad.

For continuing graduate students, the awarding of financial aid of all types is contingent upon making satisfactory progress toward a degree.

for the degree of Doctor of Philosophy in German

Applicants must meet the admission standards outlined for the Master of Arts and, in addition, hold a Master of Arts in German (or equivalent) with a graduate grade point average of 3.5 (A = 4.0). Admission to the program is on a competitive basis.

Candidates for the Ph.D. in German may specialize in older German literature, modern German literature, Germanic linguistics, or Scandinavian literature.

Students working toward the Ph.D. degree must have completed all requirements for the Master of Arts degree given above and must complete an additional 40 graduate hours of coursework approved by the graduate adviser. At least 32 graduate hours must be for courses in Germanic Languages and Literatures. No more than 8 hours of credit in 400 level courses beyond those presented for the M.A. will be counted toward these ten units. The 40 hours may include up to 4 hours of GER 593, but may not include any credit for GER 496 for work taken as independent study. Residence requirements are those of the Graduate College.

Code	Title	Hours
One course in German or Scandinavian literature before 1500		4
One course in German literature since 1500		4
One course in German, Germanic, or Scandinavian linguistics		4
GER 582	German Language Teaching	4

GER 515 & GER 520	Middle High German and History of the German Language (unless completed during masters)	8
Course work electives at the 500 level (to total 40)		
GER 593	Research in Special Topics (4 max hours applied toward degree)	0-4
Language Requirement: a reading knowledge of two research languages other than English and German		
GER 599	Thesis Research (min/max applied toward degree)	12-32
Total Hours		68-72

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Credit in GER 496 will not count toward degree requirements	
Teaching of elementary or intermediate German (at least one half-time appointment as teaching assistant for one academic year).	
Minimum Hours Required in the Unit:	32 (not including GER 599)
Minimum 500-level Hours Required Overall:	72
Masters Degree Required for Admission to PhD?	Yes
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the* department's Website *(*http://www.germanic.illinois.edu/graduate/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: German, PhD

Learning Outcomes for the degree of Doctor of Philosophy in German

1. **Disciplinary knowledge, both factual and analytical.** Ours is a very comprehensive graduate program in literature and culture of all periods, visual studies, and linguistics, in which we apply theoretical, digital, and historiographic methods and approaches. We require that students situate their disciplinary knowledge within an interdisciplinary and multicultural context. Graduates will have comprehensive factual knowledge of German literary-cultural periods, movements, authors, and linguistics, as well as the ability to use contemporary tools of analysis. They are able to position themselves within scholarly discourses: broadly at the M.A. level, and, at the Ph.D. level, within their specialties. They express this ability in writing and oral presentation (see outcomes #2 and #4). The program's foundational course (GER 510) covers learning to conduct research in a tier-one research library, techniques of literary analysis and critical approaches, conventions of scholarly writing, use of bibliographic tools, and learning about the profession. Each subsequent course in the program deepens this knowledge and is designed for students to familiarize themselves with methods of systematic literary study that can yield original findings and practice oral and written scholarly communication.
2. **Research and writing expertise.** Students are familiar with fundamental research tools in the humanities as well as tools specific to the study of German literature, culture, and linguistics. They can sustain a nuanced argument in academic writing and can produce well-written academic texts in English and in German. In their writing, they display an awareness of the audience and an understanding of how textual choices reflect coherent argumentation. Students know how to conduct research and understand the value of multiple-draft writing. They know how to use proper citation, how to evaluate print and online sources, and they understand and avoid plagiarism. Our students are thoroughly trained in theoretical, historical, and comparative methodologies of research and writing. From the start, students learn scholarly conventions, especially for footnotes and bibliography, including intensive library workshops to become acquainted with key research resources. Students learn and model critical approaches to a literary text through close readings, analysis, and interpretation of key passages in online posts, class presentations, and informal and formal writing; and students learn to develop several possible approaches to literary interpretation and criticism.
3. **Teaching preparedness and praxis.** Our graduate students participate in a thorough teacher-training program that includes a graduate seminar on teaching methodologies and approaches(GER 582), which trains students in pedagogical best practices as well as in current topics of interest in the field. Students receive ongoing, consistent mentorship from the Director of the Basic Language Program as well as from all faculty members, through a structured system of classroom observations and discussions. They teach across the curriculum, in German, and in English; they teach language as well as literature/culture courses. Students are acquainted with leading language teaching and learning theories, and consider the relationship of those theories to pedagogy. They understand the curricular and institutional contexts within which teaching and learning take place. Their German skills are at a near-native level, commensurate with the demands of the language classroom; in courses taught in English, our students are able to teach writing and argumentation at a very advanced level. Students leave our program ready to teach in any type of German curriculum or institutional context.
4. **Professional development.** Our students are able to submit and present conference papers successfully; they receive guidance in essential conference behavior, including acting as a respondent and handling question-answer sessions. They gain experience in presenting research by participating in our department lecture forum. They can write abstracts, apply for grants, and are aware of the relevant professional organizations and the advantages of membership. They receive training in professional ethics. They are mentored in preparation for the academic and non-academic job market and in interviewing for a variety of positions. Their German and English language skills are excellent. Ability in German is supported by participation in departmental exchange programs and help with grant applications to spend time researching and/or teaching in German-speaking countries. In the program's foundational course GER 510, students study the ethics of the profession, and they learn about the profession by writing a professional email, web

page content, a CV, MA/PhD reading lists, a grant application, and a conference abstract.

5. **Mobility and academic exchange.** Students all have substantial experience abroad. They gain this experience by participating in one of our departmental exchanges with German universities and/or by spending time in a German-speaking country conducting research with the support of an external grant (e.g., Fulbright, German Academic Exchange Service). The faculty mentors students through the process of writing grant applications. Our exchanges are bidirectional—we host students here and send them abroad, which means that the graduate students here in Illinois have consistent opportunities to interact with German-speaking visitors.

Health Administration, MS

for the degree of Master of Science in Health Administration

Department Head: Kim Graber
Director of Graduate Studies: Steven Petruzzello
Interim Director of Program: Laura Rice
Graduate Office: Julie Jenkins
Graduate Office Address: 906 South Goodwin Ave, 112 Freer Hall MC-052, Urbana, IL 61801
Graduate Phone: (217) 333-1083
Graduate Email: jjenkns@illinois.edu
Department Website: https://ahs.illinois.edu/community-health (https://ahs.illinois.edu/community-health/)
Program Website: https://ahs.illinois.edu/msha-overview (https://ahs.illinois.edu/msha-overview/)

APPLICATIONS SHOULD BE SUBMITTED THROUGH SOPHAS. PLEASE SEE PROGRAM WEBSITE FOR MORE INFORMATION. https://ahs.illinois.edu/msha-apply (https://ahs.illinois.edu/msha-apply/)

The Master of Science in Health Administration program is designed to prepare graduate students to become successful healthcare managers and administrators. Students will gain the knowledge and skills necessary to manage the complex United States healthcare system efficiently and effectively.

> Our mission is: Preparing future leaders in healthcare to improve health systems through effective management.
> Our vision is: To be nationally recognized for producing top leaders in healthcare management.
> Our values: Professionalism Respect Inclusive Distinguished Excellence

The Master of Science in Health Administration program seeks students with a 3.0 GPA or higher from their bachelor's degree. Generally the degree is completed in two years. No undergraduate courses will satisfy courses for both an undergraduate and master's degree (i.e. "double dipping"). Students entering the program are encouraged to have completed undergraduate coursework in health, health administration, and other business related courses with all majors accepted.

for the degree of Master of Science Major in Health Administration

The Master of Science in Health Administration program requires completion of 48 hours of coursework including an internship. The courses are intended to provide overall knowledge of the United States healthcare system while promoting student's flexibility in selecting electives. The thesis option provides students the opportunity to study a section of the healthcare system more thoroughly through in-depth research.

A student may choose to write an acceptable thesis for 4 hours of credit (i.e., Community Health 599) or select a non-thesis option by substituting 4 hours of credit (i.e., approved credit that includes 4 hours of Community Health 593 (Independent Study)). The independent study is a practical application project in conjunction with the student's internship experience.

Thesis Requirement Curriculum

Code	Title	Hours
Total Core Required Hours		**36**
CHLH 5## Strategic Planning in Healthcare		4
CHLH 573	Biostatistics in Public Health	4
CHLH 577	Health Program Evaluation	4
CHLH 5## Operations Management in Healthcare		4
CHLH 456	Organization of Health Care	4
CHLH 550	Health Policy: United States	4
CHLH 585	Community Health Internship	4
CHLH 5## Finance in Health Care		
CHLH 599	Thesis Research	4
Total Elective Hours		**12**
Chosen in accordance with the student's advisor		
Total Hours Required for Graduation		**48**

Non-Thesis Requirement Curriculum

Code	Title	Hours
Total Core Required Hours		**36**
CHLH 5## Strategic Planning in Healthcare		4
CHLH 573	Biostatistics in Public Health	4
CHLH 577	Health Program Evaluation	4
CHLH 5## Operations Management in Healthcare		4
CHLH 456	Organization of Health Care	4
CHLH 550	Health Policy: United States	4
CHLH 585	Community Health Internship	4
CHLH 593	Special Projects	4
CHLH 5## Finance in Healthcare		
Total Elective Hours		**12**
Chosen in accordance with the student's advisor		
Total Hours Required for Graduation		**48**

Other Requirements [1]

Requirement	Description
Minimum GPA:	3.0

Health Communication, MS

for the degree of Master of Science in Health Communication (on campus & online)

chair of department: John Caughlin
director of graduate studies: Leanne Knobloch
department website: http://communication.illinois.edu
college website: https://las.illinois.edu/
overview of graduate college admissions & requirements: Graduate Admissions (https://grad.illinois.edu/admissions/apply/)
overview of department admissions & requirements: Web site (https://hcom.illinois.edu/admissions/)
department office: 3001 Lincoln Hall, 702 S. Wright Street, Urbana, IL 61801
phone: (217) 333-2683
email: communication@illinois.edu

The Department of Communication offers an online Master of Science degree (M.S.) in in Health Communication. This program is not offered in a face to face format. Apply to the Master of Science program only; applications to the online Master of Arts in Communication are not being accepted. More information about the online program is available at www.hcom.illinois.edu (http://www.hcom.illinois.edu/).

Graduate Degree Programs in Communication

Communication, MA (p. 670)
concentration:
Medieval Studies (p. 1101)
Health Communication, MS (p. 799) **(on campus & online)**
concentration:
Medieval Studies (p. 1101)
Communication, PhD (p. 671)
concentration:
Medieval Studies (p. 1101)|Second Language Acquisition & Teacher Education (p. 1106)|Writing Studies Concentration (p. 1111)

The Department of Communication offers a broad curriculum in communication research. In consultation with an advisor, students assemble individualized programs, concentrating in organizational and group communication, interpersonal and family communication, health communication, communication technology, political communication, rhetoric and public discourse, communication in cultural contexts, or mass communication. Interdisciplinary programs are also encouraged.

Admission

An application must include official transcripts from every post-secondary institution the applicant has attended; scores on the general aptitude parts of the Graduate Record Examination (GRE); at least three letters of recommendation, preferably from academic recommenders; a major paper or essay as a sample of academic writing; and a statement of purpose. Students whose native language is not English must present their official scores on the Test of English as a Foreign Language (TOEFL) examination as part of their applications. The department follows the Graduate College's recommendations for English proficiency. Detailed information about admissions and financial aid can be found on the department's Web site (https://communication.illinois.edu/admissions/apply-graduate-program/). Ordinarily, students are admitted to begin graduate study in the fall semester.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program.

Financial Aid

Financial aid is usually offered in the form of part-time teaching assistantships; some fellowships and research assistantships are available.

for the degree of Master of Science in Health Communication

The Department of Communication offers an online Master of Science degree (M.S.) in in Health Communication. This program is not offered in a face to face format. Apply to the Master of Science program only; applications to the online Master of Arts in Communication are not being accepted. More information about the online program is available at www.hcom.illinois.edu (http://www.hcom.illinois.edu/).

For additional details and requirements refer to the department's Graduate Programs *(*http://www.communication.illinois.edu/prospective/grad/degrees/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

This degree program can be completed either on campus or online, the requirements are listed below:

Code	Title	Hours
Health Communication Research Methods I and II; Capstone Individual Study		8
Elective hours (24 min)		24
Independent Study Hours (4 max applied toward degree)		4
Total Hours		32

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum Hours Required Within the Unit:	28
Minimum 500-level Hours Required Overall:	12 (8 in CMN)
Minimum GPA:	2.75

Learning Outcomes: Health Communication, MS

Learning Outcomes for the degree of Master of Science in Health Communication (on-campus & online)

Students who complete the Health Communication program

1. Understand the role of communication processes in the reception and delivery of health care services and information. They learn that communication is not only the transmission of messages but also the interaction between humans and non-human technologies in the creation of practical understandings of health processes.
2. Are able to read and digest qualitative and quantitative research concerning health care services in order to assist practitioners and patients in the most effective delivery of health care messages and information.
3. Are able to identify the effectiveness and limitations of persuasion strategies used to inform and influence audience's adoption of health care information and behaviors. This outcome includes

dedicated health campaigns as well as the influence of media on health behaviors and beliefs.

4. Are familiar with interpersonal communication behaviors in health care settings as well as in private and public life that lead to or prevent the adoption of healthy behaviors. This outcome includes social support and health outcomes, patient-provider communication as well as family and support group communication related to health.
5. Are familiar with the organizational setting in which health communication takes place, particularly with reference to inter-professional communication, managerial communication, and the policies that guide health care services.6....are able to recognize the role of theory in understanding health communication processes and successfully utilize theoretical frameworks to explain breakdowns in health communication and propose methods for repairing communication problems in interpersonal, organizational and social/mediated fields.

Health Technology, MS

for the Master of Science in Health Technology

Department Head: Kim Graber
Director of Graduate Studies: Steven Petruzzello
Director of Program: Wendy Rogers
Graduate Office: Julie Jenkins
Graduate Office Address: 906 South Goodwin Ave, 112 Freer Hall MC-052, Urbana, IL 61801
Graduate Phone: (217) 333-1083
Graduate Email: jjenkns@illinois.edu
Department Website: https://ahs.illinois.edu/community-health (https://ahs.illinois.edu/community-health/)
Program Website: https://ahs.illinois.edu/ht-overview (https://ahs.illinois.edu/ht-overview/)
Program Questions: healthtech@illinois.edu

The MS in Health Technology is designed to educate the next generation of Health Technology Professionals in the development, testing, and use of technologies that promote health, rehabilitation, mitigate disability, and improve independence and quality of life. This includes bringing end-users (e.g., individuals with chronic conditions, older adults, persons with disabilities), industry professionals, and applied health professionals together with Illinois students and faculty in a multidisciplinary and inter-generational environment to identify existing problems and develop technologies to solve them.

Graduate Degree Programs in Applied Health Sciences

Health Technology, MS (p. 801)

Admissions

Students should have an undergraduate degree in a health or science related field or engineering. Applicants should have a minimum grade point average of 3.00 (A = 4.00) or equivalent for the last two years of undergraduate study and show evidence of strong quantitative skills and of serious interest in health technology through their personal statement. Students with less than a 3.0 GPA may be considered for a limited status admission.

Program prerequisites* or equivalents include:

Introduction to Computer Science (CS 125 or 105)
Introduction to Statistics (CHLH 244)
Introduction to Psychology (PSYC 100)
Intro to Public Health (CHLH 100)
Linear Algebra (MATH 125, or 225, 410, 415)
Research Methods (CHLH 201)

*Promising students might be admitted with a contingency that they complete the prerequisites before the start of the first semester.

All applicants whose native language is not English must submit a minimum TOEFL score of 103 (iBT), 254 (CBT), or 611 (PBT); or minimum International English Language Testing System (IELTS) academic exam scores of 7.0 overall and 6.0 in all subsections. Applicants may be exempt from the TOEFL if certain criteria are met. Applicants with lesser scores may still apply. Limited status is granted for lesser scores and requires enrollment in English as a Second Language (ESL) courses based on an ESL Placement Test (EPT) taken upon arrival to campus.

Financial Aid

Students in the MS in Health Technology program are not eligible for tuition-waiver generating assistantships. Students may apply for scholarships available through the University.

for the Master of Science in Health Technology

Code	Title	Hours
Core Requirements:		
HT 501	Understanding Users of Health Technology	4
HT 502	Human Factors Methods for Health Technology	4
HT 503	Hardware Engineering for Health Technology	4
HT 504	Software Engineering for Health Technology	4
HT 510	Health Technology Capstone Orientation	1
HT 511	Health Technology Capstone Development	3
HT 512	Health Technology Capstone Implementation	4
Total Core Required Hours:		**24**
Health Technology Elective List		
12 hours chosen from:		
BIOE 414	Biomedical Instrumentation	3
BIOE 415	Biomedical Instrumentation Lab	2
BIOE 416	Biosensors	3
BIOE 507	Advanced Bioinstrumentation	4
BIOE 598	Special Topics (JI: Finite Element Methods in Biomed)	1 to 4
BIOE 598	Special Topics (NIE: Surgical Technologies)	1 to 4
CHLH 421	Health Data Analysis	3 or 4
CHLH 470	Technology, Health, and Aging	3 or 4
CHLH 494	Special Topics	1 to 4
CS 440	Artificial Intelligence	3 or 4
CS 465	User Interface Design	4
CS 565	Human-Computer Interaction	4
KIN 474	Tech-Driven Health Intervention	3 or 4
ECE 422	Computer Security I	4

ECE 437	Sensors and Instrumentation	3
ECE 470	Introduction to Robotics	4
ECE 498	Special Topics in ECE	0 to 4
IE 445	Human Performance and Cognition in Context	3 or 4
IE 528	Computing for Data Analytics	4
IE 529	Stats of Big Data & Clustering	4
IE 531	Algorithms for Data Analytics	4
IE 532	Analysis of Network Data	4
IE 533	Big Graphs and Social Networks	4
IE 534	Deep Learning	4
IE 546	Human Factors in Health Care Engineering Systems	4
ME 481	Whole-Body Musculoskel Biomech	3 or 4
RST 429	Contemporary Issues in Recreation, Sport and Tourism	4
RST 441	Community Planning and Engagement	3 or 4
RST 501	Concepts & Applications in Recreation, Sport & Tourism	4
RST 502	Critical Issues Recreation Mgt	4
RST 520	Critical Issues Sport Mgt	4
RST 530	Critical Issues Tourism Mgt	4
RST 586	Health and Leisure in Recreation, Sport and Tourism	4
SHS 473	Augmentative & Alt Comm	2 to 4
SHS 553	Hearing Aids and Amplification	4
SHS 555	Comm Lang Probs Hear Impaired	4
SHS 556	Sens Prosth Devices Hear Loss	4
SHS 580	Cochlear Implants	4
Total Required Hours		**36**

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum Hours Required within the Unit at the 500 level:	8
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	3.0

History, MA

for the degree of Master of Arts in History

chair of department: Dana Rabin
director of graduate studies: Carol Symes
department website: http://www.history.illinois.edu
department faculty:
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department office: 309 Gregory Hall, 810 South Wright Street, Urbana, IL 61801
phone: (217) 244-2591
email: history@illinois.edu

Students enrolled in the Ph.D. program can usually petition to earn a Master of Arts in History within three semesters.

Graduate Degree Programs in History

History, MA (p. 802)
optional concentrations:
African American Studies (p. 1075)|Medieval Studies (p. 1101)
History, PhD (p. 802)
optional concentrations:
African American Studies (p. 1075)|Medieval Studies (p. 1101)
Teaching of Social Studies, MA
Joint degree:
History, MA and Library & Information Science, MS (p. 1153)

The Department of History offers graduate courses leading to the Doctor of Philosophy degree, complete details of which may be found in the Graduate Studies section of the department's web site. Students are not normally admitted to a terminal master's degree program.

Admission

Applicants should have a minimum of 20 semester hours of undergraduate work in history and cognate disciplines with an overall GPA of 3.25 in the last two years. Applicants who have a master's degree should have a grade point average of 3.5 for previous graduate-level work. All applicants are required to submit Graduate Record Examination (GRE) scores (verbal, writing, and quantitative are mandatory; history is optional). All applicants are required to submit a writing sample. Language preparation may be weighted heavily, depending upon the field of specialization. Foreign students whose native language is not English need a paper-based Test of English as a Foreign Language (TOEFL) score of at least 600 (250 on the computer-based test). Most successful applicants have GRE verbal scores of over 80% and/or TOEFL scores of over 630 (260 computer). Only in exceptional circumstances are students admitted for the spring term. The department is not currently admitting to the Teaching of Social Studies program. For additional details refer to www.history.illinois.edu/graduate/prospective/ (http://www.history.illinois.edu/graduate/prospective/).

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program.

Facilities and Resources

The extraordinary University Library is the department's main research facility; within it, the History, Philosophy & Newspaper Library, the Rare Book Room, and the area studies libraries (Slavic, Africana, Latin American, Asian Libraries) all serve faculty and students with expert bibliographers and focused collections. Among other special collections much used by historians are Afro-Americana and Women's Studies; the library is also a major repository for government documents.

Financial Aid

Financial aid is almost always awarded on an academic-year basis. Applications by incoming students are considered with admission applications. All fellowships and assistantships include a stipend plus tuition and service fee waiver.

Both University and department endowment fellowships are available to entering students and to advanced doctoral students embarked on their research or the writing of their dissertations. Foreign Language and Area Studies (FLAS) Fellowships may support first- and second-year students who have special interests in foreign area studies. Entering students from underrepresented groups may be awarded one- to three-year Graduate College Fellowships. The Illinois Consortium for Educational Opportunity Program (ICEOP) offers renewable fellowships to underrepresented minority students who are Illinois residents and plan academic careers within the state. Half-time teaching assistantships are the department's primary form of financial aid for graduate students in the Ph.D. program. Students who progress satisfactorily toward their degrees and demonstrate effective teaching will have their teaching assistantships renewed for a second, and usually a third, year.

for the degree of Master of Arts in History

Thesis Option

Code	Title	Hours
HIST 598 (2 hours per term) is required of candidates who hold teaching assistantships, during each semester they hold an appointment		
HIST 593 & HIST 594	Approaches to History and Intro Historical Writing	8
Two additional 500-level courses in history		8
Two courses in each of two of the fields of specialization offered by the department.		16
Language Requirement: candidate must demonstrate ability to read one foreign language related to his or her field of interest as approved by the graduate advisers		
HIST 599	Thesis Research (8 max applied toward degree)	8
Total Hours		32

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall:	16
At least one research seminar (HIST 596) with a grade of B or better must be included.	
Students may take up to two of the required eight courses in departments other than History, if approved.	
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the department's* graduate degree requirements *(*http://www.history.illinois.edu/graduate/current/requirements/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Non-Thesis Option

Code	Title	Hours
HIST 598 (2 hours per term) is required of candidates who hold teaching assistantships, during each semester they hold an appointment		
HIST 593 & HIST 594	Approaches to History and Intro Historical Writing	8
Two additional 500-level courses in history		8
Two courses in each of two of the fields of specialization offered by the department.		16
Language Requirement: candidate must demonstrate ability to read one foreign language related to his or her field of interest as approved by the graduate advisers		
Total Hours		32

Other Requirements [1]

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Students may take up to two of the required eight courses in departments other than History, if approved.	
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History, PhD

for the degree of Doctor of Philosophy in History

chair of department: Dana Rabin
director of graduate studies: Carol Symes
department website: http://www.history.illinois.edu
department faculty:
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department office: 309 Gregory Hall, 810 South Wright Street, Urbana, IL 61801
phone: (217) 244-2591
email: history@illinois.edu

Graduate Degree Programs in History

History, MA (p. 802)
optional concentrations:
African American Studies (p. 1075)|Medieval Studies (p. 1101)
History, PhD (p. 802)
optional concentrations:
African American Studies (p. 1075)|Medieval Studies (p. 1101)
Teaching of Social Studies, MA
Joint degree:
History, MA and Library & Information Science, MS (p. 1153)

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Admission

Applicants should have a minimum of 20 semester hours of undergraduate work in history and cognate disciplines with an overall GPA of 3.25 in the last two years. Applicants who have a master's degree should have a grade point average of 3.5 for previous graduate-level work. All applicants are required to submit Graduate Record Examination (GRE) scores (verbal, writing, and quantitative are mandatory; history is optional). All applicants are required to submit a writing sample. Language preparation may be weighted heavily, depending upon the field of specialization. Foreign students whose native language is not English need a paper-based Test of English as a Foreign Language (TOEFL) score of at least 600 (250 on the computer-based test). Most successful applicants have GRE verbal scores of over 80% and/or TOEFL scores of over 630 (260 computer). Only in exceptional circumstances are students admitted for the spring term. The department is not currently admitting to the Teaching of Social Studies program. For additional details refer to www.history.illinois.edu/graduate/prospective/ (http://www.history.illinois.edu/graduate/prospective/).

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Facilities and Resources

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Financial Aid

Financial aid is almost always awarded on an academic-year basis. Applications by incoming students are considered with admission applications. All fellowships and assistantships include a stipend plus tuition and service fee waiver.

Both University and department endowment fellowships are available to entering students and to advanced doctoral students embarked on their research or the writing of their dissertations. Foreign Language and Area Studies (FLAS) Fellowships may support first- and second-year students who have special interests in foreign area studies. Entering students from underrepresented groups may be awarded one- to three-year Graduate College Fellowships. The Illinois Consortium for Educational Opportunity Program (ICEOP) offers renewable fellowships to underrepresented minority students who are Illinois residents and plan academic careers within the state. Half-time teaching assistantships are the department's primary form of financial aid for graduate students in the Ph.D. program. Students who progress satisfactorily toward their degrees and demonstrate effective teaching will have their teaching assistantships renewed for a second, and usually a third, year.

for the degree of Doctor of Philosophy in History

In certain circumstances, a student in British history may substitute courses in quantitative skills for the second language. For the preliminary examination, the candidate customarily offers three fields in history - one major and two minor fields. At least one of these must be a "geographical/chronological field" and one must be a "comparative/thematic" field. One must involve a period of time before 1815. At least two geographical areas must also be represented by the fields offered for the examination. One of the three fields may be in a specialization outside the Department of History or may be a "constructed" field specially designed by the candidate in consultation with field examiners and the major advisor.

Entering with approved M.S./M.A. degree

Code	Title	Hours
HIST 598 (2 hours per term) is required of candidates who hold teaching assistantships during each semester they hold an appointment; students with research assistantships may enroll for HIST 596 for 2 hours credit per semester during the assistantship.		
HIST 593 & HIST 594	Approaches to History and Intro Historical Writing	8
Research seminars (or HIST 596), under the direction of at least two faculty members (may be reduced by one four-hour course at the discretion of the advisor)		8
Three additional courses at the 500 level		12
HIST 591	History and Social Theory	4
HIST 597	Reading Course (Oral History)	4
Another methods course in consultation with the Director of Graduate Studies		
To fulfill the minimum requirement of 64 or 96 graduate hours, 16 graduate hours in disciplines other than history may be applied.		0-16
Language Requirement: The department requires proven competence in two foreign languages for the Ph.D. degree, except for students of US History who must demonstrate competence in one foreign language. Language competence means the ability to read and comprehend a foreign language well enough to paraphrase a scholarly article in English. Students admitted into the Ph.D. program are expected to demonstrate competence in the second language within four semesters and always before they take their last prelim exam. A major advisor may require a student to acquire a reading knowledge of more than two languages, or more than one for US History students.		

HIST 599	Thesis Research (32 max applied toward degree)	32
Total Hours		64

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Qualifying Exam Required	No
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the department's* graduate degree requirements *(*http://www.history.illinois.edu/graduate/current/requirements/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Entering with approved B.S./B.A. degree

Code	Title	Hours
HIST 598 (2 hours per term) is required of candidates who hold teaching assistantships during each semester they hold an appointment; students with research assistantships may enroll for HIST 596 for 2 hours credit per semester during the assistantship.		
HIST 593 & HIST 594	Approaches to History and Intro Historical Writing	8
Research seminars (or HIST 596), under the direction of at least two faculty members (may be reduced by one four-hour course at the discretion of the advisor)		12
Three additional courses at the 500 level		12
HIST 591	History and Social Theory	4
HIST 597	Reading Course (Oral History)	4
To fulfill the minimum requirement of 64 or 96 graduate hours, 16 graduate hours in disciplines other than history may be applied.		0-16
Language Requirement: The department requires proven competence in two foreign languages for the Ph.D. degree, except for students of US History who must demonstrate competence in one foreign language. Language competence means the ability to read and comprehend a foreign language well enough to paraphrase a scholarly article in English. Students admitted into the Ph.D. program are expected to demonstrate competence in the second language within four semesters and always before they take their last prelim exam. A major advisor may require a student to acquire a reading knowledge of more than two languages, or more than one for US History students.		
HIST 599	Thesis Research (32 max applied toward degree)	32
Total Hours		96

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Qualifying Exam Required	No
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the department's* graduate degree requirements *(*http://www.history.illinois.edu/graduate/current/requirements/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: History, PhD

Learning Outcomes for the degree of Doctor of Philosophy in History

1. **Field expertise:** broad, deep, and critical knowledge of key areas of chosen study, in both selected chronological-geographic fields and comparative thematic fields.
2. **Methodological knowledge:** understanding and mastery of disciplinary and interdisciplinary methods and concepts.
3. **Research, writing, and dissemination**: Experience and accomplishment in scholarly research based on primary sources, analytical writing, and presenting this work in print and oral presentation.
4. **Teaching:** Pedagogical training and experience.
5. **Professional development:** preparation for the diverse career expectations and possibilities in academia and varied institutions in the public and private sectors.

Human Development & Family Studies, MS

for the degree of Master of Science in Human Development & Family Studies

department head: Ramona Faith Oswald, Interim Head
director of graduate programs: Brian Ogolsky
department website: https://hdfs.illinois.edu
department faculty: https://hdfs.illinois.edu/directory/faculty (https://hdfs.illinois.edu/directory/faculty/)
overview of college admissions & requirements: https://hdfs.illinois.edu/graduate/admissions (https://hdfs.illinois.edu/graduate/admissions/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://aces.illinois.edu/
department office: 222 Bevier Hall, 905 South Goodwin Avenue, Urbana, IL 61801
phone: (217) 333-3790
email: hdfs@aces.illinois.edu

Graduate Degree Programs in Human Development & Family Studies

Graduate Majors:

Human Development and Family Studies, MS (p. 805)
Human Development and Family Studies, PhD (p. 807)

The Ph.D. in Human Development and Family Studies (HDFS) focuses on positive development and resilience of diverse children, youth, and families in everyday life contexts. Our doctoral concentration is

interdisciplinary, drawing upon the canons of anthropology, economics, education, family studies, human development, psychology, and sociology. Further, we value qualitative, quantitative, and mixed methodologies.

Students who enter the doctoral program without a master's will complete one as the first part of their doctoral requirements.

Admission

Admission is based upon both academic record and the applicant's fit with faculty research programs. We examine grade point average (GPA), Graduate Record Examination (GRE, we will accept MCAT scores for Medical Scholar applicants) scores, letters of recommendation, and a personal statement. International applicants from non-English speaking countries must have an official paper Test of English as a Foreign Language (TOEFL) score of at least 103 on the internet based test. We will not admit anyone with a GPA less than 3.0 on a 4.0 scale. All applicants are required to submit official GRE scores (MCAT in the case of Medical Scholar applicants) and to have previous coursework in a relevant area of social or behavioral sciences. GRE, MCAT and TOEFL scores should be taken no more than two years prior to application. Our application deadline is December 15 for possible admission the following fall semester. We admit students for fall enrollment only. Please refer to our department website for further information.

Graduate Teaching Experience

We do not require our students to teach but recognize the importance of teacher development for their future marketability. Thus, we make teaching assistantships available and encourage students to pursue a variety of teaching experiences as well as mentorship from experienced instructors. We also encourage our students to utilize the variety of teacher training resources that are available across campus.

Faculty Research Interests

Faculty information is available on our department website at http://hdfs.illinois.edu/directory/faculty (http://hdfs.illinois.edu/directory/faculty/).

Centers, Programs, and Institutes

Child Care Resource Service (http://ccrs.illinois.edu/)
Child Development Lab (www.cdl.illinois.edu (http://www.cdl.illinois.edu/))
Pampered Chef Family Resiliency Program (www.familyresiliency.illinois.edu (http://www.familyresiliency.illinois.edu/))
Family Resiliency Center (www.familyresiliency.illinois.edu (http://www.familyresiliency.illinois.edu/))
University of Illinois Extension (http://web.extension.illinois.edu/state/index.html (http://web.extension.illinois.edu/state/))

Facilities and Resources

Bevier Hall
Child Development Lab
Doris Kelly Christopher Hall
Early Child Development Lab

Financial Aid

We are committed to funding all of our students who are making timely progress. The duration and amount of our commitment varies by program. Funding may include fellowships, research assistantships, and/or teaching assistantships. These opportunities typically include stipends and tuition waivers. In some cases, fees are also waived. All applicants are automatically considered for all department funding opportunities; there is no separate application process. Federal and state financial aid is completely separate from the support provided by our department. For information regarding federal and state financial aid, please refer to www.osfa.illinois.edu/ (http://www.osfa.illinois.edu/).

for the degree of Master of Science in Human Development & Family Studies

For additional details and requirements refer to the department's Graduate Program Information (http://hdfs.illinois.edu/graduate/handbook/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
Theory		
HDFS 501	Human Development Theories	4
HDFS 521	Family Theories	4
HDFS 533	Community In American Society	4
Research Methods and Statistics		**12**
HDFS 590	Advanced Research Methods	
HDFS 591	Qualitative Methods	
HDFS 594	Intermed Statistical Analysis	
HDFS 599	Thesis Research	8
Total Hours		32

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall:	12 (8 within the unit)
A doctoral student terminating our program early and without a master's thesis, must complete 36 hours rather than 32.	
Minimum GPA:	2.75

Learning Outcomes: Human Development and Family Studies, MS

Learning Outcomes for the degree of Master of Science in Human Development & Family Studies

HDFS Graduate Student Learning Outcomes

1. HDFS graduate students will demonstrate subject matter expertise, including theoretical and substantive expertise in a specialized area
   a. Recall key principles, theories, and concepts used in HDFS
   b. Apply key principles, theories, and concepts to the study of HDFS
   c. Critique current theories and empirical knowledge regarding HDFS
   d. Evaluate current knowledge in a specific substantive area using two distinct theories
   e. Identify knowledge gaps in a specific substantive area
   f. Pose questions to remedy said gap

2. HDFS graduate students will demonstrate social science methodology expertise
   a. Apply key principles, concepts and analytic strategies used in quantitative research
   b. Apply key principles, concepts and analytic strategies used in qualitative research
   c. Use data management and analysis software (e.g., SPSS, NVivo, MAXQDA; HLM, R)
   d. Evaluate the methodological strengths and limitations of empirical studies
   e. Design and defend a complete research project
   f. Complete an IRB application
   g. Complete an ethics certificate relevant to project
   h. Conduct a research project as per protocol and ethical standards
3. HDFS graduate students will demonstrate professional competence skills
   a. Identify career and professional goals
   b. Develop leadership skills (e.g., through formal positions; informal mentoring of undergraduates or new graduate students; representing the department; participation in class or lab teamwork)
   c. Develop professional network to support career and professional goals (e.g., relationships with mentors; participation in professional organizations)
   d. Create and maintain a CV and other job-related materials (e.g., cover letter; teaching philosophy; research statement)
   e. Exhibit professional and ethical behavior
   f. Make decisions and solve problems
   g. Collaborate to achieve group goals
4. HDFS graduate students will demonstrate scholarly communication skills in English
   a. Use effective written communication
      i. Use appropriate grammar and writing mechanics
      ii. Demonstrate a working knowledge of APA style
      iii. Respond to constructive criticism (e.g., revision process, peer review)
      iv. Produce written work that is organized, logical, and fully developed
   b. Use effective oral communication
      i. Clearly and logically present ideas aloud through presentation to class or group
   c. Use effective visual communication
      i. Use clear and logical charts, graphs, and other visual displays to present ideas
5. HDFS graduate students will demonstrate a critical and reflexive orientation toward and sensitivity to issues of diversity and inclusion
   a. Critically examine one's own beliefs, assumptions, values, attitudes, and biases regarding diverse individuals and families
   b. Reflect on one's own interconnected positions, privileges, and disadvantages across multiple contexts
   c. Demonstrate awareness of and sensitivity to issues of diversity and inclusion in one's own work (written, oral, and visual communication)

Human Development & Family Studies, PhD

for the degree of Doctor of Philosophy in Human Development & Family Studies

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department head: Ramona Faith Oswald, Interim Dept Head
director of graduate programs: Brian Ogolsky
department website: https://hdfs.illinois.edu
department faculty: https://hdfs.illinois.edu/directory/faculty (https://hdfs.illinois.edu/directory/faculty/)
overview of college admissions & requirements: https://hdfs.illinois.edu/graduate/admissions (https://hdfs.illinois.edu/graduate/admissions/)
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college website: https://aces.illinois.edu/
department office: 222 Bevier Hall, 905 South Goodwin Avenue, Urbana, IL 61801
phone: (217) 333-3790
email: hdfs@aces.illinois.edu

Graduate Degree Programs in Human Development & Family Studies

Graduate Majors:

Human Development and Family Studies, MS (p. 805)
Human Development and Family Studies, PhD (p. 807)

The HDFS doctoral program prepares students to be researchers, educators, policy developers, or professionals who develop, evaluate, and implement programs for children, families, and communities.

Students who enter the doctoral program without a master's will complete one as the first part of their doctoral requirements.

Admission

Admission is based upon both academic record and the applicant's fit with faculty research programs. We examine grade point average (GPA), Graduate Record Examination (GRE, we will accept MCAT scores for Medical Scholar applicants) scores, letters of recommendation, and a personal statement. International applicants from non-English speaking countries must have an official paper Test of English as a Foreign Language (TOEFL) score of at least 103 on the internet based test. We will not admit anyone with a GPA less than 3.0 on a 4.0 scale. All applicants are required to submit official GRE scores (MCAT in the case of Medical Scholar applicants) and to have previous coursework in a relevant area of social or behavioral sciences. GRE, MCAT and TOEFL scores should be taken no more than two years prior to application. Our application deadline is December 15 for possible admission the following fall semester. We admit students for fall enrollment only. Please refer to our department website for further information.

Graduate Teaching Experience

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instructors. We also encourage our students to utilize the variety of teacher training resources that are available across campus.

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Pampered Chef Family Resiliency Program (www.familyresiliency.illinois.edu (http://www.familyresiliency.illinois.edu/))
Family Resiliency Center (www.familyresiliency.illinois.edu (http://www.familyresiliency.illinois.edu/))
University of Illinois Extension (http://web.extension.illinois.edu/state/index.html (http://web.extension.illinois.edu/state/))

Facilities and Resources

Bevier Hall
Child Development Lab
Doris Kelly Christopher Hall
Early Child Development Lab

Financial Aid

We are committed to funding all of our students who are making timely progress. The duration and amount of our commitment varies by program. Funding may include fellowships, research assistantships, and/or teaching assistantships. These opportunities typically include stipends and tuition waivers. In some cases, fees are also waived. All applicants are automatically considered for all department funding opportunities; there is no separate application process. Federal and state financial aid is completely separate from the support provided by our department. For information regarding federal and state financial aid, please refer to www.osfa.illinois.edu/ (http://www.osfa.illinois.edu/).

for the degree of Doctor of Philosophy in Human Development & Family Studies

Those entering the doctoral program without a master's degree will complete one within their first two years in the doctoral program. Students entering with a non-thesis master's will be required to complete a "thesis equivalency" paper within the first two years of their doctoral program. Requirements for the Ph.D. include 64 graduate hours beyond the M.S. degree, completion of the written qualifying examination, defense of the written dissertation proposal, and a final thesis defense upon completion of the dissertation. Doctoral students may also complete a supporting program in "applied HDFS." This 16 graduate hour option includes 4 hours in program development or policy studies, 4 hours in program evaluation, and two 4 hour internships. The applied optional supporting program prepares students to enter careers in administration, human services, social policy, international aid agencies, and government, as well as traditional careers in teaching and research.

For additional details and requirements refer to the department's Graduate Program Information *(*http://hdfs.illinois.edu/graduate/handbook/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Code	Title	Hours
Theory Courses		**12**
HDFS 501	Human Development Theories	
HDFS 521	Family Theories	
HDFS 533	Community In American Society	
Substantive Courses		
Select four of the following:		8-16
HDFS 503	Social-Emotional Development	
HDFS 505	Advanced Adolescence	
HDFS 523	Ethnic Families	
HDFS 526	Intimate Partner Violence	
HDFS 527	Family Resiliency	
HDFS 528	Parenting	
HDFS 529	Youth and Family Acculturation	
HDFS 534	Neighborhoods and Human Dev	
HDFS 539	Youth, Culture and Society	
HDFS 540	Gender & Sexuality	
HDFS 541	Inequalities In A Diverse Society	
HDFS 543	Ethnography Urban Communities	
HDFS 561	Child and Family Program Dev	
HDFS 562	Child & Family Program Eval	
HDFS 595	Seminar	
RST 586	Health and Leisure in Recreation, Sport and Tourism	
Quantitative Methods		**12**
HDFS 590	Advanced Research Methods	
HDFS 594	Intermed Statistical Analysis	
HDFS 597	Advanced Statistical Analysis	
Qualitative Methods		**8**
HDFS 591	Qualitative Methods	
Professional Development		**24**
HDFS 500	Professional Development	
HDFS 599	Thesis Research	
Elective Courses (required hours depend upon content of M.S. degree)		0-16
Total Hours		64

Other Requirements

Requirement	Description
Other requirements may overlap	
MS equivalent, or student will earn MS in first two years of PhD program	
Qualifying Exam Required	Yes
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	2.75

Learning Outcomes: Human Development and Family Studies, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Human Development & Family Studies

HDFS Graduate Student Learning Outcomes

1. HDFS graduate students will demonstrate subject matter expertise, including theoretical and substantive expertise in a specialized area
   a. Recall key principles, theories, and concepts used in HDFS
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   c. Critique current theories and empirical knowledge regarding HDFS
   d. Evaluate current knowledge in a specific substantive area using two distinct theories
   e. Identify knowledge gaps in a specific substantive area
   f. Pose questions to remedy said gap
2. HDFS graduate students will demonstrate social science methodology expertise
   a. Apply key principles, concepts and analytic strategies used in quantitative research
   b. Apply key principles, concepts and analytic strategies used in qualitative research
   c. Use data management and analysis software (e.g., SPSS, NVivo, MAXQDA; HLM, R)
   d. Evaluate the methodological strengths and limitations of empirical studies
   e. Design and defend a complete research project
   f. Complete an IRB application
   g. Complete an ethics certificate relevant to project
   h. Conduct a research project as per protocol and ethical standards
3. HDFS graduate students will demonstrate professional competence skills
   a. Identify career and professional goals
   b. Develop leadership skills (e.g., through formal positions; informal mentoring of undergraduates or new graduate students; representing the department; participation in class or lab teamwork)
   c. Develop professional network to support career and professional goals (e.g., relationships with mentors; participation in professional organizations)
   d. Create and maintain a CV and other job-related materials (e.g., cover letter; teaching philosophy; research statement)
   e. Exhibit professional and ethical behavior
   f. Make decisions and solve problems
   g. Collaborate to achieve group goals
4. HDFS graduate students will demonstrate scholarly communication skills in English
   a. Use effective written communication
      i. Use appropriate grammar and writing mechanics
      ii. Demonstrate a working knowledge of APA style
      iii. Respond to constructive criticism (e.g., revision process, peer review)
      iv. Produce written work that is organized, logical, and fully developed
   b. Use effective oral communication
      i. Clearly and logically present ideas aloud through presentation to class or group
   c. Use effective visual communication
      i. Use clear and logical charts, graphs, and other visual displays to present ideas
5. HDFS graduate students will demonstrate a critical and reflexive orientation toward and sensitivity to issues of diversity and inclusion
   a. Critically examine one's own beliefs, assumptions, values, attitudes, and biases regarding diverse individuals and families
   b. Reflect on one's own interconnected positions, privileges, and disadvantages across multiple contexts
   c. Demonstrate awareness of and sensitivity to issues of diversity and inclusion in one's own work (written, oral, and visual communication)

Human Resources & Industrial Relations, MHRIR

for the degree of Master of Human Resources and Industrial Relations in Human Resources and Industrial Relations (on campus & online)

dean: Fritz Drasgow
overview of school admissions & requirements: Labor & Employment Relations (http://catalog.illinois.edu/ler/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
school website: https://ler.illinois.edu/
school faculty: Labor & Employment Relations Faculty (https://ler.illinois.edu/about/faculty-staff/)
graduate office: 504 East Armory Avenue, Champaign, IL 61820
on-campus program contact: Becky Barker
email: ebarker@illinois.edu
online program contact: Eden Haycraft
email: ehaycra@illinois.edu

The master's program can lead to a professional, terminal master's degree, or it can prepare students to continue their graduate study toward a Ph.D. or other doctoral degrees in law and other professional areas.

The master's degree requires 48 graduate hours of courses and usually takes three semesters to complete. The master's degree program has core requirements in human resources/industrial relations systems, and quantitative methods, and a subject distribution requirement.

Graduate Degree Programs in Labor & Employment Relations

Human Resources and Industrial Relations, MHRIR (p. 809) **(on campus & online)**
Human Resources and Industrial Relations, PhD (p. 812)
Joint Degree Programs with Human Resources and Industrial Relations, MHRIR (on campus only):
Business Administration, MBA (p. 1155)|Law, JD (p. 1156)

The School of Labor and Employment Relations offers graduate work leading to both a master's and a doctoral degree. Graduate study

in Human Resources and Industrial Relations (HRIR) is based on a multidisciplinary approach to human resources/industrial relations problems and a flexible curriculum. To achieve this, the School has joint faculty appointments or course cross-listings with economics, psychology, law, business administration, history, and finance.

Admission

Students must meet the general admission requirements of the Graduate College, as well as the specific requirements of the School. Admission to the master's program in either the fall or spring semester is based on an applicant's undergraduate record, letters of reference, Graduate Record Examination (GRE) or Graduate Management Aptitude Test (GMAT) scores, a resume and a statement of interest and career goals. The minimum requirements for admission are a course in statistics and an average grade of B in the last two years of a four year undergraduate program. A deficiency in statistics may be made up by taking the required course without graduate credit during the first semester of graduate study. International applicants must provide Test of English as Foreign Language (TOEFL) test results with a recommended minimum score of 96 on the internet-based IBT (590 on the written test) or IELTS with minimum overall score of 6.5.

Students applying to the online program will have the same admissions criteria as the on-campus MHRIR program. However, a waiver of the GRE or GMAT requirement may be available to applicants with 3 or more years of direct HR/IR experience or 5 years of related managerial experience. Eligibility of this waiver will be assessed by the Associate Director, Online Programs. Admission decisions for the online program are made in all semesters (Fall, Spring, and Summer).

Students with outstanding academic credentials, with or without a master's degree, are encouraged to apply to the Ph.D. program. Applicants to the doctoral program must submit evidence of research ability, such as a master's thesis, an undergraduate thesis, special reports, or published articles. This is in addition to the other required application materials as indicated for the on-campus master's program. Admission to the doctoral program is made for the fall semester only. An exception is made for current HRIR master's degree students at Illinois, who may submit an internal application in the spring.

Graduate Teaching Experience

Although the School has no teaching requirement, doctoral students are encouraged to gain teaching experience in this program.

Financial Aid

The School offers research assistantships, scholarships, and fellowships to graduate students with superior academic credentials in the on-campus MHRIR and Ph.D. programs. A School research/teaching assistant receives a stipend plus waiver of resident or non-resident tuition and some fees (http://www.grad.illinois.edu/gradhandbook/). The Graduate College also awards minority fellowships that carry stipends plus tuition and service fee waivers.

The online program is self-supporting and DOES NOT accept the following tuition and fee waivers (TFWs): Non-Academic waivers (including UIUC employees and employees of other state institutions), Academic waivers from UIUC, UIC and UIS employees, Related Agency waivers, waivers granted through fellowships/assistantships as governed by the Graduate College at UIUC, or Retiree waivers. This program DOES accept statutory waivers (veteran grants, etc.)

for the degree of Master of Human Resources and Industrial Relations in Human Resources and Industrial Relations (on campus & online)

For additional details and requirements refer to the department's Student Handbook (https://ler.illinois.edu/wp-content/uploads/2015/01/CurrentStudents_LERHandbook.pdf) and the Graduate College Handbook (http://www.grad.uiuc.edu/gradhandbook/).

This degree program can be completed either on campus or online. The non-thesis option is offered online, the requirements are listed below:

Thesis Option

Code	Title	Hours
LER 591 & LER 593	Employment Relations Systems and Quantitative Methods in LER	8
At least one course in each of four subject areas		**16**
Union Management and Labor Relations Policy		
LER 542	Collective Bargaining	
LER 543	Workplace Dispute Resolution	
LER 590	Individual Topics (Section CB)	
Human Resource Management and Organizational Behavior		
LER 522	Government Regulation	
LER 523	Org Fundamentals for HR	
LER 530	Found of Ind Org Psych	
LER 561	Compensation Systems	
LER 564	HR Training and Development	
LER 562	HR Planning and Staffing	
LER 567	Negotiation in HR Decisions	
LER 565	HR Management and Strategy	
LER 568	Firm Performance and HR	
LER 569	Power & Influence in HRM	
LER 570	Leadership for HR Managers	
LER 590	Individual Topics (Sections CM, ICP, EB, EC, NPH)	
LER 597	Employee Motivation & Perfmnce	
LER 598	Impl High Perf Work Systems	
Labor Markets and Employment		
LER 440	Economics of Labor Markets	
LER 545	Economics of Human Resources	
LER 590	Individual Topics (Sections EGW, WPP)	
International Human Resource Management		
LER 566	International HR Management	
LER 590	Individual Topics (Section CER)	
LER 595	Managing Diversity Globally	
Electives		**16**
LER 450	European Working Class History	
LER 540	Labor Economics I	
LER 541	Labor Economics II	
LER 547	Labor Law I	
LER 556	Industrial Relations Theory	
LER 557	Human Resources Theory	
LER 559	Micro Research Methods	

LER 590	Individual Topics (Sections CMT, CSR, E, EW, FBM, GI, GT, HDA, IM, SN, TI, TM, WFO, X)	
LER 599	Thesis Seminar (min/max applied toward degree)	8
Total Hours		48

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum Hours Required Within the Unit:	36
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	3.0

Non-Thesis Option

Code	Title	Hours
LER 591 & LER 593	Employment Relations Systems and Quantitative Methods in LER	8
At least one course in each of four subject areas		**16**
Union Management and Labor Relations Policy		
LER 542	Collective Bargaining	
LER 543	Workplace Dispute Resolution	
LER 590	Individual Topics (Section CB)	
Human Resource Management and Organizational Behavior		
LER 522	Government Regulation	
LER 523	Org Fundamentals for HR	
LER 530	Found of Ind Org Psych	
LER 561	Compensation Systems	
LER 562	HR Planning and Staffing	
LER 564	HR Training and Development	
LER 565	HR Management and Strategy	
LER 567	Negotiation in HR Decisions	
LER 568	Firm Performance and HR	
LER 569	Power & Influence in HRM	
LER 570	Leadership for HR Managers	
LER 590	Individual Topics (Sections CM, ICP, EB, EC, and NPH)	
LER 597	Employee Motivation & Perfmnce	
LER 598	Impl High Perf Work Systems	
Labor Markets and Employment		
LER 440	Economics of Labor Markets	
LER 545	Economics of Human Resources	
LER 590	Individual Topics (Section EGW, WPP)	
International Human Resource Management		
LER 566	International HR Management	
LER 590	Individual Topics (Section CER)	
LER 595	Managing Diversity Globally	
Electives		**24**
LER 450	European Working Class History	
LER 540	Labor Economics I	
LER 541	Labor Economics II	
LER 547	Labor Law I	
LER 556	Industrial Relations Theory	
LER 557	Human Resources Theory	
LER 559	Micro Research Methods	
LER 590	Individual Topics (Sections CMT, CSR, E, EW, FBM, GI, GT, HDA, IM, SN, TI, TM, WFO, X)	
Total Hours		48

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum Hours Required Within the Unit:	36
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	3.0

Learning Outcomes: Human Resources and Industrial Relations, MHRIR

Learning Outcomes for the degree of Master of Human Resources and Industrial Relations in Human Resources and Industrial Relations (on campus & online)

The purpose of the Master of Human Resources and Industrial Relations programs are to impart knowledge and skills that individuals may use to advance to mid-and upper-level positions managing employment relations in private-and public-sector organizations as well as in labor union organizations. The online program, in particular, was developed to expand our ability to train future human resource management leaders by making the program and its strengths available to place-bound human resources professionals and career-changers.

The Society for Human Resource Management (SHRM) is the leading professional organization for human resource management practitioners worldwide. SHRM created the Human Resources Certification Institute (HRCI), which is the human resource credentialing body to promote the establishment of standards for the profession. HRCI also recognizes human resource professionals who have met, though demonstrated professional experience and the passing of a written comprehensive exam, HRCI's requirements for mastering the codified HR Body of Knowledge. 1HRCI regularly reviews exam content for updates and revisions to maintain relevance and include content at the leading edge of the field.

The MHRIR programs have chosen to draw from HRCI's Human Resource Body of Knowledge and other resources such as faculty expertise and prominent practitioners and scholars in the HR field, as the foundation for our student learning outcomes.

1. Students will apply Business Management and Strategy to shape immediate and long-term HR activities, practices, and policies. Students will critically examine the complex link between strategy and business practices, understand and apply workforce metrics to drive decision-making, and apply a strategic lens to international human resources.

2. Students will drive productivity outcomes, use job and company data to predict the success of new hires, and align human capital requirements to achieve business goals to support Workforce Planning and Development within an organization's HR operation.
3. Students will understand the structural elements of compensation system design and evaluate an organization's Compensation and Benefits structure relative to market forces, union agreements, and legal requirements.
4. Students will apply and adhere to statutory and legal requirements when administering HR policies and procedures and employ Risk Management strategies to protect the employer from loss and liability and comply with labor law.
5. Students will lead Employee and Labor Relations by managing workforce relationships, developing inclusive and respectful company culture, and building communication systems.
6. To support Human Resource Development, students will support organizational priorities by managing employee performance through evaluating gaps between employee performance and the desired state, building programs to address these gaps, and designing strategies for motivating employees.
7. Students will be able to integrate, synthesize, and apply knowledge of ethical dilemmas and solutions in Human Resources. Students will apply strategies for realizing the benefits of diversity and inclusion and employ practices that contribute to healthy, safe, and secure workplaces, communities, and societies as part of the organization's corporate social responsibility.

We have also formed these additional learning outcomes to support a student's immediate and long-term success in the professional world.

1. Students will be able to use critical thinking and problem-solving skills to act strategically when making decisions in business and in life.
2. Students will produce persuasive and impactful written work and verbal presentations for academic and business audiences.
3. Students will be effective leaders of change and apply interpersonal skills to work well in cross-functional teams.
4. Students will develop professional skills to support long-term career success: resume and cover letter writing, interviewing, and networking.

Human Resources & Industrial Relations, PhD

for the degree of Doctor of Philosophy Major in Human Resources and Industrial Relations

dean: Fritz Drasgow
overview of school admissions & requirements: Labor & Employment Relations (http://catalog.illinois.edu/ler/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
school website: https://ler.illinois.edu/
school faculty: Labor & Employment Relations Faculty (https://ler.illinois.edu/about/faculty-staff/)
graduate office: 504 East Armory Avenue, Champaign, IL 61820
on-campus program contact: Becky Barker
email: ebarker@illinois.edu
online program contact: Eden Haycraft
email: ehaycra@illinois.edu

The Ph.D. is an interdisciplinary degree, which typically leads to a career in teaching and research, especially at business schools or industrial relations schools. Research-oriented careers outside the academic world are also available. The program can be completed in five years beyond the baccalaureate degree or four years beyond the master's degree. Doctoral students are required to complete 96 graduate hours of credit beyond the baccalaureate degree. Coursework is usually completed in two years. There is a second year paper requirement, one examination that focuses on the candidate's selected area of specialization, and the preliminary and final exams. Examples of areas of specialization include the effects of technological change on the human resource function; motivation, morale, and job satisfaction; labor-management relations in the public sector; labor markets and employment; and international comparative labor problems. Each student's program of study is chosen in consultation with the Ph.D. Advisory Committee at the School.

Graduate Degree Programs in Labor & Employment Relations

Human Resources and Industrial Relations, MHRIR (p. 809) **(on campus & online)**
Human Resources and Industrial Relations, PhD (p. 812)
Joint Degree Programs with Human Resources and Industrial Relations, MHRIR (on campus only):
Law, (p. 1156) JD (p. 1156)

The School of Labor and Employment Relations offers graduate work leading to both a master's and a doctoral degree. Graduate study in Human Resources and Industrial Relations (HRIR) is based on a multidisciplinary approach to human resources/industrial relations problems and a flexible curriculum. To achieve this, the School has joint faculty appointments or course cross-listings with economics, psychology, law, business administration, history, and finance.

Admission

Students must meet the general admission requirements of the Graduate College, as well as the specific requirements of the School. Admission to the master's program in either the fall or spring semester is based on an applicant's undergraduate record, letters of reference, Graduate Record Examination (GRE) or Graduate Management Aptitude Test (GMAT) scores, a resume and a statement of interest and career goals. The minimum requirements for admission are a course in statistics and an average grade of B in the last two years of a four year undergraduate program. A deficiency in statistics may be made up by taking the required course without graduate credit during the first semester of graduate study. International applicants must provide Test of English as Foreign

Language (TOEFL) test results with a recommended minimum score of 96 on the internet-based IBT (590 on the written test) or IELTS with minimum overall score of 6.5.

Students applying to the online program will have the same admissions criteria as the on-campus MHRIR program. However, a waiver of the GRE or GMAT requirement may be available to applicants with 3 or more years of direct HR/IR experience or 5 years of related managerial experience. Eligibility of this waiver will be assessed by the Associate Director, Online Programs. Admission decisions for the online program are made in all semesters (Fall, Spring, and Summer).

Students with outstanding academic credentials, with or without a master's degree, are encouraged to apply to the Ph.D. program. Applicants to the doctoral program must submit evidence of research ability, such as a master's thesis, an undergraduate thesis, special reports, or published articles. This is in addition to the other required application materials as indicated for the on-campus master's program. Admission to the doctoral program is made for the fall semester only. An exception is made for current HRIR master's degree students at Illinois, who may submit an internal application in the spring.

Graduate Teaching Experience

Although the School has no teaching requirement, doctoral students are encouraged to gain teaching experience in this program.

Financial Aid

The School offers research assistantships, scholarships, and fellowships to graduate students with superior academic credentials in the on-campus MHRIR and Ph.D. programs. A School research/teaching assistant receives a stipend plus waiver of resident or non-resident tuition and some fees (http://www.grad.illinois.edu/gradhandbook/). The Graduate College also awards minority fellowships that carry stipends plus tuition and service fee waivers.

The online program is self-supporting and DOES NOT accept the following tuition and fee waivers (TFWs): Non-Academic waivers (including UIUC employees and employees of other state institutions), Academic waivers from UIUC, UIC and UIS employees, Related Agency waivers, waivers granted through fellowships/assistantships as governed by the Graduate College at UIUC, or Retiree waivers. This program DOES accept statutory waivers (veteran grants, etc.)

for the degree of Doctor of Philosophy Major in Human Resources and Industrial Relations

For additional details and requirements refer to the department's Student Handbook (https://ler.illinois.edu/wp-content/uploads/2015/01/CurrentStudents_LERHandbook.pdf) and the Graduate College Handbook (http://www.grad.uiuc.edu/gradhandbook/).

Code	Title	Hours
LER 542	Collective Bargaining	4
LER 556	Industrial Relations Theory	4
LER 557	Human Resources Theory	4
LER 558	Faculty-Student Workshop	4
LER 540	Labor Economics I	4
or LER 541	Labor Economics II	
or LER 545	Economics of Human Resources	
One year sequence in statistics		**8**
PSYC 506 & PSYC 507	Statistical Methods I and Statistical Methods II	
or ECON 532 & ECON 535	Econometric Analysis I and Econometric Analysis II	
Or another approved sequence		
Research Methods		**8**
LER 559	Micro Research Methods	
LER 590	Individual Topics (Macro - Section X)	
Two theory courses in a social science discipline, one micro		
BADM 510	Founds of Organizational Behav	
LER 530	Found of Ind Org Psych	
and one macro		
BADM 590	Seminar in Business Admin (section MK1)	
BADM 519	Seminar in Organizational Behavior and Theory	
SOC 596	Recent Developments in Soc (section EM)	
Or another approved micro/macro sequence		
Two related courses outside discipline. See Course List tab.		**8**
Electives		**0-16**
LER 599	Thesis Seminar (min/max applied toward degree)	32-48
Total Hours		**64**

Other Requirements

Requirement	Description
Other requirements may overlap	
Masters Degree Required for Admission to PhD?	No, but M.S. equivalent hours are required, in addition. Contact department for details
Qualifying Exam Required	Yes
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

Courses outside of discipline

Code	Title	Hours
ACE 562	Applied Regression Models I	2
ACE 564	Applied Regression Models II	2
BADM 504	Phil of Science and Bus Admin	2
BADM 545	Found of Strategy Research	2
BADM 546	Strategy Content Research (Entrepreneurship)	2
BADM 549	Current Strategy Research (Management of Technology)	2
BADM 549	Current Strategy Research (Economic Foundations of Strat)	2
BADM 549	Current Strategy Research (Corporate Strat Research)	2
BADM 549	Current Strategy Research (Empirical Meth in Strat Res)	2
CMN 529	Seminar Communication Theory (Social Sci Theory Construction)	4
PSYC 594	Multivar Anlys in Psych and Ed	4

PSYC 587	Hierarchical Linear Models	4
PSYC 588	Covar Struct and Factor Models	4
PSYC 501	Best Psych Research Practices (Applied Structural Eq Modeling)	2 to 4
PSYC 581	Applied Regression Analysis	4
SOC 581	Survey Research Methods (Survey Research Methods I)	4
EPSY 586	Theories of Measurement II	4
EPSY 590	Advanced Seminar in Educational Psychology (section BAY)	0 to 4
EPSY 590	Advanced Seminar in Educational Psychology (section GCM)	0 to 4
EPSY 590	Advanced Seminar in Educational Psychology (section SEM)	0 to 4
EPSY 582	Advanced Statistical Methods	4
PSYC 541	Personality and Behav Dynamics	2 or 4
PSYC 593	Seminar (Multilevel & Networks in Orgs)	2 or 4
PSYC 490	Measurement & Test Develop Lab (section AL1)	4
STAT 542	Statistical Learning	4

Learning Outcomes: Human Resources and Industrial Relations, PhD

Learning Outcomes for the degree of Doctor of Philosophy Major in Human Resources and Industrial Relations

The purpose of the PhD in Human Resources and Industrial Relations is to train research competence (conducting and communicating research) and the writing of analytical papers of publishable quality. Toward this end, PhD courses and program milestones are designed to impart knowledge and skills that individuals may use to conduct world-class research, primarily in the academic subfields of Human Resources/Organizational Behavior, Industrial Relations, Economics, Psychology, and/or Sociology.

The following are intended student learning outcomes.

1. Develop skill in writing analytic papers of publishable quality, and publishing those papers.
2. Develop skill in publicly presenting analytical research of publishable quality.
3. Gain foundational knowledge in Human Resources Theory and Industrial Relations Theory.
4. Develop knowledge and skill in using statistics and research methods to conduct research and draw appropriate inferences.
5. Gain specialized knowledge in a social science discipline (e.g., economics, psychology, sociology).

Industrial Engineering, MS

for the degree of Master of Science in Industrial Engineering (on campus & online)

department head: Jeff Shamma (jshamma@illinois.edu)
associate head of graduate studies: Ramavarapu S Sreenivas (rsree@illinois.edu)
overview of admissions & requirements: https://ise.illinois.edu/graduate/admissions/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://ise.illinois.edu/
program website: https://ise.illinois.edu/graduate/degrees-and-programs/ms-degree-guide.html
department faculty: https://ise.illinois.edu/directory/faculty.html
college website: https://grainger.illinois.edu/
contact: Lauren Redman (lredman@illinois.edu)
address: 117 Transportation Building, 104 S Mathews Ave, Urbana, IL 61801
phone: (217) 333-2730
email: ise-grad@illinois.edu

The Department of Industrial & Enterprise Systems Engineering offers both an MS with thesis and an MS non-thesis program. Students in the MS with thesis program are required to have a research advisor and applicants are encouraged to contact department faculty (https://ise.illinois.edu/directory/faculty.html) in their areas of interest to inquire about possible research and funding opportunities.

Opportunity exists for specializing in i) advanced analytics via the Advanced Analytics in Industrial & Enterprise Systems Engineering (p. 1074) optional graduate concentration and ii) computational science and engineering via the Computational Science & Engineering (p. 1089) optional graduate concentration.

Admission Requirements

Applicants who have completed degree requirements in an accredited engineering program or its equivalent are eligible to apply for admission. A minimum grade point average of 3.25 (A = 4.00) for the last two years of undergraduate study is required.

Scores on the Graduate Record Examination (GRE) (http://www.ets.org/) general test are recommended of all applicants. Based upon the previous preparation of the student for either program, prerequisite courses may be specified by the advisor, but the credit may not be applied toward a degree.

All applicants whose native language is not English are required to submit TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) scores as evidence of English proficiency. Minimum admission requirements (https://grad.illinois.edu/admissions/instructions/04c/) are set by the Graduate College. Students applying to the online program must satisfy the full status admissions requirement.

Financial Aid

Qualified students may compete for financial assistance in the form of teaching/graduate/research assistantships, fellowships, grants, and tuition waiver scholarships. Under certain conditions, fellowships may be augmented by part-time assistantships.

All applicants, regardless of US citizenship, whose native language is not English and who wish to be considered for teaching assistantships must demonstrate spoken English language proficiency (http://grad.illinois.edu/admissions/taengprof.htm) by achieving a minimum

score of 24 on the speaking subsection of the TOEFL iBT or 8 on the speaking subsection of the IELTS. For students who are unable to take the iBT or IELTS, a minimum score of 4CP is required on the English Proficiency Interview (http://cte.illinois.edu/testing/oral_eng/epi_overview.html) (EPI), offered on campus. All new teaching assistants are required to participate in the Graduate Academy for College Teaching (https://citl.illinois.edu/citl-101/teaching-learning/grad-academy-for-college-teaching/) conducted prior to the start of the semester.

Department Research

Faculty research by ISE faculty is pursued in the following fields:

•computer-aided design	•data analytics	•optimization	•design systems	•manufacturing systems
•nondestructive testing and evaluation	•system dynamics and simulation	•control	•robotics	•real-time decision making
•reliability engineering	•financial engineering	•operations research	•management science	•biomechanics
•human factors	•supply chain logistics			

Members of the ISE Department have access to a wide range of excellent research facilities. These laboratories support a wide range of activity and are described at the department's research laboratories Web site (https://ise.illinois.edu/research/labs/).

Graduate Programs in Industrial & Enterprise Systems Engineering

degrees:

Industrial Engineering, MS (p. 814)
optional concentrations:
Advanced Analytics in Industrial & Enterprise Systems Engineering (p. 1074) | Computational Science & Engineering (p. 1089)
Industrial Engineering, PhD (p. 816)
optional concentrations:
Computational Science & Engineering (p. 1089)
Systems & Entrepreneurial Engineering, MS (p. 1034)
optional concentrations:
Computational Science & Engineering (p. 1089)
Systems & Entrepreneurial Engineering, PhD (p. 1035)
Financial Engineering, MS (p. 765) **(sponsored jointly with Department of Finance)**
optional concentrations:
Advanced Analytics in Industrial & Enterprise Systems Engineering (p. 1074) | Data Analytics in Finance (p. 1092)

The Department of Industrial and Enterprise Systems Engineering (ISE) offers graduate programs leading to degrees of Master of Science and Doctor of Philosophy in Industrial Engineering (IE) and Systems and Entrepreneurial Engineering (SEE), as well as (jointly with the Department of Finance) Master of Science in Financial Engineering. The ISE programs offers an approach to industrial engineering and systems engineering, engineering design, and entrepreneurial engineering that crosses disciplinary lines. The IE program is based in advanced studies that focus on operations research, optimization, supply chain management, financial engineering, quality and reliability engineering and production management, with the aim to advance modeling, simulation, analysis and decision making for complex engineering and economic systems. The SEE program is founded on the premise of dual competency in both traditional engineering and systems integration. The SEE program offers flexibility by permitting the student to select from a menu of advanced courses and take a wide range of electives to meet individual career goals. Graduates of these programs are prepared to enter academic and professional engineering positions in universities, industry, government, and private practice.

Opportunity also exists for specializing in energy and sustainability engineering via the

Energy and Sustainability Engineering (EaSE) Graduate Certificate Option (https://energysystemsmeng.engineering.illinois.edu/graduate-certificate-option/)

for the degree of Master of Science in Industrial Engineering (on campus & online)

The Department of Industrial and Enterprise Systems Engineering offers the non-thesis option in the Master of Science in Industrial Engineering in an online delivery format. Requirements mirror those for the on-campus non-thesis delivery format.

For additional details and requirements refer to the department's Graduate Programs Web site and the Graduate College Handbook.

This degree program can be completed with or without a thesis; either on campus or online, the requirements are listed below:

Thesis Option

Code	Title	Hours
IE 599	Thesis Research A maximum of 8 credit hours of IE 599 (or other approved thesis) may be counted toward the degree	8
IE 590	Seminar (registration for 0 hours every term while in residence)	0
500-level IE Courses		12
STEM course from outside of major	STEM course must be approved and be from a College of Engineering department, including ABE and CHBE (or other approved department). Excludes TE and ENG courses.	4
Electives in consultation with advisor	A maximum of 4 hours of IE 597 (or other approved independent study/project design) may be applied toward the elective coursework requirement.	8
Total Hours		32

Other Conditions and Requirements (may overlap)

Requirement	Description
Other Requirements and Conditions may overlap	
Minimum 500-level credit hours applied toward the degree:	12
Minimum GPA:	3.0

Non-Thesis Option

Code	Title	Hours
IE 597	Independent Study	4
IE 590	Seminar (registration for 0 hours every term while in residence)	0
500-level IE Courses		12
STEM course from outside of major	STEM course must be approved and be from a College of Engineering department, including ABE and CHBE (or other approved department). Excludes TE and ENG courses.	4
Electives in consultation with advisor	A maximum of 4 additional credit hours of IE 597 (or other approved independent study/project design) may be counted toward the elective coursework requirement.	16
Total Hours		36

Other Requirements and Conditions (may overlap)

Requirement	Description
Other Requirements and Conditions may overlap	
Minimum 500-level credit hours applied toward the degree:	12
Minimum GPA:	3.0

Learning Outcomes: Industrial Engineering, MS

Learning Outcomes for the degree of Master of Science in Industrial Engineering (on campus & online)

Graduate-level students should be able to:

1. Apply theory and methodologies to areas of research that address areas within Industrial and Enterprise Systems Engineering.
2. Effectively relate and communicate their data findings to peers, faculty and possibly peer-reviewed journals.
3. Formulate and solve complex problems with ISE by applying appropriate techniques and tools.
4. Write and defend a thesis that is designed with scientifically accepted methods and can be applied to improve a design or other real-world issue.
5. Teach concepts critical to the discipline of Industrial and Enterprise Systems Engineering at the university level.

Industrial Engineering, PhD

for the degree of Doctor of Philosophy in Industrial Engineering

department head: Jeff Shamma (jshamma@illinois.edu)
associate head of graduate studies: Ramavarapu S Sreenivas (rsree@illinois.edu)
overview of admissions & requirements: https://ise.illinois.edu/graduate/admissions/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://ise.illinois.edu/
program website: https://ise.illinois.edu/graduate/degrees-and-programs/phd-degree-guide.html
department faculty: https://ise.illinois.edu/directory/faculty.html
college website: https://grainger.illinois.edu/
contact: Lauren Redman (lredman@illinois.edu)
address: 117 Transportation Building, 104 S Mathews Ave, Urbana, IL 61801
phone: (217) 333-2731
email: ise-grad@illinois.edu

The Department of Industrial & Enterprise Systems Engineering offers both a traditional doctoral program and a direct doctoral program. A Master's degree is not required for admission to the direct doctoral program. Students in both programs are required to have a research advisor and applicants are encouraged to contact department faculty (https://ise.illinois.edu/directory/faculty.html) in their areas of interest to inquire about possible research and funding opportunities.

Admission Requirements

Applicants who have completed degree requirements in an accredited engineering program or its equivalent are eligible to apply for admission. A minimum grade point average of 3.25 (A = 4.00) for the last two years of undergraduate study is required.

Scores on the Graduate Record Examination (GRE) (http://www.ets.org/) general test are required of all applicants. Based upon the previous preparation of the student for either program, prerequisite courses may be specified by the advisor, but the credit may not be applied toward a degree.

All applicants whose native language is not English are required to submit TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) scores as evidence of English proficiency. Minimum admission requirements (https://grad.illinois.edu/admissions/instructions/04c/) are set by the Graduate College.

Financial Aid

Qualified students may compete for financial assistance in the form of teaching/graduate/research assistantships, fellowships, grants, and tuition waiver scholarships. Under certain conditions, fellowships may be augmented by part-time assistantships. Starting in Fall 2020, Grainger Engineering PhD students in their first five years of enrollment who meet the minimum eligibility requirements (https://grainger.illinois.edu/academics/graduate/phd-funding-guarantee/) are guaranteed a funded appointment for fall and spring that includes a full tuition waiver, a partial fee waiver, and a stipend.

All applicants, regardless of US citizenship, whose native language is not English and who wish to be considered for teaching assistantships must demonstrate spoken English language proficiency (http://grad.illinois.edu/admissions/taengprof.htm) by achieving a minimum score of 24 on the speaking subsection of the TOEFL iBT or 8 on

the speaking subsection of the IELTS. For students who are unable to take the iBT or IELTS, a minimum score of 4CP is required on the English Proficiency Interview (http://cte.illinois.edu/testing/oral_eng/epi_overview.html) (EPI), offered on campus. All new teaching assistants are required to participate in the Graduate Academy for College Teaching (https://citl.illinois.edu/citl-101/teaching-learning/grad-academy-for-college-teaching/) conducted prior to the start of the semester.

Department Research

Faculty research by ISE faculty is pursued in the following fields:

•computer-aided design	•data analytics	•optimization	•design systems	•manufacturing systems
•nondestructive testing and evaluation	•system dynamics and simulation	•control	•robotics	•real-time decision making
•reliability engineering	•financial engineering	•operations research	•management science	•biomechanics
•human factors	•supply chain logistics			

Members of the ISE Department have access to a wide range of excellent research facilities. These laboratories support a wide range of activity and are described at the department's research laboratories Web site (https://ise.illinois.edu/research/labs/).

Graduate Programs in Industrial & Enterprise Systems Engineering

degrees:

Industrial Engineering, MS (p. 814)
optional concentrations:
Advanced Analytics in Industrial & Enterprise Systems Engineering (p. 1074) | Computational Science & Engineering (p. 1089)
Industrial Engineering, PhD (p. 816)
optional concentrations:
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Systems & Entrepreneurial Engineering, MS (p. 1034)
optional concentrations:
Computational Science & Engineering (p. 1089)
Systems & Entrepreneurial Engineering, PhD (p. 1035)
Financial Engineering, MS (p. 765) **(sponsored jointly with Department of Finance)**
optional concentrations:
Advanced Analytics in Industrial & Enterprise Systems Engineering (p. 1074) | Data Analytics in Finance (p. 1092)

The Department of Industrial and Enterprise Systems Engineering (ISE) offers graduate programs leading to degrees of Master of Science and Doctor of Philosophy in Industrial Engineering (IE) and Systems and Entrepreneurial Engineering (SEE), as well as (jointly with the Department of Finance) Master of Science in Financial Engineering. The ISE programs offers an approach to industrial engineering and systems engineering, engineering design, and entrepreneurial engineering that crosses disciplinary lines. The IE program is based in advanced studies that focus on operations research, optimization, supply chain management, financial engineering, quality and reliability engineering and production management, with the aim to advance modeling, simulation, analysis and decision making for complex engineering and economic systems.

The SEE program is founded on the premise of dual competency in both traditional engineering and systems integration. The SEE program offers flexibility by permitting the student to select from a menu of advanced courses and take a wide range of electives to meet individual career goals. Graduates of these programs are prepared to enter academic and professional engineering positions in universities, industry, government, and private practice.

Opportunity also exists for specializing in energy and sustainability engineering via the

Energy and Sustainability Engineering (EaSE) Graduate Certificate Option (https://energysystemsmeng.engineering.illinois.edu/graduate-certificate-option/)

for the degree of Doctor of Philosophy in Industrial Engineering

The 96 graduate hours of credit may be divided into three stages of 32 hours each, consisting of 32 hours generally represented by an M.S. degree or equivalent (Stage I), 32 hours of course work beyond the M.S. degree (Stage II), and 32 hours of thesis work for the doctoral thesis (Stage III). Stage I requirements are satisfied by completion of an M.S. degree in the Department or in a related engineering or technical discipline from the University of Illinois or other accredited university. A non-technical M.S. or MBA would normally not count toward the completion of Stage I. Such students would be required to enroll in one of the Master of Science Programs in the Department and satisfy the requirements therein in order to satisfy Stage I of the Ph.D. degree.

To advance to Stage II all students must pass the Qualifying Examination. To advance from Stage II to Stage III the student must pass the Preliminary Exam. Stage III is comprised of a minimum of 32 hours of IE 599 (Thesis Research) credit and a written dissertation followed by a final oral thesis defense.

The Preliminary Examination is taken after the Qualifying Examination (https://ise.illinois.edu/graduate/degrees-and-programs/phd-industrial-engineering.html). A minimum of six months must elapse between the successful completion of the doctoral preliminary examination and the doctoral final examination (oral dissertation defense).

For additional details and requirements refer to the department's Graduate Programs Web site *(*http://ise.illinois.edu/graduate/*) and the* Graduate College Handbook *(*http://grad.illinois.edu/gradhandbook/*).*

Entering with approved M.S./M.A. degree

Code	Title	Hours
IE 599	Thesis Research A maximum of 32 credit hours of IE 599 (or other approved thesis) may be counted toward the degree	32
IE 590	Seminar (registration for 0 hours every term while in residence)	0
400/500-level IE Courses		20
STEM courses from outside of major STEM courses must be approved and be from a College of Engineering department, including ABE and CHBE (or other approved department). Excludes TE and ENG courses.		12
Total Hours		64

Other Requirements and Conditions (may overlap)

Requirement	Description
Minimum GPA:	3.25
Minimum 500-level credit hours applied toward the degree:	16
Independent study/project design courses do not count toward 500-level requirement.	
A maximum of 8 hours of IE 597 (or other approved independent study/project design) may be applied toward the elective course work requirement.	
Ph.D. exam and dissertation requirements:	
Qualifying exam	
Preliminary exam	
Final exam or dissertation defense	
Dissertation deposit	

Entering with approved B.S./B.A. degree

Code	Title	Hours
IE 599	Thesis Research A maximum of 40 credit hours of IE 599 (or other approved thesis) may be counted toward the degree	40
IE 590	Seminar (registration for 0 hours every term while in residence)	0
400/500-level IE Courses		32
STEM courses from outside of major STEM courses must be approved and be from a College of Engineering department, including ABE and CHBE (or other approved department). Excludes TE and ENG courses.		12
Electives in consultation with advisor		12
Total Hours		96

Other Requirements and Conditions (may overlap)

Requirement	Description
Minimum GPA:	3.25
Minimum 500-level credit hours applied toward the degree:	28
Independent study/project design do not count toward 500-level requirement.	
A maximum of 8 hours of IE 597 (or other approved independent study/project design) may be applied toward the degree.	
Ph.D. exam and dissertation requirements:	
Qualifying exam	
Preliminary exam	
Final exam or dissertation defense	
Dissertation deposit	

Learning Outcomes: Industrial Engineering, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Industrial Engineering

Graduate-level students should be able to:

1. Apply theory and methodologies to areas of research that address areas within Industrial and Enterprise Systems Engineering.
2. Effectively relate and communicate their data findings to peers, faculty and possibly peer-reviewed journals.
3. Formulate and solve complex problems with ISE by applying appropriate techniques and tools.
4. Write and defend a thesis that is designed with scientifically accepted methods and can be applied to improve a design or other real-world issue.
5. Teach concepts critical to the discipline of Industrial and Enterprise Systems Engineering at the university level.

Informatics, PhD

for the degree of Doctor of Philosophy in Informatics

informatics website: https://informatics.ischool.illinois.edu/
informatics faculty affiliates: https://informatics.ischool.illinois.edu/faculty-affiliates/
overview of school admissions & requirements: https://informatics.ischool.illinois.edu/phd-admission/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
on-campus contact: Karin Readel, Senior Education Coordinator, Informatics,
phone: (217)-244-1220
email: kereadel@illinois.edu

Programs in Informatics

Undergraduate Minor

Informatics Minor (p. 501)

Graduate Majors

Bioinformatics, MS (p. 625)
- Animal Sciences Concentration (p. 625)
- Bioengineering Concentration (p. 626)
- Chemical & Biomolecular Engineering Concentration (p. 628)
- Computer Science Concentration (p. 629)
- Crop Science Concentration (p. 631)
- Information Sciences Concentration (http://catalog.illinois.edu/graduate/is/concentration/information-sciences/bioinformatics/)

Informatics, PhD (http://catalog.illinois.edu/graduate/provost/phd_informatics/)

The Chair of the Governing Committee of the Informatics Ph.D. Program will appoint the supervising committee to approve each student's program of study, which will be called the Advisory Committee (first half of studies) and then the Dissertation Committee (second half of studies). The membership of these committees should remain constant for each half of the student's studies, except in unusual circumstances, but may

change when it is constituted for the dissertation. In any case, changes to the supervising committees must be approved by the Chair of the Governing Committee. The supervising committee must contain faculty with expertise in both the Applications area and the Foundations area chosen by the student, including at least four faculty members affiliated with the Informatics Program. The supervising committee will provide each student with a review of his or her progress in the spring of each academic year.

Admission

The admissions process will consist of a formal application, specifying experiences, courses, interests, and letters of recommendation. The Informatics PhD Program will admit graduate students who are approved by the Governing committee in conjunction with representatives of the Areas. With the approval of the appropriate committees, students may be admitted to the program with only a Bachelor's degree. They will work with their Advisory Committee to define appropriate courses to fulfill the 32 hours of Masters-level work. If they wish to receive a Masters degree, they will need to apply to a relevant department and meet the department's existing Masters degree requirements. If they already hold a Masters degree approved by the IPP Governing Committee, they will receive graduate credit for 32 hours. All applicants whose native language is not English must provide evidence of English proficiency as required by the Graduate College for admission (https://grad.illinois.edu/admissions/instructions/04c/).

Financial Aid

Fellowships, research assistantships, and teaching assistantships (all of which include tuition and partial fee waivers) are awarded on a competitive basis. All applicants, regardless of U.S. citizenship, whose native language is not English and who wish to be considered for teaching assistantships must demonstrate spoken English language proficiency by achieving a minimum score of 24 on the speaking subsection of the TOEFL iBT, or 8 on the speaking subsection of the IELTS. For students who are unable to take the iBT or IELTS, a minimum score of 4CP (conditional pass) must be earned on the English Proficiency Interview test offered on campus. All new teaching assistants are required to participate in the Graduate Academy for College Teaching conducted prior to the start of the semester.

for the degree of Doctor of Philosophy in Informatics

For additional details and requirements refer to the degree requirements (https://www.informatics.illinois.edu/informatics-phd/), the appropriate department's graduate handbook, and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
INFO 500	Orientation Seminar (taken twice: once for 0 hours, once for 1 hour)	1
Research Practicum		8
INFO 510	Research Practicum (taken twice 4 hrs each)	
Applications Courses	2 courses at the 500 level from approved list on Course List tab	8
Foundations Courses	2 courses at the 500 level from approved list on Course List tab	8
Electives		7
INFO 599	Thesis Research (32 min applied toward degree)	32
Total Hours	**Entering with Master's Degree**	**64**
Students entering without a Master's degree approved by their Advisory Committee will be required to take 32 additional credit hours in 400 and 500 level courses approved by their committee.		
Total Hours	**Entering with approved B.S. degree**	**96**

Other Requirements

Requirement	Description
Other requirements may overlap	
Qualifying Exam Required	Yes
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	2.75

Learning Outcomes: Informatics, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Informatics

1. Students will acquire broad and deep knowledge of informatics including both foundation and application areas. Students are expected to become experts in their specialties, but also be knowledgeable about basic principles across the informatics domain.
2. Students will demonstrate the ability to conduct informatics research in their area of specialty through developing an original piece of scholarship.
3. Students will demonstrate skills in oral and written communication sufficient to publish and present work in their field and to prepare grant proposals.
4. Students will interact with people from diverse backgrounds as both leaders and team members with integrity and professionalism.
5. Students will be aware of ethical issues regarding research including the use of human subjects (if appropriate), research misconduct, and publication practice.

Information Management, MS

for the degree of Master of Science in Information Management (on campus & online)

dean: Eunice Santos
overview of MS/IM admissions & requirements: https://ischool.illinois.edu/degrees-programs/ms-information-management (https://ischool.illinois.edu/degrees-programs/ms-information-management/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
school website: School of Information Sciences (https://ischool.illinois.edu/)
school faculty: https://ischool.illinois.edu/people/faculty (https://ischool.illinois.edu/people/faculty/)
graduate office: 501 East Daniel Street, Champaign, IL 61820-6211
program contact: Moises Orozco Villicana
phone: (217) 333-7197, (800) 982-0914 (within the US)
email: ischool-apply@illinois.edu

The Master of Science (MS) in Information Management prepares students for professional roles in the design and management of information systems and services in organizations in a range of sectors. Areas of specialization include data science and analytics; privacy, trust, security and ethics; information architecture and design; knowledge management and information consulting.

On-campus or Online

Two scheduling options are available to students pursuing the M.S. in Information Management. The on-campus option serves students who are in residence at Urbana-Champaign, as well as part-time, commuting students. The online scheduling option is an online education option that uses the Internet and other information technologies for delivery.

Graduate Degree Programs in the School of Information Science

Bioinformatics: Information Sciences, MS (http://catalog.illinois.edu/graduate/is/concentration/information-sciences/bioinformatics/) **(on campus & online)**
Information Management, MS (p. 819) **(on campus & online)**
Library & Information Science, MS (p. 852) **(on campus & online)**
Library & Information Science, CAS (p. 850) **(on campus & online)**
Information Sciences, PhD (p. 821)
concentration:
Writing Studies (p. 1111)

Joint Degree Programs:
Library & Information Science, MS and African Studies, MA (p. 1149)
Library & Information Science, MS and History, MA (p. 1153)
Library & Information Science, MS and Russian, East European, & Eurasian Studies, MA (p. 1149)

School Librarian Licensure: available in conjunction with both the MS in LIS and CAS in LIS

The School of Information Sciences (iSchool) offers programs of study leading to the Master of Science (M.S.), the Certificate of Advanced Study (C.A.S), and the Doctor of Philosophy degrees. Three Master of Science (M.S.) degrees are available. The M.S. in Library and Information Science (L.I.S.) prepares students for professional careers in all types of information organizations, including libraries. The M.S. in Information Management (I.M.) will prepare the students for information-intensive professional roles in a broad range of sectors. The Library and Information Science concentration of the campus-wide M.S. in bioinformatics program emphasizes multidisciplinary skills that are required for a career developing and managing information systems for the biological sciences community. The C.A.S. program provides the opportunity

1. to study an aspect of information sciences in greater depth than is possible in the M.S. program,
2. to refresh and upgrade one's professional training several years after completing a M.S. program, or
3. to redirect one's career into a different area of library and information science.

School Librarian Licensure is available in conjunction with both the M.S. in L.I.S. and C.A.S. The Ph.D. is a research degree program.

Admission

The general admission requirements of the Graduate College apply. Consideration is also given to language study and computer skills, relevant work experience, letters of reference, and evidence of leadership. International students must score at least 620 on the paper-based Test of English as a Foreign Language (TOEFL) (260 on the computer-based test; 104 on the iBT version); or 7 on each section of the IELTS. The M.S. in bioinformatics requires a strong background in information science including undergraduate-level computing and mathematics. The C.A.S. requires a master's degree in library and information science and a grade point average of at least 3.0 (A = 4.0) in the master's program.

School Librarian Licensure

Candidates interested in the School Librarian Licensure program must first be admitted and enrolled as a degree-seeking student within the School of Information Sciences before their application to the School Librarian Licensure program is reviewed. Accepted students must successfully pass two Illinois State Board of Education testing requirements prior to registration for the final fieldwork experience.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in the Ph.D. program for those interested in faculty careers.

Facilities and Resources

Among the major areas of faculty research are:

- **community informatics**
- **data analytics**
- **data curation**
- **digital humanities**
- **digital libraries**
- **history of information**
- **information retrieval**
- **organization of knowledge and information**
- **privacy, security, and trust**
- **ethics and values for information**
- **youth literature, culture, and services**

The iSchool's Center for Informatics Research in Science and Scholarship (CIRSS) conducts research on information problems that impact scientific and scholarly inquiry. The Center for Children's Books (CCB) provides a review and research collection of the newest literature for children and young adults. The Communications Office produces two high-quality publications, Library Trends and The Bulletin of the Center for Children's Books. The staff of each of these units is available to students and faculty for consultation and guidance. A computer network with Internet connectivity is integral to teaching and learning activities. The University Library provides a vast reservoir of resources for all types of study and research in library and information science.

The School maintains an ongoing commitment to continuing education through conferences, institutes, workshops, and course offerings.

Financial Aid

Financial aid may be available from the iSchool, the University Library, and elsewhere in the University in the form of graduate assistantships, teaching assistantships, research assistantships, and hourly paid work. Area libraries may provide pre-professional or hourly positions. Also, the iSchool offers a limited number of fellowships for which doctoral

students tend to be favored over C.A.S. and master's degree students. Students in the joint program that do not hold a FLAS fellowship are eligible for, but not guaranteed, fellowship or assistantship support in the semesters in which they are enrolled in the iSchool. Any assistantship awarded to these students provides a waiver of the base in-state tuition and service fee as well as a stipend. Non-Illinois residents must pay the difference between in- and out-of-state tuition.

for the degree of Master of Science in Information Management (on campus & online)

This degree program can be completed either on campus or online.

For additional details and requirements, refer to the unit's Graduate Programs of Study (https://ischool.illinois.edu/degrees-programs/) and the Graduate College Handbook (https://grad.illinois.edu/gradhandbook/).

Code	Title	Hours
IS 504	Sociotechnical Information Systems	4
IS 507	Data, Statistical Models and Information	4
IS 515	Information Modeling	4
Research/Project/Independent Study		max 4
Elective courses (subject to Other Requirements and Conditions below)		28
Total Hours		40

Other Requirements may overlap [1]

Requirement	Description
Minimum Hours Required within the Unit	28
Minimum 500-level Hours Required Overall	12
Competency in at least one programming language	
Minimum GPA:	2.75

Learning Outcomes: Information Management, MS

Learning Outcomes for the degree of Master of Science in Information Management (on campus & online)

Graduates of the Illinois MS/IM program will be able to:

1. Apply foundational concepts, theories, and principles to problems of information management.
2. Communicate capably with diverse stakeholders.
3. Understand some of the larger socio-technical contexts in which information management occur.
4. Apply appropriate analytic approaches to the needs of a given problem and understand how aspects of logic, statistical analysis and broader domain knowledge can inform the interpretation and confidence in their analyses.
5. Have an awareness of the rapid change in the evolving information professions, the change in technologies and methods deployed, evolving ethical principles around information use, and the need to be continually learning new skills and sub-specializations in order to be a valuable member of a multidisciplinary team.

Information Sciences, PhD

for the degree of Doctor of Philosophy in Information Sciences

dean: Eunice Santos
overview of MS/LIS admissions & requirements: https://ischool.illinois.edu/degrees-programs/ms-library-and-information-science/apply (https://ischool.illinois.edu/degrees-programs/ms-library-and-information-science/apply/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
school website: School of Information Sciences (https://ischool.illinois.edu/)
school faculty: https://ischool.illinois.edu/people/faculty (https://ischool.illinois.edu/people/faculty/)
graduate office: 501 East Daniel Street, Champaign, IL 61820-6211
program contact: Moises Orozco Villicana
phone: (217) 333-7197, (800) 982-0914 (within the US)
email: ischool-apply@illinois.edu

The Ph.D. program consists of the following components:

1. a history and foundations of IS seminar (4 graduate hours);
2. research methods (8 or more graduate hours);
3. electives (36 graduate hours);
4. field exam; and
5. thesis (32 or more graduate hours).

Thus, a minimum of 48 graduate hours of coursework plus 32 graduate hours of thesis credit are required.

Graduate Degree Programs in the School of Information Science

Bioinformatics: Information Sciences, MS (http://catalog.illinois.edu/graduate/is/concentration/information-sciences/bioinformatics/) **(on campus & online)**
Information Management, MS (p. 819) **(on campus & online)**
Library & Information Science, MS (p. 852) **(on campus & online)**
Library & Information Science, CAS (p. 850) **(on campus & online)**
Information Sciences, PhD (p. 821)
concentration:
Writing Studies (p. 1111)

Joint Degree Programs:
Library & Information Science, MS and African Studies, MA (p. 1149)
Library & Information Science, MS and History, MA (p. 1153)
Library & Information Science, MS and Russian, East European, & Eurasian Studies, MA (p. 1149)

School Librarian Licensure: available in conjunction with both the MS in LIS and CAS in LIS

The School of Information Sciences (iSchool) offers programs of study leading to the Master of Science (M.S.), the Certificate of Advanced Study (C.A.S), and the Doctor of Philosophy degrees. Three Master of

Science (M.S.) degrees are available. The M.S. in Library and Information Science (L.I.S.) prepares students for professional careers in all types of information organizations, including libraries. The M.S. in Information Management (I.M.) will prepare the students for information-intensive professional roles in a broad range of sectors. The Library and Information Science concentration of the campus-wide M.S. in bioinformatics program emphasizes multidisciplinary skills that are required for a career developing and managing information systems for the biological sciences community. The C.A.S. program provides the opportunity

1. to study an aspect of information sciences in greater depth than is possible in the M.S. program,
2. to refresh and upgrade one's professional training several years after completing a M.S. program, or
3. to redirect one's career into a different area of library and information science.

School Librarian Licensure is available in conjunction with both the M.S. in L.I.S. and C.A.S. The Ph.D. is a research degree program.

Admission

The general admission requirements of the Graduate College apply. Consideration is also given to language study and computer skills, relevant work experience, letters of reference, and evidence of leadership. International students must score at least 620 on the paper-based Test of English as a Foreign Language (TOEFL) (260 on the computer-based test; 104 on the iBT version); or 7 on each section of the IELTS. The M.S. in bioinformatics requires a strong background in information science including undergraduate-level computing and mathematics. The C.A.S. requires a master's degree in library and information science and a grade point average of at least 3.0 (A = 4.0) in the master's program.

School Librarian Licensure

Candidates interested in the School Librarian Licensure program must first be admitted and enrolled as a degree-seeking student within the School of Information Sciences before their application to the School Librarian Licensure program is reviewed. Accepted students must successfully pass two Illinois State Board of Education testing requirements prior to registration for the final fieldwork experience.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in the Ph.D. program for those interested in faculty careers.

Facilities and Resources

Among the major areas of faculty research are:

- **community informatics**
- **data analytics**
- **data curation**
- **digital humanities**
- **digital libraries**
- **history of information**
- **information retrieval**
- **organization of knowledge and information**
- **privacy, security, and trust**
- **ethics and values for information**
- **youth literature, culture, and services**

The iSchool's Center for Informatics Research in Science and Scholarship (CIRSS) conducts research on information problems that impact scientific and scholarly inquiry. The Center for Children's Books (CCB) provides a review and research collection of the newest literature for children and young adults. The Communications Office produces two high-quality publications, Library Trends and The Bulletin of the Center for Children's Books. The staff of each of these units is available to students and faculty for consultation and guidance. A computer network with Internet connectivity is integral to teaching and learning activities. The University Library provides a vast reservoir of resources for all types of study and research in library and information science.

The School maintains an ongoing commitment to continuing education through conferences, institutes, workshops, and course offerings.

Financial Aid

Financial aid may be available from the iSchool, the University Library, and elsewhere in the University in the form of graduate assistantships, teaching assistantships, research assistantships, and hourly paid work. Area libraries may provide pre-professional or hourly positions. Also, the iSchool offers a limited number of fellowships for which doctoral students tend to be favored over C.A.S. and master's degree students. Students in the joint program that do not hold a FLAS fellowship are eligible for, but not guaranteed, fellowship or assistantship support in the semesters in which they are enrolled in the iSchool. Any assistantship awarded to these students provides a waiver of the base in-state tuition and service fee as well as a stipend. Non-Illinois residents must pay the difference between in- and out-of-state tuition.

for the degree of Doctor of Philosophy Major in Information Science

For additional details and requirements, refer to the unit's Graduate Programs of Study (https://ischool.illinois.edu/degrees-programs/) and the Graduate College Handbook (https://grad.illinois.edu/gradhandbook/).

Entering with approved MS/MA degree

Code	Title	Hours
A history and foundation of IS seminar		4
Research methods (min 8)		8
Electives		20-36
Research/Project/Independent Study Hours (16 max applied toward degree)		0-16
IS 599	Thesis Research (32 min applied toward degree)	32
Total Hours		80

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum Hours Required Within the Unit:	20 hours of IS electives
A minimum of two years in residence is required to complete the necessary coursework; an additional year or more, preferably in residence, is required for the thesis.	
Qualifying Exam Required	Yes
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.25

Entering with approved BS/BA degree

Code	Title	Hours
A history and foundation of IS seminar		4
Research methods (min 8)		8
M.S. equivalent		32
Electives		20-36
Research/Project/Independent Study Hours (16 max applied toward degree)		0-16
IS 599	Thesis Research (32 min applied toward degree)	32
Total Hours		112

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum Hours Required Within the Unit:	20 hours of IS electives
A minimum of two years in residence is required to complete the necessary coursework; an additional year or more, preferably in residence, is required for the thesis.	
Qualifying Exam Required	Yes
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.25

Learning Outcomes: Information Sciences, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Information Sciences

1. Global Information Consciousness
   a. **Definition:** The iSchool's PhD students will discover how complex, interdependent global systems— including informational, social, and technical —affect and are affected by the characteristics and behavior of individuals, communities, and institutions.
2. Intellectual Reasoning and Knowledge
   a. **Definition:** The iSchool's PhD students will acquire broad and deep expertise, including knowledge and skills, across subfields of information science. This includes the ability to engage with, plan, and conduct interdisciplinary research.
3. Creative Inquiry and Discovery
   a. **Definition:** The iSchool's PhD students will apply their knowledge and skills to promote inquiry, discover solutions, generate new ideas, and communicate their research. This includes conducting independent and exemplary research, presenting their work in public settings, and publishing their work in peer-reviewed venue.
4. Social and Cultural Awareness and Understanding
   a. **Definition:** The iSchool's PhD students will develop a critical and reflective orientation toward such social and cultural differences as race, indigeneity, gender, class, sexuality, language, and disability. This includes the ability to conduct ethical and responsible research.
5. Effective Leadership and Community Engagement
   a. **Definition:** The iSchool's PhD students will build and sustain productive relationships to respond to information-centric, civic and social challenges at local, national, and global levels, creating positive impact in their communities. This includes the ability to convey their knowledge to others, e.g., by teaching or TA courses or workshops, and through outreach and service activities.

Integrative Biology, MS

for the degree of Master of Science in Integrative Biology

head of department: Carla Cáceres
director of graduate studies: Allison O'Dwyer
director of admissions committee: Allison O'Dwyer
program website: https://sib.illinois.edu/graduate/msib (https://sib.illinois.edu/graduate/msib/)
department website: http://sib.illinois.edu/ (http://sib.illinois.edu/eeb/)
department faculty: https://sib.illinois.edu/ (https://sib.illinois.edu/eeb/faculty/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department office: 286 Morrill Hall, 505 S. Goodwin Ave, Urbana, IL 61801
phone: 217-300-5039
email: msib@sib.illinois.edu

The Master of Science in Integrative Biology (MS in IB) provides students with a non-thesis, course-based advanced degree program opportunity. Students in the MS program have the ability to enhance their skill sets within IB upper-level courses through our world-class educational experiences, without having to invest in a required and timely research component for the degree. Students will thus be able to graduate in one year with a degree making them more competitive for employment and future research opportunities.

This program mainly serves students who are in a gap year between undergraduate programs and either employment or future graduate-level programs. With the ability to hone skills in critical thinking, communication, laboratory practices, and scientific knowledge this program affords students the ability to make effective use out of such a year.

The MS in IB program offers advanced coursework in fields such as organismal biology, behavioral ecology, anatomy and physiology, environmental science, bioinformatics, pathology, genomics, and mathematical modeling to name just a few. With a world-class advanced degree from the University of Illinois, our students are better prepared to enter the workforce and thus have higher earning potential.

for the degree of Master of Science in Integrative Biology

The MS in IB program degree requires a minimum of two full-time semesters. Students may take up to two years to complete their degree.

See approved course list at: https://sib.illinois.edu/graduate/msib/.

For additional details and requirements refer to the MS in IB website (https://sib.illinois.edu/graduate/msib/) and the Graduate College Handbook (https://grad.illinois.edu/handbooks-policies.html).

Code	Title	Hours
Core Curriculum Hours Required		**12-24**
At least one course from two of the following three IB disciplinary areas and one additional course with a laboratory and/or field component. See link above for course list. [1]		
Area 1: Organismal and Evolutionary Biology		
Area 2: Behavior, Ecology and the Environment		
Area 3: Integrative anatomy, Physiology and Molecular Biology		
Elective Hours Required		**6-8**
Courses to be chosen from the MS in IB approved list of courses- see link above- or upon approval from the program director.		
Minimum 500-level Hours Required		**12**
Courses to be chosen from the MS in IB approved list of courses- see link above.		
Total Hours Required		**32**

[1] *Two hours must come from* IB 492.

Other Requirements:

Requirement	Description
Minimum Hours Required Within the Unit	8
Minimum GPA	3.0
Maximum hours of IB 590 allowed to count toward the MS in IB degree	6

Italian, MA

for the degree of Master of Arts in Italian

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head of department: Zsuzsanna Fagyal
director of graduate studies: François Proulx
department website: http://www.frit.illinois.edu/
college website: https://las.illinois.edu/
overview of graduate college admissions & requirements: Graduate Admissions (https://grad.illinois.edu/admissions/apply/)
overview of college admissions & requirements: https://frit.illinois.edu/admissions/italian-graduate-admissions (https://frit.illinois.edu/admissions/italian-graduate-admissions/)
department office: 2090 Foreign Languages Building, 707 South Mathews Avenue, Urbana, IL 61801
phone: (217) 333-2020
email: french-italian@illinois.edu

The Department of French and Italian offers graduate programs leading to the Master of Arts and the Doctor of Philosophy degrees in French and in Italian. Candidates for the master's degree may specialize in French Studies, French Linguistics, French Language Learning, or Italian. Candidates for the doctoral degree in French may choose one of three specializations: French Studies, French Linguistics, or Second Language Acquisition and Teacher Education (SLATE).

The following minors and certificates may be pursued: Cinema Studies (p. 1128), Gender & Women's Studies (p. 1134), Translation Studies (https://translation.illinois.edu), Criticism and Interpretive Theory (https://criticism.english.illinois.edu)

Graduate Degree Programs in French & Italian

French, MA (p. 676)
concentration:
Medieval Studies (p. 1101)
French, PhD (p. 783)
concentration:
Medieval Studies (p. 1101)|Romance Linguistics (p. 1106)|Second Language Acquisition & Teacher Education (p. 1106)
Italian, MA (p. 824)
concentration:
Medieval Studies (p. 1101)
Italian, PhD (p. 826)
concentration:
Medieval Studies (p. 1101)|Romance Linguistics (p. 1106)|Second Language Acquisition & Teacher Education (p. 1106)

Admission

French

Students considering admission to the master's program should usually have had a college major in French. Applicants should apply online (www.grad.illinois.edu/admissions/apply (http://www.grad.illinois.edu/admissions/apply/)) and submit an academic statement of purpose (maximum 1000 words), a personal statement (maximum 500 words), three letters of recommendation, and two writing samples (5-10 pages each), at least one of which must be in French. Original transcripts showing all undergraduate and graduate work completed should be sent to SLCL Graduate Student Services. Graduate Record Examination (GRE) scores are required of all domestic applicants and should be submitted to institution code 1836. International applicants who have taken the GRE are encouraged to submit their scores as well. Applicants whose native language is not English are required to take the Test of English as a Foreign Language (TOEFL) and must score at least 79 on the

internet-based test (iBT); they must also pass the speaking sub-section of the iBT with a minimum score of 24 (http://www.grad.illinois.edu/Admissions/instructions/04c.cfm). Admission for the spring semester is rare. Students seeking admission to the Ph.D. program with a Master of Arts degree earned elsewhere are expected to have a minimum 3.5 grade point average in graduate coursework. The master's degree should be in French literature, French studies, or French linguistics. Candidates seeking admission to the Ph.D. specialization in Second Language Acquisition and Teacher Education may hold a Master of Arts in Teaching degree instead.

For more information about how to apply, see https://frit.illinois.edu/admissions/french-graduate-admissions **(**https://frit.illinois.edu/admissions/french-graduate-admissions/**)**. Application questions may be directed to SLCL Graduate Student Services at slclgradservices@illinois.edu.

Italian

The normal prerequisite for a graduate major is an undergraduate major in Italian or consent of the department. Students doing graduate work for any advanced degree in Italian must possess a command of the language. Applicants should apply online (www.grad.illinois.edu/admissions/apply (http://www.grad.illinois.edu/admissions/apply/)) and submit an academic statement of purpose (maximum 1000 words), a personal statement (maximum 500 words), three letters of recommendation, and a writing sample of approximately 10-20 pages in the form of one or two papers. Original transcripts (with English translations if applicable) showing all undergraduate and graduate work completed should also be uploaded. Graduate Record Examination (GRE) scores are required of all domestic applicants and should be submitted to institution code 1836. International applicants who have taken the GRE are encouraged to submit their scores as well. Applicants whose native language is not English are required to take the Test of English as a Foreign Language (TOEFL) and must score at least 79 on the internet-based test (iBT); they must also pass the speaking sub-section of the iBT with a minimum score of 24 (see www.grad.illinois.edu/Admissions/instructions/04c (http://www.grad.illinois.edu/Admissions/instructions/04c/)). Applications are accepted for fall admission only. Application questions may be directed to SLCL Graduate Student Services at slclgradservices@illinois.edu.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, the department requires Ph.D. candidates to do some teaching as part of their academic work because such experience is considered a vital part of graduate training and professionalization. Non-native English speakers must first pass a test of their oral English ability. See www.grad.illinois.edu/admissions/taengprof.htm (http://www.grad.illinois.edu/admissions/taengprof.htm).

Teaching Assistants in French and Italian are required to take FR 505 or ITAL 505 respectively (4 hours) as part of their contractual obligation. The course does not count toward the graduate degrees.

Faculty Research Interests

Our faculty (https://frit.illinois.edu/directory/faculty/) possess strengths in literary interpretation, critical theory, the study of civilization, cinema, theoretical and applied linguistics, and computer-assisted teaching. Members of the faculty have received national and international recognition; graduates serve on the faculties of numerous colleges and universities both in this country and abroad. See also the faculty's areas of research (https://frit.illinois.edu/research/research-areas/).

Centers, Programs, and Institutes

Our faculty hold appointments with the Departments of African American Studies, Gender and Women's Studies, Linguistics, Media and Cinema Studies, as well as the European Union Center and the Center for South Asian and Middle Eastern Studies, the Program in Comparative and World Literature, the Program in Jewish Culture and Society, the Program in Medieval Studies, and the Unit for Criticism and Interpretive Theory, broadening opportunities for interdisciplinary work.

Facilities and Resources

A language learning lab provides computer-based access to resources and audio-video services. The phonetics lab contains state-of-the-art equipment available to graduate student researchers. The Kolb-Proust Archive for Research, a unit of the Library, houses a wealth of information about Marcel Proust and his time, including the important collection of notes and materials assembled by Philip Kolb, who was a professor in the Department. Documents from the collection are accessible on the World-Wide Web through a searchable SGML-encoded Virtual Archive (www.library.illinois.edu/kolbp) (http://www.library.illinois.edu/kolbp/).

Financial Aid

All students who apply for admission are considered for financial aid. Subject to budgetary conditions, and assuming satisfactory academic and teaching performance, the Department offers two years of financial aid toward the M.A. degree and an additional four years of support toward completion of the Ph.D.

Teaching Assistantships are the most common form of graduate student support. The usual appointment requires teaching three courses during the academic year.

Research Assistantships require the recipient to assist with a faculty member's research for a specific number of hours per week. A research assistantship may be combined with a teaching assistantship.

Fellowships are offered for new and continuing students. No separate application form is required.

Tuition and Fee Waivers are included in waiver-generating fellowship, teaching assistantship, and research assistantship awards.

Graduate students in French may spend the academic year abroad under exchange agreements with universities in France, Belgium, and Canada, employed as teaching assistants.

for the degree of Master of Arts in Italian

Areas of specialization offered in Italian are Italian literature and cultural studies and Italian linguistics. The M.A. in Italian requires a minimum of 32 graduate hours. Students must also successfully complete exams in four areas of Italian literature/cultural studies or three areas of Italian linguistics, chosen in consultation with their advisor.

For additional details and requirements refer to the department's guidelines for graduate students and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
Coursework selected in consultation with advisor		32
Total Hours		32

Other Requirements

Requirement	Description
Other Requirements may overlap	
ITAL 505 is required of all teaching assistants	
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	3.0

Learning Outcomes: Italian, MA

Learning Outcomes for the degree of Master of Arts in Italian

1. **Language:** strong command of spoken and written Italian in all its registers; strong command of academic English, particularly in writing, but also spoken; ability to summarize and explain major issues in language teaching and learning.
2. **Critical Theory:** can outline major fields of theoretical inquiry current in the discipline, such as marxism, psychoanalysis, post-structuralism, feminism / queer studies, post-colonialism, biopolitics, environmental humanities and ecocriticism, and others. Ability to identify current trends and issues in critical theory of interest to the field, as well as the beginning capacity to critically evaluate different theoretical approaches.
3. **Italian Studies:** demonstrates an ability to outline the field of Italian Studies, summarize the major issues of concern within the field, and evaluate some approaches to those issues.
4. **Teaching:** ability to teach Italian language at the beginning and intermediate levels; to create and critically evaluate syllabi, exams, written assignments, and lectures. Ability to identify and assess successful classroom strategies; familiarity with current trends in pedagogy for literature and culture.
5. **The Profession:** awareness and development of professional skills, including the ability to create seminar papers that can serve as raw material for future articles, give in-class presentations as a prelude to academic talks, and create book reviews and fellowship applications.

Italian, PhD

for the degree of Doctor of Philosophy in Italian

head of department: Zsuzsanna Fagyal
director of graduate studies: François Proulx
department website: http://www.frit.illinois.edu/
college website: https://las.illinois.edu/
overview of graduate college admissions & requirements: Graduate Admissions (https://grad.illinois.edu/admissions/apply/)
overview of college admissions & requirements: https://frit.illinois.edu/admissions/italian-graduate-admissions (https://frit.illinois.edu/admissions/italian-graduate-admissions/)
department office: 2090 Foreign Languages Building, 707 South Mathews Avenue, Urbana, IL 61801
phone: (217) 333-2020
email: french-italian@illinois.edu

The Department of French and Italian offers graduate programs leading to the Master of Arts and the Doctor of Philosophy degrees in French and in Italian. Candidates for the master's degree may specialize in French Studies, French Linguistics, French Language Learning, or Italian. Candidates for the doctoral degree in French may choose one of three specializations: French Studies, French Linguistics, or Second Language Acquisition and Teacher Education (SLATE).

The following minors and certificates may be pursued: Cinema Studies (p. 1128), Gender & Women's Studies (p. 1134), Translation Studies (https://translation.illinois.edu), Criticism and Interpretive Theory (https://criticism.english.illinois.edu)

Graduate Degree Programs in French & Italian

French, MA (p. 676)
concentration:
Medieval Studies (p. 1101)
French, PhD (p. 783)
concentration:
Medieval Studies (p. 1101)|Romance Linguistics (p. 1106)|Second Language Acquisition & Teacher Education (p. 1106)
Italian, MA (p. 824)
concentration:
Medieval Studies (p. 1101)
Italian, PhD (p. 826)
concentration:
Medieval Studies (p. 1101)|Romance Linguistics (p. 1106)|Second Language Acquisition & Teacher Education (p. 1106)

Admission

French

Students considering admission to the master's program should usually have had a college major in French. Applicants should apply online (www.grad.illinois.edu/admissions/apply (http://www.grad.illinois.edu/admissions/apply/)) and submit an academic statement of purpose (maximum 1000 words), a personal statement (maximum 500 words), three letters of recommendation, and two writing samples (5-10 pages each), at least one of which must be in French. Original transcripts showing all undergraduate and graduate work completed should be sent to SLCL Graduate Student Services. Graduate Record Examination (GRE) scores are required of all domestic applicants and should be submitted to institution code 1836. International applicants who have taken the GRE are encouraged to submit their scores as well. Applicants whose native language is not English are required to take the Test of English as a Foreign Language (TOEFL) and must score at least 79 on the internet-based test (iBT); they must also pass the speaking sub-section of the iBT with a minimum score of 24 (http://www.grad.illinois.edu/Admissions/instructions/04c.cfm). Admission for the spring semester is rare. Students seeking admission to the Ph.D. program with a Master of Arts degree earned elsewhere are expected to have a minimum 3.5 grade point average in graduate coursework. The master's degree should be in French literature, French studies, or French linguistics. Candidates seeking admission to the Ph.D. specialization in Second Language Acquisition and Teacher Education may hold a Master of Arts in Teaching degree instead.

For more information about how to apply, see https://frit.illinois.edu/admissions/french-graduate-admissions (https://frit.illinois.edu/admissions/french-graduate-admissions/). Application questions may be directed to SLCL Graduate Student Services at slclgradservices@illinois.edu.

Italian

The normal prerequisite for a graduate major is an undergraduate major in Italian or consent of the department. Students doing graduate work for any advanced degree in Italian must possess a command of the language. Applicants should apply online (www.grad.illinois.edu/admissions/apply (http://www.grad.illinois.edu/admissions/apply/)) and submit an academic statement of purpose (maximum 1000 words), a personal statement (maximum 500 words), three letters of recommendation, and a writing sample of approximately 10-20 pages in the form of one or two papers. Original transcripts (with English translations if applicable) showing all undergraduate and graduate work completed should also be uploaded. Graduate Record Examination (GRE) scores are required of all domestic applicants and should be submitted to institution code 1836. International applicants who have taken the GRE are encouraged to submit their scores as well. Applicants whose native language is not English are required to take the Test of English as a Foreign Language (TOEFL) and must score at least 79 on the internet-based test (iBT); they must also pass the speaking sub-section of the iBT with a minimum score of 24 (see www.grad.illinois.edu/Admissions/instructions/04c (http://www.grad.illinois.edu/Admissions/instructions/04c/)). Applications are accepted for fall admission only. Application questions may be directed to SLCL Graduate Student Services at slclgradservices@illinois.edu.

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Although teaching is not a general Graduate College requirement, the department requires Ph.D. candidates to do some teaching as part of their academic work because such experience is considered a vital part of graduate training and professionalization. Non-native English speakers must first pass a test of their oral English ability. See www.grad.illinois.edu/admissions/taengprof.htm (http://www.grad.illinois.edu/admissions/taengprof.htm).

Teaching Assistants in French and Italian are required to take FR 505 or ITAL 505 respectively (4 hours) as part of their contractual obligation. The course does not count toward the graduate degrees.

Faculty Research Interests

Our faculty possess strengths in literary interpretation, critical theory, the study of civilization, cinema, theoretical and applied linguistics, and computer-assisted teaching. Members of the faculty have received national and international recognition; graduates serve on the faculties of numerous colleges and universities both in this country and abroad. See also the faculty's areas of research (https://frit.illinois.edu/research/research-areas/).

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Facilities and Resources

A language learning lab provides computer-based access to resources and audio-video services. The phonetics lab contains state-of-the-art equipment available to graduate student researchers. The Kolb-Proust Archive for Research, a unit of the Library, houses a wealth of information about Marcel Proust and his time, including the important collection of notes and materials assembled by Philip Kolb, who was a professor in the Department. Documents from the collection are accessible on the World-Wide Web through a searchable SGML-encoded Virtual Archive (www.library.illinois.edu/kolbp) (http://www.library.illinois.edu/kolbp/).

Financial Aid

All students who apply for admission are considered for financial aid. Subject to budgetary conditions, and assuming satisfactory academic and teaching performance, the Department offers two years of financial aid toward the M.A. degree and an additional four years of support toward completion of the Ph.D.

Teaching Assistantships are the most common form of graduate student support. The usual appointment requires teaching three courses during the academic year.

Research Assistantships require the recipient to assist with a faculty member's research for a specific number of hours per week. A research assistantship may be combined with a teaching assistantship.

Fellowships are offered for new and continuing students. No separate application form is required.

Tuition and Fee Waivers are included in waiver-generating fellowship, teaching assistantship, and research assistantship awards.

Graduate students in French may spend the academic year abroad under exchange agreements with universities in France, Belgium, and Canada, employed as teaching assistants.

for the degree of Doctor of Philosophy in Italian

Areas of specialization offered in Italian are literary and cultural studies, Italian linguistics, and Romance linguistics.

For additional details and requirements refer to the department's guidelines for graduate students and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
Coursework selected in consultation with advisor		
Language Requirement: Students in all programs except SLATE must demonstrate reading proficiency in two languages besides the foreign language of specialization (not including English).		
ITAL 599	Thesis Research	32
Total Hours		64

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall:	16
Masters Degree Required for Admission to PhD?	Yes
Qualifying Exam Required	No
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

Learning Outcomes: Italian, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Italian

1. **Language:** mastery of spoken and written Italian in all its registers; mastery of academic English, particularly in writing, but also spoken; ability to summarize and explain major issues in language teaching and learning.
2. **Critical Theory:** demonstrates ability to synthesize knowledge of major fields of theoretical inquiry current in the discipline, such as Marxism, psychoanalysis, post-structuralism, feminism / queer studies, post-colonialism, biopolitics, environmental humanities and ecocriticism, and others. Ability to identify current trends and issues in critical theory of interest to the field, as well as capacity to critically evaluate different theoretical approaches, and defend one's own approach.
3. **Italian Studies:** demonstrates an ability to evaluate the field of Italian Studies, assess the major issues of concern within the field, and evaluate different approaches to those issues.
4. **Teaching:** ability to teach Italian language at all levels, as well as a wide range of literary and cultural topics; to design syllabi, exams, written assignments, and lectures. Ability to identify and assess successful classroom strategies; familiarity with current trends in pedagogy for literature and culture.
5. **The Profession:** mastery of professional skills, including ability to formulate academic talks, generate syllabi, rewrite seminar papers as articles, construct book reviews and fellowship applications; preparation for academic job market in literary and cultural studies and other allied fields, including ability to identify successful strategies and evaluate different types of institutions and their teaching and research needs.

Journalism, MS

for the degree Master of Science in Journalism

head of department: Stephanie Craft
director of graduate studies: Brant Houston
email: journ@illinois.edu
department website: https://media.illinois.edu/journalism (https://media.illinois.edu/journalism/)
department faculty: https://media.illinois.edu/journalism/faculty (https://media.illinois.edu/journalism/faculty/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://media.illinois.edu/
department office: 119 Gregory Hall, 810 S. Wright Street, Urbana, IL 61801
phone: (217) 333-0709

The M.S. program is designed to meet the goals of three types of students: 1) students who have recently earned a bachelor's degree in Journalism or a related field and want to explore a specific type of journalism in greater depth, 2) mid-career journalists who want to expand their professional skills, and 3) students who either hold or are pursuing a terminal degree in selected fields (including but not limited to science, technology, engineering and math) seeking to complement their expertise with journalistic skills for communicating it to the public.

Programs in Journalism

Undergraduate Programs:
- **major:** Journalism, BS (p. 250)
- **major:** Journalism, BS-MJ (p. 460)
- **minors:** Journalism (p. 506) | Media (p. 513)

Graduate Programs:
- **degree:** Journalism, BS-MJ (p. 460)
- **degree:** Journalism, MS (p. 828)
- **joint degree:** Journalism, MS and Law, JD (p. 1156)

The department does not offer a Ph.D. degree. For the program leading to the Doctor of Philosophy in Communications, see Communications and Media, PhD (p. 672).

Admission

The M.S. program places a strong emphasis on journalism, and candidates who are accepted are most often those with a demonstrated interest in practicing journalism. It is imperative that all applicants supply writing samples.

Applicants to the M.S. program must have a 4-year bachelor's degree from an accredited U.S. institution or one of recognized standing abroad. A grade point average of 3.0 (A = 4.0) is the minimum requirement for admission to the Graduate College, with exceptions by petition only. Because the master's program has an enrollment ceiling, some applicants with grade point averages of 3.0 or higher may not be admitted. Ordinarily, students are admitted to begin graduate study in the fall semester.

Letters of recommendation are required, and the Graduate Record Examination (GRE) is required of all applicants who do not have either an undergraduate journalism degree from the University of Illinois or an approved post-secondary degree. An interview with the head of the department or director of graduate studies is helpful but not required. Students whose native language is not English must present their official scores on the Test of English as a Foreign Language (TOEFL) examination as part of their applications. The department follows the Graduate College's recommendations for English proficiency. Detailed information about admissions and financial aid can be found on the department's website (https://media.illinois.edu/journalism/degrees-programs/masters/).

Financial Aid

Fellowships are available only for select M.S. students. Fellowships are awarded on a quarter-time basis and carry a waiver of tuition and most fees. A limited number of merit-based scholarships are available for M.S. students.

for the degree Master of Science in Journalism

For additional details and requirements, refer to the department and the Graduate College Handbook (https://grad.illinois.edu/gradhandbook/).

Master of Science in Journalism [1]

First Year

Fall Semester	Hours
JOUR 501 Multimedia Storytelling	4
JOUR 505 Journalism Proseminar	4

Electives -- minimum of 4 hours at the JOUR 4-- level[2]		4
	Semester Hours	12
Spring Semester		
JOUR 500	Current Issues in Journalism	4
JOUR 515 (Section A)	Master's Project	4
Electives -- minimum of two JOUR 4-- courses[2]		8
	Semester Hours	16
Summer Semester		
JOUR 515 (Section B)	Master's Project	4
	Semester Hours	4
	Total Hours:	32

1 *[1] Undergraduates pursuing a B.S. in Journalism at Illinois are eligible to apply for the M.S. under a joint B.S./M.S. degree program. The B.S./M.S. requires a greater number of credit hours and more theoretical courses than the B.S./M.J. program. Students can apply for the B.S./M.S. program in the first semester of their junior year and, once admitted, are encouraged to select their remaining undergraduate journalism elective courses at the 200- and 300-level from courses covering skills other than those they emphasized in completing their undergraduate degree. As graduate students, they will enroll in a minimum of four advanced electives at the 400- and 500-levels, in addition to the required graduate courses JOUR 500, 505, and 515 (sections A and B). Electives may be in areas inside or outside Journalism to allow them to pursue a topical specialization. Those electives would require the approval of the Director of Graduate Studies. The B.S./M.S. requires a minimum of 16 hours of 500-level coursework, a 3.0 or higher GPA, and additional details and requirements are available on the department's website and in the* Graduate College Handbook *(*https://grad.illinois.edu/gradhandbook/*).*

2 *The Director of Graduate Studies must approve any non-Journalism courses chosen as electives.*

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall:	16
Minimum GPA:	3.0

Learning Outcomes: Journalism, MS

Learning Outcomes for the degree Master of Science in Journalism

1. Knowledge of principles of journalism and its history and trends.
2. Expertise in news gathering through documents and data, interviews, and field observation.
3. Expertise in one of the major presentations methods in journalism, choosing among text, audio or video presentation, with an understanding of all of these presentation methods include the use of mobile devices.
4. An understanding of professional journalism, including its changing business models, job descriptions and increasing cross-disciplinary collaborations.
5. An understanding of various qualitative and quantitative methods in data journalism.

Kinesiology, MS

for the degree of Master of Science in Kinesiology

Department Head: Kim Graber
Director of Graduate Studies: Steven Petruzzello
Graduate Office: Julie Jenkins
Graduate Office Address: 906 South Goodwin Ave, 112 Freer Hall MC-052, Urbana, IL 61801
Graduate Phone: (217) 333-1083
Graduate Email: jjenkns@illinois.edu
Department Website: https://ahs.illinois.edu/kinesiology (https://ahs.illinois.edu/kinesiology/)
Program Website: https://ahs.illinois.edu/master-of-science-kinesiology (https://ahs.illinois.edu/master-of-science-kinesiology/)

Graduate Degree Programs

Kinesiology, MS (p. 829)
Kinesiology, PhD (p. 830)
Joint Degree Program: Kinesiology, PhD and Master of Public Health, MPH (p. 1162)

Admissions

Students may apply to either the M.S. or the PhD program. Applications are due on **January 15** for Fall admissions. Applications are due on **October 1** for Spring admissions.

Admissions to the M.S. degree program requires a baccalaureate degree from an accredited institution of higher education, a minimum grade point average of 3.0 (A = 4.0) for the last two years of undergraduate study and any graduate work completed, Graduate Record Examination (GRE) test scores, a statement of interest, and three letters of recommendation.

International students must also submit Test of English as a Foreign Language (TOEFL)scores, with a minimum for full status admission: greater than 102 (IBT), greater than 253 (CBT), greater than 610 (PBT), or greater than 7.0 (IELTS). Scores cannot be morethan 2 years old. (see https://grad.illinois.edu/admissions/instructions/04c (https://grad.illinois.edu/admissions/instructions/04c/))

Major areas of specialization at both the master's and doctoral degree levels include:

- Cultural, Interpretive and Science Studies
- Exercise Physiology
- Exercise Psychology
- Motor Control / Biomechanics
- Pedagogy & Physical Activity

for the degree of Master of Science in Kinesiology

It is possible for a full-time student to complete this degree program in one academic year plus one summer session.

Thesis Option

Code	Title	Hours
KIN 501	Kinesiology Research Methods (or equivalent)	4
KIN 591	Seminar	4
Major area of study		8
Secondary area within the dept.		4
Research/Project Hours (min/max applied toward degree):		0-8
KIN 599	Thesis Research (min/max applied toward degree)	8
Total Hours		32

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum Hours Overall Required Within the Unit:	20 (not including 599)
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the department's* graduate programs *(*http://www.kch.illinois.edu/kines-grad-overview/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Non-Thesis Option

Code	Title	Hours
KIN 501	Kinesiology Research Methods (or equivalent)	4
KIN 591	Seminar	4
Major area of study		8
Secondary area within the dept.		4
Research/Project Hours (min/max applied toward degree):		4-8
Total Hours		32

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum Hours Overall Required Within the Unit:	20 (not including 599)
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the department's* graduate programs *(*http://www.kch.illinois.edu/kines-grad-overview/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Kinesiology, MS

Learning Outcomes for the degree of Master of Science in Kinesiology

1. **Content Knowledge:** Students will demonstrate an advanced understanding of current and historically significant theories, models, themes, and ideas in the biomechanical, physiological, psychological, behavioral, pedagogical, biological, socioeconomic, and sociocultural correlates of Kinesiology.
2. **Critical Thinking and Discovery:** Students will demonstrate ethical practices while applying advanced quantitative and/or qualitative methods in collecting, analyzing, and interpreting data which will then be disseminated through publications and/or oral presentations.
3. **Awareness and Understanding:** Students will understand and appreciate the diverse biological, psychological, socioeconomic, sociocultural, philosophical, and historical factors that influence health, physical activity, rehabilitation, and human movement.
4. **Programming and Assessment:** Students will apply best practices in developing, implementing, assessing, and evaluating programs and interventions related to health promotion, physical activity adoption and adherence, and the prevention and treatment of diseases in culturally diverse populations.
5. **Leadership and Engagement:** Students will demonstrate leadership and effective communication skills, showcasing an appreciation and commitment to health and physical activity as they develop and sustain productive relationships and work for the common good at local, national, and global levels.

Kinesiology, PhD

for the degree of Doctor of Philosophy in Kinesiology

Department Head: Kim Graber
Director of Graduate Studies: Steven Petruzzello
Graduate Office: Julie Jenkins
Graduate Office Address: 906 South Goodwin Ave, 112 Freer Hall MC-052, Urbana, IL 61801
Graduate Phone: (217) 333-1083
Graduate Email: jjenkns@illinois.edu
Department Website: https://ahs.illinois.edu/kinesiology (https://ahs.illinois.edu/kinesiology/)
Program Website: https://ahs.illinois.edu/kinesiology/phd (https://ahs.illinois.edu/kinesiology/phd/)

Graduate Degree Programs

Kinesiology, MS (p. 829)
Kinesiology, PhD (p. 830)
Joint Degree Program: Kinesiology, PhD and Master of Public Health, MPH (p. 1162)

Admissions

Students may apply to either the M.S. or the PhD program. Applications are due on **January 15** for Fall admissions. Applications are due on **October 1** for Spring admissions.

Admission to the PhD degree program requires a minimum of a baccalaureate degree from an accredited institution of higher education with a minimum grade point average of 3.5 (A = 4.0) for the last two years of undergraduate study. Applicants who have a master's degree should

have a grade point average of 3.5 for previous graduate-level work. All applicants are required to submit Graduate Record Examination (GRE) test scores, a statement of interest, and three letters of recommendation.

International students must also submit Test of English as a Foreign Language (TOEFL)scores, with a minimum for full status admission: greater than 102 (IBT), greater than 253 (CBT), greater than 610 (PBT), or greater than 7.0 (IELTS). Scores cannot be morethan 2 years old. (see https://grad.illinois.edu/admissions/instructions/04c (https://grad.illinois.edu/admissions/instructions/04c/))

Major areas of specialization at both the master's and doctoral degree levels include:

- Cultural, Interpretive and Science Studies
- Exercise Physiology
- Exercise Psychology
- Motor Control / Biomechanics
- Pedagogy & Physical Activity

for the degree of Doctor of Philosophy in Kinesiology

Entering with approved M.S. degree

Code	Title	Hours
KIN 591	Seminar	8
KIN/CHLH/SHS 565/RST 560	Teaching in the Professoriate	4
Competency in research methods		12
Research/Project Hours (8 max applied toward degree)		0-8
Elective hours to bring total course work hours to 32		
KIN 599	Thesis Research (min/max applied toward degree)	32
Total Hours		64

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum Hours Required Within the Unit:	24 (not including 599)
Minimum Number of 500-level Hours Required Overall in Program:	8
Qualifying Exam Required:	No
Preliminary Exam Required:	Yes
Final/Exam Dissertation Defense Required:	Yes
Dissertation Deposit Required:	Yes
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the department's* graduate programs *(*http://www.kch.illinois.edu/kines-grad-overview/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Entering with approved B.S. degree

Code	Title	Hours
KIN 591	Seminar	12
KIN/CHLH/SHS 565/RST 560	Teaching in the Professoriate	4
Competency in research methods		12
Research/Project Hours (16 max applied toward degree)		0-16
Elective hours to bring total course work hours to 64		
KIN 599	Thesis Research (min/max applied toward degree)	32
Total Hours		96

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum Hours Required Within the Unit:	40 (not including 599)
Minimum Number of 500-level Hours Required Overall in Program:	12
Qualifying Exam Required:	No
Preliminary Exam Required:	Yes
Final/Exam Dissertation Defense Required:	Yes
Dissertation Deposit Required:	Yes
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the department's* graduate programs *(*http://www.kch.illinois.edu/kines-grad-overview/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Kinesiology, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Kinesiology

1. **Content Knowledge:** Students will demonstrate an advanced understanding of current and historically significant theories, models, themes, and ideas in the biomechanical, physiological, psychological, behavioral, pedagogical, biological, socioeconomic, and sociocultural correlates of Kinesiology.
2. **Critical Thinking and Discovery:** Students will demonstrate ethical practices while applying advanced quantitative and/or qualitative methods in collecting, analyzing, and interpreting data which will then be disseminated through publications and/or oral presentations.
3. **Awareness and Understanding:** Students will understand and appreciate the diverse biological, psychological, socioeconomic, sociocultural, philosophical, and historical factors that influence health, physical activity, rehabilitation, and human movement.
4. **Programming and Assessment:** Students will apply best practices in developing, implementing, assessing, and evaluating programs and interventions related to health promotion, physical activity adoption and adherence, and the prevention and treatment of diseases in culturally diverse populations.
5. **Leadership and Engagement:** Students will demonstrate leadership and effective communication skills, showcasing an appreciation and commitment to health and physical activity as they develop and

sustain productive relationships and work for the common good at local, national, and global levels.

Landscape Architecture, MLA

for the degree of Master of Landscape Architecture in Landscape Architecture

Head of the Department David L. Hays
overview of admissions & requirements: https://landarch.illinois.edu/mla-program/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: http://landarch.illinois.edu
department faculty: https://landarch.illinois.edu/faculty/
college website: http://faa.illinois.edu
department office: 101 Temple Hoyne Buell Hall, 611 Lorado Taft Drive, Champaign, IL 61820
phone: (217) 333-0176
email: LADept@illinois.edu

Graduate Degree Programs in Landscape Architecture

Landscape Architecture, PhD (p. 833)
Landscape Architecture, MLA (p.)
Sustainable Urban Design, MSUD (p. 1031)
Heritage Studies Graduate Minor (p. 1136)

joint programs:
Landscape Architecture, MLA & Urban Planning, MUP (p. 1157)

The Department of Landscape Architecture offers the Master of Landscape Architecture (MLA) degree, the Master of Sustainable Urban Design degree (MSUD), and the PhD degree. The programs enable students to gain fresh insights and to conduct new research pertaining to land and its use by people. Courses and faculty research activities range from on-site to regional scales, and include environmental planning and design as well as community design, cultural heritage, and history.

The MLA is an accredited first professional degree. Students may pursue specialized areas that reflect their interests and career aspirations. This may include ecological design, community design, and cultural heritage history and design. Joint MLA/MUP is available.

Admission

The Graduate College admission requirements apply. Students are admitted on an individual basis according to a review of their prior accomplishments with an emphasis on academic achievement. MLA candidates from undergraduate design programs must submit portfolios with applications to the MLA program. Candidates without undergraduate preparation in landscape architecture will be admitted on limited status and must complete undergraduate prerequisite courses in addition to graduate work. All students must begin their studies in the fall semester.

Financial Aid

Students compete for fellowships, assistantships and tuition/service fee waivers. Some awards are determined during admissions review and students are informed through the acceptance letter. There are also some financial aid opportunities during the course of study (e.g., semester-long TA positions when available).

for the degree of Master of Landscape Architecture in Landscape Architecture

Master of Landscape Architecture-Thesis Option

Specific courses to be taken are determined in consultation with an adviser. Some students complete a master's thesis (LA 599), others develop a specialization through additional coursework.

Code	Title	Hours
LA 438	Design Workshop Studio II	3 to 6
LA 470	Social/Cultural Design Issues	3
LA 501	Landscape Arch Theory & Prac	2
LA 597	Research Design & Methods	3
LA 599	Thesis Research	10
Coursework		23
Additional undergraduate coursework will be required of students without a BLA. These prerequisites do not count toward the graduate degree.		
Internship required		0
Total Hours		48

Other Requirements [1]

Requirement	Description
Internship required	
Other requirements may overlap	
Minimum Hours Required Within the Unit:	48
Minimum 500-level Hours Required Overall:	24
Minimum GPA:	3.0

Master of Landscape Architecture-Specialization Option

Specific courses to be taken are determined in consultation with an adviser. Students develop a specialization through elective coursework and design studios. In their final semester, they prepare a document that describes their specialization.

Code	Title	Hours
Required Coursework		18
Design Studio Coursework		
LA 438	Design Workshop Studio II (taken twice)	
LA 470	Social/Cultural Design Issues	
LA 501	Landscape Arch Theory & Prac	
LA 597	Research Design & Methods	
Coursework, including specialization electives [2]		30
Additional undergraduate coursework will be required of students without a BLA. These prerequisites do not count toward the graduate degree. Required internship credit does not count towards the required 48 hours of graduate-level credit.		
Total Hours		48

Other Requirements [1]

Requirement	Description
Minimum Hours within the Unit	24
Minimum 500-level hours required overall	18
Internship required	5
Minimum GPA	3.0

[1] *For additional details and requirements refer to the department's* Graduate Handbook *(*http://www.landarch.illinois.edu/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

[2] Specific courses to be taken are determined in consultation with an advisor. Students develop a specialization through elective coursework and design studios. In their final semester, they prepare a document that describes their specialization.

Learning Outcomes: Landscape Architecture, MLA

Learning Outcomes for the degree of Master of Landscape Architecture in Landscape Architecture

Master of Landscape Architecture students will:

1. **Design Thinking.** Use a variety of processes to discover and frame opportunities, generate multiple possibilities, evaluate and refine ideas, rapidly prototype and test your proposal, and share your ideas in a compelling manner.
2. **Communicate with Skill.** Use a variety of digital tools to generate design proposals, test those proposals, and share your ideas with others.
3. **Tap into Existing Knowledge.** Incorporate our best understanding of natural resources, environmental systems, human development, social systems, professional practice and professional ethics into your work.
4. **Technical Competence.** Demonstrate the technical competence to translate design proposals into built work.
5. **Responsibility and Leadership.** Develop and demonstrate a sense of responsibility to the land and the people for whom we design.

Landscape Architecture, PhD

for the degree of Doctor of Philosophy in Landscape Architecture

Head of the Department David L. Hays
PhD coordinator: D. Fairchild Ruggles
overview of admissions & requirements: http://phd.faa.illinois.edu/application/index.html (http://phd.faa.illinois.edu/application/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://landarch.illinois.edu/
program website: https://landarch.illinois.edu/phd-program/
department faculty: https://landarch.illinois.edu/faculty/
college website: http://faa.illinois.edu
school office: 101 Temple Hoyne Buell Hall, 611 Lorado Taft Drive, Champaign, IL 61820
phone: (217) 333-0176
email: LADept@illinois.edu

Graduate Degree Programs in Landscape Architecture

Landscape Architecture, PhD (p. 833)
Landscape Architecture, MLA (p.)
Sustainable Urban Design, MSUD (p. 1031)
Heritage Studies Graduate Minor (http://catalog.illinois.edu/graduate/faa/minor/heritage-studies/)
joint programs:
Landscape Architecture, MLA & Urban Planning, MUP (p. 1157)

The Department of Landscape Architecture offers the Master of Landscape Architecture (MLA) degree, the Master of Sustainable Urban Design degree (MSUD), and the PhD degree.

The programs enable students to gain fresh insights and to conduct new research pertaining to land and its use by people. The PhD program is jointly administered with the School of Architecture and emphasizes both interdisciplinary study and cross-disciplinary inquiry. Areas of concentration include history and theory; technology and environment; and behavioral and cultural factors in design. Before submitting an application, students should consult the department website for information regarding the specific areas of study and the time needed to complete the requirements.

Several faculty members in the department also participate in the doctoral program administered by the Department of Urban and Regional Planning. See the program description under Regional Planning, PhD (p. 987) for more information.

Admission

The Graduate College admission requirements apply. Students are admitted on an individual basis according to a review of their prior accomplishments with an emphasis on academic achievement. The doctoral program prefers candidates with master's degrees: MLA, MArch, or related fields such as art history, ecology, geography, or planning. All graduate students must begin their studies in the fall semester.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in the PhD program.

Financial Aid

Students compete for fellowships, tuition and service fee waivers, and assistantships. Selection is based on the academic achievement and qualifications of the student.

for the degree of Doctor of Philosophy in Landscape Architecture

For additional details and requirements refer to the department's PhD Handbook *(*https://go.illinois.edu/PhDArchandPhDLArchHandbook/*),* Program Curriculum *(*http://www.landarch.illinois.edu/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

The requirements may vary slightly according to students' area of focus. Please consult the PhD Handbook *(*https://go.illinois.edu/PhDArchandPhDLArchHandbook/*)* for more explicit details.

Students are required to defend their dissertation, Policies on format of the doctoral examination can be found in the Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

96-hour program for students entering with a Baccalaureate Degree

Code	Title	Hours
All students are required to enroll in the PhD colloquium during the fall of their first year of course work.		
ARCH 589	PhD Colloquium (Taken twice)	2
Research methods		4
Elective Coursework in Major Field		26
Language Requirement: Required for all students in the History/Theory option and for some Social and Cultural Factors students		
Elective Coursework		32
LA 599	Thesis Research	32
Total Hours		**96**

64-hour program for students entering with an MS/MA

Code	Title	Hours
All students are required to enroll in the PhD colloquium during the fall of their first year of coursework.		
ARCH 589	PhD Colloquium (taken twice)	2
Research methods (unless previously waived)		4
Language Requirement: Required for all students in the History/Theory option and for some Social and Cultural Factors students		
Elective Coursework		26
LA 599	Thesis Research	32
Total Hours		**64**

80-96-hour program for students admitted with maximum 16 hours approved from a prior MLA.

Code	Title	Hours
All students are required to enroll in the PhD colloquium during the fall of their first year of coursework.		
ARCH 589	PhD Colloquium (taken twice)	2
Research methods		4
Elective Coursework in Major Field		10-26
Language Requirement: Required for all students in the History/Theory option and for some Social and Cultural Factors students		
Elective Coursework		32
LA 599	Thesis Research	32
Total Hours		**80-96**

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall (not including LA 599)	24
Professional Degree Required for Admission to PhD	No
Qualifying Exam Required:	No
Preliminary Exam Required:	Yes
Final Exam/Dissertation Defense Required:	Yes
Dissertation Deposit Required:	Yes
Minimum GPA:	3.0
Language and statistics course requirements vary by focus area. To develop proficiency, students may be required to take more than one course. Specific requirements are determined on a case-by-case basis by the Chair of the PhD Committee in consultation with the student's advisor.	

Learning Outcomes: Landscape Architecture, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Landscape Architecture

PhD students in the Department of Landscape Architecture will:

1. **Research Skills**. Develop and practice a variety of research skills. Students will design their research strategy; obtain and analyze evidence; develop evidence-based arguments; identify and evaluate the existing critical literature of the field; master languages in some cases, and in other cases master advanced computer programs.
2. **Communicate with Clarity.** Develop and demonstrate the ability to communicate complex and original ideas through clear writing supplemented by graphic representations and delivered as text (dissertation), speech (lecture presentations), and image (PowerPoint to accompany lectures). Doctoral students will gain an advanced level of written, visual, and technical literacy.
3. **Original Research.** Develop and carry out a major, original research investigation; develop it into an extended argument(the dissertation), the outcome of which might be a book, policy guidelines, a series of journal articles, or a patent.
4. **Design Research.** Use ideas and methods from design research to explore questions that advance knowledge that supports design.

5. **Pedagogy.** Demonstrate understanding of basic concepts about teaching and practice a range of instructional techniques in classrooms and studio contexts.

Latin American Studies, MA

for the degree of Master of Science in Latin American Studies

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acting center director: Andrew Orta
associate director & academic programs coordinator: Angelina Cotler
director of graduate studies: Anna Escobar
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
overview of department admissions requirements:
center website: http://www.clacs.illinois.edu/
center faculty: http://www.clacs.illinois.edu/about/people/faculty.aspx.
college website: https://las.illinois.edu/
center office: 201 International Studies Building, 910 South Fifth Street, Champaign, IL 61820
phone: (217) 333-4971
email: clacs@illinois.edu

Including classroom and online courses in Quechua, the most spoken native language in the American continent.

Specializations in Latin American and Caribbean Studies are administered by the director of the Center for Latin American and Caribbean Studies.

Candidates for the master's degree who elect a specialization in Latin American and Caribbean Studies must complete 8 graduate hours from the courses prescribed by the center. Doctoral candidates who elect a specialization in this area must complete 16 graduate hours for one specialization or 8 graduate hours for a split specialization. Courses must be taken in at least two departments; a list of courses fulfilling the specialization is available from the center. A specialization in agricultural economics and foreign areas studies (in this case, Latin American and Caribbean Studies) is also available. A high level of proficiency in one or more languages of the region (Spanish, Portuguese, and Amerindian Indian languages) is required. For course information, requirements, and methods used to establish the level of proficiency, contact the center's academic programs coordinator.

Students in technical and professional colleges and schools of the University of Illinois at Urbana-Champaign who seek knowledge of the Latin American and Caribbean region and languages are invited to consult with the director of the center or with their adviser in order to develop programs suited to their individual needs. Such a program may often be adopted as a specialization under existing regulations if the student so desires. These courses are of particular value to students who intend to undertake technical or professional work in the Latin American and Caribbean area for government, private business, publishing, or religious organizations.

Graduate Degree Programs in Latin American & Caribbean Studies

Latin American Studies, MA (p. 835)
Graduate Minor in Latin American & Caribbean Studies (p. 1137)

The Center for Latin American and Caribbean Studies administers a program of language and area courses leading to an interdisciplinary Master of Arts degree. The master's program facilitates studies in the languages, cultures, and affairs of the region for three constituencies of students: those seeking to match area expertise with professional training; those proceeding to disciplinary-based doctoral work; and those for whom the degree would stand on its own. The center also administers graduate specializations in Latin American and Caribbean Studies with various departments. The center is a Title VI National Resource Center. The center houses the Lemann Institute for Brazilian Studies.

Language Instruction

The Center offers 3 levels of Quechua, the most spoken language in the American continent, with approximately 13 million of speakers in 6 countries. The Center also offers Quechua online courses and free access to the publication Correo de Linguistica Andina and free exercises on Quechua. Visit www.clacs.illinois.edu/quechua/ (http://www.clacs.illinois.edu/quechua/).

Other languages in the University that fulfill the M.A. requirements are Spanish and Portuguese, both offered at the School Literatures, Cultures, and Linguistics.

Faculty Research Interests

More than 100 faculty throughout the University are currently affiliated with the Center. The Center's faculty devote all or a portion of their teaching and research to Latin American subjects, from agriculture to politics, culture and linguistics. Their expertise spans every important discipline and sub-region of Latin America and the Caribbean, with particular strength in the Andean countries, the Caribbean, lowland South America, Mexico, and Brazil.

For a complete list of our affiliated faculty and their research and teaching interests check our people page at http://www.clacs.illinois.edu/about/people/faculty.aspx.

Facilities and Resources

Latin American Library Collection (LALC)

The Center assist the Latin American Collection (http://www.library.illinois.edu/lat/) at the University Library in purchasing teaching and research materials to develop a strong collection that supports teaching and research in those programs sponsored and coordinated by the Center as well as interdisciplinary courses with Latin American subject matter offered by other departments.

The LACL collection ranks among the six largest in the country and is the largest collection in the Midwest region in purchasing teaching and research materials to develop a strong collection that supports teaching and research in those programs sponsored and coordinated by the Center as well as interdisciplinary courses with Latin American subject matter offered by other departments. It is located in the third floor of the main UIUC library in room 324 and while the Library itself does not house a circulating collection, our knowledgeable staff is available to help locate relevant materials, answer reference questions, and assist you in developing effective searching strategies.

The Latin American and Caribbean Library collection includes:

- **More than 400,000 monograph titles;**
- **Newspapers and magazines from over 20 Latin American and Caribbean countries;**
- **A strong collection of journals in the humanities and social sciences, as well as publications of professional associations, government agencies, central banks, and non-governmental organizations;**
- **Access to HAPI Online (Hispanic American Periodicals Index), the** Handbook of Latin American Studies (http://lcweb2.loc.gov/hlas/**), and other online databases;**
- **An extensive collection of videos available at the Media Center in the Undergraduate Library;**
- **over 32,000 maps of Latin America (housed in the Map and Geography Library);**
- **comprehensive holdings of Brazilian and Andean materials;**
- **Extensive holdings by and about Gabriel Garcia Marquez;**
- **Publications from the Archivo General de la Nacion de Mexico; and**
- **A comprehensive Latin American music collection.**

List-serv

The Center administers a listserv with more than 500 subscribers. Weekly mass messages "CALCS/Lemann Institute this Week" contain information on activities in campus related to Latin America and the Caribbean region (conferences, workshops, movies), new courses and job positions as well as future conferences in other Universities. To subscribe contact: Angelina Cotler (cotler@illinois.edu).

CLACS Brownbags

Every Thursday at Noon in Room 101 International Studies Building (910 S. Fifth Street in Champaign) CLACS presents a lecture offered by a faculty, graduate student or outside faculty on topics relevant to the region. These are open and free brownbag lectures. For complete list of presentations during the semester visit our website on the events section.

Opportunities and Events

The Center keeps update a complete list of jobs, grants, conferences, and fellowships in the U.S. and abroad for graduate students and faculty. Check it at http://www.clacs.illinois.edu/news/opportunities.aspx.

Outreach Program (http://www.clacs.illinois.edu/outreach/default.aspx)

One of the goals of our mission is to increase knowledge and awareness of Latin America and the Caribbean in the educational community and the general public by promoting language and area studies in their broadest sense. Outreach at CLACS is a service-oriented program funded through a Title VI Federal Area Studies grant. It is designed to increase public knowledge about Latin America and the Caribbean and Latin American and Caribbean peoples and cultures. All our services are free!
Services include

- Speakers Bureau composed by graduate students and faculty for presentations in schools on Latin American topics.
- Outreach Library for k-14 teachers and instructors that includes books and DVDs.
- Collaborates with the Illinois International Review, the University of Illinois' new international publication; produces CLACS this Week, a weekly Calendar of Events; and an annual newsletter on Quechua instruction, Correo de Linguistica Andina.
- Publishes several curriculum development workbooks including: Columbus: Beyond the Myth, A Teacher's Workbook on Tropical Rain Forests, and Historia Oral: The Latina/o Experience in the United States.
- Organizes the Latin American Brownbag Colloquium, a weekly series of noon seminars in which faculty, students, and visiting scholars present current research and speak on topics of special interest. Additionally, the Center sponsors many cultural events, such as Latin American music and dance ensembles, and art exhibitions.
- Maintains links to Web based curriculum-related materials on its outreach Web pages as a means of facilitating access to curriculum resources and research materials on Latin America and the Caribbean.

For more information visit http://www.clacs.illinois.edu/outreach/default.aspx.

Links

Links to local museums, units and clubs that offer Latin American and Caribbean services as well as external links to institutions abroad and in the U.S. www.clacs.illinois.edu/resources/ (http://www.clacs.illinois.edu/resources/).

Financial Aid

The Center is a recipient of Federal Government Title VI Foreign Language and Area Studies (FLAS) Fellowships for Graduate Studies in any discipline that includes a specialization in Latin American Studies and an intensive program of language instruction. Academic year language courses and summer fellowships for intensive language courses abroad or in the United States are available. Information on how to apply, requirements and datelines are posted in http://publish.illinois.edu/illinoisflas/.

The Center offers Tinker Summer Fellowship Research Grants for graduate students in any department wishing to do research during the summer in Latin America, the Caribbean and the Iberian Peninsula. Both these programs depend on outside funding and thus cannot be guaranteed in any given year. Information on how to apply, requirements and datelines are posted in http://www.clacs.illinois.edu/academics/fellowships/tinker.aspx.

for the degree of Master of Science in Latin American Studies

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Specializations in Latin American and Caribbean Studies are administered by the director of the Center for Latin American and Caribbean Studies.

Candidates for the master's degree who elect a specialization in Latin American and Caribbean Studies must complete 8 graduate hours from the courses prescribed by the center. Doctoral candidates who elect a specialization in this area must complete 16 graduate hours for one specialization or 8 graduate hours for a split specialization. Courses must be taken in at least two departments; a list of courses fulfilling the specialization is available from the center. A specialization in agricultural economics and foreign areas studies (in this case, Latin American and Caribbean Studies) is also available. A high level of proficiency in one or more languages of the region (Spanish, Portuguese, and Amerindian Indian languages) is required. For course information, requirements, and methods used to establish the level of proficiency, contact the center's academic programs coordinator.

Students in technical and professional colleges and schools of the University of Illinois at Urbana-Champaign who seek knowledge of

the Latin American and Caribbean region and languages are invited to consult with the director of the center or with their adviser in order to develop programs suited to their individual needs. Such a program may often be adopted as a specialization under existing regulations if the student so desires. These courses are of particular value to students who intend to undertake technical or professional work in the Latin American and Caribbean area for government, private business, publishing, or religious organizations.

Code	Title	Hours
Core interdisciplinary seminar (LAST 550 or different if indicated)		4
Graduate hours in 400-500 level courses in theory or research methods appropriate to the student's objectives and primary discipline		4-8
Area Courses that focus on Latin America or the Caribbean, of which at least 8 graduate hours must be taken in one (primary) discipline		20-24
Language Requirement: Demonstration that a communicative competence in Spanish, Portuguese, or other language indigenous to the area (excluding English) equivalent to six semesters' (undergraduate) work has been achieved.		
LAST 599	Thesis Research (min/max applied toward degree)	8
Total Hours		40

Other Requirements

Requirement	Description
Other requirements may overlap	
A thesis is required.	
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	3.25

[1] *For additional details and requirements refer to the department's* graduate program *(*http://www.clacs.illinois.edu/academics/graduate/graduate.aspx*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Latin American Studies, MA

Learning Outcomes for the degree of Master of Science in Latin American Studies

1. **Advanced Proficiency in a Latin American Language (Spanish, Portuguese, Indigenous)** - This will be assessed through completion of appropriate level course work and through OPI or equivalent testing.
2. **Diverse Perspectives**
   a. Students will partake in interdisciplinary inquiry that engages multiple disciplinary lenses and theoretical frameworks.
   b. Students should be able to apply these frameworks to multiple contexts (spatial, temporal, cultural etc.) within Latin American Studies.
3. **Critical and Applied Learnin**g
   a. Students should be able to critically and reasonably evaluate and apply their knowledge to current debates within Latin American Studies.
   b. Students will be able to apply interdisciplinary learning across multiple contexts, integrating knowledge and practice.
4. **Interdisciplinary Research**
   a. Students should be able to apply their knowledge to the design and implementation of along-term independent research project that uses both primary and secondary sources and articulates with current debates within Latin American Studies.
   b. They should be able to effectively communicate the results of that research in written form by producing a MA thesis.
5. **Effective Communication**
   a. Students should be able to identify research problems, approach these problems with appropriate methodologies and effectively communicate the results. They should be able to apply their knowledge to real-world situations.
   b. Students should be able to effectively communicate in written and oral form their knowledge of Latin American culture and language to a broad non-specialist audience.

Law, JSD

for the Doctor of the Science of Law

dean of the college: Vikram David Amar
associate dean for graduate and international programs: Margareth Etienne
correspondence and admission information: Christine Renshaw, Office of Graduate and International Legal Studies

college website: https://law.illinois.edu
college faculty: Law Faculty (https://law.illinois.edu/faculty-research/faculty-profiles/)
college address: 244 Law Building, 504 East Pennsylvania Avenue, Champaign, IL 61820
phone: (217) 333-6066
email: law-gradprograms@illinois.edu

The Doctor of the Science of Law (J.S.D.) degree provides students who primarily intend to pursue an academic career an opportunity for extended study, research, and scholarly writing. Those admitted to the program must have demonstrated analytic and research ability, possess outstanding academic credentials, and have completed the LL.M. or other law degree from the University of Illinois or other accredited American law school. In exceptional cases, consideration will be given to applicants who have completed programs of study in common law countries. All candidates must provide evidence of excellent reading and writing skills in English. The J.S.D. program normally takes a minimum of three years. Two years must be completed in residence at the College of Law and must include two semesters of course work. J.S.D. candidates are assigned a primary faculty advisor with expertise in the student's research area and an additional three faculty members, who form the student's doctoral committee. Each student must pass a qualifying examination demonstrating general proficiency in the student's field of study and a preliminary examination on the research proposal. The student's faculty committee then will assess the student's thesis research and writing progress, make recommendations, and conduct an oral examination on the final draft of the dissertation. The final

dissertation will then be completed and deposited with the Graduate College.

Graduate Degree Programs in the College of Law

Master of Laws, LLM (p. 839)

concentrations:

Corporate Law, Commercial Law, & Trade (p. 840)|Criminal Law (p. 841)|Intellectual Property & Technology Law (p. 843)|International & Comparative Law (p. 844)|Justice, Democracy, & Legal Rights (http://catalog.illinois.edu/graduate/graduate-majors/law/justice-democracy-legal-rights-concentration/)|Regulation, Sustainability, & Compliance (http://catalog.illinois.edu/graduate/graduate-majors/law/regulation-sustainability-compliance-concentration/)|US Legal Practice Skills (p. 848)

Master of Studies in Law (p. 849)

Doctor of the Science of Law (p. 837)

Law, JD (http://catalog.illinois.edu/professional-programs/jd_law/)

Joint Degrees with the Law, JD:

Chemistry, MS (p. 1157)|Computer Science, MCS (p. 1151)|Human Resources and Industrial Relations, MHRIR (p. 1156)|Journalism, MS (p. 1156)|Natural Resources & Environmental Sciences, MS (p. 1158)|Political Science: Civic Leadership, MA (p. 1162)|Political Science, PhD (p. 1162)|Urban Planning, MUP (p. 1168)|

Admission

The Graduate College admission requirements (http://www.grad.illinois.edu/admissions/apply/) and English language proficiency requirements (http://www.grad.illinois.edu/admissions/instructions/04c/) apply. In addition for the LL.M. program, the Test of English as a Foreign Language (TOEFL) requirement is 80 internet-based. Students are not required to take the general Graduate Record Examination (GRE). Students are admitted on an individual basis according to a review of their prior accomplishments with an emphasis on academic achievement. Admission is generally made for the fall semester only.

Financial Aid

Applicants to the College of Law graduate programs are welcome to apply for scholarship assistance. Scholarships typically are awarded to applicants with a combination of excellent academic and professional credentials and proven financial need. Awards usually provide part of tuition and do not cover living expenses. There are always more qualified applicants than there are funds available. Therefore, applicants are strongly encouraged to explore alternative sources of funding.

for the Doctor of the Science of Law

Code	Title	Hours
LAW 599	Thesis Research	0-16 per semester
Total Hours		**96**

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
A J.D. or LL.M. is required for admission	
Qualifying Exam Required	Yes
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Hours of residence credit	64
Minimum GPA:	2.75

[1] *For additional details and requirements refer to the College of Law's* graduate degree requirements *(*http://www.law.illinois.edu/admissions/llm-program-overview/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Law, JSD

Learning Outcomes for the Doctor of the Science of Law

1. Demonstrate basic knowledge of American substantive and procedural law. This requires:
   a. The foundational rules governing liability for civil and criminal wrongdoing.
   b. The foundational rules that regulate the transaction of business among individuals and the ownership of property.
   c. The constitutional rules that shape the American legal system.
   d. The procedural rules that govern court adjudication.
   e. Several advanced areas of substantive or procedural law or both.
2. Use legal reasoning and legal analysis. This requires:
   a. The ability to identify, formulate, and apply legal rules.
   b. The ability to read and analyze judicial opinions.
   c. The ability to parse and interpret statutes, regulations, contracts, and other similar legal texts.
   d. The ability to construct legal arguments and evaluate critically one's own and others' legal arguments.
   e. The ability to identify and evaluate the practical consequences of various legal rules and to formulate policy arguments for and against those rules.
3. Develop practical legal skills. This requires:
   a. The ability to write clearly and effectively in a wide range of legal contexts and for various audiences, such as courts, clients, opposing counsel and academics.
   b. The ability to articulate one's thoughts verbally in a clear and effective manner.
   c. Knowledge of and ability to use tools of legal research.
   d. The ability to identify and gather factual information relevant to the application of legal rules.
   e. The ability to work collaboratively with others, including others with opposing interests.
4. Conduct himself or herself professionally and in keeping with the highest standards of civic virtue. This requires:
   a. Knowledge and appreciation of the ethical rules governing legal practice and/or academic research.
   b. The ability to learn and grow professionally through self-reflection and continuing education.
   c. An understanding of the lawyer's distinctive role in society and of the lawyer's concomitant responsibility to contribute to society through public service and pro bono representation.

d. The ability to understand and be understood across various social, economic, cultural, political, national, racial, gender, and ethnic backgrounds.

5. Produce a substantial piece of original academic research. This requires:
   a. Mastery of literature in a particular area.
   b. Mastery of the sub-field in which a thesis will be written.
   c. Acquisition of expertise in the subject area of one's thesis.

Law, LLM

for the degree of Master of Laws

dean of the college: Vikram David Amar
associate dean for graduate and international programs: Margareth Etienne
correspondence and admission information: Christine Renshaw, Office of Graduate and International Legal Studies

college website: https://law.illinois.edu
college faculty: Law Faculty (https://law.illinois.edu/faculty-research/faculty-profiles/)
college address: 244 Law Building, 504 East Pennsylvania Avenue, Champaign, IL 61820
phone: (217) 333-6066
email: law-gradprograms@illinois.edu

The LL.M. and J.S.D. programs of graduate study in law are designed for foreign law graduates who wish to pursue advanced study and conduct independent research under the direction of the College of Law faculty. Two advanced degrees are conferred by the College of Law: the Master of Laws (LL.M.) degree and the Doctor of Science of Law (J.S.D.). Overall coordination of the graduate program is the responsibility of the Office of Graduate and International Programs, and individual inquiries should be addressed to this office. The Master of Studies in Law (M.S.L.) is a one-year, nonprofessional, terminal degree program designed for those who have had no legal training and who do not desire a professional law degree.

Graduate Degree Programs in the College of Law

Master of Laws, LLM (p. 839)
concentrations:
Corporate Law, Commercial Law, & Trade (p. 840)|Criminal Law (p. 841)|Intellectual Property & Technology Law (p. 843)|International & Comparative Law (p. 844)|Justice, Democracy, & Legal Rights (http://catalog.illinois.edu/graduate/graduate-majors/law/justice-democracy-legal-rights-concentration/)|Regulation, Sustainability, & Compliance (http://catalog.illinois.edu/graduate/graduate-majors/law/regulation-sustainability-compliance-concentration/)|US Legal Practice Skills (p. 848)
Master of Studies in Law (p. 849)
Doctor of the Science of Law (p. 837)
Law, JD (http://catalog.illinois.edu/professional-programs/jd_law/)
Joint Degrees with the Law, JD:
Chemistry, MS (p. 1157)|Computer Science, MCS (p. 1151)|Human Resources and Industrial Relations, MHRIR (p. 1156)|Journalism, MS (p. 1156)|Natural Resources & Environmental Sciences, MS (p. 1158)|Political Science: Civic Leadership, MA (p. 1162)|Political Science, PhD (p. 1162)|Urban Planning, MUP (p. 1168)|

Admission

The Graduate College admission requirements (http://www.grad.illinois.edu/admissions/apply/) and English language proficiency requirements (http://www.grad.illinois.edu/admissions/instructions/04c/) apply. In addition for the LL.M. program, the Test of English as a Foreign Language (TOEFL) requirement is 80 internet-based. Students are not required to take the general Graduate Record Examination (GRE). Students are admitted on an individual basis according to a review of their prior accomplishments with an emphasis on academic achievement. Admission is generally made for the fall semester only.

Financial Aid

Applicants to the College of Law graduate programs are welcome to apply for scholarship assistance. Scholarships typically are awarded to applicants with a combination of excellent academic and professional credentials and proven financial need. Awards usually provide part of tuition and do not cover living expenses. There are always more qualified applicants than there are funds available. Therefore, applicants are strongly encouraged to explore alternative sources of funding.

for the degree of Master of Laws

Each Concentration offers a directed, optional program of study for LL.M. students in an increasingly important field of global legal practice. Each Concentration provides (1) specialized training in the Concentration field of law, (2) guidance to students in developing a program of study with the courses deemed most useful and relevant to the Concentration, and (3) a Concentration designation on their transcripts that will better allow them to market their expertise, thus gaining a competitive advantage in the legal employment market. In some instances, a Dual Concentration (i.e., in Intellectual Property and Justice, Democracy and Legal Rights) is available to eligible students. Eligible students must apply to pursue the Dual Concentration and may stay in residence an additional semester so that the 14-credit requirements of the second Concentration can be independently met. In the case of the Dual Concentration, credits used to satisfy one Concentration cannot be used to satisfy the requirements for a second Concentration. Students interested in remaining in residence for a third semester to complete their program of study must apply by the

listed deadline at the start of the second semester of the LL.M. degree. The Concentrations require students to complete a minimum of fourteen credit hours in topics integral to each Concentration. Courses taken toward a Concentration will count toward the student's LL.M. degree, and must be selected with the program advisor.

The Master of Laws (LL.M.) degree is designed to prepare students with or without any prior legal training to enhance their professional development by adding familiarity with U.S law. Applicants must hold a bachelor's degree (or equivalent degree) from an approved school listed on the International Association of Universities List of Higher education Institutions. Full consideration for admission to the LL.M. program will be given to applicants holding a bachelor's degree in law or a bachelor's degree in a subject outside law.

The LL.M. degree requires the completion of at least 32 graduate hours of credit and is normally completed in one academic year. All candidates are required to pass Professional Responsibility (LAW 501), a four hour graduate course and LL.M. Legal Research and Writing (LAW 500) a two hour graduate course. The remaining graduate hours are selected from any College of Law course.

Code	Title	Hours
LAW 500	LLM Legal Writing and Research	2
LAW 501	Professional Responsibility	3 or 4
Total Hours		**32**

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum 500-level (or higher) Hours Required Overall:	12
One academic year in residence	
Minimum GPA:	2.75

[1] *For additional details and requirements refer to the College of Law's* graduate degree requirements (http://www.law.illinois.edu/admissions/llm-program-overview/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Law, LLM

Learning Outcomes for the degree of Master of Laws

1. Demonstrate basic knowledge of American substantive and procedural law. This requires:
   a. The foundational rules governing liability for civil and criminal wrong doing.
   b. The foundational rules that regulate the transaction of business among individuals and the ownership of property.
   c. The constitutional rules that shape the American legal system.
   d. The procedural rules that govern court adjudication.
   e. Several advanced areas of substantive or procedural law or both.
2. Use legal reasoning and legal analysis in advising and representing clients. This requires:
   a. The ability to identify, formulate, and apply legal rules.
   b. The ability to read and analyze judicial opinions.
   c. The ability to parse and interpret statutes, regulations, contracts, and other similar legal texts.
   d. The ability to construct legal arguments and evaluate critically one's own and others' legal arguments.
   e. The ability to identify and evaluate the practical consequences of various legal rules and to formulate policy arguments for and against those rules.
3. Bring practical legal skills to bear in resolving clients' legal problems. This requires:
   a. The ability to write clearly and effectively in a wide range of legal contexts and for various audiences, such as courts, clients, opposing counsel and academics.
   b. The ability to articulate one's thoughts verbally in a clear and effective manner.
   c. Knowledge of and ability to use tools of legal research.
   d. The ability to identify and gather factual information relevant to the application of legal rules.
   e. The ability to work collaboratively with others, including others with opposing interests.
   f. Knowledge and understanding of practical aspects of the legal profession and market for legal services.
4. Conduct himself or herself professionally and in keeping with the highest standards of civic virtue. This requires:
   a. Knowledge and appreciation of the ethical rules governing legal practice.
   b. The ability to learn and grow professionally through self-reflection and continuing education.
   c. An understanding of the lawyer's distinctive role in society and of the lawyer's concomitant responsibility to contribute to society through public service and pro bono representation.
   d. The ability to understand and be understood across various social, economic, cultural, political, national, racial, gender, and ethnic backgrounds.

Law: Corporate Law, Commercial Law, & Trade, LLM

for the Master of Laws, Corporate Law, Commercial Law, & Trade Concentration

dean of the college: Vikram David Amar
associate dean for graduate and international programs: Margareth Etienne
correspondence and admission information: Christine Renshaw, Office of Graduate and International Legal Studies

college website: https://law.illinois.edu
college faculty: Law Faculty (https://law.illinois.edu/faculty-research/faculty-profiles/)
college address: 244 Law Building, 504 East Pennsylvania Avenue, Champaign, IL 61820
phone: (217) 333-6066
email: law-gradprograms@illinois.edu

The LL.M. and J.S.D. programs of graduate study in law are designed for foreign law graduates who wish to pursue advanced study and conduct independent research under the direction of the College of Law faculty. Two advanced degrees are conferred by the College of Law: the Master of Laws (LL.M.) degree and the Doctor of Science of Law (J.S.D.). Overall coordination of the graduate program is the responsibility of the Office of Graduate and International Programs, and individual inquiries should

be addressed to this office. The Master of Studies in Law (M.S.L.) is a one-year, nonprofessional, terminal degree program designed for those who have had no legal training and who do not desire a professional law degree.

Graduate Degree Programs in the College of Law

Master of Laws, LLM (p. 839)

concentrations:

Corporate Law, Commercial Law, & Trade (p. 840)|Criminal Law (p. 841)|Intellectual Property & Technology Law (p. 843)|International & Comparative Law (p. 844)|Justice, Democracy, & Legal Rights (http://catalog.illinois.edu/graduate/graduate-majors/law/justice-democracy-legal-rights-concentration/)|Regulation, Sustainability, & Compliance (http://catalog.illinois.edu/graduate/graduate-majors/law/regulation-sustainability-compliance-concentration/)|US Legal Practice Skills (p. 848)

Master of Studies in Law (p. 849)

Doctor of the Science of Law (p. 837)

Law, JD (http://catalog.illinois.edu/professional-programs/jd_law/)

Joint Degrees with the Law, JD:

Chemistry, MS (p. 1157)|Computer Science, MCS (p. 1151)|Human Resources and Industrial Relations, MHRIR (p. 1156)|Journalism, MS (p. 1156)|Natural Resources & Environmental Sciences, MS (p. 1158)|Political Science: Civic Leadership, MA (p. 1162)|Political Science, PhD (p. 1162)|Urban Planning, MUP (p. 1168)|

Admission

The Graduate College admission requirements (http://www.grad.illinois.edu/admissions/apply/) and English language proficiency requirements (http://www.grad.illinois.edu/admissions/instructions/04c/) apply. In addition for the LL.M. program, the Test of English as a Foreign Language (TOEFL) requirement is 80 internet-based. Students are not required to take the general Graduate Record Examination (GRE). Students are admitted on an individual basis according to a review of their prior accomplishments with an emphasis on academic achievement. Admission is generally made for the fall semester only.

Financial Aid

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for the Master of Laws, Corporate Law, Commercial Law, & Trade Concentration

Each Concentration offers a directed, optional program of study for LL.M. students in an increasingly important field of global legal practice. Each Concentration provides (1) specialized training in the Concentration field of law, (2) guidance to students in developing a program of study with the courses deemed most useful and relevant to the Concentration, and (3) a Concentration designation on their transcripts that will better allow them to market their expertise, thus gaining a competitive advantage in the legal employment market. In some instances, a Dual Concentration (i.e., in Intellectual Property and Justice, Democracy and Legal Rights) is available to eligible students. Eligible students must apply to pursue the Dual Concentration and may stay in residence an additional semester so that the 14-credit requirements of the second Concentration can be independently met. In the case of the Dual Concentration, credits used to satisfy one Concentration cannot be used to satisfy the requirements for a second Concentration. Students interested in remaining in residence for a third semester to complete their program of study must apply by the listed deadline at the start of the second semester of the LL.M. degree. The Concentrations require students to complete a minimum of fourteen credit hours in topics integral to each Concentration. Courses taken toward a Concentration will count toward the student's LL.M. degree, and must be selected with the program advisor.

Master of Laws Requirements

Code	Title	Hours
LAW 500	LLM Legal Writing and Research	2
LAW 501	Professional Responsibility	3 or 4
Total Hours		**32**

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum 500-level (or higher) Hours Required Overall:	12
One academic year in residence	
Minimum GPA:	2.75

[1] *For additional details and requirements refer to the College of Law's* graduate degree requirements *(*http://www.law.illinois.edu/admissions/llm-program-overview/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Concentration Requirements

Code	Title	Hours
LAW 633	Business Associations I	4
Select at least ten hours of coursework from the courses below:		**10**
LAW 601	Contracts	
LAW 624	Real Estate Finance	
LAW 629	Bankruptcy	
LAW 631	Secured Transactions	
LAW 634	Securities Regulation	
LAW 642	Antitrust Law	
LAW 647	Income Taxation	
LAW 653	International Business Trans	
LAW 654	International Trade Policy	
LAW 792	Current Legal Problems	
LAW 794	Adv Topics in Business Law	
LAW 796	Comparative Law Topics	
LAW 798	Seminars	
Total Hours		14

Law: Criminal Law, LLM

for the Master of Laws, Criminal Law Concentration

dean of the college: Vikram David Amar
associate dean for graduate and international programs: Margareth Etienne
correspondence and admission information: Christine Renshaw, Office of Graduate and International Legal Studies

college website: https://law.illinois.edu
college faculty: Law Faculty (https://law.illinois.edu/faculty-research/faculty-profiles/)
college address: 244 Law Building, 504 East Pennsylvania Avenue, Champaign, IL 61820
phone: (217) 333-6066
email: law-gradprograms@illinois.edu

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Graduate Degree Programs in the College of Law

Master of Laws, LLM (p. 839)

concentrations:

Corporate Law, Commercial Law, & Trade (p. 840)|Criminal Law (p. 841)|Intellectual Property & Technology Law (p. 843)|International & Comparative Law (p. 844)|Justice, Democracy, & Legal Rights (http://catalog.illinois.edu/graduate/graduate-majors/law/justice-democracy-legal-rights-concentration/)|Regulation, Sustainability, & Compliance (http://catalog.illinois.edu/graduate/graduate-majors/law/regulation-sustainability-compliance-concentration/)|US Legal Practice Skills (p. 848)

Master of Studies in Law (p. 849)

Doctor of the Science of Law (p. 837)

Law, JD (http://catalog.illinois.edu/professional-programs/jd_law/)

Joint Degrees with the Law, JD:

Chemistry, MS (p. 1157)|Computer Science, MCS (p. 1151)|Human Resources and Industrial Relations, MHRIR (p. 1156)|Journalism, MS (p. 1156)|Natural Resources & Environmental Sciences, MS (p. 1158)|Political Science: Civic Leadership, MA (p. 1162)|Political Science, PhD (p. 1162)|Urban Planning, MUP (p. 1168)|

Admission

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Financial Aid

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for the Master of Laws, Criminal Law Concentration

Each Concentration offers a directed, optional program of study for LL.M. students in an increasingly important field of global legal practice. Each Concentration provides (1) specialized training in the Concentration field of law, (2) guidance to students in developing a program of study with the courses deemed most useful and relevant to the Concentration, and (3) a Concentration designation on their transcripts that will better allow them to market their expertise, thus gaining a competitive advantage in the legal employment market. In some instances, a Dual Concentration (i.e., in Intellectual Property and Justice, Democracy and Legal Rights) is available to eligible students. Eligible students must apply to pursue the Dual Concentration and may stay in residence an additional semester so that the 14-credit requirements of the second Concentration can be independently met. In the case of the Dual Concentration, credits used to satisfy one Concentration cannot be used to satisfy the requirements for a second Concentration. Students interested in remaining in residence for a third semester to complete their program of study must apply by the listed deadline at the start of the second semester of the LL.M. degree. The Concentrations require students to complete a minimum of fourteen credit hours in topics integral to each Concentration. Courses taken toward a Concentration will count toward the student's LL.M. degree, and must be selected with the program advisor.

Master of Laws Requirements

Code	Title	Hours
LAW 500	LLM Legal Writing and Research	2
LAW 501	Professional Responsibility	3 or 4
Total Hours		**32**

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum 500-level (or higher) Hours Required Overall:	12
One academic year in residence	
Minimum GPA:	2.75

[1] *For additional details and requirements refer to the College of Law's* graduate degree requirements *(*http://www.law.illinois.edu/admissions/llm-program-overview/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Concentration Requirements

Code	Title	Hours
LAW 604	Criminal Law	4
Select at least ten hours of coursework from the courses below:		**10**
LAW 605	Criminal Proc: Investigation	
LAW 606	Constitutional Law I	

LAW 679	Criminal Proc: Adjudication
LAW 682	Evidence
LAW 792	Current Legal Problems
LAW 793	Advanced Litigation Topics
LAW 795	Adv Topics in Criminal Law
LAW 796	Comparative Law Topics
LAW 798	Seminars
Total Hours	14

Law: Intellectual Property & Technology Law, LLM

for the Master of Laws, Intellectual Property & Technology Law Concentration

dean of the college: Vikram David Amar
associate dean for graduate and international programs: Margareth Etienne
correspondence and admission information: Christine Renshaw, Office of Graduate and International Legal Studies

college website: https://law.illinois.edu
college faculty: Law Faculty (https://law.illinois.edu/faculty-research/faculty-profiles/)
college address: 244 Law Building, 504 East Pennsylvania Avenue, Champaign, IL 61820
phone: (217) 333-6066
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Graduate Degree Programs in the College of Law

Master of Laws, LLM (p. 839)
concentrations:
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Master of Studies in Law (p. 849)
Doctor of the Science of Law (p. 837)
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Joint Degrees with the Law, JD:
Chemistry, MS (p. 1157)|Computer Science, MCS (p. 1151)|Human Resources and Industrial Relations, MHRIR (p. 1156)|Journalism, MS (p. 1156)|Natural Resources & Environmental Sciences, MS (p. 1158)|Political Science: Civic Leadership, MA (p. 1162)|Political Science, PhD (p. 1162)|Urban Planning, MUP (p. 1168)|

Admission

The Graduate College admission requirements (http://www.grad.illinois.edu/admissions/apply/) and English language proficiency requirements (http://www.grad.illinois.edu/admissions/instructions/04c/) apply. In addition for the LL.M. program, the Test of English as a Foreign Language (TOEFL) requirement is 80 internet-based. Students are not required to take the general Graduate Record Examination (GRE). Students are admitted on an individual basis according to a review of their prior accomplishments with an emphasis on academic achievement. Admission is generally made for the fall semester only.

Financial Aid

Applicants to the College of Law graduate programs are welcome to apply for scholarship assistance. Scholarships typically are awarded to applicants with a combination of excellent academic and professional credentials and proven financial need. Awards usually provide part of tuition and do not cover living expenses. There are always more qualified applicants than there are funds available. Therefore, applicants are strongly encouraged to explore alternative sources of funding.

for the Master of Laws, Intellectual Property & Technology Law Concentration

Each Concentration offers a directed, optional program of study for LL.M. students in an increasingly important field of global legal practice. Each Concentration provides (1) specialized training in the Concentration field of law, (2) guidance to students in developing a program of study with the courses deemed most useful and relevant to the Concentration, and (3) a Concentration designation on their transcripts that will better allow them to market their expertise, thus gaining a competitive advantage in the legal employment market. In some instances, a Dual Concentration (i.e., in Intellectual Property and Justice, Democracy and Legal Rights) is available to eligible students. Eligible students must apply to pursue the Dual Concentration and may stay in residence an additional semester so that the 14-credit requirements of the second Concentration can be independently met. In the case of the Dual Concentration, credits used to satisfy one Concentration cannot be used to satisfy the requirements for a second Concentration. Students interested in remaining in residence

for a third semester to complete their program of study must apply by the listed deadline at the start of the second semester of the LL.M. degree. The Concentrations require students to complete a minimum of fourteen credit hours in topics integral to each Concentration. Courses taken toward a Concentration will count toward the student's LL.M. degree, and must be selected with the program advisor.

Master of Laws Requirements

Code	Title	Hours
LAW 500	LLM Legal Writing and Research	2
LAW 501	Professional Responsibility	3 or 4
Total Hours		**32**

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum 500-level (or higher) Hours Required Overall:	12
One academic year in residence	
Minimum GPA:	2.75

[1] *For additional details and requirements refer to the College of Law's* graduate degree requirements *(*http://www.law.illinois.edu/admissions/llm-program-overview/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Concentration Requirements

Code	Title	Hours
LAW 797	Intellectual Property Topics	4
Select at least ten hours of coursework from the courses below:		**10**
LAW 602	Property	
LAW 643	Trademark & Unfair Competition	
LAW 644	Copyright Law	
LAW 645	Patent Law	
LAW 692	Field Placements	
LAW 792	Current Legal Problems	
LAW 797	Intellectual Property Topics	
Total Hours		14

Law: International & Comparative Law, LLM

for the Master of Laws, International & Comparative Law Concentration

dean of the college: Vikram David Amar
associate dean for graduate and international programs: Margareth Etienne
correspondence and admission information: Christine Renshaw, Office of Graduate and International Legal Studies

college website: https://law.illinois.edu
college faculty: Law Faculty (https://law.illinois.edu/faculty-research/faculty-profiles/)
college address: 244 Law Building, 504 East Pennsylvania Avenue, Champaign, IL 61820
phone: (217) 333-6066
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Graduate Degree Programs in the College of Law

Master of Laws, LLM (p. 839)
concentrations:
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Master of Studies in Law (p. 849)
Doctor of the Science of Law (p. 837)
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Admission

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applicants than there are funds available. Therefore, applicants are strongly encouraged to explore alternative sources of funding.

for the Master of Laws, International & Comparative Law Concentration

Each Concentration offers a directed, optional program of study for LL.M. students in an increasingly important field of global legal practice. Each Concentration provides (1) specialized training in the Concentration field of law, (2) guidance to students in developing a program of study with the courses deemed most useful and relevant to the Concentration, and (3) a Concentration designation on their transcripts that will better allow them to market their expertise, thus gaining a competitive advantage in the legal employment market. In some instances, a Dual Concentration (i.e., in Intellectual Property and Justice, Democracy and Legal Rights) is available to eligible students. Eligible students must apply to pursue the Dual Concentration and may stay in residence an additional semester so that the 14-credit requirements of the second Concentration can be independently met. In the case of the Dual Concentration, credits used to satisfy one Concentration cannot be used to satisfy the requirements for a second Concentration. Students interested in remaining in residence for a third semester to complete their program of study must apply by the listed deadline at the start of the second semester of the LL.M. degree. The Concentrations require students to complete a minimum of fourteen credit hours in topics integral to each Concentration. Courses taken toward a Concentration will count toward the student's LL.M. degree, and must be selected with the program advisor.

Master of Laws Requirements

Code	Title	Hours
LAW 500	LLM Legal Writing and Research	2
LAW 501	Professional Responsibility	3 or 4
Total Hours		**32**

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum 500-level (or higher) Hours Required Overall:	12
One academic year in residence	
Minimum GPA:	2.75

[1] *For additional details and requirements refer to the College of Law's* graduate degree requirements (http://www.law.illinois.edu/admissions/llm-program-overview/) *and the* Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Concentration Requirements

Code	Title	Hours
Select one course from:		**4**
LAW 606	Constitutional Law I	
LAW 656	International Law	
Select at least ten hours of coursework from the courses below:		**10**
LAW 653	International Business Trans	
LAW 654	International Trade Policy	
LAW 657	International Human Rights Law	
LAW 792	Current Legal Problems	
LAW 794	Adv Topics in Business Law	
LAW 795	Adv Topics in Criminal Law	
LAW 796	Comparative Law Topics	
LAW 797	Intellectual Property Topics	
LAW 798	Seminars	
Total Hours		14

Law: Justice, Democracy, and Legal Rights, LLM

for the Master of Laws, Justice, Democracy, and Legal Rights Concentration

dean of the college: Vikram David Amar
associate dean for graduate and international programs: Margareth Etienne
correspondence and admission information: Christine Renshaw, Office of Graduate and International Legal Studies

college website: https://law.illinois.edu
college faculty: Law Faculty (https://law.illinois.edu/faculty-research/faculty-profiles/)
college address: 244 Law Building, 504 East Pennsylvania Avenue, Champaign, IL 61820
phone: (217) 333-6066
email: law-gradprograms@illinois.edu

The LL.M. and J.S.D. programs of graduate study in law are designed for foreign law graduates who wish to pursue advanced study and conduct independent research under the direction of the College of Law faculty. Two advanced degrees are conferred by the College of Law: the Master of Laws (LL.M.) degree and the Doctor of Science of Law (J.S.D.). Overall coordination of the graduate program is the responsibility of the Office of Graduate and International Programs, and individual inquiries should be addressed to this office. The Master of Studies in Law (M.S.L.) is a one-year, nonprofessional, terminal degree program designed for those who have had no legal training and who do not desire a professional law degree.

Graduate Degree Programs in the College of Law

Master of Laws, LLM (p. 839)

concentrations:

Corporate Law, Commercial Law, & Trade (p. 840)|Criminal Law (p. 841)|Intellectual Property & Technology Law (p. 843)|International & Comparative Law (p. 844)|Justice, Democracy, & Legal Rights (http://catalog.illinois.edu/graduate/graduate-majors/law/justice-democracy-legal-rights-concentration/)|Regulation, Sustainability, & Compliance (http://catalog.illinois.edu/graduate/graduate-majors/law/regulation-sustainability-compliance-concentration/)|US Legal Practice Skills (p. 848)

Master of Studies in Law (p. 849)

Doctor of the Science of Law (p. 837)

Law, JD (http://catalog.illinois.edu/professional-programs/jd_law/)

Joint Degrees with the Law, JD:

Chemistry, MS (p. 1157)|Computer Science, MCS (p. 1151)|Human Resources and Industrial Relations, MHRIR (p. 1156)|Journalism, MS (p. 1156)|Natural Resources & Environmental Sciences, MS (p. 1158)|Political Science: Civic Leadership, MA (p. 1162)|Political Science, PhD (p. 1162)|Urban Planning, MUP (p. 1168)|

Admission

The Graduate College admission requirements (http://www.grad.illinois.edu/admissions/apply/) and English language proficiency requirements (http://www.grad.illinois.edu/admissions/instructions/04c/) apply. In addition for the LL.M. program, the Test of English as a Foreign Language (TOEFL) requirement is 80 internet-based. Students are not required to take the general Graduate Record Examination (GRE). Students are admitted on an individual basis according to a review of their prior accomplishments with an emphasis on academic achievement. Admission is generally made for the fall semester only.

Financial Aid

Applicants to the College of Law graduate programs are welcome to apply for scholarship assistance. Scholarships typically are awarded to applicants with a combination of excellent academic and professional credentials and proven financial need. Awards usually provide part of tuition and do not cover living expenses. There are always more qualified applicants than there are funds available. Therefore, applicants are strongly encouraged to explore alternative sources of funding.

for the Master of Laws, Justice, Democracy, and Legal Rights Concentration

Each Concentration offers a directed, optional program of study for LL.M. students in an increasingly important field of global legal practice. Each Concentration provides (1) specialized training in the Concentration field of law, (2) guidance to students in developing a program of study with the courses deemed most useful and relevant to the Concentration, and (3) a Concentration designation on their transcripts that will better allow them to market their expertise, thus gaining a competitive advantage in the legal employment market. In some instances, a Dual Concentration (i.e., in Intellectual Property and Justice, Democracy and Legal Rights) is available to eligible students. Eligible students must apply to pursue the Dual Concentration and may stay in residence an additional semester so that the 14-credit requirements of the second Concentration can be independently met. In the case of the Dual Concentration, credits used to satisfy one Concentration cannot be used to satisfy the requirements for a second Concentration. Students interested in remaining in residence for a third semester to complete their program of study must apply by the listed deadline at the start of the second semester of the LL.M. degree. The Concentrations require students to complete a minimum of fourteen credit hours in topics integral to each Concentration. Courses taken toward a Concentration will count toward the student's LL.M. degree, and must be selected with the program advisor.

Master of Laws Requirements

Code	Title	Hours
LAW 500	LLM Legal Writing and Research	2
LAW 501	Professional Responsibility	3 or 4
Total Hours		**32**

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum 500-level (or higher) Hours Required Overall:	12
One academic year in residence	
Minimum GPA:	2.75

[1] *For additional details and requirements refer to the College of Law's* graduate degree requirements *(*http://www.law.illinois.edu/admissions/llm-program-overview/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Concentration Requirements

Code	Title	Hours
LAW 606	Constitutional Law I	4
Select at least ten hours of coursework from the courses below:		**10**
LAW 605	Criminal Proc: Investigation	
LAW 616	Environmental Law and Pol I	
LAW 620	Health Law Policy	
LAW 657	International Human Rights Law	
LAW 660	Individual Employee Rights	
LAW 662	Labor Law I	
LAW 664	Employment Discrimination	
LAW 667	Family Law	
LAW 670	Elder Law	
LAW 685	Dispute Resolution	
LAW 686	Remedies	
LAW 792	Current Legal Problems	
LAW 795	Adv Topics in Criminal Law	
LAW 796	Comparative Law Topics	
LAW 798	Seminars	
Total Hours		14

Law: Regulation, Sustainability, and Compliance, LLM

for the Master of Laws, Regulation, Sustainability, & Compliance Concentration

dean of the college: Vikram David Amar
associate dean for graduate and international programs: Margareth Etienne
correspondence and admission information: Christine Renshaw, Office of Graduate and International Legal Studies

college website: https://law.illinois.edu
college faculty: Law Faculty (https://law.illinois.edu/faculty-research/faculty-profiles/)
college address: 244 Law Building, 504 East Pennsylvania Avenue, Champaign, IL 61820
phone: (217) 333-6066
email: law-gradprograms@illinois.edu

The LL.M. and J.S.D. programs of graduate study in law are designed for foreign law graduates who wish to pursue advanced study and conduct independent research under the direction of the College of Law faculty. Two advanced degrees are conferred by the College of Law: the Master of Laws (LL.M.) degree and the Doctor of Science of Law (J.S.D.). Overall coordination of the graduate program is the responsibility of the Office of Graduate and International Programs, and individual inquiries should be addressed to this office. The Master of Studies in Law (M.S.L.) is a one-year, nonprofessional, terminal degree program designed for those who have had no legal training and who do not desire a professional law degree.

Graduate Degree Programs in the College of Law

Master of Laws, LLM (p. 839)

concentrations:

Corporate Law, Commercial Law, & Trade (p. 840)|Criminal Law (p. 841)|Intellectual Property & Technology Law (p. 843)|International & Comparative Law (p. 844)|Justice, Democracy, & Legal Rights (http://catalog.illinois.edu/graduate/graduate-majors/law/justice-democracy-legal-rights-concentration/)|Regulation, Sustainability, & Compliance (http://catalog.illinois.edu/graduate/graduate-majors/law/regulation-sustainability-compliance-concentration/)|US Legal Practice Skills (p. 848)

Master of Studies in Law (p. 849)

Doctor of the Science of Law (p. 837)

Law, JD (http://catalog.illinois.edu/professional-programs/jd_law/)

Joint Degrees with the Law, JD:

Chemistry, MS (p. 1157)|Computer Science, MCS (p. 1151)|Human Resources and Industrial Relations, MHRIR (p. 1156)|Journalism, MS (p. 1156)|Natural Resources & Environmental Sciences, MS (p. 1158)|Political Science: Civic Leadership, MA (p. 1162)|Political Science, PhD (p. 1162)|Urban Planning, MUP (p. 1168)|

Admission

The Graduate College admission requirements (http://www.grad.illinois.edu/admissions/apply/) and English language proficiency requirements (http://www.grad.illinois.edu/admissions/instructions/04c/) apply. In addition for the LL.M. program, the Test of English as a Foreign Language (TOEFL) requirement is 80 internet-based. Students are not required to take the general Graduate Record Examination (GRE). Students are admitted on an individual basis according to a review of their prior accomplishments with an emphasis on academic achievement. Admission is generally made for the fall semester only.

Financial Aid

Applicants to the College of Law graduate programs are welcome to apply for scholarship assistance. Scholarships typically are awarded to applicants with a combination of excellent academic and professional credentials and proven financial need. Awards usually provide part of tuition and do not cover living expenses. There are always more qualified applicants than there are funds available. Therefore, applicants are strongly encouraged to explore alternative sources of funding.

for the Master of Laws, Regulation, Sustainability, & Compliance Concentration

Each Concentration offers a directed, optional program of study for LL.M. students in an increasingly important field of global legal practice. Each Concentration provides (1) specialized training in the Concentration field of law, (2) guidance to students in developing a program of study with the courses deemed most useful and relevant to the Concentration, and (3) a Concentration designation on their transcripts that will better allow them to market their expertise, thus gaining a competitive advantage in the legal employment market. In some instances, a Dual Concentration (i.e., in Intellectual Property and Justice, Democracy and Legal Rights) is available to eligible students. Eligible students must apply to pursue the Dual Concentration and may stay in residence an additional semester so that the 14-credit requirements of the second Concentration can be independently met. In the case of the Dual Concentration, credits used to satisfy one Concentration cannot be used to satisfy the requirements for a second Concentration. Students interested in remaining in residence for a third semester to complete their program of study must apply by the listed deadline at the start of the second semester of the LL.M. degree. The Concentrations require students to complete a minimum of fourteen credit hours in topics integral to each Concentration. Courses taken toward a Concentration will count toward the student's LL.M. degree, and must be selected with the program advisor.

Master of Laws Requirements

Code	Title	Hours
LAW 500	LLM Legal Writing and Research	2
LAW 501	Professional Responsibility	3 or 4
Total Hours		**32**

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum 500-level (or higher) Hours Required Overall:	12
One academic year in residence	
Minimum GPA:	2.75

[1] *For additional details and requirements refer to the College of Law's* graduate degree requirements *(*http://www.law.illinois.edu/admissions/llm-program-overview/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Concentration Requirements

Code	Title	Hours
LAW 615	Administrative Law	4
Select at least ten hours of coursework from the courses below:		**10**
LAW 602	Property	

LAW 616	Environmental Law and Pol I
LAW 618	Natural Resources
LAW 620	Health Law Policy
LAW 622	Land Use Planning
LAW 625	State and Local Government
LAW 633	Business Associations I
LAW 647	Income Taxation
LAW 792	Current Legal Problems
LAW 794	Adv Topics in Business Law
LAW 796	Comparative Law Topics
LAW 798	Seminars

Law: U.S. Legal Practice Skills, LLM

for the Master of Laws, U.S. Legal Practice Skills Concentration

dean of the college: Vikram David Amar
associate dean for graduate and international programs: Margareth Etienne
correspondence and admission information: Christine Renshaw, Office of Graduate and International Legal Studies

college website: https://law.illinois.edu
college faculty: Law Faculty (https://law.illinois.edu/faculty-research/faculty-profiles/)
college address: 244 Law Building, 504 East Pennsylvania Avenue, Champaign, IL 61820
phone: (217) 333-6066
email: law-gradprograms@illinois.edu

The LL.M. and J.S.D. programs of graduate study in law are designed for foreign law graduates who wish to pursue advanced study and conduct independent research under the direction of the College of Law faculty. Two advanced degrees are conferred by the College of Law: the Master of Laws (LL.M.) degree and the Doctor of Science of Law (J.S.D.). Overall coordination of the graduate program is the responsibility of the Office of Graduate and International Programs, and individual inquiries should be addressed to this office. The Master of Studies in Law (M.S.L.) is a one-year, nonprofessional, terminal degree program designed for those who have had no legal training and who do not desire a professional law degree.

Graduate Degree Programs in the College of Law

Master of Laws, LLM (p. 839)
concentrations:
Corporate Law, Commercial Law, & Trade (p. 840)|Criminal Law (p. 841)|Intellectual Property & Technology Law (p. 843)|International & Comparative Law (p. 844)|Justice, Democracy, & Legal Rights (http://catalog.illinois.edu/graduate/graduate-majors/law/justice-democracy-legal-rights-concentration/)|Regulation, Sustainability, & Compliance (http://catalog.illinois.edu/graduate/graduate-majors/law/regulation-sustainability-compliance-concentration/)|US Legal Practice Skills (p. 848)
Master of Studies in Law (p. 849)
Doctor of the Science of Law (p. 837)
Law, JD (http://catalog.illinois.edu/professional-programs/jd_law/)
Joint Degrees with the Law, JD:
Chemistry, MS (p. 1157)|Computer Science, MCS (p. 1151)|Human Resources and Industrial Relations, MHRIR (p. 1156)|Journalism, MS (p. 1156)|Natural Resources & Environmental Sciences, MS (p. 1158)|Political Science: Civic Leadership, MA (p. 1162)|Political Science, PhD (p. 1162)|Urban Planning, MUP (p. 1168)|

Admission

The Graduate College admission requirements (http://www.grad.illinois.edu/admissions/apply/) and English language proficiency requirements (http://www.grad.illinois.edu/admissions/instructions/04c/) apply. In addition for the LL.M. program, the Test of English as a Foreign Language (TOEFL) requirement is 80 internet-based. Students are not required to take the general Graduate Record Examination (GRE). Students are admitted on an individual basis according to a review of their prior accomplishments with an emphasis on academic achievement. Admission is generally made for the fall semester only.

Financial Aid

Applicants to the College of Law graduate programs are welcome to apply for scholarship assistance. Scholarships typically are awarded to applicants with a combination of excellent academic and professional credentials and proven financial need. Awards usually provide part of tuition and do not cover living expenses. There are always more qualified applicants than there are funds available. Therefore, applicants are strongly encouraged to explore alternative sources of funding.

for the Master of Laws, U.S. Legal Practice Skills Concentration

This concentration requires students to complete a minimum of 12 credit hours in topics integral to U.S. Legal Practice Skills in a third semester. The 12 credit hours for the concentration many not count towards the LL.M. degree or other concentration credit hours and must be completed in addition to the LL.M. or other concentration credit hours.

This concentration will be open to students in the LL.M. degree program at the College of Law. Students are expected to be in good standing and have a minimum overall GPA of 3.0 to be eligible for the concentration. This concentration is only available as a third-semester concentration. Interested students must apply by the listed deadline at the start of the second semester of the LL.M. degree.

Master of Laws Requirements

Code	Title	Hours
LAW 500	LLM Legal Writing and Research	2
LAW 501	Professional Responsibility	3 or 4
Total Hours		**32**

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum 500-level (or higher) Hours Required Overall:	12
One academic year in residence	
Minimum GPA:	2.75

[1] *For additional details and requirements refer to the College of Law's* graduate degree requirements *(*http://www.law.illinois.edu/admissions/llm-program-overview/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Concentration Requirements

Code	Title	Hours
LAW 692	Field Placements	1 to 4
LAW 692	Field Placements (Classroom Instruction, taken concurrently with Field Placement)	1 to 4
Select at least five hours of coursework from the courses below:		5
LAW 603	Torts	
LAW 607	Civil Procedure	
LAW 682	Evidence	
LAW 685	Dispute Resolution	
LAW 695	Fundamentals of Trial Practice	
LAW 793	Advanced Litigation Topics	
Total hours		**12**

Law, MSL

for the Master of Studies in Law

dean of the college: Vikram David Amar
associate dean for graduate and international programs: Margareth Etienne
correspondence and admission information: Kelly Salefski, Office of Graduate and International Legal Studies

college website: https://law.illinois.edu
college faculty: Law Faculty (https://law.illinois.edu/faculty-research/faculty-profiles/)
college address: 244 Law Building, 504 East Pennsylvania Avenue, Champaign, IL 61820
phone: (217) 333-6066
email: law-gradprograms@illinois.edu

A bachelor's degree is required for admission, and admission will be granted to a limited number of students on a competitive application basis.

Graduate Degree Programs in the College of Law

Master of Laws, LLM (p. 839)
concentrations:
Corporate Law, Commercial Law, & Trade (p. 840)|Criminal Law (p. 841)|Intellectual Property & Technology Law (p. 843)|International & Comparative Law (p. 844)|Justice, Democracy, & Legal Rights (http://catalog.illinois.edu/graduate/graduate-majors/law/justice-democracy-legal-rights-concentration/)|Regulation, Sustainability, & Compliance (http://catalog.illinois.edu/graduate/graduate-majors/law/regulation-sustainability-compliance-concentration/)|US Legal Practice Skills (p. 848)
Master of Studies in Law (p. 849)
Doctor of the Science of Law (p. 837)
Law, JD (http://catalog.illinois.edu/professional-programs/jd_law/)
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Admission

The Graduate College admission requirements (http://www.grad.illinois.edu/admissions/apply/) and English language proficiency requirements (http://www.grad.illinois.edu/admissions/instructions/04c/) apply. In addition for the LL.M. program, the Test of English as a Foreign Language (TOEFL) requirement is 80 internet-based. Students are not required to take the general Graduate Record Examination (GRE). Students are admitted on an individual basis according to a review of their prior accomplishments with an emphasis on academic achievement. Admission is generally made for the fall semester only.

Financial Aid

Applicants to the College of Law graduate programs are welcome to apply for scholarship assistance. Scholarships typically are awarded to applicants with a combination of excellent academic and professional credentials and proven financial need. Awards usually provide part of tuition and do not cover living expenses. There are always more qualified applicants than there are funds available. Therefore, applicants are strongly encouraged to explore alternative sources of funding.

for the Master of Studies in Law

The elective hours can be any graduate-level Law course offered by the College of Law, pursuant to a plan of study formulated in consultation with the college's academic advisors. Law credits earned in the M.S.L. program will not count toward the minimum credit hours required for the J.D. degree.

Code	Title	Hours
LAW 609	Legal Writing & Analysis	2
LAW 627	Legal Research	1
Select two of the following:		8
LAW 601	Contracts	
LAW 602	Property	
LAW 603	Torts	
LAW 604	Criminal Law	

LAW 606	Constitutional Law I	
LAW 607	Civil Procedure	
Completion of the Upper-Level Writing Requirement		2
Total Hours		32

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
A faculty supervised research paper is required	
Minimum GPA:	2.75

[1] *For additional details and requirements refer to the College of Law's* graduate degree requirements *(*http://www.law.illinois.edu/admissions/llm-program-overview/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Law, MSL

Learning Outcomes for the Master of Studies in Law

1. Demonstrate basic knowledge of American substantive and procedural law. This requires
   a. The foundational rules governing liability for civil or criminal wrongdoing.
   b. The foundational rules that regulate the transaction of business among individuals and the ownership of property.
   c. The constitutional rules that shape the American legal system.
   d. The procedural rules that govern court adjudication.
   e. Several advanced areas of substantive or procedural law or both.
2. Use legal reasoning and legal analysis. This requires:
   a. The ability to identify, formulate, and apply legal rules.
   b. The ability to read and analyze judicial opinions.
   c. The ability to parse and interpret legal texts such as statutes, regulations, contracts.
3. Bring practical legal skills. This requires:
   a. The ability to write clearly and effectively in a wide range of legal contexts and for various audiences, such as courts, clients, opposing counsel and academics.
   b. The ability to articulate one's thoughts verbally in a clear and effective manner.
   c. Knowledge of and ability to use tools of legal research.
   d. The ability to identify and gather factual information relevant to the application of legal rules.
   e. The ability to work collaboratively with others, including others with opposing interests.
4. Conduct himself or herself professionally and in keeping with the highest standards of civic virtue. This requires:
   a. Knowledge and appreciation of the ethical rules governing legal practice.
   b. The ability to learn and grow professionally through self-reflection and continuing education.
   c. An understanding of the lawyer's distinctive role in society and of the lawyer's concomitant responsibility to contribute to society through public service and pro bono representation.
   d. The ability to understand and be understood across various social, economic, cultural, political, national, racial, gender, and ethnic backgrounds.
5. Produce a substantial piece of substantial research and analysis

Library & Information Science, CAS

for the Certificate of Advanced Study Major in Library & Information Science (on campus or online)

dean: Eunice Santos
overview of MS/LIS admissions & requirements: https://ischool.illinois.edu/degrees-programs/ms-library-and-information-science/apply (https://ischool.illinois.edu/degrees-programs/ms-library-and-information-science/apply/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
school website: School of Information Sciences (https://ischool.illinois.edu/)
school faculty: https://ischool.illinois.edu/people/faculty (https://ischool.illinois.edu/people/faculty/)
graduate office: 501 East Daniel Street, Champaign, IL 61820-6211
program contact: Moises Orozco Villicana
phone: (217) 333-7197, (800) 982-0914 (within the US)
email: ischool-apply@illinois.edu

Students and faculty advisers work closely together in selecting appropriate courses of study to meet individual needs. Possible areas of focus include digital libraries, management, and youth services.

On-Campus or Online

The CAS may be completed on-campus or through the online scheduling option.

Graduate Degree Programs in the School of Information Science

Bioinformatics: Information Sciences, MS (http://catalog.illinois.edu/graduate/is/concentration/information-sciences/bioinformatics/) **(on campus & online)**
Information Management, MS (p. 819) **(on campus & online)**
Library & Information Science, MS (p. 852) **(on campus & online)**
Library & Information Science, CAS (p. 850) **(on campus & online)**
Information Sciences, PhD (p. 821)
concentration:
Writing Studies (p. 1111)

Joint Degree Programs:
Library & Information Science, MS and African Studies, MA (p. 1149)
Library & Information Science, MS and History, MA (p. 1153)
Library & Information Science, MS and Russian, East European, & Eurasian Studies, MA (p. 1149)

School Librarian Licensure: available in conjunction with both the MS in LIS and CAS in LIS

The School of Information Sciences (iSchool) offers programs of study leading to the Master of Science (M.S.), the Certificate of Advanced Study (C.A.S), and the Doctor of Philosophy degrees. Three Master of

Science (M.S.) degrees are available. The M.S. in Library and Information Science (L.I.S.) prepares students for professional careers in all types of information organizations, including libraries. The M.S. in Information Management (I.M.) will prepare the students for information-intensive professional roles in a broad range of sectors. The Library and Information Science concentration of the campus-wide M.S. in bioinformatics program emphasizes multidisciplinary skills that are required for a career developing and managing information systems for the biological sciences community. The C.A.S. program provides the opportunity

1. to study an aspect of information sciences in greater depth than is possible in the M.S. program,
2. to refresh and upgrade one's professional training several years after completing a M.S. program, or
3. to redirect one's career into a different area of library and information science.

School Librarian Licensure is available in conjunction with both the M.S. in L.I.S. and C.A.S. The Ph.D. is a research degree program.

Admission

The general admission requirements of the Graduate College apply. Consideration is also given to language study and computer skills, relevant work experience, letters of reference, and evidence of leadership. International students must score at least 620 on the paper-based Test of English as a Foreign Language (TOEFL) (260 on the computer-based test; 104 on the iBT version); or 7 on each section of the IELTS. The M.S. in bioinformatics requires a strong background in information science including undergraduate-level computing and mathematics. The C.A.S. requires a master's degree in library and information science and a grade point average of at least 3.0 (A = 4.0) in the master's program.

School Librarian Licensure

Candidates interested in the School Librarian Licensure program must first be admitted and enrolled as a degree-seeking student within the School of Information Sciences before their application to the School Librarian Licensure program is reviewed. Accepted students must successfully pass two Illinois State Board of Education testing requirements prior to registration for the final fieldwork experience.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in the Ph.D. program for those interested in faculty careers.

Facilities and Resources

Among the major areas of faculty research are:

- **community informatics**
- **data analytics**
- **data curation**
- **digital humanities**
- **digital libraries**
- **history of information**
- **information retrieval**
- **organization of knowledge and information**
- **privacy, security, and trust**
- **ethics and values for information**
- **youth literature, culture, and services**

The iSchool's Center for Informatics Research in Science and Scholarship (CIRSS) conducts research on information problems that impact scientific and scholarly inquiry. The Center for Children's Books (CCB) provides a review and research collection of the newest literature for children and young adults. The Communications Office produces two high-quality publications, Library Trends and The Bulletin of the Center for Children's Books. The staff of each of these units is available to students and faculty for consultation and guidance. A computer network with Internet connectivity is integral to teaching and learning activities. The University Library provides a vast reservoir of resources for all types of study and research in library and information science.

The School maintains an ongoing commitment to continuing education through conferences, institutes, workshops, and course offerings.

Financial Aid

Financial aid may be available from the iSchool, the University Library, and elsewhere in the University in the form of graduate assistantships, teaching assistantships, research assistantships, and hourly paid work. Area libraries may provide pre-professional or hourly positions. Also, the iSchool offers a limited number of fellowships for which doctoral students tend to be favored over C.A.S. and master's degree students. Students in the joint program that do not hold a FLAS fellowship are eligible for, but not guaranteed, fellowship or assistantship support in the semesters in which they are enrolled in the iSchool. Any assistantship awarded to these students provides a waiver of the base in-state tuition and service fee as well as a stipend. Non-Illinois residents must pay the difference between in- and out-of-state tuition.

for the Certificate of Advanced Study Major in Library & Information Science (on campus or online)

For additional details and requirements, refer to the unit's Graduate Programs of Study (https://ischool.illinois.edu/degrees-programs/) and the Graduate College Handbook (https://grad.illinois.edu/gradhandbook/).

This degree program can be completed either on campus or online; the requirements are listed below:

Code	Title	Hours
IS 593	Advanced Topics in Preservation & Tech Services	8
Elective hours (max. of 8 hours of Independent Study)		32
Total Hours		**40**

Other Requirements (may overlap)

Requirement	Description
Masters Degree in Library and Information Science is required for admission	
A concentration is not required.	
Minimum Hours Required Within the Unit:	24
Minimum 500-level Hours Required Overall:	12
The credit-no credit option can only be applied to courses taken outside the library and information science curriculum and courses taken with this option can not be applied to the degree.	
Minimum GPA:	3.25

Learning Outcomes: Library & Information Science, CAS

Learning Outcomes for the Certificate of Advanced Study Major in Library & Information Science (on campus or online)

1. Identify a problem or challenge facing a precisely defined professional community.
2. Articulate current community understanding of and practice with respect to the challenge or problem.
3. Explain the challenge and its broad implications to an audience of professional peers
4. Design a plan of action for engaging with the challenge.
5. Develop and communicate a demonstration of the plan and its execution.

Library & Information Science, MS

for the degree of Master of Science in Library & Information Science (on campus & online)

dean: Eunice Santos
overview of MS/LIS admissions & requirements: https://ischool.illinois.edu/degrees-programs/ms-library-and-information-science/apply (https://ischool.illinois.edu/degrees-programs/ms-library-and-information-science/apply/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
school website: School of Information Sciences (https://ischool.illinois.edu/)
school faculty: https://ischool.illinois.edu/people/faculty (https://ischool.illinois.edu/people/faculty/)
graduate office: 501 East Daniel Street, Champaign, IL 61820-6211
program contact: Moises Orozco Villicana
phone: (217) 333-7197, (800) 982-0914 (within the US)
email: ischool-apply@illinois.edu

The MS in LIS is accredited by the American Library Association (ALA). Two scheduling options are available to students pursuing the MS degree.

On-campus or Online

The on-campus option serves students who are in residence at Urbana-Champaign, as well as part-time, commuting students. The online scheduling option is an online education option that uses the Internet and other information technologies for delivery.

A thesis is not required but is available as an option. Students prepare for careers in all types of information organizations. Examples of the professional positions graduates hold include: Internet trainer, webmaster, and knowledge manager, as well as work in reference, automated systems, cataloging, youth services, school media, and other positions in public, academic, school, and special libraries.

Graduate Degree Programs in the School of Information Science

Bioinformatics: Information Sciences, MS (http://catalog.illinois.edu/graduate/is/concentration/information-sciences/bioinformatics/) **(on campus & online)**
Information Management, MS (p. 819) **(on campus & online)**
Library & Information Science, MS (p. 852) **(on campus & online)**
Library & Information Science, CAS (p. 850) **(on campus & online)**
Information Sciences, PhD (p. 821)
concentration:
Writing Studies (p. 1111)

Joint Degree Programs:
Library & Information Science, MS and African Studies, MA (p. 1149)
Library & Information Science, MS and History, MA (p. 1153)
Library & Information Science, MS and Russian, East European, & Eurasian Studies, MA (p. 1149)

School Librarian Licensure: available in conjunction with both the MS in LIS and CAS in LIS

The School of Information Sciences (iSchool) offers programs of study leading to the Master of Science (M.S.), the Certificate of Advanced Study (C.A.S), and the Doctor of Philosophy degrees. Three Master of Science (M.S.) degrees are available. The M.S. in Library and Information Science (L.I.S.) prepares students for professional careers in all types of information organizations, including libraries. The M.S. in Information Management (I.M.) will prepare the students for information-intensive professional roles in a broad range of sectors. The Library and Information Science concentration of the campus-wide M.S. in bioinformatics program emphasizes multidisciplinary skills that are required for a career developing and managing information systems for the biological sciences community. The C.A.S. program provides the opportunity

1. to study an aspect of information sciences in greater depth than is possible in the M.S. program,
2. to refresh and upgrade one's professional training several years after completing a M.S. program, or
3. to redirect one's career into a different area of library and information science.

School Librarian Licensure is available in conjunction with both the M.S. in L.I.S. and C.A.S. The Ph.D. is a research degree program.

Admission

The general admission requirements of the Graduate College apply. Consideration is also given to language study and computer skills, relevant work experience, letters of reference, and evidence of leadership. International students must score at least 620 on the paper-based Test of English as a Foreign Language (TOEFL) (260 on the computer-based test; 104 on the iBT version); or 7 on each section of the IELTS. The M.S. in bioinformatics requires a strong background in information science including undergraduate-level computing and mathematics. The C.A.S. requires a master's degree in library and information science and a grade point average of at least 3.0 (A = 4.0) in the master's program.

School Librarian Licensure

Candidates interested in the School Librarian Licensure program must first be admitted and enrolled as a degree-seeking student within the School of Information Sciences before their application to the School Librarian Licensure program is reviewed. Accepted students must successfully pass two Illinois State Board of Education testing requirements prior to registration for the final fieldwork experience.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in the Ph.D. program for those interested in faculty careers.

Facilities and Resources

Among the major areas of faculty research are:

- **community informatics**
- **data analytics**
- **data curation**
- **digital humanities**
- **digital libraries**
- **history of information**
- **information retrieval**
- **organization of knowledge and information**
- **privacy, security, and trust**
- **ethics and values for information**
- **youth literature, culture, and services**

The iSchool's Center for Informatics Research in Science and Scholarship (CIRSS) conducts research on information problems that impact scientific and scholarly inquiry. The Center for Children's Books (CCB) provides a review and research collection of the newest literature for children and young adults. The Communications Office produces two high-quality publications, Library Trends and The Bulletin of the Center for Children's Books. The staff of each of these units is available to students and faculty for consultation and guidance. A computer network with Internet connectivity is integral to teaching and learning activities. The University Library provides a vast reservoir of resources for all types of study and research in library and information science.

The School maintains an ongoing commitment to continuing education through conferences, institutes, workshops, and course offerings.

Financial Aid

Financial aid may be available from the iSchool, the University Library, and elsewhere in the University in the form of graduate assistantships, teaching assistantships, research assistantships, and hourly paid work. Area libraries may provide pre-professional or hourly positions. Also, the iSchool offers a limited number of fellowships for which doctoral students tend to be favored over C.A.S. and master's degree students. Students in the joint program that do not hold a FLAS fellowship are eligible for, but not guaranteed, fellowship or assistantship support in the semesters in which they are enrolled in the iSchool. Any assistantship awarded to these students provides a waiver of the base in-state tuition and service fee as well as a stipend. Non-Illinois residents must pay the difference between in- and out-of-state tuition.

for the degree of Master of Science in Library & Information Science (on campus & online)

For additional details and requirements, refer to the unit's Graduate Programs of Study (https://ischool.illinois.edu/degrees-programs/) and the Graduate College Handbook (https://grad.illinois.edu/gradhandbook/).

This degree program can be completed with or without a thesis, either on campus or online; the requirements are listed below:

Thesis Option

Code	Title	Hours
IS 505	Information Organization and Access	4
IS 510	Libraries, Information and Society	2 or 4
Research/Project/Independent Study Hours (4 max applied toward degree)		4
IS 599	Thesis Research	8
Total Hours		40

Non-Thesis Option

Code	Title	Hours
IS 505	Information Organization and Access	4
IS 510	Libraries, Information and Society	2 or 4
Research/Project/Independent Study Hours (4 max applied toward degree)		4
Total Hours		40

Other Requirements for both Thesis and Non-Thesis

Requirement	Description
Other requirements may overlap	
Minimum Hours Required Within the Unit:	28
Minimum 500-level Hours Required Overall:	12
A C grade or better in required courses.	
The credit-no credit option can only be applied to courses taken outside the library and information science curriculum and courses taken with this option can't be applied to the degree.	
Minimum GPA:	2.75

Learning Outcomes: Library & Information Science, MS

Learning outcomes for the degree of Master of Science in Library & Information Science (on-campus & online)

Graduates of the Illinois MS/LIS program will be able to:

1. Apply foundational concepts, theories, and principles to problems of information organization and access.
2. Communicate capably with diverse stakeholders, promoting not just access to but also effective use of information services and systems in specific contexts.
3. Use evidence to help address information problems, meet information needs, and create relationships in their institutions, communities, profession, and the world.
4. Compare and critique contemporary information practices, structures, and standards in relation to historical and global alternatives.
5. Apply core ethical principles to professional practice.

Linguistics, MA

for the degree of Master of Arts in Linguistics

head of department: Hye Suk James Yoon
director of graduate studies: Tania Ionin
director of admissions committee: Rakesh Bhatt
email: deptling@illinois.edu
department website: https://linguistics.illinois.edu/
department faculty: Linguistics Faculty (https://linguistics.illinois.edu/directory/faculty/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department office: 4080 Foreign Languages Building, 707 South Mathews, Urbana, IL 61801
phone: (217) 333-3563

Students are not admitted to the MA program directly. When Stage I of the doctoral program is completed doctoral students may earn the MA.

Graduate Degree Programs in Linguistics

(Including African Languages [Bamana, Lingala, Swahili, Wolof, and Zulu], Arabic, Hindi-Urdu, Modern Greek, Persian, Sanskrit, and Turkish)

Linguistics, MA (p. 854)
Teaching of English as a Second Language, MA (MATESL) (p. 1040)
Linguistics, PhD (p. 855)
optional concentrations:
Second Language Acquisition and Teacher Education (p. 1106)
Romance Linguistics (p. 1106)

The Department of Linguistics offers graduate programs leading to the Master of Arts in Teaching English as a Second Language, and Doctor of Philosophy in Linguistics. Students are not normally admitted to a terminal master's in Linguistics degree program.

More detailed information on departmental programs, offerings, admission, degree requirements, and financial aid, may be found at: www.linguistics.illinois.edu (http://www.linguistics.illinois.edu).

Admission

Applicants to the MATESL and PhD programs in Linguistics must have completed a bachelor's degree.

For the PhD program in Linguistics, undergraduate preparation should include the study of at least one foreign language; a course equivalent to LING 400 on this campus; and a broad background in the humanities, social sciences, or mathematics.

For the MATESL program, an undergraduate major in linguistics, English, a foreign language, or education is generally recommended, though other majors are also acceptable. Applicants must present a grade point average of at least 3.0 (A = 4.0) for the last 60 hours of undergraduate work. Two years of coursework in a foreign language or the equivalent are also required.

Students may be admitted to the PhD program in Linguistics with or without a prior master's degree in linguistics or a related field. Depending on the student's prior preparation, they may be admitted either into Stage 1 of the PhD or into Stage 2 of the PhD. Students who who have completed a master's degree in linguistics or a closely related field may be considered for admission to Stage 2 of the PhD program. Students without an approved prior master's degree will only be considered for admission to Stage 1 of the PhD program. Students admitted to Stage 1 must complete 40 credit hours in the areas listed on the department website, maintain a GPA of 3.5 or better in all core courses, and earn a grade of High Pass on the qualifying examination in order to advance to Stage 2. Students who are admitted directly to Stage 2, but lack any of the core courses required for Stage 1, must complete Stage 1 requirements immediately on entry into the program; the courses will not count toward the 64 hours required for Stage 2 of the PhD.

Applicants to all Linguistics graduate programs should apply online (www.grad.illinois.edu/admissions/apply/ (http://catalog.illinois.edu/graduate/las/linguistics-ma/www.grad.illinois.edu/admissions/apply/)) and submit a statement of purpose, three letters of recommendation and a writing sample of 10-20 pages in length. Original transcripts (with English translations if applicable) showing all undergraduate and graduate work completed should be sent to:

SLCL Graduate Student Services
3070 Foreign Languages Bldg.
707 S. Mathews Ave.
Urbana, IL 61801

Graduate Record Examination (GRE) scores are required. The applicant should ask the ETS to submit scores to institution 1836. Applicants whose native language is not English are required to take the Test of English as a Foreign Language (TOEFL) and must score at least 88 (100 preferred) on the internet-based test (iBT); they must also pass the speaking sub-section of the iBT with a minimum score of 24 (see www.grad.illinois.edu/Admissions/instructions/04c). Applications are accepted for fall admission only. Application questions may be directed to SLCL Graduate Student Services at slclgradservices@illinois.edu.

Financial Aid

The Linguistics department aims to provide financial aid for all graduate students in the Ph.D. program in Linguistics for up to five years, in the

form of fellowships, teaching assistantships, research assistantships, or departmental assistantships. To hold a teaching assistantship non-native English speakers must first pass a test of their oral English ability (see www.grad.illinois.edu/admissions/taengprof.htm (http://www.grad.illinois.edu/admissions/taengprof.htm)). Some students receive aid through other units in the University. New applicants receive automatic consideration for financial aid within the department, including teaching assistantships for the non-Western languages taught in its programs. For details and applications, write to the above address.

For students in the MATESL program, financial assistance is offered to as many qualified applicants as possible, but cannot be awarded to all. A record of extensive experience in teaching English as a second language enhances a candidate's chance of receiving financial assistance during one's first semester. A limited number of University fellowships are available for exceptionally qualified candidates. Teaching assistants (www.grad.illinois.edu/Admissions/instructions/04c (http://www.grad.illinois.edu/Admissions/instructions/04c/)) teach students in the Division's ESL program and in the Intensive English Institute.

for the degree of Master of Arts in Linguistics

The aim of the master's program is to instruct students in the major areas of linguistic theory and the methods of linguistic analysis. Candidates for this degree must earn at least 40 graduate hours with a minimum grade point average of 3.0 (A = 4.0) and satisfy other department and Graduate College requirements.

Code	Title	Hours
Core Courses:		**20**
Select one course each from two of the following four areas, for a total of two courses (8 hours): (a) sociolinguistics; (b) computational linguistics; (c) psycholinguistics/acquisition; (d) second language studies/applied linguistics		
LING 501	Syntax I	
LING 502	Phonology I	
LING 507	Formal Semantics I	
One course in quantitative and/or qualitative research methods		4
LING 590	Special Topics in Linguistics	2
LING 504	Practicum	2
Elective Courses		12
Total Hours	**Master's - Stage 1**	**40**

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall:	16
Stage 1 qualifying paper and examination, with a grade of Pass or High Pass	
Language Requirement: Students must have proficiency in one language other than their native tongue.	
Minimum GPA:	3.0

Learning Outcomes: Linguistics, MA

Learning Outcomes for the degree of Master of Arts in Linguistics

1. Students will receive grounding in core areas of language and linguistics.
2. Students will receive grounding in their area of linguistic specialization.
3. Students will learn the research methodology appropriate for their subfield of linguistics.
4. Students will gain academic oral communication and presentation skills.
5. Students will gain academic writing skills.

Linguistics, PhD

for the degree of Doctor of Philosophy in Linguistics

head of department: Hye Suk James Yoon
director of graduate studies: Tania Ionin
director of admissions committee: Rakesh Bhatt
email: deptling@illinois.edu
department website: https://linguistics.illinois.edu/
department faculty: Linguistics Faculty (https://linguistics.illinois.edu/directory/faculty/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department office: 4080 Foreign Languages Building, 707 South Mathews, Urbana, IL 61801
phone: (217) 333-3563

The aim of the PhD program in Linguistics is to instruct students in the major areas of linguistic theory and the methods of linguistic analysis, and to prepare students to become independent researchers in one or more linguistic subfields.

Graduate Degree Programs in Linguistics

(Including African Languages [Bamana, Lingala, Swahili, Wolof, and Zulu], Arabic, Hindi-Urdu, Modern Greek, Persian, Sanskrit, and Turkish)

Linguistics, MA (p. 854)
Teaching of English as a Second Language, MA (MATESL) (p. 1040)
Linguistics, PhD (p. 855)
optional concentrations:
Romance Linguistics (p. 1106)|Second Language Acquisition & Teacher Education (p. 1106)

The Department of Linguistics offers graduate programs leading to the Master of Arts in Teaching English as a Second Language, and Doctor of Philosophy in Linguistics. Students are not normally admitted to a terminal master's in Linguistics degree program. More detailed information on departmental programs, offerings, admission, degree requirements, and financial aid, may be found at: www.linguistics.illinois.edu (http://www.linguistics.illinois.edu).

Admission

Applicants to the MATESL and PhD programs in Linguistics must have completed a bachelor's degree.

For the PhD program in Linguistics, undergraduate preparation should include the study of at least one foreign language; a course equivalent to LING 400 on this campus; and a broad background in the humanities, social sciences, or mathematics.

For the MATESL program, an undergraduate major in linguistics, English, a foreign language, or education is generally recommended, though other majors are also acceptable. Applicants must present a grade point average of at least 3.0 (A = 4.0) for the last 60 hours of undergraduate work. Two years of coursework in a foreign language or the equivalent are also required.

Students may be admitted to the PhD program in Linguistics with or without a prior master's degree in linguistics or a related field. Depending on the student's prior preparation, they may be admitted either into Stage 1 of the PhD or into Stage 2 of the PhD. Students who who have completed a master's degree in linguistics or a closely related field may be considered for admission to Stage 2 of the PhD program. Students without an approved prior master's degree will only be considered for admission to Stage 1 of the PhD program. Students admitted to Stage 1 must complete 40 credit hours in the areas listed on the department website, maintain a GPA of 3.5 or better in all core courses, and earn a grade of High Pass on the qualifying examination in order to advance to Stage 2. Students who are admitted directly to Stage 2, but lack any of the core courses required for Stage 1, must complete Stage 1 requirements immediately on entry into the program; the courses will not count toward the 64 hours required for Stage 2 of the PhD.

Applicants to all Linguistics graduate programs should apply online (www.grad.illinois.edu/admissions/apply/ (http://catalog.illinois.edu/graduate/las/linguistics-phd/www.grad.illinois.edu/admissions/apply/)) and submit a statement of purpose, three letters of recommendation and a writing sample of 10-20 pages in length. Original transcripts (with English translations if applicable) showing all undergraduate and graduate work completed should be sent to:

SLCL Graduate Student Services
3070 Foreign Languages Bldg.
707 S. Mathews Ave.
Urbana, IL 61801

Graduate Record Examination (GRE) scores are required. The applicant should ask the ETS to submit scores to institution 1836. Applicants whose native language is not English are required to take the Test of English as a Foreign Language (TOEFL) and must score at least 88 (100 preferred) on the internet-based test (iBT); they must also pass the speaking sub-section of the iBT with a minimum score of 24 (see www.grad.illinois.edu/Admissions/instructions/04c). Applications are accepted for fall admission only. Application questions may be directed to SLCL Graduate Student Services at slclgradservices@illinois.edu.

Financial Aid

The Linguistics department aims to provide financial aid for all graduate students in the Ph.D. program in Linguistics for up to five years, in the form of fellowships, teaching assistantships, research assistantships, or departmental assistantships. To hold a teaching assistantship non-native English speakers must first pass a test of their oral English ability (see www.grad.illinois.edu/admissions/taengprof.htm (http://www.grad.illinois.edu/admissions/taengprof.htm)). Some students receive aid through other units in the University. New applicants receive automatic consideration for financial aid within the department, including teaching assistantships for the non-Western languages taught in its programs. For details and applications, write to the above address.

For students in the MATESL program, financial assistance is offered to as many qualified applicants as possible, but cannot be awarded to all. A record of extensive experience in teaching English as a second language enhances a candidate's chance of receiving financial assistance during one's first semester. A limited number of University fellowships are available for exceptionally qualified candidates. Teaching assistants (www.grad.illinois.edu/Admissions/instructions/04c (http://www.grad.illinois.edu/Admissions/instructions/04c/)) teach students in the Division's ESL program and in the Intensive English Institute.

for the degree of Doctor of Philosophy in Linguistics

The aim of the PhD program in Linguistics is to instruct students in the major areas of linguistic theory and the methods of linguistic analysis, and to prepare students to become independent researchers in one or more linguistic subfields. Candidates entering with an approved master's degree must complete 64 graduate hours with a minimum grade point average of 3.0 (A = 4.0) and satisfy other department and Graduate College requirements. Candidates entering without an approved master's degree must complete 104 graduate hours with a minimum grade point average of 3.0 (A = 4.0) and satisfy other department and Graduate College requirements.

Stage 1

(Entering WITHOUT an approved Master's. Students are not admitted to the MA program directly. When Stage 1 of the doctoral program is completed doctoral students may earn the MA.)

Code	Title	Hours
Core Courses (minimum GPA 3.5 required):		**20**
Select one course each from two of the following four areas, for a total of two courses (8 hours): (a) sociolinguistics; (b) computational linguistics; (c) psycholinguistics/acquisition; (d) second language studies/applied linguistics		
LING 501	Syntax I	
LING 502	Phonology I	
LING 507	Formal Semantics I	
One course in quantitative and/or qualitative research methods		4
LING 590	Special Topics in Linguistics	2
LING 504	Practicum	2
Elective Courses		12
Total Hours	**Master's - Stage 1**	**40**

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall:	16
Stage 1 qualifying paper and examination, with a grade of High Pass	

Language Requirement: Students must have proficiency in one language other than their native tongue.	
Minimum GPA:	3.0

Stage 2
(Entering the PhD Program WITH an approved Master's degree)

Code	Title	Hours
One upper-level course in Syntax, Phonology, or Semantics		4
One upper-level course in one of the following areas: sociolinguistics, computational linguistics, psycholinguistics/acquisition, or second language studies/applied linguistics		4
Elective courses reflecting the student's interests and professional goals, selected in consultation with advisor		12
Research/Project/Independent Study Hours:		12
LING 599	Thesis Research (min/max applied toward degree)	32
Total Hours	**Stage 2 only**	**64**

Code	Title	Hours
Total Hours	**PhD (Stage 1 & 2)**	**104**

Other Requirements

Requirement	Description
Other requirements may overlap	
Stage 2 qualifying paper and examination	
Language Requirement: Students must demonstrate knowledge of the structure of a language that is not their native tongue nor the same language that satisfied the foreign language requirement for the MA degree	
One of the languages with which the student is familiar (this may be the student's native language, or the language used to satisfy one of the language requirements) is a non-European or a non-Indo-European language.	
Minimum GPA:	3.0
Master's Degree Required for Admission to PhD?	Yes
Qualifying Exam Required:	Yes
Preliminary Exam Required:	Yes
Final Exam/Dissertation Defense Required:	Yes
Dissertation Deposit Required:	Yes

Learning Outcomes: Linguistics, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Linguistics

1. Students will receive grounding in core areas of language and linguistics.
2. Students will receive grounding in their area of linguistic specialization.
3. Students will learn the research methodology appropriate for their subfield of linguistics.
4. Students will gain academic oral communication and presentation skills.
5. Students will gain academic writing skills.
6. Students will learn to prepare a portfolio for the job market.

Livestock Systems Health, MVS

for the degree of Master of Veterinary Science in Livestock Systems Health

dean of the college: Peter D. Constable
faculty sponsor: James F. Lowe
overview of admissions & requirements: https://online.vetmed.illinois.edu/MVS-Application-Process (https://online.vetmed.illinois.edu/MVS-Application-Process/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: College of Veterinary Medicine (http://www.vetmed.illinois.edu/)
department website: Master Veterinary Science (https://online.vetmed.illinois.edu/Master-Veterinary-Science/)
college office: : i-Learning Center, 2938 Veterinary Medicine Basic Science Building, 2001 S Lincoln Avenue, Urbana, IL 61802
phone: 217-300-7439
email: ilearningvetmed@illinois.edu

The primary goal of the MVS degree program is to develop critical thinking skills, instill the desire to be life-long learners, and increase the depth and breadth of veterinary professional knowledge for food-producing animal industries. It aims to develop the skills needed to thrive in multiple career paths including specialized clinical practice, academia, industry, government, and clinical research. The Master of Veterinary Science with a major in Livestock Systems Health is a 32-hour program that will take approximately two years to complete. Design of the program focused on students currently in the workforce.
Elective courses will include but are not limited to the following subject areas:

- Pathogen biology
- Immunology and Medical Microbiology
- Epidemiology and animal health economics
- Infectious disease control and management
- Systems management and systematic approaches to problem solving

for the degree of Master of Veterinary Science in Livestock Systems Health

Code	Title	Hours
Required:		
VCM 565	Biostatistics, Information Management, and Data Analytics for Livestock Production Systems	4
VMS Experiental Learning (Capstone)		8
Electives chosen from the following:		**20**

VCM 547	Global One Health
VCM 560	Infectious Disease in Livestock Systems
VCM 562	Understanding the Host Response to Infection
VCM 563	Infectious Respiratory Diseases of Swine
VCM 564	Introduction to Livestock Business Strategy
VCM 566	Applications of Data Science to Livestock Systems
VCM 568	A Systems-Based Approach to the Operation of Livestock-Based Food Production Systems I
VCM 569	A Systems-Based Approach to the Operation of Livestock-Based Food Production Systems II
PATH 575	Vet Info Tech/Computer App
PATH 576	Communication Vet Consultation
PATH 577	Vet Leadership Organ Behavior
PATH 578	Veterinary Business Management
PATH 579	Adv Concept Swine Health Med 1
PATH 580	Adv Concept Swine Health Med 2
PATH 519	Mechanisms Viral Pathogenesis
PATH 433	Virology & Viral Pathogenesis
Total Hours	**32**

Other Requirements

Requirement	Description
Other requirements and conditions may overlap	
Minimum 500-level Hours Required	12
Final Exam Required:	Yes
Minimum GPA:	3.0

Management, MS

for the Master of Science in Management (on-campus & online)

interim chair of department: Cele Otnes
director of graduate studies: Deepak Somaya
director of admissions committee: Rakesh Bhatt
email: ba@business.illinois.edu
program website: https://giesbusiness.illinois.edu/msm (https://giesbusiness.illinois.edu/msm/)
department faculty: https://business.illinois.edu/people/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://giesbusiness.illinois.edu/
department office: 350 Wohlers Hall, 1206 S. Sixth Street, Champaign, IL 61820
phone: (217) 333-4240

The Master of Science in Management can be completed either on campus or online.

The Master of Science in Management is a 36 graduate hour master's program. It is designed to provide a foundation for practitioners leading and managing teams, units, or organizations. It provides a general management foundation and an opportunity to focus on a particular area of specialization.

Students in this program are not eligible for tuition and fee waivers, except for those that are statutory.

Graduate Degree Programs in Business Administration

Majors:

Business Administration, MBA (p. 642) **(online-iMBA)**
Business Administration, MS (p. 646)
with optional concentrations: Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Corporate Governance & International Business (p. 1090), Finance (p. 1096), Supply Chain Management (p. 1109)
Business Analytics, MS (p. 649)
Management, MS (p. 858)
with optional concentrations: Business Data Analytics (p. 1086), Finance, (p. 1096) Corporate Governance & International Business (p. 1090)
Technology Management, MS (p. 1048)
with optional concentrations: Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Finance (p. 1096), Information Technology & Control (p. 1100), Supply Chain Management (p. 1109)
Business Administration, PhD (p. 647)

Minors:

Information Technology & Control (p. 1136)
Corporate Governance & International Business (p. 1130)
Supply Chain Management (p. 1144)

Concentrations:

Business Data Analytics (p. 1086)
Corporate Governance & International Business (p. 1090)
Information Technology & Control (p. 1100)
Supply Chain Management (p. 1109)

Certificates:

Digital Marketing, CERT (p. 1115)
Entrepreneurship & Strategic Innovation, CERT (p. 1116)
Financial Management, CERT (p. 1117)
Global Challenges in Business, CERT (p. 1118)
Managerial Economics & Business Analysis, CERT (p. 1119)
Strategic Leadership Management, CERT (p. 1120)
Value Chain Management, CERT (p. 1121)

Joint Degree Program:

Accountancy, MS (iMSA) & Business Administration, MBA (iMBA) (http://catalog.illinois.edu/graduate/bus/joint-degree/accountancy-ms-business-mba-online/)

Admission

Admission to the MS in Management program requires an undergraduate degree with a scholastic average of at least B for the last 60 hours and for any previous graduate work completed along with completion of at least one college-level quantitative methods class. For additional details, please refer to the program's website. All applicants whose native

language is not English must submit a minimum Test of English as a Foreign Language (TOFEL) score of at least 102 (iBT), 253 (CBT), or 610 (PBT); or minimum International English Language Testing System (IELTS) academic exam scores of 6.5 overall and 6.0 in all subsections.

Faculty Research Interests

Faculty research interests are in the areas of marketing, organizational behavior, organization theory, decision sciences, information systems, strategic management, risk analysis, judgment under uncertainty, international business, production and operations management, accounting, economics, entrepreneurship, and finance. The Gies College of Business houses computer facilities, a behavioral science laboratory, and a separate library. The college maintains contacts with industry and government through its Survey Research Laboratory, Illinois Business Consulting, the Academy for Entrepreneurial Leadership and several professional and scholarly journals edited by its faculty.

Financial Aid

The M.S. in Business Administration, the M.S. in Management, the M.S. in Strategic Brand Communication, and the M.S. in Technology Management do not provide assistantships. Tuition and fee waivers are not available for this program.

for the Master of Science in Management (on-campus and online)

The MS in Management requires a minimum of 36 hours. Students are required to take at least 2 credit hours in each of the six courses listed under General Management Foundation Courses (12+ hours). Any remaining credit hours of the 24 credit hour core requirement need to be fulfilled by taking General Management Elective Courses. Students also need 12 credit hours of Graduate General Elective courses, which provide flexibility for individualization. Students with sufficient demonstrated background in one or more general management areas may, with permission of the program, replace General Management Foundation courses with additional General Management Elective or Graduate General Electives.

For additional details and requirements, refer to the department's Program Curriculum *(*https://giesbusiness.illinois.edu/msm/curriculum/*) and the* Graduate College Handbook *(*https://grad.illinois.edu/gradhandbook/*).*

Code	Title	Hours
General Management Foundation Courses		**12-24**
ACCY 503	Managerial Accounting	
FIN 500	Introduction to Finance	
BADM 508	Leadership and Teams	
BADM 520	Marketing Management	
BADM 544	Strategic Management	
BADM 567	Process Management	
General Management Electives		**0-12**
ACCY 500	Accounting Measurement, Reporting, and Control	
BADM 502	Communicating with Data and Decision Making	
BADM 513	Communication Strategy in Bus	
BADM 550	Business Practicum	
BADM 588	Business Practice Immersion	
Graduate General Electives - up to 12 hours of general graduate electives as needed to meet the minimum number of hours required.		**12**
Total Hours		**36**

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall	24
Minimum GPA:	2.75
International students with TOEFL scores below 613 (paper-based), 257 (computer-based), or 103 (internet-based), or IELTS score below 7.0, are required to take the English Placement Test (EPT) when they arrive on campus. After taking the EPT, most students are required to take a Business English course sequence. For these students, completion of the ESL course sequence is mandatory but does not count towards the 36 hour degree requirement.	

Management: Technology Management, MS

for the degree of Master of Science in Management, Technology Management concentration

department head: Cele Otnes
director of graduate studies: Jeffrey Loewenstein (MS) and Olga Khessina (PhD)
email: ba@business.illinois.edu
department website: https://giesbusiness.illinois.edu/msba (https://giesbusiness.illinois.edu/msba/)
department faculty: https://business.illinois.edu/people/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://giesbusiness.illinois.edu/
department office: 350 Wohlers Hall, 1206 S. Sixth Street, Champaign, IL 61820
phone: (217) 333-4240

The concentration in Technology Management is designed to develop managers who can work effectively in technology intensive areas.

The concentration is open to students enrolled in:

Management, MS (p. 858)

This concentration requires twelve graduate hours of Technology Management coursework. Successful completion of the concentration assumes certain knowledge of business and prior coursework.

Graduate Degree Programs in Business Administration

Majors:

Business Administration, MBA (p. 642) **(online-iMBA)**
Business Administration, MS (p. 646)
with optional concentrations: Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Corporate Governance & International Business (p. 1090), Supply Chain Management (p. 1109)
Management, MS (p. 858)
On-campus concentrations: Business Data Analytics (p. 1086), Finance (p. 1096), Technology Management (p. 859)
Technology Management, MS (p. 1048)
with optional concentrations: Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Information Technology & Control (p. 1100), Supply Chain Management (p. 1109)
Business Administration, PhD (p. 647)

Minors:

Information Technology & Control (p. 1136)
Corporate Governance & International Business (p. 1130)
Supply Chain Management (p. 1144)

Concentrations:

Business Data Analytics (p. 1086)
Corporate Governance & International Business (p. 1090)
Information Technology & Control (p. 1100)
Supply Chain Management (p. 1109)

Joint Degree Program:

Accountancy, MS (iMSA) & Business Administration, MBA (iMBA) (http://catalog.illinois.edu/graduate/bus/joint-degree/accountancy-ms-business-mba-online/)

Admission

Admission to the concentration requires a Graduate Student Request Form submitted to the Department and Graduate College and enrollment in a Gies College of Business graduate program or other graduate approved for the concentration. Admission is limited, and acceptance is considered based on a student's academic standing and space availability.

for the degree of Master of Science in Management, Technology Management concentration

This concentration requires twelve graduate hours of Technology Management coursework. Successful completion of the concentration assumes certain knowledge of business and prior coursework.

Code	Title	Hours
Technology Management Courses		**12**
Choose 12 hours from:		
BADM 514	Managing Innovation	
BADM 525	New Product Development	
BADM 551	Managing Intellectual Property	
BADM 566	Supply Chain Management	
BADM 571	Digital Business & IT Strategy	
BADM 574	Simulation and Risk Analysis	

Course substitutions may be approved by the Department of Business Administration.

Other Requirements

Requirement	Description
Minimum 500-level Hours Required Overall	4
Minimum GPA	2.75

Materials Engineering, MENG

for the degree of Master of Engineering in Materials Engineering

This program is not currently accepting applications.

Other Graduate Programs in the Department of Materials Science & Engineering

degrees:

Materials Science & Engineering, MS (p. 861)
optional concentrations:
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)|Computational Science & Engineering (p. 1089)
Materials Science & Engineering, PhD (p. 863)
optional concentrations:
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)|Computational Science & Engineering (p. 1089)

The Department of Materials Science & Engineering (MatSE) offers graduate programs leading to degrees of Master of Science and Doctor of Philosophy in Materials Science & Engineering. The department is consistently ranked among the top programs in the nation (undergraduate and graduate) by U.S. News and World Report. It offers opportunities to specialize in Nanoscale Science and Technology, Materials for Energy and the Environment, Materials for Medicine, and Mechanical Properties and Materials for Extreme Conditions with strong research programs in all of the areas.

Opportunity also exists for specializing in energy and sustainability engineering via the

Energy and Sustainability Engineering (EaSE) Graduate Certificate Option (http://ease.illinois.edu/)

for the degree of Master of Engineering in Materials Engineering

For additional details and requirements, please refer to the department's Graduate Degree Requirements Handbook *(*https://matse.illinois.edu/academics/graduate-programs/*) and the* Graduate College Handbook *(*http://grad.illinois.edu/gradhandbook/*).*

Code	Title	Hours
MSE 492	Lab Safety Fundamentals (credit does not apply toward the degree)	0

MSE 585	Materials Engrg Practicum (The equivalent of two semesters of industrial internships or co-ops (30 weeks total; one of the semesters can be during the B.S. program or prior to enrollment).) [1]	2
Two MSE area specialty courses in the student's chosen area of specialization.		6
MSE area specialty courses in one area outside the student's chosen area of specialization (subject to Other Requirements and Conditions below)		3-6
Technical elective course - Chosen from list appropriate for the student's area of specialization		3
Elective courses – At least 10 hours of these elective courses shall be College of Engineering courses in one or more of the areas of business, technology management, and entrepreneurship as listed on an approved list available from the department. There is the possibility of obtaining one of the Technology Entrepreneur Center Certificates.		13-20
Total Hours		36

Other Requirements and Conditions

Requirement	Description
Other Requirements and Conditions may overlap	
Minimum hours of MSE course work	11
Minimum of 500-level credit hours overall applied toward the degree.	12
MSE 595 (0 or 1 hour) must be taken every semester in the first two years of residence. A maximum of 2 hours may be applied toward the degree.	
A maximum of 2 hours of MSE 529 or MSE 559 in combination may be applied toward the degree:[2]	Ceramics, Electronic Materials, and Metallurgy area majors take MSE 529 every semester in residence; Polymer and Biomaterials area majors take MSE 559 every semester in residence
One or two MSE area specialty courses in one area outside the student's chosen area of specialization are required (two if one was not taken as part of the B.S. program)	
Minimum GPA:	3.0

[1] *Students who are admitted to the M. Eng. program are responsible for finding a suitable internship. Department or college staff may be able to help students in their search for a suitable placement suitable internship but the department does not guarantee a placement. The* MSE 585 *internship requires approval by the departmental Director of Graduate Studies to insure that it matches the student's individual career objectives and meets the learning goals of the program. Students taking an internship as part of their undergraduate B.S program should also check with the Director of Graduate Studies; his/her approval is required if the student is already accepted in the combined B.S./M.Eng. Program. Students returning to the university after having had materials engineering employment experience, if it is deemed appropriate, may use that as their internship and base their report on that experience*

[2] *Students will be expected to present an oral report on their internship in either* MSE 529 *or* MSE 559*, as appropriate, the semester following completion of the internship.*

Learning Outcomes: Materials Engineering, MENG

Learning Outcomes for the degree of Master of Engineering in Materials Engineering

1. The ability of students to function as independent scientists and engineers.
2. A deep understanding of the underlying principles of the appropriate theories in their subject area.
3. A deep understanding of the underlying principles of the synthesis and preparation of their subject materials.
4. A deep understanding of the underlying principles of characterization of their subject materials.
5. A deep understanding of the underlying principles of processing of their subject materials.
6. A deep understanding of interrelationships of structure, processing and properties of their subject materials.
7. A broad knowledge of the preparation, characterization and processing of all types of materials.

Materials Science & Engineering, MS

for the degree of Master of Science in Materials Science & Engineering

department head: Nancy Sottos (n-sottos@illinois.edu)
director of graduate studies: Moonsub Shim (mshim@illinois.edu)
overview of admissions & requirements: https://matse.illinois.edu/admissions/graduate-admissions (https://matse.illinois.edu/admissions/graduate-admissions/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://matse.illinois.edu
program website: https://matse.illinois.edu/academics/graduate-programs (https://matse.illinois.edu/academics/graduate-programs/)
department faculty: https://matse.illinois.edu/people/faculty/department-faculty (https://matse.illinois.edu/people/faculty/department-faculty/)
college website: https://grainger.illinois.edu/
contact: Ashley Phillips Smith (aphilli5@illinois.edu)
address: 201 Materials Science and Engineering Bldg, 1304 W Green St, Urbana, IL 61801
phone: (217) 333-1441
email: matse@illinois.edu

Opportunity exists for specializing in i) biomechanics via the Biomechanics (p. 1085) optional graduate concentration, ii) cancer nanotechnology via the Cancer Nanotechnology (p. 1088) optional graduate concentration, and iii) computational science and engineering via the Computational Science & Engineering (p. 1089) optional graduate concentration.

Admission Requirements

Students with bachelor's or master's degrees in the natural sciences or engineering will be considered for admission if they have a grade point average of at least 3.00 (A = 4.00) for the last two years of undergraduate study. The general test of the Graduate Record Examination (GRE) (http://www.ets.org/) is required. Admission is possible for the spring semester under special circumstances, but most admissions are for the fall semester. Full details of admission requirements are on the department's graduate admissions Web site (https://matse.illinois.edu/admissions/graduate-admissions/).

All applicants whose native language is not English are required to submit the results of the TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) as evidence of meeting the English proficiency requirements for full admission status (http://grad.illinois.edu/admissions/instructions/04c/). Under certain circumstances applicants may be exempt (https://grad.illinois.edu/admissions/instructions/04c/) from the TOELF/IELTS requirement.

Financial Aid

Except for special circumstances, MatSE does not provide financial aid to students in the MS program. When available, financial aid is in the form of teaching assistantships.

All applicants, regardless of US citizenship, whose native language is not English and who wish to be considered for teaching assistantships must demonstrate spoken English language proficiency (http://grad.illinois.edu/admissions/taengprof.htm) by achieving a minimum score of 24 on the speaking subsection of the TOEFL iBT or 8 on the speaking subsection of the IELTS. For students who are unable to take the TOEFL iBT or IELTS, a minimum score of 4CP, 5 or 6 is required on the EPI test (http://cte.illinois.edu/testing/oral_eng/epi_overview.html), offered on campus. All new teaching assistants are required to participate in the Graduate Academy for College Teaching (https://citl.illinois.edu/citl-101/teaching-learning/grad-academy-for-college-teaching/) conducted prior to the start of the semester.

Department Research

The backgrounds of faculty members vary widely within the broad areas of Nanoscale Science and Technology, Materials for Energy and the Environment, Materials for Medicine, and Mechanical Properties and Materials for Extreme Conditions. In addition, research collaborations with other faculty outside the department are frequent. For a detailed list of faculty research interests and publications, view the MatSE department's faculty biographies. (https://matse.illinois.edu/directory/faculty/)

The MatSE department has an outstanding array of facilities available for materials research. These facilities, in addition to laboratories in the department's buildings, include, among others, the Materials Research Laboratory, Center for Microanalysis of Materials, Beckman Institute for Advanced Science and Technology, and Micro and Nanotechnology Laboratory. The National Center for Supercomputing Applications and the MRL Center for Computation are readily available. Information about these facilities may be found at the MatSE department's facilities information Web site (http://www.matse.illinois.edu/research/facilities.html).

Other Graduate Programs in the Department of Materials Science & Engineering

degrees:

Materials Science & Engineering, PhD (p. 863)
optional concentrations:
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)|Computational Science & Engineering (p. 1089)

The Department of Materials Science & Engineering (MatSE) offers graduate programs leading to degrees of Master of Science and Doctor of Philosophy in Materials Science & Engineering. The department is consistently ranked among the top programs in the nation (undergraduate and graduate) by U.S. News and World Report. It offers opportunities to specialize in Nanoscale Science and Technology, Materials for Energy and the Environment, Materials for Medicine, and Mechanical Properties and Materials for Extreme Conditions with strong research programs in all of the areas.

Opportunity also exists for specializing in energy and sustainability engineering via the

Energy and Sustainability Engineering (EaSE) Graduate Certificate Option (http://ease.illinois.edu/)

for the degree of Master of Science in Materials Science & Engineering

For additional details and requirements, please refer to the department's Graduate Degree Requirements Handbook (http://mse.illinois.edu/academics/grad/handbook.html) and the Graduate College Handbook (http://grad.illinois.edu/gradhandbook/).

Thesis Option

Code	Title	Hours
MSE 599	Thesis Research (min-max applied toward the degree)	8
MSE 492	Lab Safety Fundamentals (credit does not apply toward the degree)	0
MSE 595	Materials Colloquium	0-2
Advisor group meetings (MSE 590) and area seminars (MSE 529, MSE 559) (subject to Other Requirements and Conditions below)		0-4
Elective courses – chosen in consultation with advisor (subject to Other Requirements and Conditions below)		18-24
Total Hours		32

Other Requirements and Conditions [1]

Requirement	Description
Other Requirements and Conditions may overlap	
Minimum hours of MSE course work	10
Minimum of 500-level credit hours overall applied toward the degree.	14
MSE 595 (0 or 1 hour) must be taken every semester in the first two years of residence. A maximum of 2 hours may be applied toward the degree.	
MSE 529 or MSE 559 (0 or 1 hour) must be taken every semester. A maximum of 4 hours may be applied toward the degree.	
The completed master's thesis must be approved by the advisor and the department head.	
Miminum GPA:	3.0

[1] *For additional details and requirements, please refer to the department's* Graduate Degree Requirements Handbook *(*http://mse.illinois.edu/academics/grad/handbook.html*) and the* Graduate College Handbook *(*http://grad.illinois.edu/gradhandbook/*).*

Non-Thesis Option

Code	Title	Hours
MSE 492	Lab Safety Fundamentals (credit does not apply toward the degree)	0
MSE 595	Materials Colloquium	0-2
Advisor group meetings (MSE 590) and area seminars (MSE 529, MSE 559) (subject to Other Requirements and Conditions below)		0-4
Elective courses – chosen in consultation with advisor (subject to Other Requirements and Conditions below)		30-36
Total Hours		36

Other Requirements

Requirement	Description
Other Requirements and Conditions may overlap	
Minimum hours of MSE course work	10
Minimum of 500-level credit hours overall applied toward the degree	14
MSE 595 (0 or 1 hour) must be taken every semester in the first two years of residence. A maximum of 2 hours may be applied toward the degree.	
MSE 529 or MSE 559 (0 or 1 hour) must be taken every semester. A maximum of 4 hours may be applied toward the degree.	
Generally, students on a research assistantship will not be allowed in the non-thesis option.	
Minimum GPA:	3.0

[1] *For additional details and requirements, please refer to the department's* Graduate Degree Requirements Handbook *(*http://mse.illinois.edu/academics/grad/handbook.html*) and the* Graduate College Handbook *(*http://grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Materials Science & Engineering, MS

Learning Outcomes for the degree of Master of Science in Materials Science & Engineering

1. The ability of students to function as independent scientists and engineers.
2. A deep understanding of the underlying principles of the appropriate theories in their subject area.
3. A deep understanding of the underlying principles of the synthesis and preparation of their subject materials.
4. A deep understanding of the underlying principles of characterization of their subject materials.
5. A deep understanding of the underlying principles of processing of their subject materials.
6. A deep understanding of interrelationships of structure, processing and properties of their subject materials.
7. A broad knowledge of the preparation, characterization and processing of all types of materials.

Materials Science & Engineering, PhD

for the degree of Doctor of Philosophy in Materials Science & Engineering

department head: Nancy Sottos (n-sottos@illinois.edu)
director of graduate studies: Moonsub Shim (mshim@illinois.edu)
overview of admissions & requirements: https://matse.illinois.edu/admissions/graduate-admissions (https://matse.illinois.edu/admissions/graduate-admissions/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://matse.illinois.edu
program website: https://matse.illinois.edu/academics/graduate-programs (https://matse.illinois.edu/academics/graduate-programs/)
department faculty: https://matse.illinois.edu/people/faculty/department-faculty (https://matse.illinois.edu/people/faculty/department-faculty/)
college website: https://grainger.illinois.edu/
contact: Ashley Phillips Smith (aphilli5@illinois.edu)
address: 201 Materials Science and Engineering Bldg, 1304 W Green St, Urbana, IL 61801
phone: (217) 333-1441
email: matse@illinois.edu

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Admission Requirements

Students with bachelor's or master's degrees in the natural sciences or engineering will be considered for admission if they have a grade point average of at least 3.00 (A = 4.00) for the last two years of undergraduate study. The general test of the Graduate Record Examination (GRE) (http://www.ets.org/) is required. Admission is possible for the spring semester under special circumstances, but most admissions are for the fall semester. Full details of admission requirements are on the department's graduate admissions Web site (https://matse.illinois.edu/admissions/graduate-admissions/). (https://matse.illinois.edu/admissions/graduate-admissions/)

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Financial Aid

Financial aid is available in the form of research assistantships, teaching assistantships, and partial fellowships for students in the PhD programs. All applicants to the MatSE PhD program are automatically considered for financial support in the form of a research assistantship. Starting in Fall 2020, Grainger Engineering PhD students in their first five years of enrollment who meet the minimum eligibility requirements (https://grainger.illinois.edu/academics/graduate/phd-funding-guarantee/) are guaranteed a funded appointment for fall and spring that includes a full tuition waiver, a partial fee waiver, and a stipend.

All applicants, regardless of US citizenship, whose native language is not English and who wish to be considered for teaching assistantships must demonstrate spoken English language proficiency (http://grad.illinois.edu/admissions/taengprof.htm) by achieving a minimum score of 24 on the speaking subsection of the TOEFL iBT or 8 on the speaking subsection of the IELTS. For students who are unable to take the TOEFL iBT or IELTS, a minimum score of 4CP, 5 or 6 is required on the EPI test (http://cte.illinois.edu/testing/oral_eng/epi_overview.html), offered on campus. All new teaching assistants are required to participate in the Graduate Academy for College Teaching (https://citl.illinois.edu/citl-101/teaching-learning/grad-academy-for-college-teaching/) conducted prior to the start of the semester.

Department Research

The backgrounds of faculty members vary widely within the broad areas of Nanoscale Science and Technology, Materials for Energy and the Environment, Materials for Medicine, and Mechanical Properties and Materials for Extreme Conditions. In addition, research collaborations with other faculty outside the department are frequent. For a detailed list of faculty research interests and publications, view the MatSE department's faculty biographies. (https://matse.illinois.edu/directory/faculty/)

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Other Graduate Programs in the Department of Materials Science & Engineering

degrees:

Materials Science & Engineering, MS (p. 861)
optional concentrations:
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)|Computational Science & Engineering (p. 1089)

The Department of Materials Science & Engineering (MatSE) offers graduate programs leading to degrees of Master of Science and Doctor of Philosophy in Materials Science & Engineering. The department is consistently ranked among the top programs in the nation (undergraduate and graduate) by U.S. News and World Report. It offers opportunities to specialize in Nanoscale Science and Technology, Materials for Energy and the Environment, Materials for Medicine, and Mechanical Properties and Materials for Extreme Conditions with strong research programs in all of the areas.

Opportunity also exists for specializing in energy and sustainability engineering via the

Energy and Sustainability Engineering (EaSE) Graduate Certificate Option (http://ease.illinois.edu/)

for the degree of Doctor of Philosophy in Materials Science & Engineering

For additional details and requirements, please refer to the department's Graduate Degree Requirements Handbook *(*https://matse.illinois.edu/academics/graduate-programs/*) and the* Graduate College Handbook *(*http://grad.illinois.edu/gradhandbook/*).*

Entering with approved M.S. degree

Code	Title	Hours
MSE 599	Thesis Research (min-max applied toward the degree)	44
One of CHEM 544, MSE 500, PHYS 504 with a grade of B or higher		4
MSE 492	Lab Safety Fundamentals (credit does not apply toward the degree)	0
MSE 595	Materials Colloquium	0-2
Advisor group meetings (MSE 590) and area seminars (MSE 529, MSE 559) (subject to Other Requirements and Conditions below)		0-4
Elective courses (subject to Other Requirements and Conditions below)		10-16
Total Hours		64

Other Requirements and Conditions [1]

Requirement	Description
Other Requirements and Conditions may overlap	
MSE course work hours	10
500-level credit hours applied toward the degree	10
MSE 595 (0 or 1 hour) must be taken every semester in the first two years of residence. A maximum of 2 hours may be applied toward the degree.	
MSE 529 or MSE 559 (0 or 1 hours) must be taken every semester. A maximum of 4 hours may be applied toward the degree.	
Ph.D. exam and dissertation requirements:	
Qualifying exam:[2]	
Preliminary exam	
Final exam or dissertation defense	
Dissertation deposit	
Minimum GPA:	3.0

1 *For additional details and requirements, please refer to the department's* Graduate Degree Requirements Handbook *(*https://matse.illinois.edu/academics/graduate/handbook.html*) and the* Graduate College Handbook *(*http://grad.illinois.edu/gradhandbook/*).*

2 Qualifying Exam Information *(*https://matse.illinois.edu/academics/graduate/exams/*)*

Entering with approved B.S. degree

Code	Title	Hours
MSE 599	Thesis Research (min-max applied toward the degree)	52
One of CHEM 544, MSE 500, PHYS 504 with a grade of B or higher		4
MSE 492	Lab Safety Fundamentals (credit does not apply toward the degree)	0
MSE 595	Materials Colloquium	0-4
Advisor group meetings (MSE 590) and area seminars (MSE 529, MSE 559) (subject to Other Requirements and Conditions below)		0-8
Elective courses (subject to Other Requirements and Conditions below) (28-40 hours)		28-40
Total Hours		96

Other Requirements and Conditions [1]

Requirement	Description
Other Requirements and Conditions may overlap	
MSE course work hours	10
500-level credit hours applied toward the degree	10
MSE 595 (0 or 1 hour) must be taken every semester in the first two years of residence. A maximum of 4 hours may be applied toward the degree.	
MSE 529 or MSE 559 (0 or 1 hours) must be taken every semester. A maximum of 8 hours may be applied toward the degree.	
These students may earn a Master of Science degree during the Ph.D. program.	
Ph.D. exam and dissertation requirements:	
Qualifying exam:[2]	
Preliminary exam	
Final exam or dissertation defense	
Dissertation deposit	
Minimum GPA:	3.0

1 *For additional details and requirements, please refer to the department's* Graduate Degree Requirements Handbook *(*https://matse.illinois.edu/academics/graduate/handbook.html*) and the* Graduate College Handbook *(*http://grad.illinois.edu/gradhandbook/*).*

2 Qualifying Exam Information *(*https://matse.illinois.edu/academics/graduate/exams/*)*

Learning Outcomes: Materials Science & Engineering, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Materials Science & Engineering

1. The ability of students to function as independent scientists and engineers.
2. A deep understanding of the underlying principles of the appropriate theories in their subject area.

3. A deep understanding of the underlying principles of the synthesis and preparation of their subject materials.
4. A deep understanding of the underlying principles of characterization of their subject materials.
5. A deep understanding of the underlying principles of processing of their subject materials.
6. A deep understanding of interrelationships of structure, processing and properties of their subject materials.
7. A broad knowledge of the preparation, characterization and processing of all types of materials.

Mathematics, MS

for the Master of Science in Mathematics

department chair: Vera Hur
director of graduate studies: Yuliy Baryshnikov
overview of admissions & requirements: https://math.illinois.edu/admissions/graduate-program-mathematics-admissions#MS-Math (https://math.illinois.edu/admissions/graduate-program-mathematics-admissions/#MS-Math)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: http://www.math.illinois.edu
department faculty: https://math.illinois.edu/research/faculty-research (https://math.illinois.edu/research/faculty-research/) **and** https://math.illinois.edu/directory/faculty (https://math.illinois.edu/directory/faculty/)
college website: https://las.illinois.edu/
department office: 273 Altgeld Hall, 1409 West Green Street, Urbana, IL 61801
phone: (217) 333-5749
email: math-grad@illinois.edu

The MS in Mathematics program allows students a wide range of course choices and can offer good preparation either for a job in industry or for pursuit of a doctorate in mathematics at another university. It is rare, though not impossible, for students to enter the PhD program at the University of Illinois after finishing the MS in Mathematics. The degree requires 32 credit hours and can normally be completed in 18 months. A master's thesis is optional. Applications are accepted for Fall semester each year. Financial aid is generally not available.

Graduate Degree Programs in Mathematics

Actuarial Science, MS (p. 548)
Applied Mathematics, MS (p. 575)
Mathematics, MS (p. 866)
Mathematics, PhD (p. 867)
optional concentrations:
Actuarial Science & Risk Analytics (p. 868)
Computational Science and Engineering (p. 1089)
Teaching of Mathematics, MS (p. 1043)
Computational Science and Engineering (p. 1089)

for the Master of Science in Mathematics

For additional details and requirements refer to the department's Guide to Graduate Studies (https://files.webservices.illinois.edu/7917/GraduateGuide18-19.pdf) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Thesis Option

Code	Title	Hours
Select one of the following:		3-4
MATH 448	Complex Variables	
MATH 540	Real Analysis	
MATH 542	Complex Variables I	
Select one of the following:		3-4
MATH 418	Intro to Abstract Algebra II	
MATH 500	Abstract Algebra I	
MATH 501	Abstract Algebra II	
MATH 599	Thesis Research (min/max applied toward degree)	4
Total Hours Required: 32		

Other Requirements

Requirement	Description
Other requirements may overlap	
MATH 405, MATH 406, MATH 415, MATH 444, and MATH 499 cannot be counted toward this graduate degree.	
Minimum Hours Required Within the Unit:	24
Minimum 500-level Hours Required Overall:	12 (in MATH)
Minimum GPA:	3.0

Non-Thesis Option

Code	Title	Hours
Select one of the following:		3-4
MATH 448	Complex Variables	
MATH 540	Real Analysis	
MATH 542	Complex Variables I	
Select one of the following:		3-4
MATH 418	Intro to Abstract Algebra II	
MATH 500	Abstract Algebra I	
MATH 501	Abstract Algebra II	
Total Hours Required: 32		

Other Requirements

Requirement	Description
Other requirements may overlap	
MATH 405, MATH 406, MATH 415, MATH 444, and MATH 499 cannot be counted toward this graduate degree.	
Minimum Hours Required Within the Unit:	24
Minimum 500-level Hours Required Overall:	12 (in MATH)
Minimum GPA:	3.0

Learning Outcomes: Mathematics, MS

Learning Outcomes for the Master of Science in Mathematics

1. Students will have a strong understanding of abstract algebra.
2. Students will have a strong understanding of real analysis.
3. Students will gain the ability to engage with theoretical mathematical thinking at the graduate level.
4. Students will gain experience in original research in mathematics, if desired. This goal applies to students on the thesis track of this program.

Mathematics, PhD

for the Doctor of Philosophy in Mathematics

department chair: Vera Hur
director of graduate studies: Yuliy Baryshnikov
overview of admissions & requirements: https://math.illinois.edu/admissions/graduate-program-mathematics-admissions#Math-PhD (https://math.illinois.edu/admissions/graduate-program-mathematics-admissions/#Math-PhD)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: http://www.math.illinois.edu
department faculty: https://math.illinois.edu/research/faculty-research (https://math.illinois.edu/research/faculty-research/) **and** https://math.illinois.edu/directory/faculty (https://math.illinois.edu/directory/faculty/)
college website: https://las.illinois.edu/
department office: 273 Altgeld Hall, 1409 West Green Street, Urbana, IL 61801
phone: (217) 333-5749
email: math-grad@illinois.edu

Graduate Degree Programs in Mathematics

Actuarial Science, MS (p. 548)
Applied Mathematics, MS (p. 575)
Mathematics, MS (p. 866)
Mathematics, PhD (p. 867)
optional concentrations:
Actuarial Science & Risk Analytics (p. 868)
Computational Science and Engineering (p. 1089)
Teaching of Mathematics, MS (p. 1043)
Computational Science and Engineering (p. 1089)

for the Doctor of Philosophy in Mathematics

Students working toward a Ph.D. degree usually require from four to six years to complete the requirements. Each student must pass the comprehensive examinations (testing the student's knowledge of basic graduate-level mathematics in algebra, analysis, and other areas) and the preliminary examination (testing the student's ability to begin or continue research in a chosen field). Students must also write and defend a research thesis in their field of mathematics.

For additional details and requirements refer to the department's Guide to Graduate Studies (https://math.illinois.edu/academics/graduate-program-mathematics/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Requirements

Code	Title	Hours
Students must demonstrate competence in five core courses. Two of these are required to be MATH 500 (Abstract Algebra) and MATH 540 (Real Analysis). The remaining three can be chosen from the following list of electives: MATH 511, MATH 518, MATH 525, MATH 530, MATH 531, MATH 542, MATH 550, MATH 553, MATH 561, MATH 563, MATH 570, MATH 580. To demonstrate competence, a student must receive a B+ or higher in the course, or pass a written exam on the topic.		20
Students must also demonstrate proficiency in undergraduate complex analysis, which can be done by a B+ in MATH 448, a B+ in MATH 542, or by passing the exam associated to MATH 542.		0-4
Master's equivalency		32
MATH 599	Thesis Research (0 min applied toward degree)	0
Total Hours:		96

Other Requirements

Requirement	Description
Other requirements may overlap	
MATH 405, MATH 406, MATH 415, MATH 444, and MATH 499 cannot be counted toward this graduate degree.	
64 hours in residence	
Masters Degree Required for Admission to PhD?	No
Comprehensive Exam Required	Yes
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.25

Learning Outcomes: Mathematics, PhD

Learning Outcomes for the Doctor of Philosophy in Mathematics

1. Acquire a foundation in abstract algebra at the graduate level.
2. Acquire a foundation in real analysis at the graduate level.
3. Acquire a suitable breadth of knowledge to provide a foundation for undertaking high-level research.
4. Gain a broad understanding of the range of current research in the mathematical sciences.
5. Demonstrate depth of knowledge in chosen area of research specialization.

6. Gain the ability to conduct independent mathematical research at a professional level.
7. Gain experience and competence in the teaching of mathematics at the college level.

Mathematics: Actuarial Science & Risk Analytics, PhD

for the Doctor of Philosophy in Mathematics, Actuarial Science and Risk Analytics Concentration

department chair: Vera Hur
director of graduate studies: Yuliy Baryshnikov
overview of admissions & requirements:
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: http://www.math.illinois.edu
program website: https://math.illinois.edu/admissions/graduate-program-mathematics-admissions#Math-PhD (https://math.illinois.edu/admissions/graduate-program-mathematics-admissions/#Math-PhD)
department faculty: https://math.illinois.edu/research/faculty-research/actuarial-science (https://math.illinois.edu/research/faculty-research/actuarial-science/)
college website: https://las.illinois.edu/
department office: 273 Altgeld Hall, 1409 West Green Street, Urbana, IL 61801
phone: (217) 333-5749
email: math-grad@illinois.edu

The Concentration attracts students with strong interest in financial risk analytics and actuarial applications of mathematics, and equips them with advanced analytical tools for professional and academic careers. Students in the Concentration complete coursework or professional exams in Probability, Risk Modeling and Analysis, Mathematical Statistics, Theory of Finance, and Actuarial Models for Life Contingencies or Financial Economics.

Graduate Degree Programs in Mathematics

Actuarial Science, MS (p. 548)
Applied Mathematics, MS (p. 575)
Mathematics, MS (p. 866)
Mathematics, PhD (p. 867)
- **optional concentrations:**
  - Actuarial Science & Risk Analytics (p. 868)
  - Computational Science and Engineering (p. 1089)

Teaching of Mathematics, MS (p. 1043)
- Computational Science and Engineering (p. 1089)

Students working toward a Ph.D. degree usually require four to six years to complete the requirements. Each student must pass the comprehensive examinations/courses and the preliminary examination (testing the student's ability to begin or continue research in a chosen field). Students must also write and defend a research thesis in their field of mathematics.

For additional details and requirements refer to the department's Guide to Graduate Studies (https://files.webservices.illinois.edu/7917/GraduateGuide18-19.pdf) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Requirements

Code	Title	Hours
Students must demonstrate competence in five core courses including the following: [1]		
MATH 540	Real Analysis	4
MATH 561	Theory of Probability I	4
MATH 563	Risk Modeling and Analysis	4
STAT 510	Mathematical Statistics	4
Select one of:		
MATH 511	Intro to Algebraic Geometry	
MATH 518	Differentiable Manifolds I	
MATH 525	Algebraic Topology I	
MATH 530	Algebraic Number Theory	
MATH 531	Analytic Theory of Numbers I	
MATH 542	Complex Variables I	
MATH 550	Dynamical Systems I	
MATH 553	Partial Differential Equations	
MATH 570	Mathematical Logic	
MATH 580	Combinatorial Mathematics	
Students must also demonstrate proficiency in undergraduate complex analysis, which can be done by a B+ in MATH 448, a B+ in MATH 542, or by passing the exam associated to MATH 542.		
Students must demonstrate competence in the following:		
MATH 564	Applied Stochastic Processes	4
STAT 425	Statistical Modeling I	3 or 4
FIN 591	Theory of Finance	4
Students must demonstrate competence in two of the following:		**8**
ASRM 575	Life Insurance and Pension Mathematics	4
ASRM 510	Financial Mathematics	4
ASRM 561	Loss Data Analytics & Credibility	4
Master's equivalency		**32**
MATH 599	Thesis Research (0 min applied toward degree)	0
Total Hours required for the degree		**96**

Other requirements

Requirement	Description
Other requirements may overlap.	
MATH 405, MATH 406, MATH 415, MATH 444, and MATH 499 cannot be counted toward this graduate degree.	
64 hours in residence	
Masters Degree Required for Admission to PhD	No
Comprehensive Exam Required	Yes
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes

Dissertation Deposit Required	Yes
Minimum GPA	3.25

[1] To demonstrate competence, a student must receive a B+ or higher in the course, or pass a written exam on the topic.

Mechanical Engineering, MENG

for the degree of Master of Engineering in Mechanical Engineering (on campus & online)

department head: Anthony Jacobi (a-jacobi@illinois.edu)
director of graduate studies: Petros Sofronis (http://catalog.illinois.edu/graduate/engineering/mechanical-engineering-meng/sofronis@illinois.edu)
director of M.Eng. program: Jiajun He (jiajunhe@illinois.edu)
overview of admissions & requirements: https://mechse.illinois.edu/graduate/graduate-degree-programs/master-engineering-mechanical-engineering/things-know-when (https://mechse.illinois.edu/graduate/graduate-degree-programs/master-engineering-mechanical-engineering/things-know-when/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://mechanical.illinois.edu/
program website: https://mechanical.illinois.edu/graduate/graduate-degree-programs/master-engineering-mechanical-engineering (https://mechanical.illinois.edu/graduate/graduate-degree-programs/master-engineering-mechanical-engineering/)
college website: https://grainger.illinois.edu/
contact: Susan Roughton (roughton@illinois.edu)
address: 168 Mechanical Engineering Building, 1206 West Green Street, Urbana, IL 61801
phone: (217) 300-3319
email: mechse-meng@illinois.edu

The MEng in Mechanical Engineering is a professionally-oriented degree that provides advanced knowledge and experiential opportunities beyond that of a bachelor's degree. Students may choose to design their curriculum around three tracks of study: Design, Energy, and Control & Manufacturing. Alternate tracks of study may be pursued with the approval and guidance of the director of the MEng program.

Opportunity exists for specializing in i) biomechanics via the Biomechanics (p. 1085) optional graduate concentration and ii) cancer nanotechnology via the Cancer Nanotechnology (p. 1088) optional graduate concentration.

Admission Requirements

An applicant for admission to the MEng program at the Department of Mechanical Science and Engineering must:

1. Be a graduate of an institution awarding a baccalaureate degree equivalent to that granted by the University of Illinois at Urbana-Champaign in engineering or a related field;
2. Be adequately prepared for advanced study as demonstrated by his or her previous program of study and scholastic record; and
3. Be recommended for admission by the Department of Mechanical Science and Engineering. A minimum grade point average of 3.00 (A = 4.00) for the last two years of undergraduate study is required.

Due to COVID 19 the department of Mechanical Science and Engineering is waiving the GRE requirement for the Fall 2021 cycle.

All applicants whose native language is not English are required to submit TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) scores as evidence of English proficiency. Minimum admission requirements (https://grad.illinois.edu/admissions/instructions/04c/) are set by the Graduate College. Students applying to the online program must satisfy the full status admissions requirement.

The Department of Mechanical Science and Engineering accepts MEng applications for both Spring and Fall terms.

Financial Aid

Students in the MEng in Mechanical Engineering program are not eligible for Board of Trustees (BOT) tuition-waiver generating assistantships at the University of Illinois.

Other Graduate Programs in the Department of Mechanical Science & Engineering

degree programs:

Mechanical Engineering, MS (p. 870)
Mechanical Engineering, PhD (p. 872)
Theoretical & Applied Mechanics, MS (p. 1054)
Theoretical & Applied Mechanics, PhD (p. 1057)

optional concentrations available for MS and PhD programs:

Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)|Computational Science & Engineering (p. 1089)

Opportunity also exists for specializing in energy and sustainability engineering via the

Energy and Sustainability Engineering (EaSE) Graduate Certificate Option (http://ease.illinois.edu/)

for the degree of Master of Engineering in Mechanical Engineering

For additional details and requirements refer to the department's graduate program requirements *(*http://mechanical.illinois.edu/graduate/*) and the* Graduate College Handbook *(*http://grad.illinois.edu/gradhandbook/*).*

Degree Requirements

Code	Title	Hours
ME or TAM course work		12-20
Applied math/computational science requirement [1]		3-4
Elective courses chosen in consultation with advisor		4-8
Professional development [2]		4-8
Total required hours		**32**

[1] Choose from approved list; consult the program's website (https://masterengineering.mechanical.illinois.edu/) for more information.

[2] Choice or combination of (a) graduate-level capstone project (e.g., ME 597 Independent Study), or (b) course in leadership, entrepreneurship, or other business-related course.

Requirement	Description
A minimum of 4 elective hours must be completed outside of the major department.	
A minimum of 12 500-level credit hours applied toward the degree, 8 of which must be in ME or TAM.	
A maximum of 4 hours of independent study may be applied toward degree requirements.	
Elective course category may include a maximum of 4 hours of special topics credit.	
Professional development category may include a maximum of 4 hours of special topics credit.	
The minimum program GPA is 3.0.	
Requirements and conditions may overlap.	

Learning Outcomes: Mechanical Engineering, MENG

Learning Outcomes for the degree of Master of Engineering in Mechanical Engineering

Illinois MechSE MEng graduates will have:

1. A solid understanding of one or more core areas of Mechanical engineering and technology entrepreneurship (e.g., mechanics of materials, combustion, controls and dynamics, manufacturing, fluid mechanics, solid mechanics).
2. Familiarity with applied math/computational science concepts relevant to Mechanical Engineering.
3. Familiarity with technical concepts in physics, math, and/or other engineering disciplines.
4. Working knowledge of how select business concepts can be applied to Mechanical Engineering.

Mechanical Engineering, MS

for the degree of Master of Science in Mechanical Engineering (on campus & online)

department head: Anthony Jacobi (a-jacobi@illinois.edu)
director of graduate studies: Petros Sofronis
overview of admissions & requirements: https://mechanical.illinois.edu/graduate/applying-mechse-graduate-programs (https://mechanical.illinois.edu/graduate/applying-mechse-graduate-programs/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://mechanical.illinois.edu/
program website: https://mechanical.illinois.edu/graduate/graduate-degree-programs/ms-programs (https://mechanical.illinois.edu/graduate/graduate-degree-programs/ms-programs/)
department faculty: https://mechanical.illinois.edu/people (https://mechanical.illinois.edu/people/)
college website: https://grainger.illinois.edu/
contact: Amy Cates (acate2@illinois.edu)
address: 168 Mechanical Engineering Building, 1206 West Green Street, Urbana, IL 61801
phone: (217) 300-6722
email: mechse-grad@illinois.edu

The MS in Mechanical Engineering is available for both on-campus and online students. Prospective students planning to continue for the PhD should apply to the PhD program.

Opportunity exists for specializing in i) biomechanics via the Biomechanics (p. 1085) optional graduate concentration, ii) cancer nanotechnology via the Cancer Nanotechnology (p. 1088) optional graduate concentration, and iii) computational science and engineering via the Computational Science & Engineering (p. 1089) optional graduate concentration.

Admission Requirements

An applicant for admission to the MS program in Mechanical Engineering in the Department of Mechanical Science and Engineering must:

1. Be a graduate of an institution awarding a baccalaureate degree equivalent to that granted by the University of Illinois at Urbana-Champaign;
2. Be adequately prepared for advanced study as demonstrated by his or her previous program of study and scholastic record; and
3. Be recommended for admission by the Department of Mechanical Science and Engineering. A minimum grade point average of 3.25 (A = 4.00) for the last two years of undergraduate study is required, and a minimum grade point average of 3.50 (A = 4.00) is required for any previous graduate work completed.

Scores on the Graduate Record Examination (GRE) (http://www.ets.org/) general test are required of all applicants. Based on the previous preparation of the student, prerequisite courses may be specified by the advisor, but the credit may not be applied toward a degree.

All applicants whose native language is not English are required to submit TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) scores as evidence of English proficiency. Minimum admission requirements (https://grad.illinois.edu/admissions/instructions/04c/) are set by the Graduate College. Students applying to the online program must satisfy the full status admissions requirement.

The Department of Mechanical Science and Engineering accepts MS applications for both Spring and Fall terms.

Financial Aid

Students admitted to the MS program are eligible for Board of Trustees (BOT) tuition-waiver generating assistantships at the University of Illinois. All applicants whose native language is not English, regardless of US citizenship, who wish to be considered for teaching assistantships must demonstrate spoken English language proficiency (http://grad.illinois.edu/admissions/taengprof.htm) by achieving a minimum score of 24 on the speaking subsection of the TOEFL iBT or 8.0 on the speaking subsection of the IELTS. Students who are already at Illinois may request to take the on-campus EPI test (http://cte.illinois.edu/testing/oral_eng/epi_overview.html), for which the minimum passing score for TA eligibility is 4CP. All new teaching assistants are required to participate in the Graduate Academy for College Teaching (https://citl.illinois.edu/citl-101/teaching-learning/grad-academy-for-college-teaching/) prior to the start of their first semester as a teaching assistant.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in both the ME and TAM MS programs.

Department Research

A new paradigm in research is being created in the department by integrating basic sciences such as biology, chemistry, applied mathematics, and applied physics with the traditional mechanical engineering and engineering mechanics disciplines of fluid mechanics/thermal sciences, solid mechanics/materials and controls/dynamics. This integration is fostering new directions and discoveries in nanomechanics, nanomanufacturing, biomechanics and computational science and engineering.

The goal of all research in the department is to address critical societal problems in the areas of health, security/defense, energy/environment, manufacturing, and transportation. While the basic function of departmental research is generation of new knowledge, a growing number of projects are prompted by current needs of the state of Illinois, the United States, and the world. For more information, see the department's research Web site (https://mechanical.illinois.edu/research/).

MechSE faculty are major participants in activities at the department, college, and university level via research centers and programs that are integral to the MechSE graduate program. For more information, see the department's research centers Web site (https://mechanical.illinois.edu/mechse-research-centers/).

MechSE's wealth of research laboratories allows faculty, graduate and undergraduate research assistants, and postdoctoral and visiting scholars to conduct theoretical and experimental investigations of phenomena related to materials behavior, combustion, micro- and nanomechanical systems, controls and dynamics, thermodynamics, biomechanics, and much more. For more information, see the department's research laboratories Web site (https://mechanical.illinois.edu/research/mechse-laboratories/).

Other Graduate Programs in the Department of Mechanical Science & Engineering

degree programs:

Mechanical Engineering, MENG (p. 869)

optional concentrations:
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)

Mechanical Engineering, PhD (p. 872)
Theoretical & Applied Mechanics, MS (p. 1054)
Theoretical & Applied Mechanics, PhD (p. 1057)

optional concentrations available for MS and PhD programs:
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)|Computational Science & Engineering (p. 1089)

Opportunity also exists for specializing in energy and sustainability engineering via the

Energy and Sustainability Engineering (EaSE) Graduate Certificate Option (http://ease.illinois.edu/)

for the degree of Master of Science in Mechanical Engineering (on campus & online)

The online MSME degree program offers both a thesis (32 credit hours) and non-thesis (36 credit hours) option. Online students have five years to complete the degree requirements. The degree awarded through our online program is the exact same degree awarded to on-campus MSME students.

For additional details and requirements refer to the department's graduate program requirements *(*http://mechanical.illinois.edu/graduate/*) and the* Graduate College Handbook *(*http://grad.illinois.edu/gradhandbook/*).*

Thesis Option

Code	Title	Hours
ME 599	Thesis Research (min-max applied toward the degree)	4-8
MSE 492	Lab Safety Fundamentals (credit does not apply toward the degree)	0
ME 590	Seminar (registration for 1 hour every term while in residence; credit does not apply toward the degree)	0
Elective courses (formal graded coursework) – chosen in consultation with advisor (subject to Other Requirements and Conditions below)		24-28
Total Hours		32

Other Requirements and Conditions (may overlap)

Requirement	Description
A minimum of 8 ME or TAM credit hours with 4 at the 500 level.	
A minimum of 12 500-level credit hours applied toward the degree.	

For the thesis option, a maximum of 4 hours of ME 597 or TAM 597 (or other approved independent study) may be applied toward the elective course work requirement.	
No ME 599 credit may be applied toward the elective course work requirement (599 is not formal graded coursework).	
Minimum GPA:	3.0

Non-Thesis Option

Code	Title	Hours
MSE 492	Lab Safety Fundamentals (credit does not apply toward the degree)	0
ME 590	Seminar (registration for 1 hour every term while in residence; credit does not apply toward the degree)	0
ME 597	Independent Study	4
or TAM 597	Advanced Independent Study	
Elective courses – chosen in consultation with advisor (subject to Other Requirements and Conditions below)		32
Total Hours		36

Other Requirements and Conditions (may overlap)

Requirement	Description
A minimum of 8 ME or TAM credit hours with 4 at the 500 level.	
A minimum of 12 500-level credit hours applied toward the degree.	
Departmental approval is required to pursue the non-thesis option.	
Minimum GPA:	3.0

Learning Outcomes: Mechanical Engineering, MS

Learning Outcomes for the degree of Master of Science in Mechanical Engineering (on campus & online)

Illinois MechSE ME graduates will have:

1. A deep understanding of at least one core area of Mechanical engineering (e.g., mechanics of materials, combustion, controls and dynamics, manufacturing, fluid mechanics, solid mechanics). [MS/PhD]
2. A broader understanding of at least 1-2 areas of Mechanical Engineering that are different from the area of research of the student's thesis. [MS/PhD]
3. Ability to think critically and creatively in defining research questions and to outline strategies of inquiry. [MS/PhD]
4. Ability to document research outcomes comprehensively for publication. [MS/PhD]
5. Ability to communicate research results to scientific audience in conferences. [PhD]
6. Ability to work collaboratively with other peers. [MS/PhD]

Mechanical Engineering, PhD

for the degree of Doctor of Philosophy in Mechanical Engineering

department head: Anthony Jacobi (a-jacobi@illinois.edu)
director of graduate studies: Petros Sofronis
overview of admissions & requirements: https://mechanical.illinois.edu/graduate/applying-mechse-graduate-programs (https://mechanical.illinois.edu/graduate/applying-mechse-graduate-programs/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://mechanical.illinois.edu/
program website: https://mechanical.illinois.edu/graduate/graduate-degree-programs/phd-programs (https://mechanical.illinois.edu/graduate/graduate-degree-programs/ms-programs/)
department faculty: https://mechanical.illinois.edu/people (https://mechanical.illinois.edu/people/)
college website: https://grainger.illinois.edu/
contact: Amy Cates (acate2@illinois.edu)
address: 168 Mechanical Engineering Building, 1206 West Green Street, Urbana, IL 61801
phone: (217) 300-6722
email: mechse-grad@illinois.edu

The Department of Mechanical Science & Engineering offers both a traditional doctoral program (for students with a previous master's degree) and a direct doctoral program (for students with only a bachelor's degree) in Mechanical Engineering.

Opportunity exists for specializing in i) biomechanics via the Biomechanics (p. 1085) optional graduate concentration, ii) cancer nanotechnology via the Cancer Nanotechnology (p. 1088) optional graduate concentration, and iii) computational science and engineering via the Computational Science & Engineering (p. 1089) optional graduate concentration.

Admission Requirements

An applicant for admission to the PhD program in Mechanical Engineering in Department of Mechanical Science and Engineering must:

1. Be a graduate of an institution awarding a baccalaureate degree equivalent to that granted by the University of Illinois at Urbana-Champaign;
2. be adequately prepared for advanced study as demonstrated by his or her previous program of study and scholastic record; and
3. be recommended for admission by the Department of Mechanical Science and Engineering. A minimum grade point average of 3.25 (A = 4.00) for the last two years of undergraduate study is required, and a minimum grade point average of 3.50 (A = 4.00) is required for any previous graduate work completed.

Scores on the Graduate Record Examination (GRE) (http://www.ets.org/) general test are required of all applicants. Based upon the previous preparation of the student, prerequisite courses may be specified by the advisor, but the credit may not be applied toward a degree.

All applicants whose native language is not English are required to submit TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) scores as evidence of English proficiency. Minimum admission requirements (https://grad.illinois.edu/admissions/instructions/04c/) are set by the Graduate College.

The Department of Mechanical Science and Engineering accepts PhD applications for both Spring and Fall terms.

Financial Aid

Students admitted to the PhD program are eligible for Board of Trustees (BOT) tuition-waiver generating appointments at the University of Illinois, including research assistantships, teaching assistantships, and fellowships. Starting in Fall 2020, Grainger Engineering PhD students in their first five years of enrollment who meet the minimum eligibility requirements (https://grainger.illinois.edu/academics/graduate/phd-funding-guarantee/) are guaranteed a funded appointment for fall and spring that includes a full tuition waiver, a partial fee waiver, and a stipend.

All applicants whose native language is not English, regardless of US citizenship, who wish to be considered for teaching assistantships must demonstrate spoken English language proficiency (http://grad.illinois.edu/admissions/taengprof.htm) by achieving a minimum score of 24 on the speaking subsection of the TOEFL iBT or 8.0 on the speaking subsection of the IELTS. Students who are already at Illinois may request to take the on-campus EPI test (http://cte.illinois.edu/testing/oral_eng/epi_overview.html), for which the minimum passing score for TA eligibility is 4CP. All new teaching assistants are required to participate in the Graduate Academy for College Teaching (https://citl.illinois.edu/citl-101/teaching-learning/grad-academy-for-college-teaching/) prior to the start of their first semester as a teaching assistant.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in both the ME and TAM PhD programs.

Department Research

A new paradigm in research is being created in the department by integrating basic sciences such as biology, chemistry, applied mathematics, and applied physics with the traditional mechanical engineering and engineering mechanics disciplines of fluid mechanics/thermal sciences, solid mechanics/materials and controls/dynamics. This integration is fostering new directions and discoveries in nanomechanics, nanomanufacturing, biomechanics and computational science and engineering.

The goal of all research in the department is to address critical societal problems in the areas of health, security/defense, energy/environment, manufacturing, and transportation. While the basic function of departmental research is generation of new knowledge, a growing number of projects are prompted by current needs of the state of Illinois, the United States, and the world. For more information, see the department's research Web site (https://mechanical.illinois.edu/research/).

MechSE faculty are major participants in activities at the department, college, and university level via research centers and programs that are integral to the MechSE graduate program. For more information, see the department's research centers Web site (https://mechanical.illinois.edu/mechse-research-centers/).

MechSE's wealth of research laboratories allows faculty, graduate and undergraduate research assistants, and postdoctoral and visiting scholars to conduct theoretical and experimental investigations of phenomena related to materials behavior, combustion, micro- and nanomechanical systems, controls and dynamics, thermodynamics, biomechanics, and much more. For more information, see the department's research laboratories Web site (https://mechanical.illinois.edu/research/mechse-laboratories/).

Other Graduate Programs in the Department of Mechanical Science & Engineering

degree programs:

- Mechanical Engineering, MENG (p. 869)
  optional concentrations:
  - Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)
- Mechanical Engineering, MS (p. 870)
- Theoretical & Applied Mechanics, MS (p. 1054)
- Theoretical & Applied Mechanics, PhD (p. 1057)
  optional concentrations for MS and PhD programs:
  - Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)|Computational Science & Engineering (p. 1089)

Opportunity also exists for specializing in energy and sustainability engineering via the

- Energy and Sustainability Engineering (EaSE) Graduate Certificate Option (http://ease.illinois.edu/)

for the degree of Doctor of Philosophy in Mechanical Engineering

For the Ph.D. program, a preliminary examination is taken after the qualifying examination. A minimum of six months should elapse between the successful completion of the doctoral preliminary examination and the doctoral final examination (oral dissertation defense).

For additional details and requirements refer to the department's graduate program requirements *(*http://mechanical.illinois.edu/graduate/*) and the* Graduate College Handbook *(*http://grad.illinois.edu/gradhandbook/*).*

Entering with approved M.S. or M.A. degree

Code	Title	Hours
ME 599	Thesis Research (min-max applied toward the degree)	44
MSE 492	Lab Safety Fundamentals (1 hour if not taken while completing the Master's degree; credit does not apply toward the degree)	0
ME 590	Seminar (registration for 1 hour every term while in residence; credit does not apply toward the degree)	0
Advanced math requirement from an approved list [1]		3-4

Elective courses – chosen in consultation with advisor (subject to Other Requirements and Conditions below)	16-17
Total Hours	64

Other Requirements and Conditions (may overlap)

Requirement	Description
Minimum 500-level credit hours applied toward the degree	16
Maximum hours of ME 597 or TAM 597 (or other approved independent study) which may be applied only toward the elective course work requirement	4
A maximum of 4 hours of ME 597 or TAM 597 (or other approved independent study) may be applied toward the elective course work requirement.	
No ME 599 credit may be applied toward the elective course work requirement.	
Minimum GPA:	3.0
Continuous registration is required after the preliminary exam and until dissertation deposit, while on campus and during semester of final defense.	
Ph.D. exam and dissertation requirements:	
Qualifying Exam: Qualifying examinations should be taken no later than the second calendar semester after initial enrollment.	
Preliminary exam	
Final exam or dissertation defense	
Dissertation deposit	

[1] Advanced math requirement approved list (http://mechanical.illinois.edu/graduate/mechse-graduate-degrees/phd-mechanical-engineering/)

Entering with approved B.S. or B.A. degree

A student entering with a bachelor's degree has the option of a direct Ph.D. program. It does not award an M.S. degree.

Code	Title	Hours
ME 599	Thesis Research (min-max applied toward the degree)	52
MSE 492	Lab Safety Fundamentals (1 hour if not taken while completing the Master's degree; credit does not apply toward the degree)	0
ME 590	Seminar (registration for 1 hour every term while in residence; credit does not apply toward the degree)	0
Advanced math requirement from an approved list [1]		3-4
Elective courses – chosen in consultation with advisor (subject to Other Requirements and Conditions below)		40-41
Total Hours		96

Other Requirements and Conditions (may overlap)

Requirement	Description
Minimum 500-level credit hours applied toward the degree	24
Maximum hours of ME 597 or TAM 597 (or other approved independent study) which may be applied only toward the elective course work requirement	8
A maximum of 4 hours of ME 597 or TAM 597 (or other approved independent study) may be applied toward the elective course work requirement.	
No ME 599 credit may be applied toward the elective course work requirement.	
Continuous registration is required after the preliminary exam and until dissertation deposit, while on campus and during semester of final defense.	
Ph.D. exam and dissertation requirements:	
Qualifying Exam: Qualifying examinations should be taken as early as possible, generally no later than the third semester.	
Preliminary exam	
Final exam or dissertation defense	
Dissertation deposit	
Minimum GPA:	3.0

[1] Advanced math requirement approved list (http://mechanical.illinois.edu/graduate/mechse-graduate-degrees/phd-mechanical-engineering/)

Learning Outcomes: Mechanical Engineering, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Mechanical Engineering

Illinois MechSE ME graduates will have:

1. A deep understanding of at least one core area of Mechanical engineering (e.g., mechanics of materials, combustion, controls and dynamics, manufacturing, fluid mechanics, solid mechanics). [MS/PhD]
2. A broader understanding of at least 1-2 areas of Mechanical Engineering that are different from the area of research of the student's thesis. [MS/PhD]
3. Ability to think critically and creatively in defining research questions and to outline strategies of inquiry. [MS/PhD]

4. Ability to document research outcomes comprehensively for publication. [MS/PhD]
5. Ability to communicate research results to scientific audience in conferences. [PhD]
6. Ability to work collaboratively with other peers. [MS/PhD]

Mental Health Counseling, MS

for the degree of Master of Science in Mental Health Counseling

chair of the department: Kiel Christianson
director of graduate studies: Jinming Zhang
graduate admissions information: Mitzi Koeberlein
overview of admissions & requirements: College of Education (https://education.illinois.edu/programs/grad/how-to-apply/?url=/programs/grad)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: http://education.illinois.edu/edpsy (http://education.illinois.edu/edpsy/)
program website: College of Education Programs (https://education.illinois.edu/faceted-search/programs/)
department faculty: Educational Psychology Faculty (https://education.illinois.edu/faculty-finder/edpsy/)
college website: http://education.illinois.edu/
department office: 142 Education Building, 1310 South Sixth Street, Champaign, IL 61820
phone: (217) 244-3542
email: gradservices@education.illinois.edu

The Master's of Science in Mental Health Counseling is a two-year, 61-credit hour program. The face-to-face program emphasizes training in psychological science and cultural diversity in practice across the lifespan. Students receive extensive preparation in applied psychology and complete a 100 hour (about 7 hours per week) practicum during the first year and a 600 hour (about 18 hours per week) internship during the second year. Graduates from the mental health counseling and career counseling tracks are Illinois Licensed Professional Counselor (LCP) licensure eligible. Graduates may wish to seek further training at the doctoral level in an applied psychology area or to enter the counseling field as a Master's level professional.

Graduate Degree Programs in Educational Psychology

Educational Psychology, EdM (p. 725) **(on campus & online)**
optional concentrations: Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)
Educational Psychology, MA (p. 728)
optional concentrations: Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)
Educational Psychology, MS (p. 731)
optional concentrations: Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)
Educational Psychology, PhD (p. 734)
optional concentration: Digital Learning (p. 1093)
Mental Health Counseling, MS (p. 875)
optional concentrations:
African American Studies (p. 1075) **(available to all on campus degrees)**
Second Language Acquisition and Teacher Education (http://www.slate.illinois.edu/) (PhD only)

Admission

Students entering a Ph.D. program without a master's degree must first complete the requirements for a Master of Science (including a master's thesis).

The Department offers admission to two terminal on-campus Master of Science (M.S.) degrees focusing on Quantitative and Qualitative Methodology, Measurement, and Evaluation (QUERIES) and Mental Health Counseling. There is no admission to terminal masters degrees in Cognitive Science of Teaching and Learning (CSTL), Developmental Sciences, or Counseling Psychology areas of specialization.

The department accepts applications for the Ph.D. degree, from both applicants who have completed their bachelor's degrees and those who have a master's degree. Students who enter the program without a prior master's incorporate their master's class work and research into their doctoral program, and earn a master's degree as the first step toward their Ph.D (satisfying the "Early Research Project" requirement). The department does not accept applications for master's degrees in CSTL, Developmental Sciences, or Counseling Psychology.

Applications

Applicants must submit a complete application for university admission, including three letters of reference, transcripts from all schools where undergraduate and graduate degrees were awarded or expect to be awarded prior to the application enrollment term, and other items listed in the department Web site (http://www.education.illinois.edu/edpsy/). Applicants to our doctoral program and M.S. in Mental Health Counseling apply for Fall enrollment. Current deadlines are posted on our department Web site (http://www.education.illinois.edu/edpsy/).

Doctoral candidates are admitted into one of four divisions: CSTL, Developmental Sciences, QUERIES and Counseling Psychology. When making admission decisions, division committees consider academic performance (e.g., grade-point average, GPA), GRE scores (optional), letters of recommendation, and statement of purpose. Preference is given to those with research experience and research interests that are aligned with existing research programs in the Department.

Master's candidates are admitted into QUERIES and Mental Health Counseling.

Grade Point Average

The preferred department standard for grade point average is 3.0 on a 4.0 scale. The University calculates undergraduate GPAs on the last two years of grades for degreed applicants and in the last one year for students who have not yet completed their bachelor's degree. Graduate GPAs are calculated on the total of all graduate level courses taken beyond the undergraduate degree.

Test of English as a Foreign Language (TOEFL)

International applicants must demonstrate English Language Proficiency for admission. Please see https://grad.illinois.edu/admissions/instructions/04c (https://grad.illinois.edu/admissions/instructions/04c/) for additional information on this requirement.

Area of Study Affiliation

All applicants to the Educational Psychology doctoral program must specify one of four areas in which they wish to study:

- Cognitive Science of Teaching and Learning (CSTL)
- Counseling Psychology (Counseling);
- Developmental Sciences
- Studies in Interpretive, Statistical Measurement, and Evaluative Methodologies for Research (QUERIES)

Detailed information about each area and about the research interests of the faculty can be found on the department Web site (http://www.education.illinois.edu/edpsy/).

Although all Ph.D. students are admitted to a specific area of study, the actual coursework, research, and faculty often overlap area boundaries. Departmental policy makes it possible for a student to change advisers and affiliation from one area to another when interests and research foci become more clearly defined or change. Many faculty members are affiliated with more than one area of study.

Mental Health Counseling M.S. students must choose one of three areas of study for their practicum experience:

- Mental Health Counseling
- Career Counseling
- Counseling and Developmental Sciences

Faculty Research Interests

The faculty's research agendas span a wide range of topics related to the study and application of psychological principles to develop and inform educational interventions and facilitate human development across the life span. Faculty conduct basic and translational research that explores the cognitive, life-span developmental, social-emotional, and socio-cultural factors that affect behavior, learning, and achievement in educational, clinical, and community contexts. They also engage in research on approaches to educational inquiry and the development of quantitative, qualitative and evaluative methodologies that underpin the development of evidence-based, policy-relevant studies. For information about specific faculty research interests, current grants, and publications, please visit the Faculty Finder (https://education.illinois.edu/faculty-finder/).

Center, Programs, and Institutes

Department faculty are affiliated with both research centers and institutes in the College of Education and the university more broadly, including the Adult Learning Lab, the Center for Education in Small Urban Communities, the Center for Advanced Study, the Beckman Institute, the Center for the Study of Reading, the Social Development Consortium, and others.

Facilities and Resources

The Department of Educational Psychology puts a high priority on working with its graduate students to secure fellowships and other awards.

The College of Education also has many resources to assist graduate students through their academic career. The Bureau of Educational Research works with students to secure research funding. The Council on Teacher Education (http://cote.illinois.edu/) entitles candidates seeking a Professional Educator License and provides accreditation of professional education programs. Each student completing a degree program is assigned a graduate adviser, who is available to assist the student with planning the program of study and determining degree requirements, courses and timelines for degree completion.

Information on University resources can be found at http://www.grad.illinois.edu/current-students (http://www.grad.illinois.edu/current-students/).

Financial Aid

Financial aid in the form of assistantships, scholarships, fellowships, and tuition waivers can be found throughout the college (https://education.illinois.edu/current-students/graduate/financial-aid/) and campus. Campus opportunities can be found at the Graduate College (http://www.grad.illinois.edu/funding-jobs/) and the Office of Student Financial Aid (http://www.osfa.illinois.edu/). **Please note: Graduate students employed as Staff by the University of Illinois at Urbana-Champaign are not eligible for a College of Education Award or Scholarship.**

The department does not require a separate financial aid application.

for the degree of Master of Science in Mental Health Counseling

A list of programs and additional requirements can be found on the program's website, (https://education.illinois.edu/faceted-search/programs/?degree=edm&department=edpsy) the College of Education Graduate Programs Handbook (https://education.illinois.edu/current-students/graduate/coe-graduate-handbook/), and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Students will choose one of three areas of study for their practicum:

- Mental Health Counseling
- Career Counseling
- Counseling and Developmental Sciences

Code	Title	Hours
Human Growth & Development		
Select one of the following:		4
EPSY 405	Personality and Soc Dev	
EPSY 407	Adult Learning and Development	
EPSY 430	Early Adolescent Development	
Assessment		
Select one of the following:		4
EPSY 413	Intelligence Assessment and Theory	

PSYC 567	Personality Assessment	
SPED 517	Disability Issues in Special Education	
EPS 405	Historical and Social Barriers	4
EPSY 403	Research Methods in Learning Sciences	4
EPSY 419	Counseling Psychology Pre-Practicum	4
EPSY 420	Theories of Psychotherapy	4
EPSY 510	Counseling Psych/Ethics ProSem	4
EPSY 511	Vocational Psychology Theories and Assessment	4
EPSY 515	Multicultural Counseling	4
EPSY 520	Counseling Psychology Practicum (A)	4
EPSY 520	Counseling Psychology Practicum (B)	8
EPSY 521	Group Counseling	4
EPSY 590	Advanced Seminar in Educational Psychology (Substance Abuse)	3
EPSY 590	Advanced Seminar in Educational Psychology (Family Therapy)	3
EPSY 590	Advanced Seminar in Educational Psychology (Psychopathology)	3
Total Hours		**61**

Other Requirements

Requirement	Description
Minimum GPA	3.0
Human Subjects Approval	

Microbiology, MS

for the degree of Master of Science in Microbiology

head of department: James Slauch
directors of graduate studies: Andrei Kuzminov, Cari Vanderpool, and Rachel Whitaker
email: gradinfo@mcb.illinois.edu
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
overview of mcb admissions requirements: http://mcb.illinois.edu/graduate/gradprospect (http://mcb.illinois.edu/graduate/gradprospect/)
department website: https://mcb.illinois.edu/departments/microbiology/
school website: School of Molecular and Cellular Biology (http://mcb.illinois.edu)
college website: https://las.illinois.edu/
department office: B103 Chemical and Life Sciences Laboratory, 601 South Goodwin Avenue, Urbana, IL 61801
phone: (217) 333-1736

Students are not admitted to the M.S. program; these requirements are completed as part of the Ph.D. program.

Graduate Degree Programs in Microbiology

Microbiology, MS (p. 877)
Microbiology, PhD (p. 878)

The Department of Microbiology at Illinois offers unique opportunities for graduate students to become skilled and creative microbiologists. Our graduate program of study leads to the doctor of philosophy degree (Ph.D.). We have outstanding resources in our internationally recognized faculty, graduate students, and research facilities. This exposes our students to the latest research techniques and fosters their development as independent scientists. The program has particular strengths in the areas of microbial physiology, metabolism, genetics, evolution, and pathogenesis. For an application and departmental materials that provide greater detail on programs, offerings, admission, degree requirements, and financial aid, visit our website at www.mcb.illinois.edu/departments/microbiology/.

Graduates from the Department of Microbiology are employed in colleges and universities, industry, and government. Scientific advances in genetic engineering and biotechnology provide many opportunities in pharmaceutical, chemical, and genetic engineering companies.

The Department of Microbiology is a part of the School of Molecular and Cellular Biology (MCB), which also includes the Departments of Biochemistry, Cell and Developmental Biology, and Molecular and Integrative Physiology. The Department is part of an umbrella program in MCB that encompasses over 70 different research laboratories. Students admitted into any of these departmental graduate programs can select faculty thesis advisors from these active research laboratories in the School. Close ties are also maintained with the School of Integrative Biology, the School of Chemical Sciences, the Carle Illinois College of Medicine, and the College of Veterinary Medicine.Admission

Students interested in this program must apply directly to the School of Molecular and Cellular Biology (mcb.illinois.edu/graduate/gradprospect (http://mcb.illinois.edu/graduate/gradprospect.html)). During the first semester, students perform three laboratory rotations, choosing from any laboratory in the School. Students select a laboratory for their thesis research in December and formally join the appropriate graduate program/department at that time.

Students electing microbiology as a major for an advanced degree should have had a total of at least 15 credit hours of physical or biological sciences, including general biology or microbiology, chemistry through organic chemistry and biochemistry, and mathematics through calculus. Admission requirements include: a bachelor's degree with course work in biological sciences, chemistry, and physics; Graduate Record Examination (GRE) scores. In addition to the above requirements, international students must attain a minimum Test of English as a Foreign Language (TOEFL) score of 96 on the internet-based test (iBT), with a score of 24 on the speaking section, is also accepted. The department does not admit students into the M.S. program.

Graduate Teaching Experience

Experience in teaching is considered to be a vital part of the graduate program and is required as part of the academic work of all Ph.D. degree candidates. For the Department of Microbiology, a minimum of two semesters of teaching experience is a degree requirement.

Faculty Research Interests

Major areas of research interest include gene expression and regulation in bacteria, archaea, and eukaryotes; virus pathogenesis and host-cell interactions; viruses of bacteria and archaea; membrane biogenesis; lipid and polysaccharide synthesis in bacteria and yeast; cell wall biogenesis; bacterial pathogenesis and bacteria-host interactions; immunology; DNA replication, recombination, and repair; anaerobic microbiology; the biochemistry and physiology of methane formation; mechanisms of oxygen toxicity; bacterial and archaeal genomics, ecology, and evolution.

For further details, please consult the Department of Microbiology's website (www.mcb.illinois.edu/departments/microbiology/).

Facilities and Resources

The Microbiology Department is located in the modern Chemical and Life Sciences Laboratory (CLSL). Central to main campus, the CLSL houses all of the major equipment and expertise necessary for research in microbiology, cell biology, molecular biology, genomics, and biochemistry.

The University of Illinois has excellent core facilities to aid in scientific research, many of which are located in buildings adjacent to CLSL. Each core facility has full-time salaried support staff for training and support. The Roy J. Carver Biotechnology Center (http://biotech.illinois.edu/) includes core research facilities supporting genomics, proteomics, metabolomics, flow cytometry, bioinformatics and translational medical research (http://biotech.illinois.edu). The Center for Microscopic Imaging is a campus-wide service center for electron, confocal, and light microscopy

Several services are available to graduate students for support outside of the classroom and laboratory. The University of Illinois library is the nation's third largest university library, allowing access to reference books and on-line scientific journals. The Writers Workshop offers free, personal writing assistance for class assignments, scientific manuscripts, and theses. Please visit the School of Molecular and Cellular Biology (http://mcb.illinois.edu) to learn about these and other resources available to graduate students.

Financial Aid

All students admitted into the Ph.D. program receive financial support throughout their graduate training. Incoming graduate students are supported by the School of Molecular and Cellular Biology. Several University Fellowships are awarded to outstanding applicants on a competitive basis. Financial support is usually in the form of a research assistantship, teaching assistantship, and/or fellowship. In addition to this stipend, we offer a tuition and service fee waiver. A health insurance fee and other miscellaneous fees, must be paid by the student.

for the degree of Master of Science in Microbiology

Students are not admitted to the M.S. program; these requirements are completed as part of the Ph.D. program.

For specific information, visit our Web site at mcb.illinois.edu/departments/microbiology/gradcurrent.html (http://mcb.illinois.edu/departments/microbiology/gradcurrent.html) and refer to the department's Graduate Student Handbook and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Thesis Option

Code	Title	Hours
Coursework (not including MICR 590)		8
Research/Project Hours (4 min applied toward degree)		4
MICR 599	Thesis Research (0 min applied toward degree)	0
Total Hours		32

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum Hours Required Within the Unit:	8 (500 level)
Minimum Number of 500-level Hours Required Overall in Program:	12
Completion of one of the following and approval by the research advisor and head of the department: a research thesis; submission of a manuscript with the candidate as first author and to which the candidate has made the major contribution; the successful passing of the departmental preliminary exam.	
Minimum GPA:	3.0

Non-Thesis Option

Code	Title	Hours
Coursework (not including MICR 590)		8
Research/Project Hours (4 min applied toward degree)		4
Total Hours		32

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum Hours Required Within the Unit:	8 (500 level)
Minimum Number of 500-level Hours Required Overall in Program:	12
Completion of one of the following and approval by the research advisor and head of the department: a research thesis; submission of a manuscript with the candidate as first author and to which the candidate has made the major contribution; the successful passing of the departmental preliminary exam.	
Minimum GPA:	3.0

Microbiology, PhD

for the degree of Doctor of Philosophy in Microbiology

head of department: James Slauch
directors of graduate studies: Andrei Kuzminov, Cari Vanderpool, and Rachel Whitaker
email: gradinfo@mcb.illinois.edu
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
overview of mcb admissions requirements: http://mcb.illinois.edu/graduate/gradprospect (http://mcb.illinois.edu/graduate/gradprospect/)
department website: https://mcb.illinois.edu/departments/microbiology/
school website: School of Molecular and Cellular Biology (http://mcb.illinois.edu)
college website: https://las.illinois.edu/
department office: B103 Chemical and Life Sciences Laboratory, 601 South Goodwin Avenue, Urbana, IL 61801
phone: (217) 333-1736

The requirements for a Ph.D. from the Department of Microbiology include successful completion of course work, teaching, two first-author manuscripts in peer-reviewed journals, passing a preliminary examination and annual assessments of progress thereafter, and writing and depositing a research thesis.

Graduate Degree Programs in Microbiology

Microbiology, MS (p. 877)
Microbiology, PhD (p. 878)

The Department of Microbiology at Illinois offers unique opportunities for graduate students to become skilled and creative microbiologists. Our graduate program of study leads to the doctor of philosophy degree (Ph.D.). We have outstanding resources in our internationally recognized faculty, graduate students, and research facilities. This exposes our students to the latest research techniques and fosters their development as independent scientists. The program has particular strengths in the areas of microbial physiology, metabolism, genetics, evolution, and pathogenesis. For an application and departmental materials that provide greater detail on programs, offerings, admission, degree requirements, and financial aid, visit our website at www.mcb.illinois.edu/departments/microbiology/.

Graduates from the Department of Microbiology are employed in colleges and universities, industry, and government. Scientific advances in genetic engineering and biotechnology provide many opportunities in pharmaceutical, chemical, and genetic engineering companies.

The Department of Microbiology is a part of the School of Molecular and Cellular Biology (MCB), which also includes the Departments of Biochemistry, Cell and Developmental Biology, and Molecular and Integrative Physiology. The Department is part of an umbrella program in MCB that encompasses over 70 different research laboratories. Students admitted into any of these departmental graduate programs can select faculty thesis advisors from these active research laboratories in the School. Close ties are also maintained with the School of Integrative Biology, the School of Chemical Sciences, the Carle Illinois College of Medicine, and the College of Veterinary Medicine.Admission

Students interested in this program must apply directly to the School of Molecular and Cellular Biology (mcb.illinois.edu/graduate/gradprospect (http://mcb.illinois.edu/graduate/gradprospect.html)). During the first semester, students perform three laboratory rotations, choosing from any laboratory in the School. Students select a laboratory for their thesis research in December and formally join the appropriate graduate program/department at that time.

Students electing microbiology as a major for an advanced degree should have had a total of at least 15 credit hours of physical or biological sciences, including general biology or microbiology, chemistry through organic chemistry and biochemistry, and mathematics through calculus. Admission requirements include: a bachelor's degree with course work in biological sciences, chemistry, and physics; Graduate Record Examination (GRE) scores. In addition to the above requirements, international students must attain a minimum Test of English as a Foreign Language (TOEFL) score of 96 on the internet-based test (iBT), with a score of 24 on the speaking section, is also accepted. The department does not admit students into the M.S. program.

Graduate Teaching Experience

Experience in teaching is considered to be a vital part of the graduate program and is required as part of the academic work of all Ph.D. degree candidates. For the Department of Microbiology, a minimum of two semesters of teaching experience is a degree requirement.

Faculty Research Interests

Major areas of research interest include gene expression and regulation in bacteria, archaea, and eukaryotes; virus pathogenesis and host-cell interactions; viruses of bacteria and archaea; membrane biogenesis; lipid and polysaccharide synthesis in bacteria and yeast; cell wall biogenesis; bacterial pathogenesis and bacteria-host interactions; immunology; DNA replication, recombination, and repair; anaerobic microbiology; the biochemistry and physiology of methane formation; mechanisms of oxygen toxicity; bacterial and archaeal genomics, ecology, and evolution. For further details, please consult the Department of Microbiology's website (www.mcb.illinois.edu/departments/microbiology/).

Facilities and Resources

The Microbiology Department is located in the modern Chemical and Life Sciences Laboratory (CLSL). Central to main campus, the CLSL houses all of the major equipment and expertise necessary for research in microbiology, cell biology, molecular biology, genomics, and biochemistry.

The University of Illinois has excellent core facilities to aid in scientific research, many of which are located in buildings adjacent to CLSL. Each core facility has full-time salaried support staff for training and support. The Roy J. Carver Biotechnology Center (http://biotech.illinois.edu/) includes core research facilities supporting genomics, proteomics, metabolomics, flow cytometry, bioinformatics and translational medical research (http://biotech.illinois.edu). The Center for Microscopic Imaging is a campus-wide service center for electron, confocal, and light microscopy

Several services are available to graduate students for support outside of the classroom and laboratory. The University of Illinois library is the nation's third largest university library, allowing access to reference books and on-line scientific journals. The Writers Workshop offers free, personal writing assistance for class assignments, scientific manuscripts, and theses. Please visit the School of Molecular and Cellular Biology (http://mcb.illinois.edu) to learn about these and other resources available to graduate students.

Financial Aid

All students admitted into the Ph.D. program receive financial support throughout their graduate training. Incoming graduate students are

supported by the School of Molecular and Cellular Biology. Several University Fellowships are awarded to outstanding applicants on a competitive basis. Financial support is usually in the form of a research assistantship, teaching assistantship, and/or fellowship. In addition to this stipend, we offer a tuition and service fee waiver. A health insurance fee and other miscellaneous fees, must be paid by the student.

for the degree of Doctor of Philosophy in Microbiology

The requirements for a Ph.D. from the Department of Microbiology include successful completion of course work, teaching, two first-author manuscripts in peer-reviewed journals, passing a preliminary examination and annual assessments of progress thereafter, and writing and depositing a research thesis.

For specific information, visit our Web site at mcb.illinois.edu/departments/microbiology/gradcurrent.html (http://mcb.illinois.edu/departments/microbiology/gradcurrent.html) and refer to the department's Graduate Student Handbook and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
Master's level requirements		32
Core coursework:		19
MCB 501	Advanced Biochemistry	
MCB 502	Advanced Molecular and Cell Biology	
MCB 580	Res Ethics & Responsibilities	
MCB 581	Laboratory Rotation I	
MCB 582	Laboratory Rotation II	
MCB 583	Laboratory Rotation III	
MCB 585	Current Topics in Microbiology	
Registration in MICR 595 every semester of enrollment (9 min)		9
400- or 500-level discussion-based courses (3 min)		3
400- or 500-level lecture-based courses (12 min)		12
Research/Project Hours (min/max applied toward degree):		before prelim
MICR 599	Thesis Research (min/max applied toward degree)	after prelim
Total Hours		96

Other Requirements

Requirement	Description
Other requirements may overlap	
Two first-author manuscripts in peer-reviewed journals. At the time of graduation at least one of these manuscripts must be accepted.	
A minimum of two semesters as a teaching assistant	
Masters Degree Required for Admission to PhD?	No, but Masters level requirements must be met.
Qualifying Exam Required	No
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

Learning Outcomes: Microbiology, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Microbiology

Students graduating with a PhD in Microbiology will have:

1. Effective oral communication skills that are developed via one or more of the following tasks: group discussions in courses; presentations in departmental seminar courses; discussion of scientific topics in courses; defending their work in a preliminary exam; acting as a teaching assistant for at least 2 semesters; giving yearly student seminars.
2. Effective written communication skills that are developed via one or more of the following tasks: writing at least one original, full-length manuscript that has been accepted for publication in a refereed journal; writing a dissertation; writing an NIH-style grant for the preliminary exam.
3. A level of competency and research independence commensurate with the degree, such that they can obtain an initial science-related placement in a job that uses critical thinking components.
4. Demonstrated ability to organize and execute a research project that uses critical-thinking components and problem-solving expertise, hypothesis-driven, and fills a gap in knowledge.
5. Knowledge of the discipline and acquired technical skills in general Microbiology and in their specialized Microbiology research area.

Molecular & Cellular Biology, MS

for the degree of Master of Science in Molecular & Cellular Biology

head of school of mcb: Milan Bagchi
director of graduate studies (for MS in MCB): Melissa Michael
email: msmcb@mcb.illinois.edu
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
ms in mcb website: https://mcb.illinois.edu/msmcb/
school website: School of Molecular and Cellular Biology (http://mcb.illinois.edu)
college website: https://las.illinois.edu/
MCB instructional program office (for MS in MCB): 127 Burrill Hall, 407 South Goodwin Avenue, Urbana, IL 61801
phone: (217) 244-6239

Graduate Degree Programs in Molecular & Cellular Biology

The Master of Science in Molecular and Cellular Biology (MS in MCB) at the University of Illinois provides a non-thesis, course-based degree program for those students interested in additional advanced preparation for professional or graduate school or for future careers in industry, government or academia. The goal of the program is to provide students with a strong and broad educational background and problem-solving skill set in molecular and cellular biology at the advanced level without requiring a research thesis component. While the MS in MCB program is

suitable as preparation for a PhD program in MCB or related areas, it is uncommon for students to enter the MCB PhD program at the University of Illinois after finishing this degree.

The MS in MCB degree program serves primary two different audiences:

- Those students who wish to obtain a master's degree during a post-baccalaureate gap year, but prior to admission to professional or graduate school, by deepening and broadening their scientific knowledge base to better prepare for the next degree program.
- Those students who plan to obtain employment in industry, government, or nongovernmental organizations, where additional coursework at the advanced level would enhance their competitiveness, and in particular, where their laboratory skills could be bolstered through advanced laboratory courses without the necessity of conducting a research-based thesis project.

Students will take foundation and advanced courses from an approved list in the School of Molecular and Cellular Biology, choosing from a wide range of course topics, including biochemistry, molecular genetics, cell biology, microbiology, neurobiology, systems and computational biology, and advanced laboratory methods. Students will take advanced lecture, discussion, and seminar courses that hone scientific critical reading, analytical thinking, and communication skills that are highly desirable for advanced degree programs and future employers.
The MS in MCB degree requires a minimum of two full-time semester, which can be completed within one year, depending on prior education and experience. Some students may choose to take up to two years to complete, if they hold outside employment, but it is intended to be completed within two years. To maintain active status in the program, students must register for a minimum of 12 credit hours in 400- or 500-level MCB courses per semester.
Students entering the MS in MCB program will be expected to have completed a Bachelor's degree from an accredited 4-year college or university with undergraduate coursework in biology, chemistry, physics, calculus and English composition. Applicants must have completed the last 60 hours of coursework with grades of B (3.0 on a scale of 1 to 4) or better. Deficiencies in these areas will require additional coursework, as necessary, for successful completion of the degree.

for the degree of Master of Science Major in Molecular & Cellular Biology

Minimum required major and supporting course work: To maintain active status in the program students must register for a minimum of 12 credit hours in 400- or 500-level MCB courses per semester. A course-based master's degree requires a minimum of two full-time semesters. Consult the List of Approved Courses for the MS in MCB Program at this link (https://mcb.illinois.edu/msmcb/MS_MCB_ApprCrsList.pdf) for the most up-to-date information. For additional details and requirements refer to the MS MCB Program Handbook and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Core Curriculum

Code	Title	Hours
One 3- or 4-hour 400-level course from each of 4 disciplinary areas:		**12-14**
	Area 1: Biochemistry	
	Area 2: Cell & Developmental Biology	
	Area 3: Microbiology	
	Area 4: Molecular & Integrative Physiology	

Elective Hours

Code	Title	Hours
Electives Hours Required		**6-8**
	Courses to be chosen from the MS in MCB approved list of courses. See link above.	
Minimum 500-level Hours Required		**12**
	Courses to be chosen from the MS in MCB approved list of courses. See link above.	
	Other courses may be available See MS MCB Program Office for review request.	
Total Hours Required		**32**

Other Requirements

Requirement	Description
Minimum 500-level Hours Required:	12
Minimum Hours Required Within the Unit:	8
Courses taken "credit/no credit" may not be used toward degree requirements.	
Courses, or their equivalents, taken as an undergraduate/prior to admission to this program, may not be counted toward the requirements for this program.	
MCB 450 is only available to students who have not already taken MCB 354 or the equivalent.	
Minimum GPA:	3.0

Molecular & Integrative Physiology, MS

for the degree of Master of Science in Molecular & Integrative Physiology

head of department: Claudio Grosman
director of graduate studies: Lori Raetzman
email: mcbinfo@life.uiuc.edu
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
overview of mcb admissions requirements: http://mcb.illinois.edu/graduate/gradprospect (http://mcb.illinois.edu/graduate/gradprospect/)
department website: https://mcb.illinois.edu/departments/mip/
school website: School of Molecular and Cellular Biology (http://mcb.illinois.edu)
college website: https://las.illinois.edu/
department office: 524 Burrill Hall, 407 South Goodwin Avenue, Urbana, IL 61801
phone: (217) 333-1735

The M.S. is earned in route to the Ph.D. degree. Students are not admitted to the M.S. program.

Graduate Degree Programs in Molecular & Integrative Physiology

Molecular & Integrative Physiology, MS (p. 881)
Molecular & Integrative Physiology, PhD (p. 883)

The graduate program in molecular and integrative physiology is designed to provide individualized training in preparation for research and teaching careers in molecular, cellular, and integrative physiology. The objective of the training is to produce scientists who are technically competent and broadly educated. The program offers a Ph.D. in Molecular and Integrative Physiology and a joint M.D./Ph.D. degree in conjunction with the College of Medicine. Please note: Students interested in this program must apply directly to the School of Molecular and Cellular Biology (http://mcb.illinois.edu/). The Department of Molecular & Integrative Physiology does not accept applications for the master's degree. During the first semester, students perform three laboratory rotations, choosing from any laboratory in the School. Students select a laboratory for their thesis research in December and formally join the appropriate graduate program at that time.

Admission

Candidates for admission must meet the minimum standards established by the Graduate College for graduate study at the University of Illinois at Urbana-Champaign, but final selection of students who enter the molecular and integrative physiology program each fall is determined by an admissions committee. Admission beginning in the spring semester is rarely allowed except under extraordinary circumstances. Students should have strong undergraduate training in science. To be admitted, students should have a grade point average between an A and a B and three letters of recommendation that indicate ability to perform graduate work. All applicants are required to submit scores of the Graduate Record Examination (GRE) or similar examinations. Applicants whose native language is not English are required to submit the results of the Test of English as a Foreign Language (TOEFL). The department requires a minimum score of 590 on the paper-based TOEFL (243 on the computer-based test), the Graduate College requirement. For admission purposes, TOEFL scores are valid for only two years before the proposed term of entry.

Graduate Teaching Experience

Experience in teaching is considered a vital part of the graduate program and is required as part of the academic work of all Ph.D. candidates in this program. Minimum teaching requirement is 50% for one semester. However, it is strongly recommended that students gain experience equivalent to 50% for at least two semesters.

Financial Aid

Financial support is guaranteed for all students who remain in good academic standing.

for the degree of Master of Science in Molecular & Integrative Physiology

The M.S. is earned in route to the Ph.D. degree. Students are not admitted to the M.S. program. For additional details and requirements refer to the department's Student Guide (http://mcb.illinois.edu/departments/mip/gradstudentguide.html)and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
MCB 401 & MCB 402	Cellular Physiology and Sys & Integrative Physiology (College of Medicine M1 Physiology, both semesters, or equivalent, or proficiency exam.)	6
MCB 501	Advanced Biochemistry	4
MCB 502	Advanced Molecular and Cell Biology	4
MCB 509	Curr Topics Mol & Int Physiol	2
MCB 580	Res Ethics & Responsibilities	1
Six credit hours taken from the department's Course Menu. See Course List tab.		6
Required registration in MIP 595 each semester until passing the qualifying exam		0-8
MCB 581 & MCB 582 & MCB 583	Laboratory Rotation I and Laboratory Rotation II and Laboratory Rotation III	9
Total Hours		32

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum Number of 500-level Hours Required Overall in Program:	12
Students whose native language is other than English are required to have passed the SPEAK test before taking the Qualifying Examination.	
Passing the qualifying exam is required.	
All core courses must be completed with grades of B or above.	
Minimum GPA:	2.75

Department Course Menu

Code	Title	Hours
Lecture Format		
MCB 400	Cancer Cell Biology	3
MCB 408	Immunology	3
MCB 410	Developmental Biology, Stem Cells and Regenerative Medicine	3
MCB 413	Endocrinology	3
MCB 419	Brain, Behavior & Info Process	3
MCB 429	Cellular Microbiology &Disease	3
MCB 431	Microbial Physiology	3
MCB 432	Computing in Molecular Biology	3
MCB 442	Comparative Immunobiology	4
MCB 461	Cell & Molecular Neuroscience	3
MCB 462	Integrative Neuroscience	3
MCB 571	Bioinformatics	4
MCB 480	Eukaryotic Cell Signaling	2
MCB 493	Special Topics Mol Cell Biol (Human Metabolic Disease)	1 to 4
ECE 480	Magnetic Resonance Imaging	3 or 4
ANSC 445	Statistical Methods	4

ANSC 542	Applied Bioinformatics	4
ANSC 554	Immunobiological Methods	3
Journal-Club Format		
MCB 530	Reproductive Physiol Seminar	1
Laboratory Format		
MCB 403	Cell & Membrane Physiology Lab	1 or 2
MCB 404	Sys & Integrative Physiol Lab	1 to 2
BIOC 455	Technqs Biochem & Biotech	4
ECE 415	Biomedical Instrumentation Lab	2
These courses need to be approved to count:		
MCB 493	Special Topics Mol Cell Biol	
MCB 529	Special Topics in Cell and Developmental Biology	
NEUR 520	Advanced Topics in Neuroscience	
MIP Seminars in Physiology		

Learning Outcomes: Molecular & Integrative Physiology, MS

Learning Outcomes for the degree of Master of Science in Molecular & Integrative Physiology

1. Acquire in-depth, leading-edge knowledge of physiological function at multiple levels of biological organization spanning molecular, cellular, tissue and organismal levels.
2. Learn the skills and methodologies of scientific inquiry necessary to conduct original, independent research in physiology that expands the frontiers of knowledge in the field.
3. Develop the professional skills for responsible conduct of research and embody the ethical principles necessary to behave with honesty, integrity, objectivity, and respect in all professional interactions.
4. To develop effective scientific literacy skills necessary to read, write, critique, and analyze a wide range of written materials, including primary scientific literature, review articles, grant proposals, and teaching materials.
5. To become an effective oral communicator of scientific information in multiple settings, including individual and small group discussions, seminars, classroom instruction, and public engagement.

Molecular & Integrative Physiology, PhD

for the degree of Doctor of Philosophy in Molecular & Integrative Physiology

head of department: Claudio Grosman
director of graduate studies: Lori Raetzman
email: mcbinfo@life.uiuc.edu
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
overview of mcb admissions requirements: http://mcb.illinois.edu/graduate/gradprospect (http://mcb.illinois.edu/graduate/gradprospect/)
department website: https://mcb.illinois.edu/departments/mip/
school website: School of Molecular and Cellular Biology (http://mcb.illinois.edu)
college website: https://las.illinois.edu/
department office: 524 Burrill Hall, 407 South Goodwin Avenue, Urbana, IL 61801
phone: (217) 333-1735

The doctoral program uses a flexible approach to curriculum requirements. Students are required to take two core courses, three laboratory rotations (five weeks each), and electives. The students in consultation with a faculty advisory committee choose additional courses in chemistry, biochemistry, immunology, molecular biology, mathematics, and cell biology. Students are encouraged to begin research as soon as they identify an area of research interest.
The department has a particularly strong focus in cell physiology, comparative physiology, computational biology, neurophysiology, and endocrinology. Courses and lab research are supplemented by a weekly seminar series. Toward the end of the second year, students must submit a report describing their initial research and pass an oral qualifying examination in order to continue in the Ph.D. program. One year after their qualifying examinations, and no later than the end of their eighth semester in the program, students are expected to take their preliminary examinations in which they present their thesis topic and preliminary research to a faculty committee. Finally, a thesis, which is based on original work in one area of physiology and which demonstrates a thorough knowledge of underlying theories and experimental approaches, must be defended at the final examination. Most students complete their Ph.D. training in four to five years.

Graduate Degree Programs in Molecular & Integrative Physiology

Molecular & Integrative Physiology, MS (p. 881)
Molecular & Integrative Physiology, PhD (p. 883)

The graduate program in molecular and integrative physiology is designed to provide individualized training in preparation for research and teaching careers in molecular, cellular, and integrative physiology. The objective of the training is to produce scientists who are technically competent and broadly educated. The program offers a Ph.D. in Molecular and Integrative Physiology and a joint M.D./Ph.D. degree in conjunction with the College of Medicine. Please note: Students interested in this program must apply directly to the School of Molecular and Cellular Biology (http://mcb.illinois.edu/). The Department of Molecular & Integrative Physiology does not accept applications for the master's degree. During the first semester, students perform three laboratory rotations, choosing from any laboratory in the School. Students select a laboratory for their thesis research in December and formally join the appropriate graduate program at that time.

Admission

Candidates for admission must meet the minimum standards established by the Graduate College for graduate study at the University of Illinois at Urbana-Champaign, but final selection of students who enter the molecular and integrative physiology program each fall is determined by an admissions committee. Admission beginning in the spring semester is rarely allowed except under extraordinary circumstances. Students should have strong undergraduate training in science. To be admitted, students should have a grade point average between an A and a B and three letters of recommendation that indicate ability to perform graduate work. All applicants are required to submit scores of the Graduate Record Examination (GRE) or similar examinations. Applicants whose native language is not English are required to submit the results of the Test of English as a Foreign Language (TOEFL). The department requires a minimum score of 590 on the paper-based TOEFL (243 on the computer-based test), the Graduate College requirement. For admission purposes, TOEFL scores are valid for only two years before the proposed term of entry.

Graduate Teaching Experience

Experience in teaching is considered a vital part of the graduate program and is required as part of the academic work of all Ph.D. candidates in this program. Minimum teaching requirement is 50% for one semester. However, it is strongly recommended that students gain experience equivalent to 50% for at least two semesters.

Financial Aid

Financial support is guaranteed for all students who remain in good academic standing.

for the degree of Doctor of Philosophy in Molecular & Integrative Physiology

The doctoral program uses a flexible approach to curriculum requirements. Students are required to take two core courses, three laboratory rotations (five weeks each), and electives. The students in consultation with a faculty advisory committee choose additional courses in chemistry, biochemistry, immunology, molecular biology, mathematics, and cell biology. Students are encouraged to begin research as soon as they identify an area of research interest.
The department has a particularly strong focus in cell physiology, comparative physiology, computational biology, neurophysiology, and endocrinology. Courses and lab research are supplemented by a weekly seminar series. Toward the end of the second year, students must submit a report describing their initial research and pass an oral qualifying examination in order to continue in the Ph.D. program. One year after their qualifying examinations, and no later than the end of their eighth semester in the program, students are expected to take their preliminary examinations in which they present their thesis topic and preliminary research to a faculty committee. Finally, a thesis, which is based on original work in one area of physiology and which demonstrates a thorough knowledge of underlying theories and experimental approaches, must be defended at the final examination. Most students complete their Ph.D. training in four to five years.

For additional details and requirements refer to the department's Student Guide (http://mcb.illinois.edu/departments/mip/gradstudentguide.html)and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Entering with approved M.S. degree

Code	Title	Hours
MCB 401 & MCB 402	Cellular Physiology and Sys & Integrative Physiology (College of Medicine M1 Physiology, both semesters, or equivalent, or proficiency exam.)	6
MCB 501	Advanced Biochemistry	4
MCB 502	Advanced Molecular and Cell Biology	4
MCB 509	Curr Topics Mol & Int Physiol	2
MCB 580	Res Ethics & Responsibilities	1
MCB 581 & MCB 582 & MCB 583	Laboratory Rotation I and Laboratory Rotation II and Laboratory Rotation III	9
Six credit hours taken from the department's Course Menu. See course list tab.		6
Required registration in MIP 590 each semester until passing the qualifying exam		0-8
Thesis Hours Required (0 min applied toward degree)		0
Total Hours		64

Other Requirements

Requirement	Description
Other requirements may overlap	
All graduate students in the Program are required to teach during their graduate training. The minimum teaching requirement is 50% for one semester.	
Successful completion of 96 hours of study (including the Core Courses with a grade A or B).	
Qualifying Exam Required	Yes
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	2.75

Entering with approved B.S. degree

Code	Title	Hours
MCB 401 & MCB 402	Cellular Physiology and Sys & Integrative Physiology (College of Medicine M1 Physiology, both semesters, or equivalent, or proficiency exam.)	6
MCB 501	Advanced Biochemistry	4
MCB 502	Advanced Molecular and Cell Biology	4
MCB 509	Curr Topics Mol & Int Physiol	2
MCB 580	Res Ethics & Responsibilities	1
MCB 581 & MCB 582 & MCB 583	Laboratory Rotation I and Laboratory Rotation II and Laboratory Rotation III	9
Six credit hours taken from the department's Course Menu. See Course List tab.		6

Required registration in MIP 590 each semester until passing the qualifying exam	0-8
Thesis Hours Required (0 min/max applied toward degree)	0
Total Hours	96

Other Requirements

Requirement	Description
Other requirements may overlap	
All graduate students in the Program are required to teach during their graduate training. The minimum teaching requirement is 50% for one semester.	
Successful completion of 96 hours of study (including the Core Courses with a grade A or B).	
Qualifying Exam Required	Yes
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	2.75

Department Course Menu

Code	Title	Hours
Lecture Format		
MCB 400	Cancer Cell Biology	3
MCB 408	Immunology	3
MCB 410	Developmental Biology, Stem Cells and Regenerative Medicine	3
MCB 413	Endocrinology	3
MCB 419	Brain, Behavior & Info Process	3
MCB 429	Cellular Microbiology &Disease	3
MCB 431	Microbial Physiology	3
MCB 432	Computing in Molecular Biology	3
MCB 442	Comparative Immunobiology	4
MCB 461	Cell & Molecular Neuroscience	3
MCB 462	Integrative Neuroscience	3
MCB 571	Bioinformatics	4
MCB 480	Eukaryotic Cell Signaling	2
MCB 493	Special Topics Mol Cell Biol (Human Metabolic Disease)	1 to 4
ECE 480	Magnetic Resonance Imaging	3 or 4
ANSC 445	Statistical Methods	4
ANSC 542	Applied Bioinformatics	4
ANSC 554	Immunobiological Methods	3
Journal-Club Format		
MCB 530	Reproductive Physiol Seminar	1
Laboratory Format		
MCB 403	Cell & Membrane Physiology Lab	1 or 2
MCB 404	Sys & Integrative Physiol Lab	1 to 2
BIOC 455	Technqs Biochem & Biotech	4
ECE 415	Biomedical Instrumentation Lab	2

These courses need to be approved to count:

MCB 493	Special Topics Mol Cell Biol
MCB 529	Special Topics in Cell and Developmental Biology
NEUR 520	Advanced Topics in Neuroscience

MIP Seminars in Physiology

Learning Outcomes: Molecular & Integrative Physiology, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Molecular & Integrative Physiology

1. Acquire in-depth, leading-edge knowledge of physiological function at multiple levels of biological organization spanning molecular, cellular, tissue and organismal levels.
2. Learn the skills and methodologies of scientific inquiry necessary to conduct original, independent research in physiology that expands the frontiers of knowledge in the field.
3. Develop the professional skills for responsible conduct of research and embody the ethical principles necessary to behave with honesty, integrity, objectivity, and respect in all professional interactions.
4. To develop effective scientific literacy skills necessary to read, write, critique, and analyze a wide range of written materials, including primary scientific literature, review articles, grant proposals, and teaching materials.
5. To become an effective oral communicator of scientific information in multiple settings, including individual and small group discussions, seminars, classroom instruction, and public engagement.

Music Education, MME

for the degree of Master of Music Education in Music Education

director of school: Dr. Jeffrey Sposato
associate director of graduate studies: Dr. Reynold Tharp
program contact: Jenny Phillips
overview of school of music admissions & requirements: https://music.illinois.edu/graduate-admissions (https://music.illinois.edu/graduate-admissions/)
admissions questions: musicadmissions@illinois.edu | **(217) 244-7899**
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)

department website: https://music.illinois.edu
department faculty: Music Faculty (https://music.illinois.edu/people/)
college website: https://faa.illinois.edu/
department office: School of Music, 2040 Music Building, 1114 West Nevada Street, Urbana, IL 61801
phone: (217) 333-3459

The Master of Music Education degree program is designed to meet the needs and interests of individuals who are already certified to teach music and who seek to continue their careers as public school music educators or music administrators. It is also possible to structure a program that will enable individuals interested in seeking careers in

education-related fields or as a step in preparation for eventual college teaching.

Although prior teaching experience is not a requirement for entrance into this degree program, graduate study will be more meaningful if teaching experience in the field has first been gained. Therefore, individuals considering pursuit of the MME are urged to plan to teach one to three years prior to initial enrollment or before completing the degree. Students interested in gaining certification to teach music as part of the MME should refer to the MME+certification website for information about the MME+Certification Program.

Graduate Degree Programs in Music

Artist Diploma in Music (p. 890)
Music, MMUS (p. 914)
concentrations:
Choral Music (p. 916)|Instrumental Conducting - Band (p. 918)|Instrumental Conducting - Orchestra (p. 921)|Jazz Performance (p. 923)|Music Composition (p. 926)|Music Theory (p. 928)|Musicology (p. 931)|Performance & Literature (p. 933)|Piano Pedagogy (p. 936)|Vocal Coaching & Accompanying (p. 938)
Music, DMA (p. 893)
concentrations:
Choral Music (p. 895)|Instrumental Conducting - Orchestra (p. 897)|Instrumental Conducting – Wind Band (p. 900)|Jazz Performance (p. 903)|Music Composition (p. 906)|Performance & Literature (p. 909)|Vocal Coaching & Accompanying (p. 911)
Music Education, MME (p. 885)
Music Education, PhD (p. 888)
Musicology, PhD (p. 941)
concentration:
Medieval Studies (p. 1101)

The School of Music has been an accredited member of the National Association of Schools of Music since 1933.

Admission

For all degree programs, consult the admission requirements stated on the School of Music's website: https://music.illinois.edu/prospective-students (https://music.illinois.edu/prospective-students/).

Requirements for admission to the **Master of Music (MM)** programs are a Bachelor of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution. Students holding other degrees may be admitted but will be expected to make up any deficiencies in addition to fulfilling all requirements for the graduate degree.

Applicants to choral music, instrumental conducting (wind band or orchestra), jazz performance, piano pedagogy, performance and literature, and vocal accompanying and coaching must pass a qualifying audition for their major area or submit satisfactory recordings. Applicants in musicology and composition must present writings or other evidence of their ability to pursue work at the graduate level. The Graduate Record Examination (GRE) is not required.

The School of Music requires all new MM students to complete entrance examinations in music theory and musicianship; all new MM students, except those in musicology, complete a musicology entrance exam as well. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/graduate-academic-affairs/) page for more information.

Prerequisite for admission to the **Artist Diploma** is a master's degree in music performance.

Applicants to the **MM and the Artist Diploma (AD)** whose native language is not English must present an iBT score of 79 for admission to the Artist Diploma (AD), 90 for the Master of Music (MM), excluding Musicology; MM in Musicology requires an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements, please see: https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/). Fall admission only; other terms of entry by departmental petition approval only.

Requirements for admission to the **Master of Music in Education** (MME) are:

1. Undergraduate degree in music education from an accredited institution;
2. An overall grade average for the last 60 credit hours of undergraduate work of at least 3.0 (on a 4.0 scale). The grade average for Music Education and Education courses, when averaged separately, must also be at least 3.0 (on a 4.0 scale);
3. Recommendations from three individuals who can discuss the applicant's musicianship, ability to undertake graduate level study, and teaching ability/potential.
4. The Graduate Record Exam (GRE) is not required for application to the MME, nor do MME students take placement tests in music theory or music history.

For MME applicants with public school experience:

1. recommendation from a principal or supervisor who speaks primarily to the quality of the applicants teaching experience;
2. recommendation from an individual who speaks primarily to the quality of the applicants musicianship;
3. recommendation from an individual who speaks primarily to the applicants potential for completion of graduate level study;
4. applicants who wish to be considered for a Teaching Assistantship should ensure that at least one of their references provides specific comments on their potential to engage in university level teaching duties associated with such an appointment.

For MME applicants without public school experience:

1. recommendation from a music education professor;
2. recommendation from an applied or ensemble music professor;
3. recommendation from an individual who can speak to the applicants potential for completion of graduate study.

Applicants seeking admission to the MME + Licensure program, should review the requirements found online at: https://music.illinois.edu/prospective-students (https://music.illinois.edu/prospective-students/)

Applicants to the **MME** whose native language is not English must present an iBT score of 96 for the Master of Music Education (MME). A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full

English proficiency requirements, please see: https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/)

The School of Music offers an academic year program and a Summers-only MME. For academic year applications, the School of Music offers Fall admission only; spring term of entry by departmental petition approval only.

Requirements for admission to the **Doctor of Musical Arts** and the **Doctor of Philosophy** in Musicology programs are the Master of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution.

Applicants to the **Doctor of Musical Arts** programs must have:

1. a high level of proficiency in composition, conducting, or performance - candidates in composition must submit original scores for review, and candidates in performance and literature must pass a qualifying audition or submit satisfactory recordings; and
2. appropriate experience in ensemble performance and/or score reading. Candidates in voice and vocal accompanying and coaching must have fulfilled all foreign language requirements considered prerequisites for the Master of Music degree, including 1 year of college-level study in Italian, French, and German.

The School of Music requires all new **DMA** students to complete entrance examinations in musicology, music theory, aural skills, and score reading. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/resources/) page for more information.

Applicants to the **DMA or PhD** whose native language is not English must submit an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements please see: https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/)

Fall admission only; other terms of entry by departmental petition approval only.

For information about admission to the MME and PhD in Music Education, please visit www.music.illinois.edu (https://music.illinois.edu/).

Language Requirements

For the Master of Music program, applicants in voice and vocal accompanying and coaching are required to have had at least one year each of college-level French, German, and Italian or the equivalent. Applicants in other applied music areas, composition, conducting, and musicology are required to have had one year of any language at the college level or the equivalent.

All Doctor of Musical Arts candidates will be required to demonstrate proficiency in at least one language other than English. Each area may specify which language is required or may require proficiency in more than one language. Please review the current Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/) for more details.

Proficiency is required in two languages, depending on the proposed field of specialization, for candidates in the Doctor of Philosophy in Musicology program. This may be demonstrated through two years of undergraduate study in each language.

For all Graduate Degrees:

For those students who do not meet the language requirement at the time of entrance, it may be satisfied by evidence of two years of undergraduate study or the equivalent, or by completion of a two-semester, 500-level reading course sequence at UIUC with a grade of at least B-, or by satisfactory test scores. For up-to-date information regarding language requirements of the School of Music, please see the Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/).

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience.

Financial Aid

Fellowships, teaching, graduate, and research assistantships are awarded on a one-year basis with continuation dependent upon success in the program. Specific information on application procedures is available from the Music Admissions Office, (217) 244-7899; musicadmissions@illinois.edu.

for the degree of Master of Music Education in Music Education

Code	Title	Hours
MUS 532	Curricular Perspectives on Music Education	4
MUS 533	Research in Music Education	4
Music Education Electives (any 400 or 500-level music education course)		6-8
EPSY, EPS or C&I (Educational Psychology, Educational Policy or Curriculum & Instruction)		4
Music (Music Theory, Musicology/Ethnomusicology, Conducting and Literature, Applied Study (4 cr. max), Ensemble (1 cr. max)		10
Choose 1 Capstone Option:		2-4
Capstone Option I: MUS 569 - Capstone Project Synthesis (2 credits)		
Capstone Option II: MUS 599 - Thesis (4 credits)		
Total Hours		32

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum Hours Required Within the Unit:	14
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the department's Graduate Handbook* https://music.illinois.edu/graduate-handbooks (https://music.illinois.edu/graduate-handbooks/) *and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

New Footnote

Learning Outcomes: Music Education, MME

Learning Outcomes for the degree of Master of Music Education in Music Education

1. Students in the MME Program in Music Education will apply sound principles of curriculum design to the creation of comprehensive music programs that will further students' musical growth.
2. Students in the MME Program in Music Education will demonstrate understanding of the techniques of educational research sufficient to design and conduct an inquiry project in their school settings.
3. Students in the MME Program in Music Education will analyze evidence of student learning and demonstrate their ability to synthesize and present these findings in written and oral form.
4. Students in the MME Program in Music Education will refine and expand their musical understanding, skills, and knowledge through focused musical study.
5. Students in the MME Program in Music Education will develop and extend their knowledge of the field of music education through studies in curriculum, instruction, assessment, musical practices, and the role of schooling in education.

Music Education, PhD

for the degree of Doctor of Philosophy in Music Education

director of school: Dr. Jeffrey Sposato
associate director of graduate studies: Dr. Reynold Tharp
program contact: Jenny Phillips
overview of school of music admissions & requirements: http://music.illinois.edu/prospective-students (http://music.illinois.edu/prospective-students/)
admissions questions: musicadmissions@illinois.edu | **(217) 244-7899**
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)

department website: https://music.illinois.edu
department faculty: Music Faculty (https://music.illinois.edu/people/)
college website: https://faa.illinois.edu/
department office: School of Music, 2040 Music Building, 1114 West Nevada Street, Urbana, IL 61801
phone: (217) 333-3459

The doctoral program in music education consists of the Doctor of Philosophy in Music Education. The Ph.D. is tailored to meet the varying needs and interests of individuals seeking a terminal degree in Music Education. The Ph.D. is appropriate for those students who possess a strong background and interest in research. The Ph.D. places emphasis on research and research methodology training. Students entering the Ph.D. must have already completed a substantial thesis or research project as part of their master's degree.

Graduate Degree Programs in Music

Artist Diploma in Music (p. 890)
Music, MMUS (p. 914)
concentrations:
Choral Music (p. 916)|Instrumental Conducting - Band (p. 918)|Instrumental Conducting - Orchestra (p. 921)|Jazz Performance (p. 923)|Music Composition (p. 926)|Music Theory (p. 928)|Musicology (p. 931)|Performance & Literature (p. 933)|Piano Pedagogy (p. 936)|Vocal Coaching & Accompanying (p. 938)
Music, DMA (p. 893)
concentrations:
Choral Music (p. 895)|Instrumental Conducting - Orchestra (p. 897)|Instrumental Conducting – Wind Band (p. 900)|Jazz Performance (p. 903)|Music Composition (p. 906)|Performance & Literature (p. 909)|Vocal Coaching & Accompanying (p. 911)
Music Education, MME (p. 885)
Music Education, PhD (p. 888)
Musicology, PhD (p. 941)
concentration:
Medieval Studies (p. 1101)

The School of Music has been an accredited member of the National Association of Schools of Music since 1933.

Admission

For all degree programs, consult the admission requirements stated on the School of Music's website: https://music.illinois.edu/prospective-students.

Requirements for admission to the **Master of Music (MM)** programs are a Bachelor of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution. Students holding other degrees may be admitted but will be expected to make up any deficiencies in addition to fulfilling all requirements for the graduate degree.

Applicants to choral music, instrumental conducting (wind band or orchestra), jazz performance, piano pedagogy, performance and literature, and vocal accompanying and coaching must pass a qualifying audition for their major area or submit satisfactory recordings. Applicants in musicology and composition must present writings or other evidence of their ability to pursue work at the graduate level. The Graduate Record Examination (GRE) is not required.

The School of Music requires all new MM students to complete entrance examinations in music theory and musicianship; all new MM students, except those in musicology, complete a musicology entrance exam as well. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/graduate-academic-affairs/) page for more information.

Prerequisite for admission to the **Artist Diploma** is a master's degree in music performance.

Applicants to the **MM and the Artist Diploma (AD)** whose native language is not English must present an iBT score of 79 for admission to the Artist

Diploma (AD), 90 for the Master of Music (MM), excluding Musicology; MM in Musicology requires an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements, please see: https://music.illinois.edu/english-proficiency-requirement. Fall admission only; other terms of entry by departmental petition approval only.

Requirements for admission to the **Master of Music in Education** (MME) are:

1. Undergraduate degree in music education from an accredited institution;
2. An overall grade average for the last 60 credit hours of undergraduate work of at least 3.0 (on a 4.0 scale). The grade average for Music Education and Education courses, when averaged separately, must also be at least 3.0 (on a 4.0 scale);
3. Recommendations from three individuals who can discuss the applicant's musicianship, ability to undertake graduate level study, and teaching ability/potential.
4. The Graduate Record Exam (GRE) is not required for application to the MME, nor do MME students take placement tests in music theory or music history.

For MME applicants with public school experience:

1. recommendation from a principal or supervisor who speaks primarily to the quality of the applicants teaching experience;
2. recommendation from an individual who speaks primarily to the quality of the applicants musicianship;
3. recommendation from an individual who speaks primarily to the applicants potential for completion of graduate level study;
4. applicants who wish to be considered for a Teaching Assistantship should ensure that at least one of their references provides specific comments on their potential to engage in university level teaching duties associated with such an appointment.

For MME applicants without public school experience:

1. recommendation from a music education professor;
2. recommendation from an applied or ensemble music professor;
3. recommendation from an individual who can speak to the applicants potential for completion of graduate study.

Applicants seeking admission to the MME + Licensure program, should review the requirements found online at: https://music.illinois.edu/prospective-students

Applicants to the **MME** whose native language is not English must present an iBT score of 96 for the Master of Music Education (MME). A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements, please see: https://music.illinois.edu/english-proficiency-requirement

The School of Music offers an academic year program and a Summers-only MME. For academic year applications, the School of Music offers Fall admission only; spring term of entry by departmental petition approval only.

Requirements for admission to the **Doctor of Musical Arts** and the **Doctor of Philosophy** in Musicology programs are the Master of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution.

Applicants to the **Doctor of Musical Arts** programs must have:

1. a high level of proficiency in composition, conducting, or performance - candidates in composition must submit original scores for review, and candidates in performance and literature must pass a qualifying audition or submit satisfactory recordings; and
2. appropriate experience in ensemble performance and/or score reading. Candidates in voice and vocal accompanying and coaching must have fulfilled all foreign language requirements considered prerequisites for the Master of Music degree, including 1 year of college-level study in Italian, French, and German.

The School of Music requires all new **DMA** students to complete entrance examinations in musicology, music theory, aural skills, and score reading. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/resources/) page for more information.

Applicants to the **DMA or PhD** whose native language is not English must submit an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements please see: https://music.illinois.edu/english-proficiency-requirement

Fall admission only; other terms of entry by departmental petition approval only.

For information about admission to the MME and PhD in Music Education, please visit www.music.illinois.edu (https://music.illinois.edu/).

Language Requirements

For the Master of Music program, applicants in voice and vocal accompanying and coaching are required to have had at least one year each of college-level French, German, and Italian or the equivalent. Applicants in other applied music areas, composition, conducting, and musicology are required to have had one year of any language at the college level or the equivalent.

All Doctor of Musical Arts candidates will be required to demonstrate proficiency in at least one language other than English. Each area may specify which language is required or may require proficiency in more than one language. Please review the current Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/) for more details.

Proficiency is required in two languages, depending on the proposed field of specialization, for candidates in the Doctor of Philosophy in Musicology program. This may be demonstrated through two years of undergraduate study in each language.

For all Graduate Degrees:

For those students who do not meet the language requirement at the time of entrance, it may be satisfied by evidence of two years of undergraduate study or the equivalent, or by completion of a two-semester, 500-level reading course sequence at UIUC with a grade of at least B-, or by satisfactory test scores. For up-to-date information regarding language requirements of the School of Music, please see the Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/).

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience.

Financial Aid

Fellowships, teaching, graduate, and research assistantships are awarded on a one-year basis with continuation dependent upon success in the program. Specific information on application procedures is available from the Music Admissions Office, (217) 244-7899; musicadmissions@illinois.edu.

for the degree of Doctor of Philosophy in Music Education

Code	Title	Hours
MUS 535	Philosophic Inquiry in Mus Ed	4
MUS 543	Music Teacher Education	4
MUS 544	Doctoral Seminar in Music Education (enrollment every semester) [1]	0-2
Music Education Electives [2]		6
Educational Psychology (EPSY) (8 hrs. required, minimum of 4 in the College of Education) [3]		8
Educational Policy (EPS or C&I) (8 hrs. required, minimum of 4 in the College of Education) [4]		8
Research methodology courses in College of Education [5]		16
MUS 599	Thesis Research (min/max applied toward degree)	16-32
Total Hours		64

Other Requirements:[6]

Requirement	Description
Other requirements may overlap	
Masters Degree Required for Admission to PhD?	Yes
Qualifying Exam Required:	Yes
Preliminary Exam Required:	Yes
Final Exam/Dissertation Defense Required:	Yes
Dissertation Deposit Required:	Yes
Minimum GPA:	3.0

1 *Local students must register every semester. Credit is earned only for one semester.*

2 *Minimum of 6 hours of electives from music education; or, with approval of the Music Education Graduate Coordinator, courses in other Colleges.* (e.g., MUS 529, MUS 530, MUS 531, MUS 532, MUS 533, MUS 536, MUS 539, MUS 541, MUS 542)

3 MUS 531 *may be counted as one EPSY course.*

4 *To partially fulfill the EPS requirement, a student may take courses in the College of Education or the following:* MUS 539*.*

5 *A student must take 12 hours of College of Education Research Specialization Methodology courses, unless exceptions are approved by the Music Education Graduate Coordinator. In addition,* MUS 534 *earns four credits, bringing the total Research Methodology credits to 16.*

6 *For additional details and requirements refer to the department's Graduate Handbook* https://music.illinois.edu/graduate-handbooks *(*https://music.illinois.edu/graduate-handbooks/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*)*

Learning Outcomes: Music Education, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Music Education

The PhD in Music Education at Illinois emphasizes professional preparation for careers as researchers, music teacher educators, and leaders in the field. Doctoral students enroll in courses that provide depth and breadth in research approaches, theoretical and scholarly analysis, and opportunities to conduct research studies under the guidance of faculty members in music education and across campus. Participation in the MOSAIC Consortium, an ongoing scholarly community of doctoral students and faculty, is a critical part of the doctoral experience at Illinois.

1. Students in the PhD Program in Music Education will demonstrate knowledge of rigorous methods for conducting scholarly inquiry related to music teaching and learning. [Research]
2. Students in the PhD program in Music Education will contribute to the discovery of new evidence or the exercise of critical judgment in research and scholarship, applying and synthesizing key methodological and theoretical perspectives from their research course preparation. [Research]
3. Students in the PhD Program in Music Education will develop a research agenda for primary and secondary research emphases. [Research]
4. Students in the PhD Program in Music Education will demonstrate their ability to plan, implement, and reflect on college-level teaching. [Music Teacher Education]
5. Students in the PhD Program in Music Education will apply understanding of educational philosophy, curriculum design, methods of teaching and evaluation, and supervision of study teaching to undergraduate music teacher preparation.[Music Teacher Education]
6. Students in the PhD Program in Music Education will exhibit leadership in areas of vital importance to the field,such as curricular reform, music teacher education, community music, and social justice. [Professional Leadership]

Music, AD

for the Artist Diploma in Music

director of school: Dr. Jeffrey Sposato
associate director of graduate studies: Dr. Reynold Tharp
program contact: Jenny Phillips
overview of school of music admissions & requirements: https://music.illinois.edu/graduate-admissions (https://music.illinois.edu/graduate-admissions/)
admissions questions: musicadmissions@illinois.edu | **(217) 244-7899**
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)

department website: https://music.illinois.edu
department faculty: Music Faculty (https://music.illinois.edu/people/)
college website: https://faa.illinois.edu/
department office: School of Music, 2040 Music Building, 1114 West Nevada Street, Urbana, IL 61801
phone: (217) 333-3459

The fields of specialization for the Artist Diploma are keyboard, voice, and orchestra/band instruments. The degree is intended only for musicians at the highest level of artistic accomplishment and potential, and the entrance audition must reflect this exceptional standard. Upon completion of the Artist Diploma, students are expected to be ready for entrance into the music profession as a solo artist, member of an orchestra or chamber or jazz ensemble, or as an apprentice in an opera company, and should be prepared to compete effectively in international competition.

The University of Illinois at Urbana-Champaign's School of Music complies with the U.S. Department of Education's Gainful Employment requirements by disclosing information to applicants regarding our Artist Diploma program.

Graduate Degree Programs in Music

Artist Diploma in Music (p. 890)
Music, MMUS (p. 914)
concentrations:
Choral Music (p. 916)|Instrumental Conducting - Band (p. 918)|Instrumental Conducting - Orchestra (p. 921)|Jazz Performance (p. 923)|Music Composition (p. 926)|Music Theory (p. 928)|Musicology (p. 931)|Performance & Literature (p. 933)|Piano Pedagogy (p. 936)|Vocal Coaching & Accompanying (p. 938)
Music, DMA (p. 893)
concentrations:
Choral Music (p. 895)|Instrumental Conducting - Orchestra (p. 897)|Instrumental Conducting – Wind Band (p. 900)|Jazz Performance (p. 903)|Music Composition (p. 906)|Performance & Literature (p. 909)|Vocal Coaching & Accompanying (p. 911)
Music Education, MME (p. 885)
Music Education, PhD (p. 888)
Musicology, PhD (p. 941)
concentration:
Medieval Studies (p. 1101)

The School of Music has been an accredited member of the National Association of Schools of Music since 1933.

Admission

For all degree programs, consult the admission requirements stated on the School of Music's website: https://music.illinois.edu/prospective-students (https://music.illinois.edu/prospective-students/).

Requirements for admission to the **Master of Music (MM)** programs are a Bachelor of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution. Students holding other degrees may be admitted but will be expected to make up any deficiencies in addition to fulfilling all requirements for the graduate degree.

Applicants to choral music, instrumental conducting (wind band or orchestra), jazz performance, piano pedagogy, performance and literature, and vocal accompanying and coaching must pass a qualifying audition for their major area or submit satisfactory recordings. Applicants in musicology and composition must present writings or other evidence of their ability to pursue work at the graduate level. The Graduate Record Examination (GRE) is not required.

The School of Music requires all-new MM students to complete entrance examinations in music theory and musicianship. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/graduate-academic-affairs/) page for more information.

A prerequisite for admission to the **Artist Diploma** is a bachelor's degree in music performance.

Applicants to the **MM and the Artist Diploma (AD)** whose native language is not English must present an iBT score of 79 for admission to the Artist Diploma (AD), 90 for the Master of Music (MM), excluding Musicology; MM in Musicology requires an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements, please see https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/). Fall admission only; other terms of entry by departmental petition approval only.

Requirements for admission to the **Master of Music in Education** (MME) are:

1. Undergraduate degree in music education from an accredited institution;
2. An overall grade average for the last 60 credit hours of undergraduate work of at least 3.0 (on a 4.0 scale). The grade average for Music Education and Education courses, when averaged separately, must also be at least 3.0 (on a 4.0 scale);
3. Recommendations from three individuals who can discuss the applicant's musicianship, ability to undertake graduate-level study, and teaching ability/potential.
4. The Graduate Record Exam (GRE) is not required for application to the MME, nor do MME students take placement tests in music theory or music history.

For MME applicants with public school experience:

1. recommendation from a principal or supervisor who speaks primarily to the quality of the applicant's teaching experience;
2. recommendation from an individual who speaks primarily to the quality of the applicant's musicianship;
3. recommendation from an individual who speaks primarily to the applicants potential for completion of graduate-level study;
4. applicants who wish to be considered for a Teaching Assistantship should ensure that at least one of their references provides specific comments on their potential to engage in university-level teaching duties associated with such an appointment.

For MME applicants without public school experience:

1. recommendation from a music education professor;
2. recommendation from an applied or ensemble music professor;
3. recommendation from an individual who can speak to the applicant's potential for completion of graduate study.

Applicants seeking admission to the MME + Licensure program should review the requirements found online at https://music.illinois.edu/prospective-students (https://music.illinois.edu/prospective-students/).

Applicants to the **MME** whose native language is not English must present an iBT score of 96 for the Master of Music Education (MME). A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements, please see: https://music.illinois.edu/english-proficiency-requirement

The School of Music offers an academic year program and a Summers-only MME. For academic year applications, the School of Music offers Fall admission only; spring term of entry by departmental petition approval only.

Requirements for admission to the **Doctor of Musical Arts** and the **Doctor of Philosophy** in Musicology programs are the Master of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution.

Applicants to the **Doctor of Musical Arts** programs must have:

1. a high level of proficiency in composition, conducting, or performance - candidates in composition must submit original scores for review, and candidates in performance and literature must pass a qualifying audition or submit satisfactory recordings; and
2. appropriate experience in ensemble performance and/or score reading. Candidates in voice and vocal accompanying and coaching must have fulfilled all foreign language requirements considered prerequisites for the Master of Music degree, including 1 year of college-level study in Italian, French, and German.

The School of Music requires all new **DMA** students to complete entrance examinations in music theory, score reading, and musicianship. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/resources/) page for more information.

Applicants to the **DMA or PhD** whose native language is not English must submit an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements please see: https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/).

For information about admission to the MME and PhD in Music Education, please visit www.music.illinois.edu (https://music.illinois.edu/).

Language Requirements

For the Master of Music program, applicants in voice and vocal accompanying and coaching are required to have had at least one year each of college-level French, German, and Italian or the equivalent. Applicants in other applied music areas, composition, conducting, and musicology are required to have had one year of any language at the college level or the equivalent.

All Doctor of Musical Arts candidates will be required to demonstrate proficiency in at least one language other than English. Each area may specify which language is required or may require proficiency in more than one language. Please review the current Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/) for more details.

Proficiency is required in two languages, depending on the proposed field of specialization, for candidates in the Doctor of Philosophy in Musicology program. This may be demonstrated through two years of undergraduate study in each language.

For all Graduate Degrees:

For those students who do not meet the language requirement at the time of entrance, it may be satisfied by evidence of two years of undergraduate study or the equivalent, or by completion of a two-semester, or by satisfactory test scores. For up-to-date information regarding language requirements of the School of Music, please see the Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/).

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience.

Financial Aid

Fellowships, teaching, graduate, and research assistantships are awarded on a one-year basis with continuation dependent upon success in the program. Specific information on application procedures is available from the Music Admissions Office, (217) 244-7899; musicadmissions@illinois.edu.

for the Artist Diploma in Music

Code	Title	Hours
MUS 579- MUS 598, Applied music/ performance studies		20
MUS 450/ MUS 499, ensemble participation, both in large and chamber/small groups		8
MUS 500, performances, including solo and chamber music		4
Total Hours		32

Other Requirements (may overlap):

Requirement	Description
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	3.0

Learning Outcomes: Music, AD

Learning Outcomes for the Artist Diploma in Music

Students in theArtist Diploma in Music program will:

1. Develop performance skills as a soloist at the highest professional level, using creative and critical thinking to inform stylistic choices and artistic expression while demonstrating spontaneity and collaboration as appropriate, and will communicate their artistry to diverse audiences.

2. Develop performance skills as an ensemble performer at the highest professional level, using creative and critical thinking to inform stylistic choices and artistic expression while demonstrating collaboration and spontaneity as appropriate and will communicate their artistry and musicianship to diverse audiences.
3. Additionally, some Illinois Artist Diploma students may develop experience and expertise in instruction, pedagogy, and student assessment in their major area of musical study, gaining insights into studio and/or classroom teaching and appropriate methods of evaluation.

Music, DMA

for the degree of Doctor of Musical Arts in Music

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director of school: Dr. Jeffrey Sposato
associate director of graduate studies: Dr. Reynold Tharp
program contact: Jenny Phillips
overview of school of music admissions & requirements: https://music.illinois.edu/graduate-admissions (https://music.illinois.edu/graduate-admissions/)
admissions questions: musicadmissions@illinois.edu | **(217) 244-7899**
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)

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department website: https://music.illinois.edu
department faculty: Music Faculty (https://music.illinois.edu/people/)
college website: https://faa.illinois.edu/
department office: School of Music, 2040 Music Building, 1114 West Nevada Street, Urbana, IL 61801
phone: (217) 333-3459

The School of Music offers comprehensive musical training for students who seek to combine their artistic and academic interests through pursuit of the Doctoral of Musical Arts.
Students must choose a concentration:

Choral Music (p. 895)
Instrumental Conducting - Orchestra (p. 897)
Instrumental Conducting – Wind Band (p. 900)
Jazz Performance (p. 903)
Music Composition (p. 906)
Performance & Literature (p. 909)
Vocal Coaching & Accompanying (p. 911)

Graduate Degree Programs in Music

Artist Diploma in Music (p. 890)
Music, MMUS (p. 914)
concentrations:
Choral Music (p. 916)|Instrumental Conducting - Band (p. 918)|Instrumental Conducting - Orchestra (p. 921)|Jazz Performance (p. 923)|Music Composition (p. 926)|Music Theory (p. 928)|Musicology (p. 931)|Performance & Literature (p. 933)|Piano Pedagogy (p. 936)|Vocal Coaching & Accompanying (p. 938)
Music, DMA (p. 893)
concentrations:
Choral Music (p. 895)|Instrumental Conducting - Orchestra (p. 897)|Instrumental Conducting – Wind Band (p. 900)|Jazz Performance (p. 903)|Music Composition (p. 906)|Performance & Literature (p. 909)|Vocal Coaching & Accompanying (p. 911)
Music Education, MME (p. 885)
Music Education, PhD (p. 888)
Musicology, PhD (p. 941)
concentration:
Medieval Studies (p. 1101)

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Admission

For all degree programs, consult the admission requirements stated on the School of Music's website: https://music.illinois.edu/prospective-students (https://music.illinois.edu/prospective-students/).

Requirements for admission to the **Master of Music (MM)** programs are a Bachelor of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution. Students holding other degrees may be admitted but will be expected to make up any deficiencies in addition to fulfilling all requirements for the graduate degree.

Applicants to choral music, instrumental conducting (wind band or orchestra), jazz performance, piano pedagogy, performance and literature, and vocal accompanying and coaching must pass a qualifying audition for their major area or submit satisfactory recordings. Applicants in musicology and composition must present writings or other evidence of their ability to pursue work at the graduate level. The Graduate Record Examination (GRE) is not required.

The School of Music requires all new MM students to complete entrance examinations in music theory and musicianship; all new MM students, except those in musicology, complete a musicology entrance exam as well. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/graduate-academic-affairs/) page for more information.

Prerequisite for admission to the **Artist Diploma** is a master's degree in music performance.

Applicants to the **MM and the Artist Diploma (AD)** whose native language is not English must present an iBT score of 79 for admission to the Artist Diploma (AD), 90 for the Master of Music (MM), excluding Musicology; MM in Musicology requires an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois

Graduate College and School of Music. For the full English proficiency requirements, please see https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/). Fall admission only; other terms of entry by departmental petition approval only.

Requirements for admission to the **Master of Music in Education** (MME) are:

1. Undergraduate degree in music education from an accredited institution;
2. An overall grade average for the last 60 credit hours of undergraduate work of at least 3.0 (on a 4.0 scale). The grade average for Music Education and Education courses, when averaged separately, must also be at least 3.0 (on a 4.0 scale);
3. Recommendations from three individuals who can discuss the applicant's musicianship, ability to undertake graduate level study, and teaching ability/potential.
4. The Graduate Record Exam (GRE) is not required for application to the MME, nor do MME students take placement tests in music theory or music history.

For MME applicants with public school experience:

1. recommendation from a principal or supervisor who speaks primarily to the quality of the applicants teaching experience;
2. recommendation from an individual who speaks primarily to the quality of the applicants musicianship;
3. recommendation from an individual who speaks primarily to the applicants potential for completion of graduate level study;
4. applicants who wish to be considered for a Teaching Assistantship should ensure that at least one of their references provides specific comments on their potential to engage in university level teaching duties associated with such an appointment.

For MME applicants without public school experience:

1. recommendation from a music education professor;
2. recommendation from an applied or ensemble music professor;
3. recommendation from an individual who can speak to the applicants potential for completion of graduate study.

Applicants seeking admission to the MME + Licensure program, should review the requirements found online at https://music.illinois.edu/prospective-students (https://music.illinois.edu/prospective-students/).

Applicants to the **MME** whose native language is not English must present an iBT score of 96 for the Master of Music Education (MME). A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements, please see: https://music.illinois.edu/english-proficiency-requirement

The School of Music offers an academic year program and a Summers-only MME. For academic year applications, the School of Music offers Fall admission only; spring term of entry by departmental petition approval only.

Requirements for admission to the **Doctor of Musical Arts** and the **Doctor of Philosophy** in Musicology programs are the Master of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution.

Applicants to the **Doctor of Musical Arts** programs must have:

1. a high level of proficiency in composition, conducting, or performance - candidates in composition must submit original scores for review, and candidates in performance and literature must pass a qualifying audition or submit satisfactory recordings; and
2. appropriate experience in ensemble performance and/or score reading. Candidates in voice and vocal accompanying and coaching must have fulfilled all foreign language requirements considered prerequisites for the Master of Music degree, including 1 year of college-level study in Italian, French, and German.

The School of Music requires all new **DMA** students to complete entrance examinations in musicology, music theory, aural skills, and score reading. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/resources/) page for more information.

Applicants to the **DMA or PhD** whose native language is not English must submit an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements please see: https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/).

Fall admission only; other terms of entry by departmental petition approval only.

For information about admission to the MME and PhD in Music Education, please visit www.music.illinois.edu (https://music.illinois.edu/).

Language Requirements

For the Master of Music program, applicants in voice and vocal accompanying and coaching are required to have had at least one year each of college-level French, German, and Italian or the equivalent. Applicants in other applied music areas, composition, conducting, and musicology are required to have had one year of any language at the college level or the equivalent.

All Doctor of Musical Arts candidates will be required to demonstrate proficiency in at least one language other than English. Each area may specify which language is required or may require proficiency in more than one language. Please review the current Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/) for more details.

Proficiency is required in two languages, depending on the proposed field of specialization, for candidates in the Doctor of Philosophy in Musicology program. This may be demonstrated through two years of undergraduate study in each language.

For all Graduate Degrees:

For those students who do not meet the language requirement at the time of entrance, it may be satisfied by evidence of two years of undergraduate study or the equivalent, or by completion of a two-semester, 500-level reading course sequence at UIUC with a grade of at least B-, or by satisfactory test scores. For up-to-date information regarding language requirements of the School of Music, please see the Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/).

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience.

Financial Aid

Fellowships, teaching, graduate, and research assistantships are awarded on a one-year basis with continuation dependent upon success in the program. Specific information on application procedures is available from the Music Admissions Office, (217) 244-7899; musicadmissions@illinois.edu.

Music: Choral Music, DMA

for the degree of Doctor of Musical Arts in Music, Choral Music Concentration

director of school: Dr. Jeffrey Sposato
associate director of graduate studies: Dr. Reynold Tharp
program contact: Jenny Phillips
overview of school of music admissions & requirements: https://music.illinois.edu/graduate-admissions (https://music.illinois.edu/graduate-admissions/)
admissions questions: musicadmissions@illinois.edu | **(217) 244-7899**
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)

department website: https://music.illinois.edu
department faculty: Music Faculty (https://music.illinois.edu/people/)
college website: https://faa.illinois.edu/
department office: School of Music, 2040 Music Building, 1114 West Nevada Street, Urbana, IL 61801
phone: (217) 333-3459

Graduate Degree Programs in Music

Artist Diploma in Music (p. 890)
Music, MMUS (p. 914)
concentrations:
Choral Music (p. 916)|Instrumental Conducting - Band (p. 918)|Instrumental Conducting - Orchestra (p. 921)|Jazz Performance (p. 923)|Music Composition (p. 926)|Music Theory (p. 928)|Musicology (p. 931)|Performance & Literature (p. 933)|Piano Pedagogy (p. 936)|Vocal Coaching & Accompanying (p. 938)
Music, DMA (p. 893)
concentrations:
Choral Music (p. 895)|Instrumental Conducting - Orchestra (p. 897)|Instrumental Conducting – Wind Band (p. 900)|Jazz Performance (p. 903)|Music Composition (p. 906)|Performance & Literature (p. 909)|Vocal Coaching & Accompanying (p. 911)
Music Education, MME (p. 885)
Music Education, PhD (p. 888)
Musicology, PhD (p. 941)
concentration:
Medieval Studies (p. 1101)

The School of Music has been an accredited member of the National Association of Schools of Music since 1933.

Admission

For all degree programs, consult the admission requirements stated on the School of Music's website: https://music.illinois.edu/prospective-students (https://music.illinois.edu/prospective-students/).

Requirements for admission to the **Master of Music (MM)** programs are a Bachelor of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution. Students holding other degrees may be admitted but will be expected to make up any deficiencies in addition to fulfilling all requirements for the graduate degree.

Applicants to choral music, instrumental conducting (wind band or orchestra), jazz performance, piano pedagogy, performance and literature, and vocal accompanying and coaching must pass a qualifying audition for their major area or submit satisfactory recordings. Applicants in musicology and composition must present writings or other evidence of their ability to pursue work at the graduate level. The Graduate Record Examination (GRE) is not required.

The School of Music requires all new MM students to complete entrance examinations in music theory and musicianship; all new MM students, except those in musicology, complete a musicology entrance exam as well. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/graduate-academic-affairs/) page for more information.

Prerequisite for admission to the **Artist Diploma** is a master's degree in music performance.

Applicants to the **MM and the Artist Diploma (AD)** whose native language is not English must present an iBT score of 79 for admission to the Artist Diploma (AD), 90 for the Master of Music (MM), excluding Musicology; MM in Musicology requires an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois

Graduate College and School of Music. For the full English proficiency requirements, please see https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/). Fall admission only; other terms of entry by departmental petition approval only.

Requirements for admission to the **Master of Music in Education** (MME) are:

1. Undergraduate degree in music education from an accredited institution;
2. An overall grade average for the last 60 credit hours of undergraduate work of at least 3.0 (on a 4.0 scale). The grade average for Music Education and Education courses, when averaged separately, must also be at least 3.0 (on a 4.0 scale);
3. Recommendations from three individuals who can discuss the applicant's musicianship, ability to undertake graduate level study, and teaching ability/potential.
4. The Graduate Record Exam (GRE) is not required for application to the MME, nor do MME students take placement tests in music theory or music history.

For MME applicants with public school experience:

1. recommendation from a principal or supervisor who speaks primarily to the quality of the applicants teaching experience;
2. recommendation from an individual who speaks primarily to the quality of the applicants musicianship;
3. recommendation from an individual who speaks primarily to the applicants potential for completion of graduate level study;
4. applicants who wish to be considered for a Teaching Assistantship should ensure that at least one of their references provides specific comments on their potential to engage in university level teaching duties associated with such an appointment.

For MME applicants without public school experience:

1. recommendation from a music education professor;
2. recommendation from an applied or ensemble music professor;
3. recommendation from an individual who can speak to the applicants potential for completion of graduate study.

Applicants seeking admission to the MME + Licensure program, should review the requirements found online at https://music.illinois.edu/prospective-students (https://music.illinois.edu/prospective-students/).

Applicants to the **MME** whose native language is not English must present an iBT score of 96 for the Master of Music Education (MME). A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements, please see: https://music.illinois.edu/english-proficiency-requirement

The School of Music offers an academic year program and a Summers-only MME. For academic year applications, the School of Music offers Fall admission only; spring term of entry by departmental petition approval only.

Requirements for admission to the **Doctor of Musical Arts** and the **Doctor of Philosophy** in Musicology programs are the Master of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution.

Applicants to the **Doctor of Musical Arts** programs must have:

1. a high level of proficiency in composition, conducting, or performance - candidates in composition must submit original scores for review, and candidates in performance and literature must pass a qualifying audition or submit satisfactory recordings; and
2. appropriate experience in ensemble performance and/or score reading. Candidates in voice and vocal accompanying and coaching must have fulfilled all foreign language requirements considered prerequisites for the Master of Music degree, including 1 year of college-level study in Italian, French, and German.

The School of Music requires all new **DMA** students to complete entrance examinations in musicology, music theory, aural skills, and score reading. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/resources/) page for more information.

Applicants to the **DMA or PhD** whose native language is not English must submit an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements please see: https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/).

Fall admission only; other terms of entry by departmental petition approval only.

For information about admission to the MME and PhD in Music Education, please visit www.music.illinois.edu (https://music.illinois.edu/).

Language Requirements

For the Master of Music program, applicants in voice and vocal accompanying and coaching are required to have had at least one year each of college-level French, German, and Italian or the equivalent. Applicants in other applied music areas, composition, conducting, and musicology are required to have had one year of any language at the college level or the equivalent.

All Doctor of Musical Arts candidates will be required to demonstrate proficiency in at least one language other than English. Each area may specify which language is required or may require proficiency in more than one language. Please review the current Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/) for more details.

Proficiency is required in two languages, depending on the proposed field of specialization, for candidates in the Doctor of Philosophy in Musicology program. This may be demonstrated through two years of undergraduate study in each language.

For all Graduate Degrees:

For those students who do not meet the language requirement at the time of entrance, it may be satisfied by evidence of two years of undergraduate study or the equivalent, or by completion of a two-semester, 500-level reading course sequence at UIUC with a grade of at least B-, or by satisfactory test scores. For up-to-date information regarding language requirements of the School of Music, please see the Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/).

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience.

Financial Aid

Fellowships, teaching, graduate, and research assistantships are awarded on a one-year basis with continuation dependent upon success in the program. Specific information on application procedures is available from the Music Admissions Office, (217) 244-7899; musicadmissions@illinois.edu.

for the degree of Doctor of Musical Arts in Music, Choral Music Concentration

For additional details and requirements refer to the department's Graduate Handbook https://music.illinois.edu/graduate-handbooks (https://music.illinois.edu/graduate-handbooks/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
MUS 553 & MUS 563 & MUS 565	Graduate Orchestral Conducting and Topics in Choral Repertoire and Doctoral Choral Conducting	16
Advanced Music Literature [1]		6-8
Cognate field or minor area		8
Ensemble and Electives		4-10
MUS 481 & MUS 450	and	
and electives [1]		
Language Requirements: Courses taken to meet language requirements do not count toward the degree. See the department handbook for details.		
Thesis Hours or Doctoral Project Hours		
MUS 576	Doctoral Projects	4
MUS 599	Thesis Research	20
Final Exam/Dissertation Defense Required		
Dissertation Deposit Required		
Graduate Recital		

Code	Title	Hours
Concentration-specific requirements as listed above		
MUS 528	Res & Bibliography in Music (sections A1-A3)	2
MUS 528	Res & Bibliography in Music (sections B1-B2)	2
Total Hours		**64**

Other Requirements

Requirement	Description
Other requirements may overlap	
Concentration	Yes
Minimum 500-level Hours Required Overall:	12
Masters Degree Required for Admission to DMA?	Yes
Qualifying Exam Required:	Yes
Preliminary Exam Required:	Yes
Minimum GPA:	3.0

Learning Outcomes: Choral Music, DMA

Learning Outcomes for the degree of Doctor of Musical Arts in Music, Choral Music Concentration

Students in the Doctor of Musical Arts program, with a concentration in **Instrumental Conducting (orchestra) or Instrumental Conducting (wind band) or Choral Music** [which is a degree in choral conducting], will:

1. Develop conducting skills at the highest professional level, using creative and critical thinking to inform stylistic choices and artistic expression, while demonstrating appropriate spontaneity, and will communicate their artistry to diverse audiences; in addition, students will demonstrate effective, musical, and efficient rehearsal techniques.
2. Develop a secondary area of expertise to demonstrate discipline-related breadth at an advanced level, and/or the acquisition of new professional skills.
3. Demonstrate an ability to summarize, synthesize and critique disciplinary content in relation to their major and secondary (cognate) areas of study; in the major area, students will demonstrate a thorough knowledge of the core repertoire.
4. Demonstrate effective analytical and interpretative skills in music theory, musicology and/or performance practice, as well as an ability to communicate an advanced understanding and evaluation of musical knowledge and ideas in written and/or oral forms.
5. Pursue specialized studies, to develop expertise and an ability to synthesize knowledge in areas of interest that enhance their required curriculum and/or professional goals.
6. Utilize and apply appropriate research methods to explore a focused research topic and to contribute original perspectives to discipline-related knowledge, communicating their research findings clearly and professionally in written, oral, and performative forms.
7. In addition, many Illinois DMA students will develop experience and expertise in instruction, pedagogy, and student assessment in at least one area of musical study, also gaining insights into rehearsal strategies for large ensemble in the major area, and appropriate methods of student evaluation.

Music: Instrumental Conducting Orchestra, DMA

for the degree of Doctor of Musical Arts in Music, Instrumental Conducting Orchestra Concentration

director of school: Dr. Jeffrey Sposato
associate director of graduate studies: Dr. Reynold Tharp
program contact: Jenny Phillips
overview of school of music admissions & requirements: https://music.illinois.edu/g (http://music.illinois.edu/prospective-students/)**raduate-admissions**
admissions questions: musicadmissions@illinois.edu | **(217) 244-7899**
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)

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department website: https://music.illinois.edu
department faculty: Music Faculty (https://music.illinois.edu/people/)
college website: https://faa.illinois.edu/
department office: School of Music, 2040 Music Building, 1114 West Nevada Street, Urbana, IL 61801
phone: (217) 333-3459

Graduate Degree Programs in Music

Artist Diploma in Music (p. 890)
Music, MMUS (p. 914)
concentrations:
Choral Music (p. 916)|Instrumental Conducting - Band (p. 918)|Instrumental Conducting - Orchestra (p. 921)|Jazz Performance (p. 923)|Music Composition (p. 926)|Music Theory (p. 928)|Musicology (p. 931)|Performance & Literature (p. 933)|Piano Pedagogy (p. 936)|Vocal Coaching & Accompanying (p. 938)
Music, DMA (p. 893)
concentrations:
Choral Music (p. 895)|Instrumental Conducting - Orchestra (p. 897)|Instrumental Conducting – Wind Band (p. 900)|Jazz Performance (p. 903)|Music Composition (p. 906)|Performance & Literature (p. 909)|Vocal Coaching & Accompanying (p. 911)
Music Education, MME (p. 885)
Music Education, PhD (p. 888)
Musicology, PhD (p. 941)
concentration:
Medieval Studies (p. 1101)

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Admission

For all degree programs, consult the admission requirements stated on the School of Music's website: https://music.illinois.edu/prospective-students (https://music.illinois.edu/prospective-students/).

Requirements for admission to the **Master of Music (MM)** programs are a Bachelor of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution. Students holding other degrees may be admitted but will be expected to make up any deficiencies in addition to fulfilling all requirements for the graduate degree.

Applicants to choral music, instrumental conducting (wind band or orchestra), jazz performance, piano pedagogy, performance and literature, and vocal accompanying and coaching must pass a qualifying audition for their major area or submit satisfactory recordings. Applicants in musicology and composition must present writings or other evidence of their ability to pursue work at the graduate level. The Graduate Record Examination (GRE) is not required.

The School of Music requires all new MM students to complete entrance examinations in music theory and musicianship; all new MM students, except those in musicology, complete a musicology entrance exam as well. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/graduate-academic-affairs/) page for more information.

Prerequisite for admission to the **Artist Diploma** is a master's degree in music performance.

Applicants to the **MM and the Artist Diploma (AD)** whose native language is not English must present an iBT score of 79 for admission to the Artist Diploma (AD), 90 for the Master of Music (MM), excluding Musicology; MM in Musicology requires an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements, please see https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/). Fall admission only; other terms of entry by departmental petition approval only.

Requirements for admission to the **Master of Music in Education** (MME) are:

1. Undergraduate degree in music education from an accredited institution;
2. An overall grade average for the last 60 credit hours of undergraduate work of at least 3.0 (on a 4.0 scale). The grade average for Music Education and Education courses, when averaged separately, must also be at least 3.0 (on a 4.0 scale);
3. Recommendations from three individuals who can discuss the applicant's musicianship, ability to undertake graduate level study, and teaching ability/potential.
4. The Graduate Record Exam (GRE) is not required for application to the MME, nor do MME students take placement tests in music theory or music history.

For MME applicants with public school experience:

1. recommendation from a principal or supervisor who speaks primarily to the quality of the applicants teaching experience;
2. recommendation from an individual who speaks primarily to the quality of the applicants musicianship;
3. recommendation from an individual who speaks primarily to the applicants potential for completion of graduate level study;
4. applicants who wish to be considered for a Teaching Assistantship should ensure that at least one of their references provides specific comments on their potential to engage in university level teaching duties associated with such an appointment.

For MME applicants without public school experience:

1. recommendation from a music education professor;
2. recommendation from an applied or ensemble music professor;
3. recommendation from an individual who can speak to the applicants potential for completion of graduate study.

Applicants seeking admission to the MME + Licensure program, should review the requirements found online at https://music.illinois.edu/prospective-students (https://music.illinois.edu/prospective-students/).

Applicants to the **MME** whose native language is not English must present an iBT score of 96 for the Master of Music Education (MME). A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements, please see: https://music.illinois.edu/english-proficiency-requirement

The School of Music offers an academic year program and a Summers-only MME. For academic year applications, the School of Music offers Fall admission only; spring term of entry by departmental petition approval only.

Requirements for admission to the **Doctor of Musical Arts** and the **Doctor of Philosophy** in Musicology programs are the Master of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution.

Applicants to the **Doctor of Musical Arts** programs must have:

1. a high level of proficiency in composition, conducting, or performance - candidates in composition must submit original scores for review, and candidates in performance and literature must pass a qualifying audition or submit satisfactory recordings; and
2. appropriate experience in ensemble performance and/or score reading. Candidates in voice and vocal accompanying and coaching must have fulfilled all foreign language requirements considered prerequisites for the Master of Music degree, including 1 year of college-level study in Italian, French, and German.

The School of Music requires all new **DMA** students to complete entrance examinations in musicology, music theory, aural skills, and score reading. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/resources/) page for more information.

Applicants to the **DMA or PhD** whose native language is not English must submit an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements please see: https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/).

Fall admission only; other terms of entry by departmental petition approval only.

For information about admission to the MME and PhD in Music Education, please visit www.music.illinois.edu (https://music.illinois.edu/).

Language Requirements

For the Master of Music program, applicants in voice and vocal accompanying and coaching are required to have had at least one year each of college-level French, German, and Italian or the equivalent. Applicants in other applied music areas, composition, conducting, and musicology are required to have had one year of any language at the college level or the equivalent.

All Doctor of Musical Arts candidates will be required to demonstrate proficiency in at least one language other than English. Each area may specify which language is required or may require proficiency in more than one language. Please review the current Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/) for more details.

Proficiency is required in two languages, depending on the proposed field of specialization, for candidates in the Doctor of Philosophy in Musicology program. This may be demonstrated through two years of undergraduate study in each language.

For all Graduate Degrees:

For those students who do not meet the language requirement at the time of entrance, it may be satisfied by evidence of two years of undergraduate study or the equivalent, or by completion of a two-semester, 500-level reading course sequence at UIUC with a grade of at least B-, or by satisfactory test scores. For up-to-date information regarding language requirements of the School of Music, please see the Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/).

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience.

Financial Aid

Fellowships, teaching, graduate, and research assistantships are awarded on a one-year basis with continuation dependent upon success in the program. Specific information on application procedures is available from the Music Admissions Office, (217) 244-7899; musicadmissions@illinois.edu.

for the degree of Doctor of Musical Arts in Music, Instrumental Conducting Orchestra Concentration

For additional details and requirements refer to the department's Graduate Handbook https://music.illinois.edu/graduate-handbooks (https://music.illinois.edu/graduate-handbooks/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
MUS 546 & MUS 547	Orchestral Literature I and Orchestral Literature II	12
MUS 572	Doctoral Orchestral Conducting	16
Advanced Music History or Performance Practice		4
MUS 418	Regional Studies in Musicology	
MUS 511	Fdns/Methods of Musicology I	
MUS 512	Fdns/Methods of Musicology II	
MUS 516	Fieldwork and Ethnography	
MUS 517	Topics in Instrumental Music	
MUS 518	Regional Studies in Musicology	
MUS 519	Analytical Methods: Musicology	
MUS 520	Soc Theory in Ethnomusicology	
MUS 521	Hist Studies in 20thC Music	
MUS 522	Special Topics Seminar	
MUS 523	Seminar in Musicology	
MUS 524	Sem in Wrks of Select Composer	
MUS 526	Baroque Performance Practice	
MUS 527	Classical Performance Practice	
Advanced Music Theory		4

MUS 400	Counterpoint and Fugue (or MUS 408 (A-E) or MUS 507)	
Cognate field or minor area		8
Electives [1]		8
Language Requirements:		
Courses taken to meet language requirements do not count toward the degree. See the departmental handbook for details.		
Thesis Hours or Doctoral Project Hours Required – MUS 576/MUS 599 (min/max applied toward degree):		8
Final Exam/Dissertation Defense Required		
Dissertation Deposit Not Required		

Code	Title	Hours
Concentration-specific requirements as listed above		
MUS 528	Res & Bibliography in Music (sections A1-A3)	2
MUS 528	Res & Bibliography in Music (sections B1-B2)	2
Total Hours		**64**

Other Requirements

Requirement	Description
Other requirements may overlap	
Concentration	Yes
Minimum 500-level Hours Required Overall:	12
Masters Degree Required for Admission to DMA?	Yes
Qualifying Exam Required:	Yes
Preliminary Exam Required:	Yes
Minimum GPA:	3.0

Learning Outcomes: Instrumental Conducting Orchestra, DMA

Learning Outcomes for the degree of Doctor of Musical Arts in Music, Instrumental Conducting Orchestra Concentration

Students in the Doctor of Musical Arts program, with a concentration in **Instrumental Conducting (orchestra) or Instrumental Conducting (wind band) or Choral Music** [which is a degree in choral conducting], will:

1. Develop conducting skills at the highest professional level, using creative and critical thinking to inform stylistic choices and artistic expression, while demonstrating appropriate spontaneity, and will communicate their artistry to diverse audiences; in addition, students will demonstrate effective, musical, and efficient rehearsal techniques.
2. Develop a secondary area of expertise to demonstrate discipline-related breadth at an advanced level, and/or the acquisition of new professional skills.
3. Demonstrate an ability to summarize, synthesize and critique disciplinary content in relation to their major and secondary (cognate) areas of study; in the major area, students will demonstrate a thorough knowledge of the core repertoire.
4. Demonstrate effective analytical and interpretative skills in music theory, musicology and/or performance practice, as well as an ability to communicate an advanced understanding and evaluation of musical knowledge and ideas in written and/or oral forms.
5. Pursue specialized studies, to develop expertise and an ability to synthesize knowledge in areas of interest that enhance their required curriculum and/or professional goals.
6. Utilize and apply appropriate research methods to explore a focused research topic and to contribute original perspectives to discipline-related knowledge, communicating their research findings clearly and professionally in written, oral, and performative forms.
7. In addition, many Illinois DMA students will develop experience and expertise in instruction, pedagogy, and student assessment in at least one area of musical study, also gaining insights into rehearsal strategies for large ensemble in the major area, and appropriate methods of student evaluation.

Music: Instrumental Conducting Wind Band, DMA

for the degree of Doctor of Musical Arts in Music, Instrumental Conducting Wind Band Concentration

director of school: Dr. Jeffrey Sposato
associate director of graduate studies: Dr. Reynold Tharp
program contact: Jenny Phillips
overview of school of music admissions & requirements: https://music.illinois.edu/graduate-admissions (https://music.illinois.edu/graduate-admissions/)
admissions questions: musicadmissions@illinois.edu | **(217) 244-7899**
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)

department website: https://music.illinois.edu
department faculty: Music Faculty (https://music.illinois.edu/people/)
college website: https://faa.illinois.edu/
department office: School of Music, 2040 Music Building, 1114 West Nevada Street, Urbana, IL 61801
phone: (217) 333-3459

Enter specific information here.

Graduate Degree Programs in Music

Artist Diploma in Music (p. 890)
Music, MMUS (p. 914)
concentrations:
Choral Music (p. 916)|Instrumental Conducting - Band (p. 918)|Instrumental Conducting - Orchestra (p. 921)|Jazz Performance (p. 923)|Music Composition (p. 926)|Music Theory (p. 928)|Musicology (p. 931)|Performance & Literature (p. 933)|Piano Pedagogy (p. 936)|Vocal Coaching & Accompanying (p. 938)
Music, DMA (p. 893)
concentrations:
Choral Music (p. 895)|Instrumental Conducting - Orchestra (p. 897)|Instrumental Conducting – Wind Band (p. 900)|Jazz Performance (p. 903)|Music Composition (p. 906)|Performance & Literature (p. 909)|Vocal Coaching & Accompanying (p. 911)
Music Education, MME (p. 885)
Music Education, PhD (p. 888)
Musicology, PhD (p. 941)
concentration:
Medieval Studies (p. 1101)

The School of Music has been an accredited member of the National Association of Schools of Music since 1933.

Admission

For all degree programs, consult the admission requirements stated on the School of Music's website: https://music.illinois.edu/prospective-students (https://music.illinois.edu/prospective-students/).

Requirements for admission to the **Master of Music (MM)** programs are a Bachelor of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution. Students holding other degrees may be admitted but will be expected to make up any deficiencies in addition to fulfilling all requirements for the graduate degree.

Applicants to choral music, instrumental conducting (wind band or orchestra), jazz performance, piano pedagogy, performance and literature, and vocal accompanying and coaching must pass a qualifying audition for their major area or submit satisfactory recordings. Applicants in musicology and composition must present writings or other evidence of their ability to pursue work at the graduate level. The Graduate Record Examination (GRE) is not required.

The School of Music requires all new MM students to complete entrance examinations in music theory and musicianship; all new MM students, except those in musicology, complete a musicology entrance exam as well. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/graduate-academic-affairs/) page for more information.

Prerequisite for admission to the **Artist Diploma** is a master's degree in music performance.

Applicants to the **MM and the Artist Diploma (AD)** whose native language is not English must present an iBT score of 79 for admission to the Artist Diploma (AD), 90 for the Master of Music (MM), excluding Musicology; MM in Musicology requires an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements, please see https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/). Fall admission only; other terms of entry by departmental petition approval only.

Requirements for admission to the **Master of Music in Education** (MME) are:

1. Undergraduate degree in music education from an accredited institution;
2. An overall grade average for the last 60 credit hours of undergraduate work of at least 3.0 (on a 4.0 scale). The grade average for Music Education and Education courses, when averaged separately, must also be at least 3.0 (on a 4.0 scale);
3. Recommendations from three individuals who can discuss the applicant's musicianship, ability to undertake graduate level study, and teaching ability/potential.
4. The Graduate Record Exam (GRE) is not required for application to the MME, nor do MME students take placement tests in music theory or music history.

For MME applicants with public school experience:

1. recommendation from a principal or supervisor who speaks primarily to the quality of the applicants teaching experience;
2. recommendation from an individual who speaks primarily to the quality of the applicants musicianship;
3. recommendation from an individual who speaks primarily to the applicants potential for completion of graduate level study;
4. applicants who wish to be considered for a Teaching Assistantship should ensure that at least one of their references provides specific comments on their potential to engage in university level teaching duties associated with such an appointment.

For MME applicants without public school experience:

1. recommendation from a music education professor;
2. recommendation from an applied or ensemble music professor;
3. recommendation from an individual who can speak to the applicants potential for completion of graduate study.

Applicants seeking admission to the MME + Licensure program, should review the requirements found online at https://music.illinois.edu/prospective-students (https://music.illinois.edu/prospective-students/).

Applicants to the **MME** whose native language is not English must present an iBT score of 96 for the Master of Music Education (MME). A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements, please see: https://music.illinois.edu/english-proficiency-requirement

The School of Music offers an academic year program and a Summers-only MME. For academic year applications, the School of Music offers Fall admission only; spring term of entry by departmental petition approval only.

Requirements for admission to the **Doctor of Musical Arts** and the **Doctor of Philosophy** in Musicology programs are the Master of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution.

Applicants to the **Doctor of Musical Arts** programs must have:

1. a high level of proficiency in composition, conducting, or performance - candidates in composition must submit original scores for review, and candidates in performance and literature must pass a qualifying audition or submit satisfactory recordings; and
2. appropriate experience in ensemble performance and/or score reading. Candidates in voice and vocal accompanying and coaching must have fulfilled all foreign language requirements considered prerequisites for the Master of Music degree, including 1 year of college-level study in Italian, French, and German.

The School of Music requires all new **DMA** students to complete entrance examinations in musicology, music theory, aural skills, and score reading. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/resources/) page for more information.

Applicants to the **DMA or PhD** whose native language is not English must submit an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements please see: https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/).

Fall admission only; other terms of entry by departmental petition approval only.

For information about admission to the MME and PhD in Music Education, please visit www.music.illinois.edu (https://music.illinois.edu/).

Language Requirements

For the Master of Music program, applicants in voice and vocal accompanying and coaching are required to have had at least one year each of college-level French, German, and Italian or the equivalent. Applicants in other applied music areas, composition, conducting, and musicology are required to have had one year of any language at the college level or the equivalent.

All Doctor of Musical Arts candidates will be required to demonstrate proficiency in at least one language other than English. Each area may specify which language is required or may require proficiency in more than one language. Please review the current Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/) for more details.

Proficiency is required in two languages, depending on the proposed field of specialization, for candidates in the Doctor of Philosophy in Musicology program. This may be demonstrated through two years of undergraduate study in each language.

For all Graduate Degrees:

For those students who do not meet the language requirement at the time of entrance, it may be satisfied by evidence of two years of undergraduate study or the equivalent, or by completion of a two-semester, 500-level reading course sequence at UIUC with a grade of at least B-, or by satisfactory test scores. For up-to-date information regarding language requirements of the School of Music, please see the Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/).

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience.

Financial Aid

Fellowships, teaching, graduate, and research assistantships are awarded on a one-year basis with continuation dependent upon success in the program. Specific information on application procedures is available from the Music Admissions Office, (217) 244-7899; musicadmissions@illinois.edu.

for the degree of Doctor of Musical Arts in Music, Instrumental Conducting Wind Band Concentration

For additional details and requirements refer to the department's Graduate Handbook https://music.illinois.edu/graduate-handbooks (https://music.illinois.edu/graduate-handbooks/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
MUS 509	Graduate Seminar in Band Conducting, History, and Literature	8
MUS 573	Doctoral Wind Band Conducting	16
Advanced Music History or Performance Practice		4
MUS 418	Regional Studies in Musicology	
MUS 511	Fdns/Methods of Musicology I	
MUS 512	Fdns/Methods of Musicology II	
MUS 516	Fieldwork and Ethnography	
MUS 517	Topics in Instrumental Music	
MUS 518	Regional Studies in Musicology	
MUS 519	Analytical Methods: Musicology	
MUS 520	Soc Theory in Ethnomusicology	
MUS 521	Hist Studies in 20thC Music	
MUS 522	Special Topics Seminar	
MUS 523	Seminar in Musicology	
MUS 524	Sem in Wrks of Select Composer	
MUS 526	Baroque Performance Practice	
MUS 527	Classical Performance Practice	
Advanced Music Theory		3
MUS 400	Counterpoint and Fugue (or MUS 408 (A-E) or MUS 507)	3
Cognate field or minor area		8
Electives [1]		13
Language Requirements:		
Courses taken to meet language requirements do not count toward the degree. See the departmental handbook for details.		
Thesis Hours or Doctoral Project Hours Required – MUS 576/MUS 599 (min/max applied toward degree):		8

Code	Title	Hours
Concentration-specific requirements as listed above		
MUS 528	Res & Bibliography in Music (sections A1-A3)	2

MUS 528	Res & Bibliography in Music (sections B1-B2)	2
Total Hours		**64**

Other Requirements

Requirement	Description
Other requirements may overlap	
Concentration	Yes
Minimum 500-level Hours Required Overall:	12
Masters Degree Required for Admission to DMA?	Yes
Qualifying Exam Required:	Yes
Preliminary Exam Required:	Yes
Minimum GPA:	3.0

Learning Outcomes: Instrumental Conducting Wind Band, DMA

Learning Outcomes for the degree of Doctor of Musical Arts in Music, Instrumental Conducting Wind Band Concentration

Students in the Doctor of Musical Arts program, with a concentration in **Instrumental Conducting (orchestra) or Instrumental Conducting (wind band) or Choral Music** [which is a degree in choral conducting], will:

1. Develop conducting skills at the highest professional level, using creative and critical thinking to inform stylistic choices and artistic expression, while demonstrating appropriate spontaneity, and will communicate their artistry to diverse audiences; in addition, students will demonstrate effective, musical, and efficient rehearsal techniques.
2. Develop a secondary area of expertise to demonstrate discipline-related breadth at an advanced level, and/or the acquisition of new professional skills.
3. Demonstrate an ability to summarize, synthesize and critique disciplinary content in relation to their major and secondary (cognate) areas of study; in the major area, students will demonstrate a thorough knowledge of the core repertoire.
4. Demonstrate effective analytical and interpretative skills in music theory, musicology and/or performance practice, as well as an ability to communicate an advanced understanding and evaluation of musical knowledge and ideas in written and/or oral forms.
5. Pursue specialized studies, to develop expertise and an ability to synthesize knowledge in areas of interest that enhance their required curriculum and/or professional goals.
6. Utilize and apply appropriate research methods to explore a focused research topic and to contribute original perspectives to discipline-related knowledge, communicating their research findings clearly and professionally in written, oral, and performative forms.
7. In addition, many Illinois DMA students will develop experience and expertise in instruction, pedagogy, and student assessment in at least one area of musical study, also gaining insights into rehearsal strategies for large ensemble in the major area, and appropriate methods of student evaluation.

Music: Jazz Performance, DMA

for the degree of Doctor of Musical Arts in Music, Jazz Performance Concentration

director of school: Dr. Jeffrey Sposato
associate director of graduate studies: Dr. Reynold Tharp
program contact: Jenny Phillips
overview of school of music admissions & requirements: https://music.illinois.edu/graduate-admissions (https://music.illinois.edu/graduate-admissions/)
admissions questions: musicadmissions@illinois.edu | **(217) 244-7899**
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)

department website: https://music.illinois.edu
department faculty: Music Faculty (https://music.illinois.edu/people/)
college website: https://faa.illinois.edu/
department office: School of Music, 2040 Music Building, 1114 West Nevada Street, Urbana, IL 61801
phone: (217) 333-3459

Enter specific information here.

Graduate Degree Programs in Music

Artist Diploma in Music (p. 890)
Music, MMUS (p. 914)
concentrations:
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Music, DMA (p. 893)
concentrations:
Choral Music (p. 895)|Instrumental Conducting - Orchestra (p. 897)|Instrumental Conducting – Wind Band (p. 900)|Jazz Performance (p. 903)|Music Composition (p. 906)|Performance & Literature (p. 909)|Vocal Coaching & Accompanying (p. 911)
Music Education, MME (p. 885)
Music Education, PhD (p. 888)
Musicology, PhD (p. 941)
concentration:
Medieval Studies (p. 1101)

The School of Music has been an accredited member of the National Association of Schools of Music since 1933.

Admission

For all degree programs, consult the admission requirements stated on the School of Music's website: https://music.illinois.edu/prospective-students (https://music.illinois.edu/prospective-students/).

Requirements for admission to the **Master of Music (MM)** programs are a Bachelor of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution. Students holding other degrees may be admitted but will be expected to make up any deficiencies in addition to fulfilling all requirements for the graduate degree.

Applicants to choral music, instrumental conducting (wind band or orchestra), jazz performance, piano pedagogy, performance and literature, and vocal accompanying and coaching must pass a qualifying audition for their major area or submit satisfactory recordings. Applicants in musicology and composition must present writings or other evidence of their ability to pursue work at the graduate level. The Graduate Record Examination (GRE) is not required.

The School of Music requires all new MM students to complete entrance examinations in music theory and musicianship; all new MM students, except those in musicology, complete a musicology entrance exam as well. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/graduate-academic-affairs/) page for more information.

Prerequisite for admission to the **Artist Diploma** is a master's degree in music performance.

Applicants to the **MM and the Artist Diploma (AD)** whose native language is not English must present an iBT score of 79 for admission to the Artist Diploma (AD), 90 for the Master of Music (MM), excluding Musicology; MM in Musicology requires an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements, please see https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/). Fall admission only; other terms of entry by departmental petition approval only.

Requirements for admission to the **Master of Music in Education** (MME) are:

1. Undergraduate degree in music education from an accredited institution;
2. An overall grade average for the last 60 credit hours of undergraduate work of at least 3.0 (on a 4.0 scale). The grade average for Music Education and Education courses, when averaged separately, must also be at least 3.0 (on a 4.0 scale);
3. Recommendations from three individuals who can discuss the applicant's musicianship, ability to undertake graduate level study, and teaching ability/potential.
4. The Graduate Record Exam (GRE) is not required for application to the MME, nor do MME students take placement tests in music theory or music history.

For MME applicants with public school experience:

1. recommendation from a principal or supervisor who speaks primarily to the quality of the applicants teaching experience;
2. recommendation from an individual who speaks primarily to the quality of the applicants musicianship;
3. recommendation from an individual who speaks primarily to the applicants potential for completion of graduate level study;
4. applicants who wish to be considered for a Teaching Assistantship should ensure that at least one of their references provides specific comments on their potential to engage in university level teaching duties associated with such an appointment.

For MME applicants without public school experience:

1. recommendation from a music education professor;
2. recommendation from an applied or ensemble music professor;
3. recommendation from an individual who can speak to the applicants potential for completion of graduate study.

Applicants seeking admission to the MME + Licensure program, should review the requirements found online at https://music.illinois.edu/prospective-students (https://music.illinois.edu/prospective-students/).

Applicants to the **MME** whose native language is not English must present an iBT score of 96 for the Master of Music Education (MME). A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements, please see: https://music.illinois.edu/english-proficiency-requirement

The School of Music offers an academic year program and a Summers-only MME. For academic year applications, the School of Music offers Fall admission only; spring term of entry by departmental petition approval only.

Requirements for admission to the **Doctor of Musical Arts** and the **Doctor of Philosophy** in Musicology programs are the Master of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution.

Applicants to the **Doctor of Musical Arts** programs must have:

1. a high level of proficiency in composition, conducting, or performance - candidates in composition must submit original scores for review, and candidates in performance and literature must pass a qualifying audition or submit satisfactory recordings; and
2. appropriate experience in ensemble performance and/or score reading. Candidates in voice and vocal accompanying and coaching must have fulfilled all foreign language requirements considered prerequisites for the Master of Music degree, including 1 year of college-level study in Italian, French, and German.

The School of Music requires all new **DMA** students to complete entrance examinations in musicology, music theory, aural skills, and score reading. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/resources/) page for more information.

Applicants to the **DMA or PhD** whose native language is not English must submit an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements please see: https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/).

Fall admission only; other terms of entry by departmental petition approval only.

For information about admission to the MME and PhD in Music Education, please visit www.music.illinois.edu (https://music.illinois.edu/).

Language Requirements

For the Master of Music program, applicants in voice and vocal accompanying and coaching are required to have had at least one year each of college-level French, German, and Italian or the equivalent. Applicants in other applied music areas, composition, conducting, and musicology are required to have had one year of any language at the college level or the equivalent.

All Doctor of Musical Arts candidates will be required to demonstrate proficiency in at least one language other than English. Each area may specify which language is required or may require proficiency in more than one language. Please review the current Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/) for more details.

Proficiency is required in two languages, depending on the proposed field of specialization, for candidates in the Doctor of Philosophy in Musicology program. This may be demonstrated through two years of undergraduate study in each language.

For all Graduate Degrees:

For those students who do not meet the language requirement at the time of entrance, it may be satisfied by evidence of two years of undergraduate study or the equivalent, or by completion of a two-semester, 500-level reading course sequence at UIUC with a grade of at least B-, or by satisfactory test scores. For up-to-date information regarding language requirements of the School of Music, please see the Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/).

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience.

Financial Aid

Fellowships, teaching, graduate, and research assistantships are awarded on a one-year basis with continuation dependent upon success in the program. Specific information on application procedures is available from the Music Admissions Office, (217) 244-7899; musicadmissions@illinois.edu.

for the degree of Doctor of Musical Arts in Music, Jazz Performance Concentration

For additional details and requirements refer to the department's Graduate Handbook https://music.illinois.edu/graduate-handbooks (https://music.illinois.edu/graduate-handbooks/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
500 level major applied music		12-16
MUS 566	(sections DB1-VO2)	
Jazz Core Curriculum [1]		10-12
MUS 499	Proseminar in Music (multiple sections)	
MUS 435	Jazz Aural Skills I	
MUS 436	Jazz Aural Skills II	
MUS 450	(multiple sections)	
MUS 462	Jazz Listening Seminar I	
MUS 463	Jazz Listening Seminar II	
MUS 464	Jazz History I	
MUS 465	Jazz History II	
MUS 504 & MUS 508	Grad. Jazz Improv. I and Grad. Jazz Improv. II	
MUS 548	Advanced Jazz Harmony I	
MUS 549	Advanced Jazz Harmony II	
MUS 574	Jazz Arranging III	
MUS 575	Jazz Arranging IV	
Advanced Music Theory - Select one from the following options:		3
MUS 408	Analysis of Musical Form (D-E)	
or MUS 400	Counterpoint and Fugue	
Cognate field or minor area		8-16
Electives (min/max applied toward degree): [1]		7
Ensembles		0-4
Language Requirements:		
Courses taken to meet language requirements do not count toward the degree. See the departmental handbook for details.		
Thesis Hours or Doctoral Project Hours Required – MUS 576/MUS 599 (min/max applied toward degree):		16
Graduate Recital		

Code	Title	Hours
Concentration-specific requirements as listed above		
MUS 528	Res & Bibliography in Music (sections A1-A3)	2
MUS 528	Res & Bibliography in Music (sections B1-B2)	2
Total Hours		**64**

Other Requirements

Requirement	Description
Other requirements may overlap	
Concentration	Yes
Minimum 500-level Hours Required Overall:	12
Masters Degree Required for Admission to DMA?	Yes
Qualifying Exam Required:	Yes
Preliminary Exam Required:	Yes
Minimum GPA:	3.0

Learning Outcomes: Jazz Performance, DMA

Learning Outcomes for the degree of Doctor of Musical Arts in Music, Jazz Performance Concentration

Students in the Doctor of Musical Arts program, with a concentration in Jazz Performance, will:

1. Develop performance skills in their major area at the highest professional level, using critical thinking and analysis to inform stylistic choices and individual artistic expression while demonstrating spontaneity and collaboration with others, and will communicate their creativity to diverse audiences.

2. Develop a secondary area of expertise to demonstrate discipline-related breadth at an advanced level, and/or the acquisition of new professional skills.
3. Demonstrate an ability to summarize, synthesize and critique disciplinary content (including pedagogical material) in relation to their major and secondary (cognate) areas of study.
4. Demonstrate effective analytical and interpretative skills in music theory and musicology, as well as an ability to communicate an advanced understanding and evaluation of musical knowledge and ideas in written and/or oral form.
5. Pursue specialized studies, to demonstrate expertise and an ability to synthesize knowledge in areas of interest that enhance their required curriculum and/or professional goals.
6. Utilize and apply appropriate research methods to explore a focused research topic and to contribute original perspectives to discipline-related knowledge, communicating their research findings clearly and professionally in written, oral, and performative forms.
7. In addition, many Illinois DMA students will develop experience and expertise in instruction, pedagogy, and student assessment in at least one area of musical study, gaining insights into studio and/or classroom teaching and appropriate methods of evaluation.

Music: Music Composition, DMA

for the degree of Doctor of Musical Arts in Music, Music Composition Concentration

director of school: Dr. Jeffrey Sposato
associate director of graduate studies: Dr. Reynold Tharp
program contact: Jenny Phillips
overview of school of music admissions & requirements: https://music.illinois.edu/graduate-admissions (https://music.illinois.edu/graduate-admissions/)
admissions questions: musicadmissions@illinois.edu | **(217) 244-7899**
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)

department website: https://music.illinois.edu
department faculty: Music Faculty (https://music.illinois.edu/people/)
college website: https://faa.illinois.edu/
department office: School of Music, 2040 Music Building, 1114 West Nevada Street, Urbana, IL 61801
phone: (217) 333-3459

Graduate Degree Programs in Music

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Music, MMUS (p. 914)
concentrations:
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Music, DMA (p. 893)
concentrations:
Choral Music (p. 895)|Instrumental Conducting - Orchestra (p. 897)|Instrumental Conducting – Wind Band (p. 900)|Jazz Performance (p. 903)|Music Composition (p. 906)|Performance & Literature (p. 909)|Vocal Coaching & Accompanying (p. 911)
Music Education, MME (p. 885)
Music Education, PhD (p. 888)
Musicology, PhD (p. 941)
concentration:
Medieval Studies (p. 1101)

The School of Music has been an accredited member of the National Association of Schools of Music since 1933.

Admission

For all degree programs, consult the admission requirements stated on the School of Music's website: https://music.illinois.edu/prospective-students (https://music.illinois.edu/prospective-students/).

Requirements for admission to the **Master of Music (MM)** programs are a Bachelor of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution. Students holding other degrees may be admitted but will be expected to make up any deficiencies in addition to fulfilling all requirements for the graduate degree.

Applicants to choral music, instrumental conducting (wind band or orchestra), jazz performance, piano pedagogy, performance and literature, and vocal accompanying and coaching must pass a qualifying audition for their major area or submit satisfactory recordings. Applicants in musicology and composition must present writings or other evidence of their ability to pursue work at the graduate level. The Graduate Record Examination (GRE) is not required.

The School of Music requires all new MM students to complete entrance examinations in music theory and musicianship; all new MM students, except those in musicology, complete a musicology entrance exam as well. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/graduate-academic-affairs/) page for more information.

Prerequisite for admission to the **Artist Diploma** is a master's degree in music performance.

Applicants to the **MM and the Artist Diploma (AD)** whose native language is not English must present an iBT score of 79 for admission to the Artist Diploma (AD), 90 for the Master of Music (MM), excluding Musicology; MM in Musicology requires an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois

Graduate College and School of Music. For the full English proficiency requirements, please see https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/). Fall admission only; other terms of entry by departmental petition approval only.

Requirements for admission to the **Master of Music in Education** (MME) are:

1. Undergraduate degree in music education from an accredited institution;
2. An overall grade average for the last 60 credit hours of undergraduate work of at least 3.0 (on a 4.0 scale). The grade average for Music Education and Education courses, when averaged separately, must also be at least 3.0 (on a 4.0 scale);
3. Recommendations from three individuals who can discuss the applicant's musicianship, ability to undertake graduate level study, and teaching ability/potential.
4. The Graduate Record Exam (GRE) is not required for application to the MME, nor do MME students take placement tests in music theory or music history.

For MME applicants with public school experience:

1. recommendation from a principal or supervisor who speaks primarily to the quality of the applicants teaching experience;
2. recommendation from an individual who speaks primarily to the quality of the applicants musicianship;
3. recommendation from an individual who speaks primarily to the applicants potential for completion of graduate level study;
4. applicants who wish to be considered for a Teaching Assistantship should ensure that at least one of their references provides specific comments on their potential to engage in university level teaching duties associated with such an appointment.

For MME applicants without public school experience:

1. recommendation from a music education professor;
2. recommendation from an applied or ensemble music professor;
3. recommendation from an individual who can speak to the applicants potential for completion of graduate study.

Applicants seeking admission to the MME + Licensure program, should review the requirements found online at https://music.illinois.edu/prospective-students (https://music.illinois.edu/prospective-students/).

Applicants to the **MME** whose native language is not English must present an iBT score of 96 for the Master of Music Education (MME). A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements, please see: https://music.illinois.edu/english-proficiency-requirement

The School of Music offers an academic year program and a Summers-only MME. For academic year applications, the School of Music offers Fall admission only; spring term of entry by departmental petition approval only.

Requirements for admission to the **Doctor of Musical Arts** and the **Doctor of Philosophy** in Musicology programs are the Master of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution.

Applicants to the **Doctor of Musical Arts** programs must have:

1. a high level of proficiency in composition, conducting, or performance - candidates in composition must submit original scores for review, and candidates in performance and literature must pass a qualifying audition or submit satisfactory recordings; and
2. appropriate experience in ensemble performance and/or score reading. Candidates in voice and vocal accompanying and coaching must have fulfilled all foreign language requirements considered prerequisites for the Master of Music degree, including 1 year of college-level study in Italian, French, and German.

The School of Music requires all new **DMA** students to complete entrance examinations in musicology, music theory, aural skills, and score reading. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/resources/) page for more information.

Applicants to the **DMA or PhD** whose native language is not English must submit an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements please see: https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/).

Fall admission only; other terms of entry by departmental petition approval only.

For information about admission to the MME and PhD in Music Education, please visit www.music.illinois.edu (https://music.illinois.edu/).

Language Requirements

For the Master of Music program, applicants in voice and vocal accompanying and coaching are required to have had at least one year each of college-level French, German, and Italian or the equivalent. Applicants in other applied music areas, composition, conducting, and musicology are required to have had one year of any language at the college level or the equivalent.

All Doctor of Musical Arts candidates will be required to demonstrate proficiency in at least one language other than English. Each area may specify which language is required or may require proficiency in more than one language. Please review the current Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/) for more details.

Proficiency is required in two languages, depending on the proposed field of specialization, for candidates in the Doctor of Philosophy in Musicology program. This may be demonstrated through two years of undergraduate study in each language.

For all Graduate Degrees:

For those students who do not meet the language requirement at the time of entrance, it may be satisfied by evidence of two years of undergraduate study or the equivalent, or by completion of a two-semester, 500-level reading course sequence at UIUC with a grade of at least B-, or by satisfactory test scores. For up-to-date information regarding language requirements of the School of Music, please see the Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/).

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience.

Financial Aid

Fellowships, teaching, graduate, and research assistantships are awarded on a one-year basis with continuation dependent upon success in the program. Specific information on application procedures is available from the Music Admissions Office, (217) 244-7899; musicadmissions@illinois.edu.

for the degree of Doctor of Musical Arts in Music, Music Composition Concentration

For additional details and requirements refer to the department's Graduate Handbook https://music.illinois.edu/graduate-handbooks (https://music.illinois.edu/graduate-handbooks/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
MUS 506	Graduate Level Composition	12-16
Advanced Musicology - select 8 hours from the following (MUS 511, 512, 516, 519, 520, and 523 are particularly appropriate for DMS students pursuing a cognate in Musicology:		8
MUS 418	Regional Studies in Musicology (must enroll for 4 credits)	
MUS 511	Fdns/Methods of Musicology I	
MUS 512	Fdns/Methods of Musicology II	
MUS 516	Fieldwork and Ethnography	
MUS 517	Topics in Instrumental Music	
MUS 518	Regional Studies in Musicology	
MUS 519	Analytical Methods: Musicology	
MUS 520	Soc Theory in Ethnomusicology	
MUS 521	Hist Studies in 20thC Music	
MUS 522	Special Topics Seminar	
MUS 523	Seminar in Musicology	
MUS 524	Sem in Wrks of Select Composer	
Advanced Music Theory - select one course from each of the following two groups		6
MUS 408	Analysis of Musical Form (Section A-C)	
or MUS 400	Counterpoint and Fugue	
MUS 408	Analysis of Musical Form (Sections D-E)	
Cognate field or minor area		8-16
Electives (min/max applied toward degree): [1]		6-10
Language Requirements:		
Courses taken to meet language requirements do not count toward the degree. See the departmental handbook for details.		
Thesis Hours or Doctoral Project Hours Required — MUS 576/MUS 599 (min/max applied toward degree):		16
Final Exam/Dissertation Defense Required		
Dissertation Deposit Not Required		

Code	Title	Hours
Concentration-specific requirements as listed above		
MUS 528	Res & Bibliography in Music (sections A1-A3)	2
MUS 528	Res & Bibliography in Music (sections B1-B2)	2
Total Hours		**64**

Other Requirements

Requirement	Description
Other requirements may overlap	
Concentration	Yes
Minimum 500-level Hours Required Overall:	12
Masters Degree Required for Admission to DMA?	Yes
Qualifying Exam Required:	Yes
Preliminary Exam Required:	Yes
Minimum GPA:	3.0

Learning Outcomes: Music Composition, DMA

Learning Outcomes for the degree of Doctor of Musical Arts in Music, Music Composition Concentration

Students in the Doctor of Musical Arts program, with a concentration in Music Composition will:

1. Develop their musical craft and creativity at the highest professional level, using critical thinking, analysis and technology to inform stylistic choices and artistic expression, and will communicate their creativity to diverse audiences through performances of their music.
2. Develop a secondary area of expertise to demonstrate discipline-related breadth at an advanced level, and/or the acquisition of new professional skills.
3. Demonstrate an ability to summarize, synthesize and critique disciplinary content (including pedagogical material) in relation to their major and secondary (cognate) areas of study.
4. Demonstrate effective analytical and interpretative skills in music theory and musicology, as well as an ability to communicate an advanced understanding and evaluation of musical knowledge and ideas in written and/or oral forms.
5. Pursue specialized studies, to demonstrate expertise and an ability to synthesize knowledge in areas of interest that enhance their required curriculum and/or professional goals.
6. Exhibit their musical creativity through the production of an original, large-scale composition and will demonstrate their ability to communicate the conceptual and artistic framework for their work clearly and professionally in written and/or oral forms.
7. Utilize and apply appropriate research methods to explore a focused research topic and to contribute original perspectives to discipline-related knowledge, communicating their research findings clearly and professionally in written or oral forms.
8. In addition, many Illinois DMA students will develop experience and expertise in instruction, pedagogy, and student assessment in at

least one area of musical study, gaining insights into studio and/or classroom teaching and appropriate methods of evaluation.

Music: Performance & Literature, DMA

for the degree of Doctor of Musical Arts in Music, Performance & Literature Concentration

director of school: Dr. Jeffrey Sposato
associate director of graduate studies: Dr. Reynold Tharp
program contact: Jenny Phillips
overview of school of music admissions & requirements: http://music.illinois.edu/prospective-students (http://music.illinois.edu/prospective-students/)
admissions questions: musicadmissions@illinois.edu | **(217) 244-7899**
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)

department website: https://music.illinois.edu
department faculty: Music Faculty (https://music.illinois.edu/people/)
college website: https://www.faa.illinois.edu/
department office: School of Music, 2040 Music Building, 1114 West Nevada Street, Urbana, IL 61801
phone: (217) 333-3459

Enter specific information here.

Graduate Degree Programs in Music

Artist Diploma in Music (p. 890)
Music, MMUS (p. 914)
concentrations:
Choral Music (p. 916)|Instrumental Conducting - Band (p. 918)|Instrumental Conducting - Orchestra (p. 921)|Jazz Performance (p. 923)|Music Composition (p. 926)|Music Theory (p. 928)|Musicology (p. 931)|Performance & Literature (p. 933)|Piano Pedagogy (p. 936)|Vocal Coaching & Accompanying (p. 938)
Music, DMA (p. 893)
concentrations:
Choral Music (p. 895)|Instrumental Conducting - Orchestra (p. 897)|Instrumental Conducting – Wind Band (p. 900)|Jazz Performance (p. 903)|Music Composition (p. 906)|Performance & Literature (p. 909)|Vocal Coaching & Accompanying (p. 911)
Music Education, MME (p. 885)
Music Education, PhD (p. 888)
Musicology, PhD (p. 941)
concentration:
Medieval Studies (p. 1101)

The School of Music has been an accredited member of the National Association of Schools of Music since 1933.

Admission

For all degree programs, consult the admission requirements stated on the School of Music's website: https://music.illinois.edu/graduate-admissions (https://music.illinois.edu/graduate-admissions/).

Requirements for admission to the **Master of Music (MM)** programs are a Bachelor of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution. Students holding other degrees may be admitted but will be expected to make up any deficiencies in addition to fulfilling all requirements for the graduate degree.

Applicants to choral music, instrumental conducting (wind band or orchestra), jazz performance, piano pedagogy, performance and literature, and vocal accompanying and coaching must pass a qualifying audition for their major area or submit satisfactory recordings. Applicants in musicology, theory, and composition must present writings or other evidence of their ability to pursue work at the graduate level. The Graduate Record Examination (GRE) is not required.

The School of Music requires all new MM students to complete entrance examinations in music theory and musicianship; all new MM students, except those in musicology, complete a musicology entrance exam as well. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/graduate-academic-affairs/) page for more information.

Prerequisite for admission to the **Artist Diploma** is a master's degree in music performance.

International applicants to the **MM and the Artist Diploma (AD)** whose native language is not English must present an iBT score of 79 for admission to the Artist Diploma (AD), 90 for the Master of Music (MM), excluding Musicology; MM in Musicology requires an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. Fall admission only; other terms of entry by departmental petition approval only.

Requirements for admission to the **Master of Music in Education** (MME) are:

1. Undergraduate degree in music education from an accredited institution;
2. An overall grade average for the last 60 credit hours of undergraduate work of at least 3.0 (on a 4.0 scale). The grade average for Music Education and Education courses, when averaged separately, must also be at least 3.0 (on a 4.0 scale);
3. Recommendations from three individuals who can discuss the applicant's musicianship, ability to undertake graduate level study, and teaching ability/potential.
4. The Graduate Record Exam (GRE) is not required for application to the MME, nor do MME students take placement tests in music theory or music history.

For MME applicants with public school experience:

1. recommendation from a principal or supervisor who speaks primarily to the quality of the applicants teaching experience;
2. recommendation from an individual who speaks primarily to the quality of the applicants musicianship;
3. recommendation from an individual who speaks primarily to the applicants potential for completion of graduate level study;

4. applicants who wish to be considered for a Teaching Assistantship should ensure that at least one of their references provides specific comments on their potential to engage in university level teaching duties associated with such an appointment.

For MME applicants without public school experience:

1. recommendation from a music education professor;
2. recommendation from an applied or ensemble music professor;
3. recommendation from an individual who can speak to the applicants potential for completion of graduate study.

Applicants seeking admission to the MME + Licensure program, should review the requirements found online at: https://music.illinois.edu/graduate-admissions (https://music.illinois.edu/graduate-admissions/)

International applicants to the **MME** whose native language is not English must present an iBT score of 96 for the Master of Music Education (MME). A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music.

The School of Music offers an academic year program and a Summers-only MME. For academic year applications, the School of Music offers Fall admission only; spring term of entry by departmental petition approval only.

Requirements for admission to the **Doctor of Musical Arts** and the **Doctor of Philosophy** in Musicology programs are the Master of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution.

Applicants to the **Doctor of Musical Arts** programs must have:

1. a high level of proficiency in composition, conducting, or performance - candidates in composition must submit original scores for review, and candidates in performance and literature must pass a qualifying audition or submit satisfactory recordings; and
2. appropriate experience in ensemble performance and/or score reading. Candidates in voice and vocal accompanying and coaching must have fulfilled all foreign language requirements considered prerequisites for the Master of Music degree, including 1 year of college-level study in Italian, French, and German.

The School of Music requires all new **DMA** students to complete entrance examinations in musicology, music theory, aural skills, and score reading. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/resources/) page for more information.

International applicants to the **DMA or PhD** whose native language is not English must submit an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music.

Fall admission only; other terms of entry by departmental petition approval only.

For information about admission to the MME and PhD in Music Education, please visit www.music.illinois.edu (https://music.illinois.edu/).

Language Requirements

For the Master of Music program, applicants in voice and vocal accompanying and coaching are required to have had at least one year each of college-level French, German, and Italian or the equivalent. Applicants in other applied music areas, composition, conducting, musicology, and theory are required to have had one year of any language at the college level or the equivalent.

All Doctor of Musical Arts candidates will be required to demonstrate proficiency in at least one language other than English. Each division may specify which language is required or may require proficiency in more than one language. Please review the current Graduate Music Handbook (https://music.illinois.edu/graduate-handbooksc-handbooks/) for more details.

Proficiency is required in two languages, depending on the proposed field of specialization, for candidates in the Doctor of Philosophy in Musicology program. This may be demonstrated through two years of undergraduate study in each language.

For all Graduate Degrees:

For those students who do not meet the language requirement at the time of entrance, it may be satisfied by evidence of two years of undergraduate study or the equivalent, or by completion of a two-semester, 500-level reading course sequence at UIUC with a grade of at least B-, or by satisfactory test scores. For up-to-date information regarding language requirements of the School of Music, please see the Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/).

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience.

Financial Aid

Fellowships, teaching, graduate, and research assistantships are awarded on a one-year basis with continuation dependent upon success in the program. Specific information on application procedures is available from the Music Admissions Office, (217) 244-7899; musicadmissions@illinois.edu.

for the degree of Doctor of Musical Arts in Music, Performance & Literature Concentration

For additional details and requirements refer to the department's Graduate Handbook https://music.illinois.edu/graduate-handbooks (https://music.illinois.edu/graduate-handbooks/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
500 level major applied music		12-16
Advanced Musicology, select 8 hours from the following (MUS 511, 512, 516, 519, 520, and 523 are particularly appropriate for students pursuing a cognate in Musicology):		8
MUS 418	Regional Studies in Musicology (must enroll 4 four credits)	
MUS 511	Fdns/Methods of Musicology I	
MUS 512	Fdns/Methods of Musicology II	
MUS 516	Fieldwork and Ethnography	
MUS 517	Topics in Instrumental Music	
MUS 518	Regional Studies in Musicology	
MUS 519	Analytical Methods: Musicology [1]	

MUS 520	Soc Theory in Ethnomusicology	
MUS 521	Hist Studies in 20thC Music	
MUS 522	Special Topics Seminar	
MUS 523	Seminar in Musicology	
MUS 524	Sem in Wrks of Select Composer	
Advanced Music Theory, select one from each of the following groups		6
MUS 408	Analysis of Musical Form (section A-C)	
or MUS 400	Counterpoint and Fugue	
MUS 408	Analysis of Musical Form (section D-E)	
Cognate field or minor area		8-16
Electives (min/max applied toward degree): [1]		6-10
Ensembles: Students whose primary instruments are woodwinds, bras, percussion, or strings will have a curricular requirement of four semesters of approved ensemble participation.		0-4
Language Requirements:		
Courses taken to meet language requirements do not count toward the degree. See the departmental handbook for details.		
Thesis Hours or Doctoral Project Hours Required — MUS 576/MUS 599 (min/max applied toward degree):		16
Final Exam/Dissertation Defense Required		
Dissertation Deposit Not Required		

Code	Title	Hours
Concentration-specific requirements as listed above		
MUS 528	Res & Bibliography in Music (sections A1-A3)	2
MUS 528	Res & Bibliography in Music (sections B1-B2)	2
Total Hours		**64**

Other Requirements

Requirement	Description
Other requirements may overlap	
Concentration	Yes
Minimum 500-level Hours Required Overall:	12
Masters Degree Required for Admission to DMA?	Yes
Qualifying Exam Required:	Yes
Preliminary Exam Required:	Yes
Minimum GPA:	3.0

Learning Outcomes: Performance & Literature, DMA

Learning Outcomes for the degree of Doctor of Musical Arts in Music, Performance & Literature Concentration

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Students in the Doctor of Musical Arts program, with a concentration in Performance and Literature, or Vocal Coaching and Accompanying will:

1. Develop performance skills in their major area at the highest professional level, using creative and critical thinking to inform stylistic choices and artistic expression while demonstrating spontaneity and collaboration as appropriate, and will communicate their artistry to diverse audiences.
2. Develop a secondary area of expertise to demonstrate discipline-related breadth at an advanced level, and/or the acquisition of new professional skills.
3. Demonstrate an ability to summarize, synthesize, and critique disciplinary content (including pedagogical material) in relation to their major and secondary (cognate) areas of study.
4. Demonstrate effective analytical and interpretative skills in music theory and musicology, as well as an ability to communicate an advanced understanding and evaluation of musical knowledge and ideas in written and/or oral forms.
5. Pursue additional, specialized studies, to develop expertise and an ability to synthesize knowledge in areas of interest that enhance their required curriculum and/or professional goals.
6. Utilize and apply appropriate research methods to explore a focused research topic and to contribute original perspectives to discipline-related knowledge, communicating their research findings clearly and professionally in written, oral, and performative forms.
7. Additionally, many Illinois DMA students will develop experience and expertise in instruction, pedagogy, and student assessment in at least one area of musical study, gaining insights into studio and/or classroom teaching and appropriate methods of evaluation.

Music: Vocal Coaching & Accompanying, DMA

for the degree of Doctor of Musical Arts in Music, Vocal Coaching & Accompanying Concentration

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director of school: Dr. Jeffrey Sposato
associate director of graduate studies: Dr. Reynold Tharp
program contact: Jenny Phillips
overview of school of music admissions & requirements: https://music.illinois.edu/graduate-admissions (https://music.illinois.edu/graduate-admissions/)
admissions questions: musicadmissions@illinois.edu | **(217) 244-7899**
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)

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department website: https://music.illinois.edu
department faculty: Music Faculty (https://music.illinois.edu/people/)
college website: https://faa.illinois.edu/
department office: School of Music, 2040 Music Building, 1114 West Nevada Street, Urbana, IL 61801
phone: (217) 333-3459

Graduate Degree Programs in Music

Artist Diploma in Music (p. 890)
Music, MMUS (p. 914)
concentrations:
Choral Music (p. 916)|Instrumental Conducting - Band (p. 918)|Instrumental Conducting - Orchestra (p. 921)|Jazz Performance (p. 923)|Music Composition (p. 926)|Music Theory (p. 928)|Musicology (p. 931)|Performance & Literature (p. 933)|Piano Pedagogy (p. 936)|Vocal Coaching & Accompanying (p. 938)
Music, DMA (p. 893)
concentrations:
Choral Music (p. 895)|Instrumental Conducting - Orchestra (p. 897)|Instrumental Conducting – Wind Band (p. 900)|Jazz Performance (p. 903)|Music Composition (p. 906)|Performance & Literature (p. 909)|Vocal Coaching & Accompanying (p. 911)
Music Education, MME (p. 885)
Music Education, PhD (p. 888)
Musicology, PhD (p. 941)
concentration:
Medieval Studies (p. 1101)

The School of Music has been an accredited member of the National Association of Schools of Music since 1933.

Admission

For all degree programs, consult the admission requirements stated on the School of Music's website: https://music.illinois.edu/prospective-students (https://music.illinois.edu/prospective-students/).

Requirements for admission to the **Master of Music (MM)** programs are a Bachelor of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution. Students holding other degrees may be admitted but will be expected to make up any deficiencies in addition to fulfilling all requirements for the graduate degree.

Applicants to choral music, instrumental conducting (wind band or orchestra), jazz performance, piano pedagogy, performance and literature, and vocal accompanying and coaching must pass a qualifying audition for their major area or submit satisfactory recordings. Applicants in musicology and composition must present writings or other evidence of their ability to pursue work at the graduate level. The Graduate Record Examination (GRE) is not required.

The School of Music requires all new MM students to complete entrance examinations in music theory and musicianship; all new MM students, except those in musicology, complete a musicology entrance exam as well. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/graduate-academic-affairs/) page for more information.

Prerequisite for admission to the **Artist Diploma** is a master's degree in music performance.

Applicants to the **MM and the Artist Diploma (AD)** whose native language is not English must present an iBT score of 79 for admission to the Artist Diploma (AD), 90 for the Master of Music (MM), excluding Musicology; MM in Musicology requires an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements, please see https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/). Fall admission only; other terms of entry by departmental petition approval only.

Requirements for admission to the **Master of Music in Education** (MME) are:

1. Undergraduate degree in music education from an accredited institution;
2. An overall grade average for the last 60 credit hours of undergraduate work of at least 3.0 (on a 4.0 scale). The grade average for Music Education and Education courses, when averaged separately, must also be at least 3.0 (on a 4.0 scale);
3. Recommendations from three individuals who can discuss the applicant's musicianship, ability to undertake graduate level study, and teaching ability/potential.
4. The Graduate Record Exam (GRE) is not required for application to the MME, nor do MME students take placement tests in music theory or music history.

For MME applicants with public school experience:

1. recommendation from a principal or supervisor who speaks primarily to the quality of the applicants teaching experience;
2. recommendation from an individual who speaks primarily to the quality of the applicants musicianship;
3. recommendation from an individual who speaks primarily to the applicants potential for completion of graduate level study;
4. applicants who wish to be considered for a Teaching Assistantship should ensure that at least one of their references provides specific comments on their potential to engage in university level teaching duties associated with such an appointment.

For MME applicants without public school experience:

1. recommendation from a music education professor;
2. recommendation from an applied or ensemble music professor;
3. recommendation from an individual who can speak to the applicants potential for completion of graduate study.

Applicants seeking admission to the MME + Licensure program, should review the requirements found online at https://music.illinois.edu/prospective-students (https://music.illinois.edu/prospective-students/).

Applicants to the **MME** whose native language is not English must present an iBT score of 96 for the Master of Music Education (MME). A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements, please see: https://music.illinois.edu/english-proficiency-requirement

The School of Music offers an academic year program and a Summers-only MME. For academic year applications, the School of Music offers Fall admission only; spring term of entry by departmental petition approval only.

Requirements for admission to the **Doctor of Musical Arts** and the **Doctor of Philosophy** in Musicology programs are the Master of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution.

Applicants to the **Doctor of Musical Arts** programs must have:

1. a high level of proficiency in composition, conducting, or performance - candidates in composition must submit original scores for review, and candidates in performance and literature must pass a qualifying audition or submit satisfactory recordings; and
2. appropriate experience in ensemble performance and/or score reading. Candidates in voice and vocal accompanying and coaching must have fulfilled all foreign language requirements considered prerequisites for the Master of Music degree, including 1 year of college-level study in Italian, French, and German.

The School of Music requires all new **DMA** students to complete entrance examinations in musicology, music theory, aural skills, and score reading. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/resources/) page for more information.

Applicants to the **DMA or PhD** whose native language is not English must submit an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements please see: https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/).

Fall admission only; other terms of entry by departmental petition approval only.

For information about admission to the MME and PhD in Music Education, please visit www.music.illinois.edu (https://music.illinois.edu/).

Language Requirements

For the Master of Music program, applicants in voice and vocal accompanying and coaching are required to have had at least one year each of college-level French, German, and Italian or the equivalent. Applicants in other applied music areas, composition, conducting, and musicology are required to have had one year of any language at the college level or the equivalent.

All Doctor of Musical Arts candidates will be required to demonstrate proficiency in at least one language other than English. Each area may specify which language is required or may require proficiency in more than one language. Please review the current Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/) for more details.

Proficiency is required in two languages, depending on the proposed field of specialization, for candidates in the Doctor of Philosophy in Musicology program. This may be demonstrated through two years of undergraduate study in each language.

For all Graduate Degrees:

For those students who do not meet the language requirement at the time of entrance, it may be satisfied by evidence of two years of undergraduate study or the equivalent, or by completion of a two-semester, 500-level reading course sequence at UIUC with a grade of at least B-, or by satisfactory test scores. For up-to-date information regarding language requirements of the School of Music, please see the Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/).

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience.

Financial Aid

Fellowships, teaching, graduate, and research assistantships are awarded on a one-year basis with continuation dependent upon success in the program. Specific information on application procedures is available from the Music Admissions Office, (217) 244-7899; musicadmissions@illinois.edu.

for the degree of Doctor of Musical Arts in Music, Vocal Coaching & Accompanying Concentration

For additional details and requirements refer to the department's Graduate Handbook https://music.illinois.edu/graduate-handbooks (https://music.illinois.edu/graduate-handbooks/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
MUS 577		12-16
Advanced Musicology, select 8 hours from the following (MUS 511, 512, 516, 519, 520, and 523 are particularly appropriate for students pursuing a cognate in Musicology):		8
MUS 418	Regional Studies in Musicology (must enroll for 4 credits)	
MUS 511	Fdns/Methods of Musicology I	
MUS 512	Fdns/Methods of Musicology II	
MUS 516	Fieldwork and Ethnography [1]	
MUS 517	Topics in Instrumental Music	
MUS 518	Regional Studies in Musicology	
MUS 519	Analytical Methods: Musicology	
MUS 520	Soc Theory in Ethnomusicology	
MUS 521	Hist Studies in 20thC Music	
MUS 522	Special Topics Seminar	
MUS 523	Seminar in Musicology	
MUS 524	Sem in Wrks of Select Composer	
Advanced Music Theory, select one from each of the following groups		6
MUS 408	Analysis of Musical Form (section A-C)	
or MUS 400	Counterpoint and Fugue	
MUS 408	Analysis of Musical Form (section D-E)	
Cognate field or minor area		8-16
Electives (min/max applied toward degree): [1]		6-10
Language Requirements:		
Courses taken to meet language requirements do not count toward the degree. See the departmental handbook for details.		
Thesis Hours or Doctoral Project Hours Required – MUS 576/MUS 599 (min/max applied toward degree):		16

Code	Title	Hours
Concentration-specific requirements as listed above		
MUS 528	Res & Bibliography in Music (sections A1-A3)	2

MUS 528	Res & Bibliography in Music (sections B1-B2)	2
Total Hours		**64**

Other Requirements

Requirement	Description
Other requirements may overlap	
Concentration	Yes
Minimum 500-level Hours Required Overall:	12
Masters Degree Required for Admission to DMA?	Yes
Qualifying Exam Required:	Yes
Preliminary Exam Required:	Yes
Minimum GPA:	3.0

Learning Outcomes: Vocal Coaching & Accompanying, DMA

Learning Outcomes for the degree of Doctor of Musical Arts in Music, Vocal Coaching & Accompanying Concentration

Students in the Doctor of Musical Arts program, with a concentration in Performance and Literature, or Vocal Coaching and Accompanying will:

1. Develop performance skills in their major area at the highest professional level, using creative and critical thinking to inform stylistic choices and artistic expression while demonstrating spontaneity and collaboration as appropriate, and will communicate their artistry to diverse audiences.
2. Develop a secondary area of expertise to demonstrate discipline-related breadth at an advanced level, and/or the acquisition of new professional skills.
3. Demonstrate an ability to summarize, synthesize, and critique disciplinary content (including pedagogical material) in relation to their major and secondary (cognate) areas of study.
4. Demonstrate effective analytical and interpretative skills in music theory and musicology, as well as an ability to communicate an advanced understanding and evaluation of musical knowledge and ideas in written and/or oral forms.
5. Pursue additional, specialized studies, to develop expertise and an ability to synthesize knowledge in areas of interest that enhance their required curriculum and/or professional goals.
6. Utilize and apply appropriate research methods to explore a focused research topic and to contribute original perspectives to discipline-related knowledge, communicating their research findings clearly and professionally in written, oral, and performative forms.
7. Additionally, many Illinois DMA students will develop experience and expertise in instruction, pedagogy, and student assessment in at least one area of musical study, gaining insights into studio and/or classroom teaching and appropriate methods of evaluation.

Music, MMUS

for the degree of Master of Music in Music

director of school: Dr. Jeffrey Sposato
associate director of graduate studies: Dr. Reynold Tharp
program contact: Jenny Phillips
overview of school of music admissions & requirements: https://music.illinois.edu/graduate-admissions (https://music.illinois.edu/graduate-admissions/)
admissions questions: musicadmissions@illinois.edu | **(217) 244-7899**
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)

department website: https://music.illinois.edu
department faculty: Music Faculty (https://music.illinois.edu/people/)
college website: https://faa.illinois.edu/
department office: School of Music, 2040 Music Building, 1114 West Nevada Street, Urbana, IL 61801
phone: (217) 333-3459

Students must choose a concentration:

Choral Music (p. 916)
Instrumental Conducting - Band (p. 918)
Instrumental Conducting - Orchestra (p. 921)
Jazz Performance (p. 923)
Music Composition (p. 926)
Music Theory (p. 928)
Musicology (p. 931)
Performance & Literature (p. 933)
Piano Pedagogy (p. 936)
Vocal Coaching & Accompanying (p. 938)

Graduate Degree Programs in Music

Artist Diploma in Music (p. 890)
Music, MMUS (p. 914)
concentrations:
Choral Music (p. 916)|Instrumental Conducting - Band (p. 918)|Instrumental Conducting - Orchestra (p. 921)|Jazz Performance (p. 923)|Music Composition (p. 926)|Music Theory (p. 928)|Musicology (p. 931)|Performance & Literature (p. 933)|Piano Pedagogy (p. 936)|Vocal Coaching & Accompanying (p. 938)
Music, DMA (p. 893)
concentrations:
Choral Music (p. 895)|Instrumental Conducting - Orchestra (p. 897)|Instrumental Conducting – Wind Band (p. 900)|Jazz Performance (p. 903)|Music Composition (p. 906)|Performance & Literature (p. 909)|Vocal Coaching & Accompanying (p. 911)
Music Education, MME (p. 885)
Music Education, PhD (p. 888)
Musicology, PhD (p. 941)
concentration:
Medieval Studies (p. 1101)

The School of Music has been an accredited member of the National Association of Schools of Music since 1933.

Admission

For all degree programs, consult the admission requirements stated on the School of Music's website: https://music.illinois.edu/prospective-students (https://music.illinois.edu/prospective-students/).

Requirements for admission to the **Master of Music (MM)** programs are a Bachelor of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution. Students holding other degrees may be admitted but will be expected to make up any deficiencies in addition to fulfilling all requirements for the graduate degree.

Applicants to choral music, instrumental conducting (wind band or orchestra), jazz performance, piano pedagogy, performance and literature, and vocal accompanying and coaching must pass a qualifying audition for their major area or submit satisfactory recordings. Applicants in musicology and composition must present writings or other evidence of their ability to pursue work at the graduate level. The Graduate Record Examination (GRE) is not required.

The School of Music requires all-new MM students to complete entrance examinations in music theory and musicianship. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/graduate-academic-affairs/) page for more information.

A prerequisite for admission to the **Artist Diploma** is a bachelor's degree in music performance.

Applicants to the **MM and the Artist Diploma (AD)** whose native language is not English must present an iBT score of 79 for admission to the Artist Diploma (AD), 90 for the Master of Music (MM), excluding Musicology; MM in Musicology requires an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements, please see https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/). Fall admission only; other terms of entry by departmental petition approval only.

Requirements for admission to the **Master of Music in Education** (MME) are:

1. Undergraduate degree in music education from an accredited institution;
2. An overall grade average for the last 60 credit hours of undergraduate work of at least 3.0 (on a 4.0 scale). The grade average for Music Education and Education courses, when averaged separately, must also be at least 3.0 (on a 4.0 scale);
3. Recommendations from three individuals who can discuss the applicant's musicianship, ability to undertake graduate level study, and teaching ability/potential.
4. The Graduate Record Exam (GRE) is not required for application to the MME, nor do MME students take placement tests in music theory or music history.

For MME applicants with public school experience:

1. recommendation from a principal or supervisor who speaks primarily to the quality of the applicants teaching experience;
2. recommendation from an individual who speaks primarily to the quality of the applicants musicianship;
3. recommendation from an individual who speaks primarily to the applicants potential for completion of graduate level study;
4. applicants who wish to be considered for a Teaching Assistantship should ensure that at least one of their references provides specific comments on their potential to engage in university level teaching duties associated with such an appointment.

For MME applicants without public school experience:

1. recommendation from a music education professor;
2. recommendation from an applied or ensemble music professor;
3. recommendation from an individual who can speak to the applicants potential for completion of graduate study.

Applicants seeking admission to the MME + Licensure program, should review the requirements found online at https://music.illinois.edu/prospective-students (https://music.illinois.edu/prospective-students/).

Applicants to the **MME** whose native language is not English must present an iBT score of 96 for the Master of Music Education (MME). A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements, please see: https://music.illinois.edu/english-proficiency-requirement

The School of Music offers an academic year program and a Summers-only MME. For academic year applications, the School of Music offers Fall admission only; spring term of entry by departmental petition approval only.

Requirements for admission to the **Doctor of Musical Arts** and the **Doctor of Philosophy** in Musicology programs are the Master of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution.

Applicants to the **Doctor of Musical Arts** programs must have:

1. a high level of proficiency in composition, conducting, or performance - candidates in composition must submit original scores for review, and candidates in performance and literature must pass a qualifying audition or submit satisfactory recordings; and
2. appropriate experience in ensemble performance and/or score reading. Candidates in voice and vocal accompanying and coaching must have fulfilled all foreign language requirements considered prerequisites for the Master of Music degree, including 1 year of college-level study in Italian, French, and German.

The School of Music requires all new **DMA** students to complete entrance examinations in musicology, music theory, musicianship, and score reading. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/resources/) page for more information.

Applicants to the **DMA or PhD** whose native language is not English must submit an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements please see: https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/).

For information about admission to the MME and PhD in Music Education, please visit www.music.illinois.edu (https://music.illinois.edu/).

Language Requirements

For the Master of Music program, applicants in voice and vocal accompanying and coaching are required to have had at least one year each of college-level French, German, and Italian or the equivalent. Applicants in other applied music areas, composition, conducting, and musicology are required to have had one year of any language at the college level or the equivalent.

All Doctor of Musical Arts candidates will be required to demonstrate proficiency in at least one language other than English. Each area may specify which language is required or may require proficiency in more than one language. Please review the current Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/) for more details.

Proficiency is required in two languages, depending on the proposed field of specialization, for candidates in the Doctor of Philosophy in Musicology program. This may be demonstrated through two years of undergraduate study in each language.

For all Graduate Degrees:

For those students who do not meet the language requirement at the time of entrance, it may be satisfied by evidence of two years of undergraduate study or the equivalent, or by completion of a two-semester, or by satisfactory test scores. For up-to-date information regarding the language requirements of the School of Music, please see the Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/).

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience.

Financial Aid

Fellowships, teaching, graduate, and research assistantships are awarded on a one-year basis with continuation dependent upon success in the program. Specific information on application procedures is available from the Music Admissions Office, (217) 244-7899; musicadmissions@illinois.edu.

Music: Choral Music, MMUS

for the degree of Master of Music in Music, Choral Music Concentration

director of school: Dr. Jeffrey Sposato
associate director of graduate studies: Dr. Reynold Tharp
program contact: Jenny Phillips
overview of school of music admissions & requirements: https://music.illinois.edu/graduate-admissions (https://music.illinois.edu/graduate-admissions/)
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overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://music.illinois.edu
department faculty: Music Faculty (https://music.illinois.edu/people/)
college website: https://faa.illinois.edu/
department office: School of Music, 2040 Music Building, 1114 West Nevada Street, Urbana, IL 61801
phone: (217) 333-3459

Graduate Degree Programs in Music

Artist Diploma in Music (p. 890)
Music, MMUS (p. 914)
concentrations:
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Music Education, MME (p. 885)
Music Education, PhD (p. 888)
Musicology, PhD (p. 941)
concentration:
Medieval Studies (p. 1101)

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Admission

For all degree programs, consult the admission requirements stated on the School of Music's website: https://music.illinois.edu/prospective-students (https://music.illinois.edu/prospective-students/).

Requirements for admission to the **Master of Music (MM)** programs are a Bachelor of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution. Students holding other degrees may be admitted but will be expected to make up any deficiencies in addition to fulfilling all requirements for the graduate degree.

Applicants to choral music, instrumental conducting (wind band or orchestra), jazz performance, piano pedagogy, performance and literature, and vocal accompanying and coaching must pass a qualifying audition for their major area or submit satisfactory recordings. Applicants in musicology and composition must present writings or other evidence of their ability to pursue work at the graduate level. The Graduate Record Examination (GRE) is not required.

The School of Music requires all new MM students to complete entrance examinations in music theory and musicianship; all new MM students, except those in musicology, complete a musicology entrance exam as well. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/graduate-academic-affairs/) page for more information.

Prerequisite for admission to the **Artist Diploma** is a master's degree in music performance.

Applicants to the **MM and the Artist Diploma (AD)** whose native language is not English must present an iBT score of 79 for admission to the Artist Diploma (AD), 90 for the Master of Music (MM), excluding Musicology; MM in Musicology requires an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements, please see https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/). Fall admission only; other terms of entry by departmental petition approval only.

Requirements for admission to the **Master of Music in Education** (MME) are:

1. Undergraduate degree in music education from an accredited institution;
2. An overall grade average for the last 60 credit hours of undergraduate work of at least 3.0 (on a 4.0 scale). The grade average for Music Education and Education courses, when averaged separately, must also be at least 3.0 (on a 4.0 scale);
3. Recommendations from three individuals who can discuss the applicant's musicianship, ability to undertake graduate level study, and teaching ability/potential.
4. The Graduate Record Exam (GRE) is not required for application to the MME, nor do MME students take placement tests in music theory or music history.

For MME applicants with public school experience:

1. recommendation from a principal or supervisor who speaks primarily to the quality of the applicants teaching experience;
2. recommendation from an individual who speaks primarily to the quality of the applicants musicianship;
3. recommendation from an individual who speaks primarily to the applicants potential for completion of graduate level study;
4. applicants who wish to be considered for a Teaching Assistantship should ensure that at least one of their references provides specific comments on their potential to engage in university level teaching duties associated with such an appointment.

For MME applicants without public school experience:

1. recommendation from a music education professor;
2. recommendation from an applied or ensemble music professor;
3. recommendation from an individual who can speak to the applicants potential for completion of graduate study.

Applicants seeking admission to the MME + Licensure program, should review the requirements found online at https://music.illinois.edu/prospective-students (https://music.illinois.edu/prospective-students/).

Applicants to the **MME** whose native language is not English must present an iBT score of 96 for the Master of Music Education (MME). A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements, please see: https://music.illinois.edu/english-proficiency-requirement

The School of Music offers an academic year program and a Summers-only MME. For academic year applications, the School of Music offers Fall admission only; spring term of entry by departmental petition approval only.

Requirements for admission to the **Doctor of Musical Arts** and the **Doctor of Philosophy** in Musicology programs are the Master of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution.

Applicants to the **Doctor of Musical Arts** programs must have:

1. a high level of proficiency in composition, conducting, or performance - candidates in composition must submit original scores for review, and candidates in performance and literature must pass a qualifying audition or submit satisfactory recordings; and
2. appropriate experience in ensemble performance and/or score reading. Candidates in voice and vocal accompanying and coaching must have fulfilled all foreign language requirements considered prerequisites for the Master of Music degree, including 1 year of college-level study in Italian, French, and German.

The School of Music requires all new **DMA** students to complete entrance examinations in musicology, music theory, aural skills, and score reading. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/resources/) page for more information.

Applicants to the **DMA or PhD** whose native language is not English must submit an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements please see: https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/).

Fall admission only; other terms of entry by departmental petition approval only.

For information about admission to the MME and PhD in Music Education, please visit www.music.illinois.edu (https://music.illinois.edu/).

Language Requirements

For the Master of Music program, applicants in voice and vocal accompanying and coaching are required to have had at least one year each of college-level French, German, and Italian or the equivalent. Applicants in other applied music areas, composition, conducting, and musicology are required to have had one year of any language at the college level or the equivalent.

All Doctor of Musical Arts candidates will be required to demonstrate proficiency in at least one language other than English. Each area may specify which language is required or may require proficiency in more than one language. Please review the current Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/) for more details.

Proficiency is required in two languages, depending on the proposed field of specialization, for candidates in the Doctor of Philosophy in Musicology program. This may be demonstrated through two years of undergraduate study in each language.

For all Graduate Degrees:

For those students who do not meet the language requirement at the time of entrance, it may be satisfied by evidence of two years of undergraduate study or the equivalent, or by completion of a two-

semester, 500-level reading course sequence at UIUC with a grade of at least B-, or by satisfactory test scores. For up-to-date information regarding language requirements of the School of Music, please see the Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/).

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience.

Financial Aid

Fellowships, teaching, graduate, and research assistantships are awarded on a one-year basis with continuation dependent upon success in the program. Specific information on application procedures is available from the Music Admissions Office, (217) 244-7899; musicadmissions@illinois.edu.

for the degree of Master of Music in Music, Choral Music Concentration

Code	Title	Hours
MUS 528	Res & Bibliography in Music	2
MUS 564	Choral Conducting Project	2
MUS 450	(section F)	4
Major Area Coursework		8
Electives selected in consultation with the student's advisor.		16
Master's Comprehensive Exam		
Graduate Recital		
Language Requirements:		
Courses taken to meet language requirements do not count toward the degree. See the departmental handbook for details.		

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Concentration required	Yes
Minimum 500-level hours required overall:	12
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the department's Graduate Handbook* https://music.illinois.edu/graduate-handbooks *(*https://music.illinois.edu/graduate-handbooks/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*)*

Learning Outcomes: Choral Music, MMUS

Learning Outcomes for the degree of Master of Music in Music, Choral Music Concentration

Students in the Master of Music (MM) program, with concentrations in Instrumental Conducting (Wind Band), Instrumental Conducting (Orchestra), and Choral Music will:

1. Develop conducting skills at a high professional level, using creative and critical thinking to inform stylistic choices and artistic expression while demonstrating appropriate spontaneity, and will communicate their artistry to diverse audiences; in addition, students will demonstrate effective, musical, and efficient rehearsal techniques.
2. Exhibit an ability to summarize, synthesize, and discuss disciplinary content in relation to their major area of study (including a thorough knowledge of core repertoire), and to communicate their findings, using appropriate academic conventions, in written, oral and/or performative form.
3. Demonstrate an understanding of appropriate methods for library-based musical research and scholarly writing, and a facility in handling print and technology sources.
4. Demonstrate effective analytical and interpretative skills in music theory, musicology, or performance practice, as well as an ability to communicate an advanced understanding of that knowledge and ideas in written and/or oral form.
5. Pursue specialized studies, to develop expertise and an ability to synthesize knowledge in areas of interest that enhance their required curriculum and/or professional goals.
6. In addition, some Illinois MM students will develop experience and expertise in instruction, pedagogy, and student assessment in one or more areas of musical study, also gaining insights into rehearsal strategies for large ensemble, and appropriate methods of student evaluation.

Music: Instrumental Conducting Band, MMUS

for the degree of Master of Music in Music, Instrumental Conducting Band Concentration

director of school: Dr. Jeffrey Sposato
associate director of graduate studies: Dr. Reynold Tharp
program contact: Jenny Phillips
overview of school of music admissions & requirements: https://music.illinois.edu/graduate-admissions (https://music.illinois.edu/graduate-admissions/)
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department website: https://music.illinois.edu
department faculty: Music Faculty (https://music.illinois.edu/people/)
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Graduate Degree Programs in Music

Artist Diploma in Music (p. 890)
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Music Education, MME (p. 885)
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concentration:
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Admission

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Requirements for admission to the **Master of Music (MM)** programs are a Bachelor of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution. Students holding other degrees may be admitted but will be expected to make up any deficiencies in addition to fulfilling all requirements for the graduate degree.

Applicants to choral music, instrumental conducting (wind band or orchestra), jazz performance, piano pedagogy, performance and literature, and vocal accompanying and coaching must pass a qualifying audition for their major area or submit satisfactory recordings. Applicants in musicology and composition must present writings or other evidence of their ability to pursue work at the graduate level. The Graduate Record Examination (GRE) is not required.

The School of Music requires all new MM students to complete entrance examinations in music theory and musicianship; all new MM students, except those in musicology, complete a musicology entrance exam as well. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/graduate-academic-affairs/) page for more information.

Prerequisite for admission to the **Artist Diploma** is a master's degree in music performance.

Applicants to the **MM and the Artist Diploma (AD)** whose native language is not English must present an iBT score of 79 for admission to the Artist Diploma (AD), 90 for the Master of Music (MM), excluding Musicology; MM in Musicology requires an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements, please see https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/). Fall admission only; other terms of entry by departmental petition approval only.

Requirements for admission to the **Master of Music in Education** (MME) are:

1. Undergraduate degree in music education from an accredited institution;
2. An overall grade average for the last 60 credit hours of undergraduate work of at least 3.0 (on a 4.0 scale). The grade average for Music Education and Education courses, when averaged separately, must also be at least 3.0 (on a 4.0 scale);
3. Recommendations from three individuals who can discuss the applicant's musicianship, ability to undertake graduate level study, and teaching ability/potential.
4. The Graduate Record Exam (GRE) is not required for application to the MME, nor do MME students take placement tests in music theory or music history.

For MME applicants with public school experience:

1. recommendation from a principal or supervisor who speaks primarily to the quality of the applicants teaching experience;
2. recommendation from an individual who speaks primarily to the quality of the applicants musicianship;
3. recommendation from an individual who speaks primarily to the applicants potential for completion of graduate level study;
4. applicants who wish to be considered for a Teaching Assistantship should ensure that at least one of their references provides specific comments on their potential to engage in university level teaching duties associated with such an appointment.

For MME applicants without public school experience:

1. recommendation from a music education professor;
2. recommendation from an applied or ensemble music professor;
3. recommendation from an individual who can speak to the applicants potential for completion of graduate study.

Applicants seeking admission to the MME + Licensure program, should review the requirements found online at https://music.illinois.edu/prospective-students (https://music.illinois.edu/prospective-students/).

Applicants to the **MME** whose native language is not English must present an iBT score of 96 for the Master of Music Education (MME). A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements, please see: https://music.illinois.edu/english-proficiency-requirement

The School of Music offers an academic year program and a Summers-only MME. For academic year applications, the School of Music offers Fall admission only; spring term of entry by departmental petition approval only.

Requirements for admission to the **Doctor of Musical Arts** and the **Doctor of Philosophy** in Musicology programs are the Master of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution.

Applicants to the **Doctor of Musical Arts** programs must have:

1. a high level of proficiency in composition, conducting, or performance - candidates in composition must submit original scores for review, and candidates in performance and literature must pass a qualifying audition or submit satisfactory recordings; and
2. appropriate experience in ensemble performance and/or score reading. Candidates in voice and vocal accompanying and coaching must have fulfilled all foreign language requirements considered prerequisites for the Master of Music degree, including 1 year of college-level study in Italian, French, and German.

The School of Music requires all new **DMA** students to complete entrance examinations in musicology, music theory, aural skills, and score reading. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/resources/) page for more information.

Applicants to the **DMA or PhD** whose native language is not English must submit an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements please see: https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/).

Fall admission only; other terms of entry by departmental petition approval only.

For information about admission to the MME and PhD in Music Education, please visit www.music.illinois.edu (https://music.illinois.edu/).

Language Requirements

For the Master of Music program, applicants in voice and vocal accompanying and coaching are required to have had at least one year each of college-level French, German, and Italian or the equivalent. Applicants in other applied music areas, composition, conducting, and musicology are required to have had one year of any language at the college level or the equivalent.

All Doctor of Musical Arts candidates will be required to demonstrate proficiency in at least one language other than English. Each area may specify which language is required or may require proficiency in more than one language. Please review the current Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/) for more details.

Proficiency is required in two languages, depending on the proposed field of specialization, for candidates in the Doctor of Philosophy in Musicology program. This may be demonstrated through two years of undergraduate study in each language.

For all Graduate Degrees:

For those students who do not meet the language requirement at the time of entrance, it may be satisfied by evidence of two years of undergraduate study or the equivalent, or by completion of a two-semester, 500-level reading course sequence at UIUC with a grade of at least B-, or by satisfactory test scores. For up-to-date information regarding language requirements of the School of Music, please see the Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/).

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience.

Financial Aid

Fellowships, teaching, graduate, and research assistantships are awarded on a one-year basis with continuation dependent upon success in the program. Specific information on application procedures is available from the Music Admissions Office, (217) 244-7899; musicadmissions@illinois.edu.

for the degree of Master of Music in Music, Instrumental Conducting Band Concentration

For additional details and requirements refer to the department's Graduate Handbook https://music.illinois.edu/graduate-handbooks (https://music.illinois.edu/graduate-handbooks/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
MUS 528	Res & Bibliography in Music (sections A1-A3)	2
MUS 540	Graduate Wind Band Conducting	12
MUS 509	Graduate Seminar in Band Conducting, History, and Literature	8
Advanced Music History, Music Theory, or Performance Practice, choose from the following:		3-4
MUS 400	Counterpoint and Fugue	
MUS 408	Analysis of Musical Form (sections A-E)	
MUS 418	Regional Studies in Musicology	
MUS 507	Sem in Music Comp and Theory	
MUS 511	Fdns/Methods of Musicology I	
MUS 512	Fdns/Methods of Musicology II	
MUS 516	Fieldwork and Ethnography	
MUS 517	Topics in Instrumental Music	
MUS 518	Regional Studies in Musicology	
MUS 519	Analytical Methods: Musicology	
MUS 520	Soc Theory in Ethnomusicology	
MUS 521	Hist Studies in 20thC Music	
MUS 522	Special Topics Seminar	
MUS 523	Seminar in Musicology	
MUS 524	Sem in Wrks of Select Composer	
MUS 526	Baroque Performance Practice	
MUS 527	Classical Performance Practice	
Electives to be selected in consultation with the student's advisor.		6-7
Master's Comprehensive Examination		

Code	Title	Hours
Concentration requirements as listed in table above.		
Total Hours		**32**

Other Requirements

Requirement	Description
Other requirements may overlap	
Concentration required	Yes

Minimum 500-level hours required overall:	12
Minimum GPA:	3.0

Learning Outcomes: Instrumental Conducting Wind Band, MMUS

Learning Outcomes for the degree of Master of Music in Music, Instrumental Conducting Band Concentration

Students in the Master of Music (MM) program, with concentrations in Instrumental Conducting (Wind Band), Instrumental Conducting (Orchestra), and Choral Music will:

1. Develop conducting skills at a high professional level, using creative and critical thinking to inform stylistic choices and artistic expression while demonstrating appropriate spontaneity, and will communicate their artistry to diverse audiences; in addition, students will demonstrate effective, musical, and efficient rehearsal techniques.
2. Exhibit an ability to summarize, synthesize, and discuss disciplinary content in relation to their major area of study (including a thorough knowledge of core repertoire), and to communicate their findings, using appropriate academic conventions, in written, oral and/or performative form.
3. Demonstrate an understanding of appropriate methods for library-based musical research and scholarly writing, and a facility in handling print and technology sources.
4. Demonstrate effective analytical and interpretative skills in music theory, musicology, or performance practice, as well as an ability to communicate an advanced understanding of that knowledge and ideas in written and/or oral form.
5. Pursue specialized studies, to develop expertise and an ability to synthesize knowledge in areas of interest that enhance their required curriculum and/or professional goals.
6. In addition, some Illinois MM students will develop experience and expertise in instruction, pedagogy, and student assessment in one or more areas of musical study, also gaining insights into rehearsal strategies for large ensemble, and appropriate methods of student evaluation.

Music: Instrumental Conducting Orchestra, MMUS

for the degree of Master of Music in Music, Instrumental Conducting Orchestra Concentration

director of school: Dr. Jeffrey Sposato
associate director of graduate studies: Dr. Reynold Tharp
program contact: Jenny Phillips
overview of school of music admissions & requirements: https://music.illinois.edu/graduate-admissions (https://music.illinois.edu/graduate-admissions/)
admissions questions: musicadmissions@illinois.edu | **(217) 244-7899**
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://music.illinois.edu
department faculty: Music Faculty (https://music.illinois.edu/people/)
college website: https://faa.illinois.edu/
department office: School of Music, 2040 Music Building, 1114 West Nevada Street, Urbana, IL 61801
phone: (217) 333-3459

Graduate Degree Programs in Music

Artist Diploma in Music (p. 890)
Music, MMUS (p. 914)
concentrations:
Choral Music (p. 916)|Instrumental Conducting - Band (p. 918)|Instrumental Conducting - Orchestra (p. 921)|Jazz Performance (p. 923)|Music Composition (p. 926)|Music Theory (p. 928)|Musicology (p. 931)|Performance & Literature (p. 933)|Piano Pedagogy (p. 936)|Vocal Coaching & Accompanying (p. 938)
Music, DMA (p. 893)
concentrations:
Choral Music (p. 895)|Instrumental Conducting - Orchestra (p. 897)|Instrumental Conducting – Wind Band (p. 900)|Jazz Performance (p. 903)|Music Composition (p. 906)|Performance & Literature (p. 909)|Vocal Coaching & Accompanying (p. 911)
Music Education, MME (p. 885)
Music Education, PhD (p. 888)
Musicology, PhD (p. 941)
concentration:
Medieval Studies (p. 1101)

The School of Music has been an accredited member of the National Association of Schools of Music since 1933.

Admission

For all degree programs, consult the admission requirements stated on the School of Music's website: https://music.illinois.edu/prospective-students (https://music.illinois.edu/prospective-students/).

Requirements for admission to the **Master of Music (MM)** programs are a Bachelor of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution. Students holding other degrees may be admitted but will be expected to make up any deficiencies in addition to fulfilling all requirements for the graduate degree.

Applicants to choral music, instrumental conducting (wind band or orchestra), jazz performance, piano pedagogy, performance and literature, and vocal accompanying and coaching must pass a qualifying audition for their major area or submit satisfactory recordings. Applicants in musicology and composition must present writings or other evidence of their ability to pursue work at the graduate level. The Graduate Record Examination (GRE) is not required.

The School of Music requires all new MM students to complete entrance examinations in music theory and musicianship; all new MM students, except those in musicology, complete a musicology entrance exam as well. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/graduate-academic-affairs/) page for more information.

Prerequisite for admission to the **Artist Diploma** is a master's degree in music performance.

Applicants to the **MM and the Artist Diploma (AD)** whose native language is not English must present an iBT score of 79 for admission to the Artist Diploma (AD), 90 for the Master of Music (MM), excluding Musicology; MM in Musicology requires an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements, please see https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/). Fall admission only; other terms of entry by departmental petition approval only.

Requirements for admission to the **Master of Music in Education** (MME) are:

1. Undergraduate degree in music education from an accredited institution;
2. An overall grade average for the last 60 credit hours of undergraduate work of at least 3.0 (on a 4.0 scale). The grade average for Music Education and Education courses, when averaged separately, must also be at least 3.0 (on a 4.0 scale);
3. Recommendations from three individuals who can discuss the applicant's musicianship, ability to undertake graduate level study, and teaching ability/potential.
4. The Graduate Record Exam (GRE) is not required for application to the MME, nor do MME students take placement tests in music theory or music history.

For MME applicants with public school experience:

1. recommendation from a principal or supervisor who speaks primarily to the quality of the applicants teaching experience;
2. recommendation from an individual who speaks primarily to the quality of the applicants musicianship;
3. recommendation from an individual who speaks primarily to the applicants potential for completion of graduate level study;
4. applicants who wish to be considered for a Teaching Assistantship should ensure that at least one of their references provides specific comments on their potential to engage in university level teaching duties associated with such an appointment.

For MME applicants without public school experience:

1. recommendation from a music education professor;
2. recommendation from an applied or ensemble music professor;
3. recommendation from an individual who can speak to the applicants potential for completion of graduate study.

Applicants seeking admission to the MME + Licensure program, should review the requirements found online at https://music.illinois.edu/prospective-students (https://music.illinois.edu/prospective-students/).

Applicants to the **MME** whose native language is not English must present an iBT score of 96 for the Master of Music Education (MME). A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements, please see: https://music.illinois.edu/english-proficiency-requirement

The School of Music offers an academic year program and a Summers-only MME. For academic year applications, the School of Music offers Fall admission only; spring term of entry by departmental petition approval only.

Requirements for admission to the **Doctor of Musical Arts** and the **Doctor of Philosophy** in Musicology programs are the Master of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution.

Applicants to the **Doctor of Musical Arts** programs must have:

1. a high level of proficiency in composition, conducting, or performance - candidates in composition must submit original scores for review, and candidates in performance and literature must pass a qualifying audition or submit satisfactory recordings; and
2. appropriate experience in ensemble performance and/or score reading. Candidates in voice and vocal accompanying and coaching must have fulfilled all foreign language requirements considered prerequisites for the Master of Music degree, including 1 year of college-level study in Italian, French, and German.

The School of Music requires all new **DMA** students to complete entrance examinations in musicology, music theory, aural skills, and score reading. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/resources/) page for more information.

Applicants to the **DMA or PhD** whose native language is not English must submit an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements please see: https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/).

Fall admission only; other terms of entry by departmental petition approval only.

For information about admission to the MME and PhD in Music Education, please visit www.music.illinois.edu (https://music.illinois.edu/).

Language Requirements

For the Master of Music program, applicants in voice and vocal accompanying and coaching are required to have had at least one year each of college-level French, German, and Italian or the equivalent. Applicants in other applied music areas, composition, conducting, and musicology are required to have had one year of any language at the college level or the equivalent.

All Doctor of Musical Arts candidates will be required to demonstrate proficiency in at least one language other than English. Each area may specify which language is required or may require proficiency in more than one language. Please review the current Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/) for more details.

Proficiency is required in two languages, depending on the proposed field of specialization, for candidates in the Doctor of Philosophy in Musicology program. This may be demonstrated through two years of undergraduate study in each language.

For all Graduate Degrees:

For those students who do not meet the language requirement at the time of entrance, it may be satisfied by evidence of two years of undergraduate study or the equivalent, or by completion of a two-

semester, 500-level reading course sequence at UIUC with a grade of at least B-, or by satisfactory test scores. For up-to-date information regarding language requirements of the School of Music, please see the Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/).

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience.

Financial Aid

Fellowships, teaching, graduate, and research assistantships are awarded on a one-year basis with continuation dependent upon success in the program. Specific information on application procedures is available from the Music Admissions Office, (217) 244-7899; musicadmissions@illinois.edu.

for the degree of Master of Music in Music, Instrumental Conducting Orchestra Concentration

For additional details and requirements refer to the department's Graduate Handbook https://music.illinois.edu/graduate-handbooks (https://music.illinois.edu/graduate-handbooks/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
MUS 528	Res & Bibliography in Music (select from sections A1-A3)	2
MUS 553	Graduate Orchestral Conducting	12
MUS 546 & MUS 547	Orchestral Literature I and Orchestral Literature II	8
Advanced Music History, Music Theory, or Performance Practice, choose from the following:		4
MUS 400	Counterpoint and Fugue	
MUS 408	Analysis of Musical Form (sections A - E)	
MUS 418	Regional Studies in Musicology	
MUS 507	Sem in Music Comp and Theory	
MUS 511	Fdns/Methods of Musicology I	
MUS 512	Fdns/Methods of Musicology II	
MUS 516	Fieldwork and Ethnography	
MUS 517	Topics in Instrumental Music	
MUS 518	Regional Studies in Musicology	
MUS 519	Analytical Methods: Musicology	
MUS 520	Soc Theory in Ethnomusicology	
MUS 521	Hist Studies in 20thC Music	
MUS 522	Special Topics Seminar	
MUS 523	Seminar in Musicology	
MUS 524	Sem in Wrks of Select Composer	
MUS 526	Baroque Performance Practice	
MUS 527	Classical Performance Practice	
Electives selected in consultation with the student's advisor.		6
Master's Comprehensive examination		
Concentration requirements as listed in table above.		
Total Hours		**32**

Other Requirements

Requirement	Description
Other requirements may overlap	
Concentration required	Yes
Minimum 500-level hours required overall:	12
Minimum GPA:	3.0

Learning Outcomes: Instrumental Conducting Orchestra, MMUS

Learning Outcomes for the degree of Master of Music in Music, Instrumental Conducting Orchestra Concentration

Students in the Master of Music (MM) program, with concentrations in Instrumental Conducting (Wind Band), Instrumental Conducting (Orchestra), and Choral Music will:

1. Develop conducting skills at a high professional level, using creative and critical thinking to inform stylistic choices and artistic expression while demonstrating appropriate spontaneity, and will communicate their artistry to diverse audiences; in addition, students will demonstrate effective, musical, and efficient rehearsal techniques.
2. Exhibit an ability to summarize, synthesize, and discuss disciplinary content in relation to their major area of study (including a thorough knowledge of core repertoire), and to communicate their findings, using appropriate academic conventions, in written, oral and/or performative form.
3. Demonstrate an understanding of appropriate methods for library-based musical research and scholarly writing, and a facility in handling print and technology sources.
4. Demonstrate effective analytical and interpretative skills in music theory, musicology, or performance practice, as well as an ability to communicate an advanced understanding of that knowledge and ideas in written and/or oral form.
5. Pursue specialized studies, to develop expertise and an ability to synthesize knowledge in areas of interest that enhance their required curriculum and/or professional goals.
6. In addition, some Illinois MM students will develop experience and expertise in instruction, pedagogy, and student assessment in one or more areas of musical study, also gaining insights into rehearsal strategies for large ensemble, and appropriate methods of student evaluation.

Music: Jazz Performance, MMUS

for the degree of Master of Music in Music, Jazz Performance Concentration

director of school: Dr. Jeffrey Sposato
associate director of graduate studies: Dr. Reynold Tharp
program contact: Jenny Phillips
overview of school of music admissions & requirements: http://music.illinois.edu/prospective-students (http://music.illinois.edu/prospective-students/)
admissions questions: musicadmissions@illinois.edu | **(217) 244-7899**
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)

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department website: https://music.illinois.edu
department faculty: Music Faculty (https://music.illinois.edu/people/)
college website: https://faa.illinois.edu/
department office: School of Music, 2040 Music Building, 1114 West Nevada Street, Urbana, IL 61801
phone: (217) 333-3459

Graduate Degree Programs in Music

Artist Diploma in Music (p. 890)
Music, MMUS (p. 914)
concentrations:
Choral Music (p. 916)|Instrumental Conducting - Band (p. 918)|Instrumental Conducting - Orchestra (p. 921)|Jazz Performance (p. 923)|Music Composition (p. 926)|Music Theory (p. 928)|Musicology (p. 931)|Performance & Literature (p. 933)|Piano Pedagogy (p. 936)|Vocal Coaching & Accompanying (p. 938)
Music, DMA (p. 893)
concentrations:
Choral Music (p. 895)|Instrumental Conducting - Orchestra (p. 897)|Instrumental Conducting – Wind Band (p. 900)|Jazz Performance (p. 903)|Music Composition (p. 906)|Performance & Literature (p. 909)|Vocal Coaching & Accompanying (p. 911)
Music Education, MME (p. 885)
Music Education, PhD (p. 888)
Musicology, PhD (p. 941)
concentration:
Medieval Studies (p. 1101)

The School of Music has been an accredited member of the National Association of Schools of Music since 1933.

Admission

For all degree programs, consult the admission requirements stated on the School of Music's website: https://music.illinois.edu/prospective-students (https://music.illinois.edu/prospective-students/).

Requirements for admission to the **Master of Music (MM)** programs are a Bachelor of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution. Students holding other degrees may be admitted but will be expected to make up any deficiencies in addition to fulfilling all requirements for the graduate degree.

Applicants to choral music, instrumental conducting (wind band or orchestra), jazz performance, piano pedagogy, performance and literature, and vocal accompanying and coaching must pass a qualifying audition for their major area or submit satisfactory recordings. Applicants in musicology and composition must present writings or other evidence of their ability to pursue work at the graduate level. The Graduate Record Examination (GRE) is not required.

The School of Music requires all new MM students to complete entrance examinations in music theory and musicianship; all new MM students, except those in musicology, complete a musicology entrance exam as well. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/graduate-academic-affairs/) page for more information.

Prerequisite for admission to the **Artist Diploma** is a master's degree in music performance.

Applicants to the **MM and the Artist Diploma (AD)** whose native language is not English must present an iBT score of 79 for admission to the Artist Diploma (AD), 90 for the Master of Music (MM), excluding Musicology; MM in Musicology requires an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements, please see https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/). Fall admission only; other terms of entry by departmental petition approval only.

Requirements for admission to the **Master of Music in Education** (MME) are:

1. Undergraduate degree in music education from an accredited institution;
2. An overall grade average for the last 60 credit hours of undergraduate work of at least 3.0 (on a 4.0 scale). The grade average for Music Education and Education courses, when averaged separately, must also be at least 3.0 (on a 4.0 scale);
3. Recommendations from three individuals who can discuss the applicant's musicianship, ability to undertake graduate level study, and teaching ability/potential.
4. The Graduate Record Exam (GRE) is not required for application to the MME, nor do MME students take placement tests in music theory or music history.

For MME applicants with public school experience:

1. recommendation from a principal or supervisor who speaks primarily to the quality of the applicants teaching experience;
2. recommendation from an individual who speaks primarily to the quality of the applicants musicianship;
3. recommendation from an individual who speaks primarily to the applicants potential for completion of graduate level study;
4. applicants who wish to be considered for a Teaching Assistantship should ensure that at least one of their references provides specific comments on their potential to engage in university level teaching duties associated with such an appointment.

For MME applicants without public school experience:

1. recommendation from a music education professor;
2. recommendation from an applied or ensemble music professor;
3. recommendation from an individual who can speak to the applicants potential for completion of graduate study.

Applicants seeking admission to the MME + Licensure program, should review the requirements found online at https://music.illinois.edu/prospective-students (https://music.illinois.edu/prospective-students/).

Applicants to the **MME** whose native language is not English must present an iBT score of 96 for the Master of Music Education (MME). A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements, please see: https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/)

The School of Music offers an academic year program and a Summers-only MME. For academic year applications, the School of Music offers Fall admission only; spring term of entry by departmental petition approval only.

Requirements for admission to the **Doctor of Musical Arts** and the **Doctor of Philosophy** in Musicology programs are the Master of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution.

Applicants to the **Doctor of Musical Arts** programs must have:

1. a high level of proficiency in composition, conducting, or performance - candidates in composition must submit original scores for review, and candidates in performance and literature must pass a qualifying audition or submit satisfactory recordings; and
2. appropriate experience in ensemble performance and/or score reading. Candidates in voice and vocal accompanying and coaching must have fulfilled all foreign language requirements considered prerequisites for the Master of Music degree, including 1 year of college-level study in Italian, French, and German.

The School of Music requires all new **DMA** students to complete entrance examinations in musicology, music theory, aural skills, and score reading. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/resources/) page for more information.

Applicants to the **DMA or PhD** whose native language is not English must submit an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements please see: https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/).

Fall admission only; other terms of entry by departmental petition approval only.

For information about admission to the MME and PhD in Music Education, please visit www.music.illinois.edu (https://music.illinois.edu/).

Language Requirements

For the Master of Music program, applicants in voice and vocal accompanying and coaching are required to have had at least one year each of college-level French, German, and Italian or the equivalent. Applicants in other applied music areas, composition, conducting, and musicology are required to have had one year of any language at the college level or the equivalent.

All Doctor of Musical Arts candidates will be required to demonstrate proficiency in at least one language other than English. Each area may specify which language is required or may require proficiency in more than one language. Please review the current Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/) for more details.

Proficiency is required in two languages, depending on the proposed field of specialization, for candidates in the Doctor of Philosophy in Musicology program. This may be demonstrated through two years of undergraduate study in each language.

For all Graduate Degrees:

For those students who do not meet the language requirement at the time of entrance, it may be satisfied by evidence of two years of undergraduate study or the equivalent, or by completion of a two-semester, 500-level reading course sequence at UIUC with a grade of at least B-, or by satisfactory test scores. For up-to-date information regarding language requirements of the School of Music, please see the Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/).

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience.

Financial Aid

Fellowships, teaching, graduate, and research assistantships are awarded on a one-year basis with continuation dependent upon success in the program. Specific information on application procedures is available from the Music Admissions Office, (217) 244-7899; musicadmissions@illinois.edu.

for the degree of Master of Music in Music, Jazz Performance Concentration

For additional details and requirements refer to the department's Graduate Handbook https://music.illinois.edu/graduate-handbooks (https://music.illinois.edu/graduate-handbooks/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
MUS 528	Res & Bibliography in Music (select from sections A1-A3)	2
500-level Applied Music Major		8-12
MUS 566		
Music literature course in major applied area to be selected in consultation with the student's advisor.		8
MUS 435	Jazz Aural Skills I	
MUS 436	Jazz Aural Skills II	
MUS 499	Proseminar in Music (section JC1 or JC2)	
MUS 504	Grad. Jazz Improv. I	
MUS 508	Grad. Jazz Improv. II	
MUS 548	Advanced Jazz Harmony I	
MUS 549	Advanced Jazz Harmony II	
Electives, including ensembles, may be selected from additional jazz courses, musicology, music theory, and non-music major courses. To be chosen in consultation with the student's advisor.		6
Advanced jazz courses to be selected from the list below in consultation with the student's advisor.		4-8

MUS 435	Jazz Aural Skills I
MUS 436	Jazz Aural Skills II
MUS 450	
MUS 462	Jazz Listening Seminar I
MUS 463	Jazz Listening Seminar II
MUS 464	Jazz History I
MUS 465	Jazz History II
MUS 504	Grad. Jazz Improv. I
MUS 499	Proseminar in Music (sections JC1, JC2, JK1 or JK2)
MUS 508	Grad. Jazz Improv. II
MUS 548	Advanced Jazz Harmony I
MUS 549	Advanced Jazz Harmony II
MUS 574	Jazz Arranging III
MUS 575	Jazz Arranging IV
Master's Comprehensive Examination	

Code	Title	Hours
Concentration requirements as listed in table above.		
Total Hours		**32**

Other Requirements

Requirement	Description
Other requirements may overlap	
Concentration required	Yes
Minimum 500-level hours required overall:	12
Minimum GPA:	3.0

Learning Outcomes: Jazz Performance, MMUS

Learning Outcomes for the degree of Master of Music in Music, Jazz Performance Concentration

Students in the Master of Music program, with a concentration in Jazz Performance will:

1. Develop performance skills at a high professional level, using creative and critical thinking to inform stylistic choices and artistic expression while demonstrating spontaneity and collaboration as appropriate, and will communicate their artistry to diverse audiences.
2. Exhibit an ability to summarize, synthesize, and discuss disciplinary content in relation to their major area of study, and to communicate their findings, using appropriate academic conventions, in written, oral, notational, or performative form.
3. Demonstrate an understanding of appropriate methods for library-based musical research and scholarly writing, and a facility in handling print and technology sources.
4. Pursue specialized studies, to develop expertise and an ability to synthesize knowledge in areas of interest that enhance their required curriculum and/or professional goals.
5. In addition, some Illinois MM students will develop experience and expertise in instruction, pedagogy, and student assessment in one or more areas of musical study, gaining insights into studio and/or classroom teaching and appropriate methods of evaluation.

Music: Music Composition, MMUS

for the degree of Master of Music in Music, Music Composition Concentration

director of school: Dr. Jeffrey Sposato
associate director of graduate studies: Dr. Reynold Tharp
program contact: Jenny Phillips
overview of school of music admissions & requirements: http://music.illinois.edu/prospective-students (http://music.illinois.edu/prospective-students/)
admissions questions: musicadmissions@illinois.edu | **(217) 244-7899**
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)

department website: https://music.illinois.edu
department faculty: Music Faculty (https://music.illinois.edu/people/)
college website: https://faa.illinois.edu/
department office: School of Music, 2040 Music Building, 1114 West Nevada Street, Urbana, IL 61801
phone: (217) 333-3459

Graduate Degree Programs in Music

Artist Diploma in Music (p. 890)
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Music, DMA (p. 893)
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The School of Music has been an accredited member of the National Association of Schools of Music since 1933.

Admission

For all degree programs, consult the admission requirements stated on the School of Music's website: https://music.illinois.edu/prospective-students (https://music.illinois.edu/prospective-students/).

Requirements for admission to the **Master of Music (MM)** programs are a Bachelor of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution. Students holding other degrees may be admitted but will be expected to make up any deficiencies in addition to fulfilling all requirements for the graduate degree.

Applicants to choral music, instrumental conducting (wind band or orchestra), jazz performance, piano pedagogy, performance and literature, and vocal accompanying and coaching must pass a qualifying audition for their major area or submit satisfactory recordings. Applicants in musicology and composition must present writings or other evidence of their ability to pursue work at the graduate level. The Graduate Record Examination (GRE) is not required.

The School of Music requires all new MM students to complete entrance examinations in music theory and musicianship; all new MM students, except those in musicology, complete a musicology entrance exam as well. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/graduate-academic-affairs/) page for more information.

Prerequisite for admission to the **Artist Diploma** is a master's degree in music performance.

Applicants to the **MM and the Artist Diploma (AD)** whose native language is not English must present an iBT score of 79 for admission to the Artist Diploma (AD), 90 for the Master of Music (MM), excluding Musicology; MM in Musicology requires an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements, please see https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/). Fall admission only; other terms of entry by departmental petition approval only.

Requirements for admission to the **Master of Music in Education** (MME) are:

1. Undergraduate degree in music education from an accredited institution;
2. An overall grade average for the last 60 credit hours of undergraduate work of at least 3.0 (on a 4.0 scale). The grade average for Music Education and Education courses, when averaged separately, must also be at least 3.0 (on a 4.0 scale);
3. Recommendations from three individuals who can discuss the applicant's musicianship, ability to undertake graduate level study, and teaching ability/potential.
4. The Graduate Record Exam (GRE) is not required for application to the MME, nor do MME students take placement tests in music theory or music history.

For MME applicants with public school experience:

1. recommendation from a principal or supervisor who speaks primarily to the quality of the applicants teaching experience;
2. recommendation from an individual who speaks primarily to the quality of the applicants musicianship;
3. recommendation from an individual who speaks primarily to the applicants potential for completion of graduate level study;
4. applicants who wish to be considered for a Teaching Assistantship should ensure that at least one of their references provides specific comments on their potential to engage in university level teaching duties associated with such an appointment.

For MME applicants without public school experience:

1. recommendation from a music education professor;
2. recommendation from an applied or ensemble music professor;
3. recommendation from an individual who can speak to the applicants potential for completion of graduate study.

Applicants seeking admission to the MME + Licensure program, should review the requirements found online at https://music.illinois.edu/prospective-students (https://music.illinois.edu/prospective-students/).

Applicants to the **MME** whose native language is not English must present an iBT score of 96 for the Master of Music Education (MME). A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements, please see: https://music.illinois.edu/english-proficiency-requirement

The School of Music offers an academic year program and a Summers-only MME. For academic year applications, the School of Music offers Fall admission only; spring term of entry by departmental petition approval only.

Requirements for admission to the **Doctor of Musical Arts** and the **Doctor of Philosophy** in Musicology programs are the Master of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution.

Applicants to the **Doctor of Musical Arts** programs must have:

1. a high level of proficiency in composition, conducting, or performance - candidates in composition must submit original scores for review, and candidates in performance and literature must pass a qualifying audition or submit satisfactory recordings; and
2. appropriate experience in ensemble performance and/or score reading. Candidates in voice and vocal accompanying and coaching must have fulfilled all foreign language requirements considered prerequisites for the Master of Music degree, including 1 year of college-level study in Italian, French, and German.

The School of Music requires all new **DMA** students to complete entrance examinations in musicology, music theory, aural skills, and score reading. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/resources/) page for more information.

Applicants to the **DMA or PhD** whose native language is not English must submit an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements please see: https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/).

Fall admission only; other terms of entry by departmental petition approval only.

For information about admission to the MME and PhD in Music Education, please visit www.music.illinois.edu (https://music.illinois.edu/).

Language Requirements

For the Master of Music program, applicants in voice and vocal accompanying and coaching are required to have had at least one year each of college-level French, German, and Italian or the equivalent. Applicants in other applied music areas, composition, conducting, and musicology are required to have had one year of any language at the college level or the equivalent.

All Doctor of Musical Arts candidates will be required to demonstrate proficiency in at least one language other than English. Each area may specify which language is required or may require proficiency in more than one language. Please review the current Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/) for more details.

Proficiency is required in two languages, depending on the proposed field of specialization, for candidates in the Doctor of Philosophy in Musicology program. This may be demonstrated through two years of undergraduate study in each language.

For all Graduate Degrees:

For those students who do not meet the language requirement at the time of entrance, it may be satisfied by evidence of two years of undergraduate study or the equivalent, or by completion of a two-semester, 500-level reading course sequence at UIUC with a grade of at least B-, or by satisfactory test scores. For up-to-date information regarding language requirements of the School of Music, please see the Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/).

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience.

Financial Aid

Fellowships, teaching, graduate, and research assistantships are awarded on a one-year basis with continuation dependent upon success in the program. Specific information on application procedures is available from the Music Admissions Office, (217) 244-7899; musicadmissions@illinois.edu.

for the degree of Master of Music in Music, Music Composition Concentration

For additional details and requirements refer to the department's Graduate Handbook https://music.illinois.edu/graduate-handbooks (https://music.illinois.edu/graduate-handbooks/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
MUS 528	Res & Bibliography in Music (sections A1-A3)	2
MUS 506	Graduate Level Composition	12
Courses in Theory of Music		8
choose one from MUS 400 or MUS 408 sections B-C		
choose one from MUS 408 sections D-E		
additional courses may be selected from MUS 407, 505, 507 and 525		
Electives selected in consultation with the student's advisor.		10
Master's Comprehensive Examination		
Must present a portfolio of their works for approval by the composition faculty.		
Language Requirements:		
Courses taken to meet language requirements do not count toward the degree. See the departmental handbook for details.		
Code	**Title**	**Hours**
Concentration requirements as listed in table above.		
Total Hours		**32**

Other Requirements

Requirement	Description
Other requirements may overlap	
Concentration required	Yes
Minimum 500-level hours required overall:	12
Minimum GPA:	3.0

Learning Outcomes: Music Composition, MMUS

Learning Outcomes for the degree of Master of Music in Music, Music Composition Concentration

Students in the Master of Music program, with a concentration in Music Composition, will:

1. Develop their musical craft and creativity at a high professional level, using critical thinking, analysis and technology to inform stylistic choices and artistic expression, and will communicate their creativity to diverse audiences through performance.
2. Exhibit an ability to summarize, synthesize, and discuss disciplinary content in relation to the theory of music, and to communicate their findings, using appropriate academic conventions, in written and/or oral form.
3. Demonstrate an understanding of appropriate methods for library-based musical research and scholarly writing, and a facility in handling print and technology sources.
4. Pursue specialized studies, to developing expertise and an ability to synthesize knowledge in areas of interest that enhance their required curriculum and/or professional goals.
5. Develop experience and expertise in instruction, pedagogy, and student assessment in their major area of musical study, gaining insights into class teaching and appropriate methods of evaluation.

Music: Music Theory, MMUS

for the degree of Master of Music in Music, Music Theory Concentration

director of school: Dr. Jeffrey Sposato
associate director of graduate studies: Dr. Reynold Tharp
program contact: Jenny Phillips
overview of school of music admissions & requirements: http://music.illinois.edu/prospective-students (http://music.illinois.edu/prospective-students/)
admissions questions: musicadmissions@illinois.edu | **(217) 244-7899**
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)

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department website: https://music.illinois.edu
department faculty: Music Faculty (https://music.illinois.edu/people/)
college website: https://faa.illinois.edu/
department office: School of Music, 2040 Music Building, 1114 West Nevada Street, Urbana, IL 61801
phone: (217) 333-3459

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concentrations:
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Admission

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Applicants to choral music, instrumental conducting (wind band or orchestra), jazz performance, piano pedagogy, performance and literature, and vocal accompanying and coaching must pass a qualifying audition for their major area or submit satisfactory recordings. Applicants in musicology and composition must present writings or other evidence of their ability to pursue work at the graduate level. The Graduate Record Examination (GRE) is not required.

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Prerequisite for admission to the **Artist Diploma** is a master's degree in music performance.

Applicants to the **MM and the Artist Diploma (AD)** whose native language is not English must present an iBT score of 79 for admission to the Artist Diploma (AD), 90 for the Master of Music (MM), excluding Musicology; MM in Musicology requires an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements, please see https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/). Fall admission only; other terms of entry by departmental petition approval only.

Requirements for admission to the **Master of Music in Education** (MME) are:

1. Undergraduate degree in music education from an accredited institution;
2. An overall grade average for the last 60 credit hours of undergraduate work of at least 3.0 (on a 4.0 scale). The grade average for Music Education and Education courses, when averaged separately, must also be at least 3.0 (on a 4.0 scale);
3. Recommendations from three individuals who can discuss the applicant's musicianship, ability to undertake graduate level study, and teaching ability/potential.
4. The Graduate Record Exam (GRE) is not required for application to the MME, nor do MME students take placement tests in music theory or music history.

For MME applicants with public school experience:

1. recommendation from a principal or supervisor who speaks primarily to the quality of the applicants teaching experience;
2. recommendation from an individual who speaks primarily to the quality of the applicants musicianship;
3. recommendation from an individual who speaks primarily to the applicants potential for completion of graduate level study;
4. applicants who wish to be considered for a Teaching Assistantship should ensure that at least one of their references provides specific comments on their potential to engage in university level teaching duties associated with such an appointment.

For MME applicants without public school experience:

1. recommendation from a music education professor;
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Applicants seeking admission to the MME + Licensure program, should review the requirements found online at https://music.illinois.edu/prospective-students (https://music.illinois.edu/prospective-students/).

Applicants to the **MME** whose native language is not English must present an iBT score of 96 for the Master of Music Education (MME). A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements, please see: https://music.illinois.edu/english-proficiency-requirement

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Applicants to the **Doctor of Musical Arts** programs must have:

1. a high level of proficiency in composition, conducting, or performance - candidates in composition must submit original scores for review, and candidates in performance and literature must pass a qualifying audition or submit satisfactory recordings; and
2. appropriate experience in ensemble performance and/or score reading. Candidates in voice and vocal accompanying and coaching must have fulfilled all foreign language requirements considered prerequisites for the Master of Music degree, including 1 year of college-level study in Italian, French, and German.

The School of Music requires all new **DMA** students to complete entrance examinations in musicology, music theory, aural skills, and score reading. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/resources/) page for more information.

Applicants to the **DMA or PhD** whose native language is not English must submit an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements please see: https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/).

Fall admission only; other terms of entry by departmental petition approval only.

For information about admission to the MME and PhD in Music Education, please visit www.music.illinois.edu (https://music.illinois.edu/).

Language Requirements

For the Master of Music program, applicants in voice and vocal accompanying and coaching are required to have had at least one year each of college-level French, German, and Italian or the equivalent. Applicants in other applied music areas, composition, conducting, and musicology are required to have had one year of any language at the college level or the equivalent.

All Doctor of Musical Arts candidates will be required to demonstrate proficiency in at least one language other than English. Each area may specify which language is required or may require proficiency in more than one language. Please review the current Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/) for more details.

Proficiency is required in two languages, depending on the proposed field of specialization, for candidates in the Doctor of Philosophy in Musicology program. This may be demonstrated through two years of undergraduate study in each language.

For all Graduate Degrees:

For those students who do not meet the language requirement at the time of entrance, it may be satisfied by evidence of two years of undergraduate study or the equivalent, or by completion of a two-semester, 500-level reading course sequence at UIUC with a grade of at least B-, or by satisfactory test scores. For up-to-date information regarding language requirements of the School of Music, please see the Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/).

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience.

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Fellowships, teaching, graduate, and research assistantships are awarded on a one-year basis with continuation dependent upon success in the program. Specific information on application procedures is available from the Music Admissions Office, (217) 244-7899; musicadmissions@illinois.edu.

for the degree of Master of Music in Music, Music Theory Concentration

For additional details and requirements refer to the department's Graduate Handbook https://music.illinois.edu/graduate-handbooks (https://music.illinois.edu/graduate-handbooks/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
MUS 505	Individ Topics in Music Theory	8
Select from the following courses:		4
MUS 528	Res & Bibliography in Music	
MUS 511	Fdns/Methods of Musicology I	
MUS 512	Fdns/Methods of Musicology II	
Courses in Theory, Composition and Musicology		6
Electives (including ensemble)		8
Language Requirements		
Courses taken to meet language requirements do not count toward the degree. See the departmental handbook for details.		
MUS 599	Thesis Research (min/max applied toward degree)	6

Code	Title	Hours
Concentration requirements as listed in table above.		
Total Hours		**32**

Other Requirements

Requirement	Description
Other requirements may overlap	
Concentration required	Yes
Minimum 500-level hours required overall:	12
Minimum GPA:	3.0

Music: Musicology, MMUS

for the degree of Master of Music in Music, Musicology Concentration

director of school: Dr. Jeffrey Sposato
associate director of graduate studies: Dr. Reynold Tharp
program contact: Jenny Phillips
overview of school of music admissions & requirements: http://music.illinois.edu/prospective-students (http://music.illinois.edu/prospective-students/)
admissions questions: musicadmissions@illinois.edu | **(217) 244-7899**
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)

department website: https://music.illinois.edu
department faculty: Music Faculty (https://music.illinois.edu/people/)
college website: https://faa.illinois.edu/
department office: School of Music, 2040 Music Building, 1114 West Nevada Street, Urbana, IL 61801
phone: (217) 333-3459

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Applicants to the **MM and the Artist Diploma (AD)** whose native language is not English must present an iBT score of 79 for admission to the Artist Diploma (AD), 90 for the Master of Music (MM), excluding Musicology; MM in Musicology requires an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements, please see https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/). Fall admission only; other terms of entry by departmental petition approval only.

Requirements for admission to the **Master of Music in Education** (MME) are:

1. Undergraduate degree in music education from an accredited institution;
2. An overall grade average for the last 60 credit hours of undergraduate work of at least 3.0 (on a 4.0 scale). The grade average for Music Education and Education courses, when averaged separately, must also be at least 3.0 (on a 4.0 scale);
3. Recommendations from three individuals who can discuss the applicant's musicianship, ability to undertake graduate level study, and teaching ability/potential.
4. The Graduate Record Exam (GRE) is not required for application to the MME, nor do MME students take placement tests in music theory or music history.

For MME applicants with public school experience:

1. recommendation from a principal or supervisor who speaks primarily to the quality of the applicants teaching experience;
2. recommendation from an individual who speaks primarily to the quality of the applicants musicianship;

3. recommendation from an individual who speaks primarily to the applicants potential for completion of graduate level study;
4. applicants who wish to be considered for a Teaching Assistantship should ensure that at least one of their references provides specific comments on their potential to engage in university level teaching duties associated with such an appointment.

For MME applicants without public school experience:

1. recommendation from a music education professor;
2. recommendation from an applied or ensemble music professor;
3. recommendation from an individual who can speak to the applicants potential for completion of graduate study.

Applicants seeking admission to the MME + Licensure program, should review the requirements found online at https://music.illinois.edu/prospective-students (https://music.illinois.edu/prospective-students/).

Applicants to the **MME** whose native language is not English must present an iBT score of 96 for the Master of Music Education (MME). A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements, please see: https://music.illinois.edu/english-proficiency-requirement

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Applicants to the **Doctor of Musical Arts** programs must have:

1. a high level of proficiency in composition, conducting, or performance - candidates in composition must submit original scores for review, and candidates in performance and literature must pass a qualifying audition or submit satisfactory recordings; and
2. appropriate experience in ensemble performance and/or score reading. Candidates in voice and vocal accompanying and coaching must have fulfilled all foreign language requirements considered prerequisites for the Master of Music degree, including 1 year of college-level study in Italian, French, and German.

The School of Music requires all new **DMA** students to complete entrance examinations in musicology, music theory, aural skills, and score reading. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/resources/) page for more information.

Applicants to the **DMA or PhD** whose native language is not English must submit an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements please see: https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/).

Fall admission only; other terms of entry by departmental petition approval only.

For information about admission to the MME and PhD in Music Education, please visit www.music.illinois.edu (https://music.illinois.edu/).

Language Requirements

For the Master of Music program, applicants in voice and vocal accompanying and coaching are required to have had at least one year each of college-level French, German, and Italian or the equivalent. Applicants in other applied music areas, composition, conducting, and musicology are required to have had one year of any language at the college level or the equivalent.

All Doctor of Musical Arts candidates will be required to demonstrate proficiency in at least one language other than English. Each area may specify which language is required or may require proficiency in more than one language. Please review the current Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/) for more details.

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For all Graduate Degrees:

For those students who do not meet the language requirement at the time of entrance, it may be satisfied by evidence of two years of undergraduate study or the equivalent, or by completion of a two-semester, 500-level reading course sequence at UIUC with a grade of at least B-, or by satisfactory test scores. For up-to-date information regarding language requirements of the School of Music, please see the Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/).

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for the degree of Master of Music in Music, Musicology Concentration

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Thesis Option

Code	Title	Hours
8 hours selected from:		8
MUS 516	Fieldwork and Ethnography	
MUS 519	Analytical Methods: Musicology	
MUS 520	Soc Theory in Ethnomusicology	
MUS 523	Seminar in Musicology	

MUS 511	Fdns/Methods of Musicology I	4
MUS 512	Fdns/Methods of Musicology II	4
Electives to include 2 semesters of ensemble participation		8
MUS 599	Thesis Research (min/max applied toward degree)	8
Language Requirements		
Courses taken to meet language requirements do not count toward the degree. See the departmental handbook for details.		
Total Hours		32

Non-Thesis Option

Code	Title	Hours
12 hours selected from:		12
MUS 516	Fieldwork and Ethnography	
MUS 519	Analytical Methods: Musicology	
MUS 520	Soc Theory in Ethnomusicology	
MUS 523	Seminar in Musicology	
MUS 511	Fdns/Methods of Musicology I	4
MUS 512	Fdns/Methods of Musicology II	4
MUS 525	Rdgs in Musicol and Mus Theory	4
Electives to include 2 semesters of ensemble participation		8
Language Requirements		
Courses taken to meet language requirements do not count toward the degree. See the departmental handbook for details.		
Total Hours		32

Other Requirements

Requirement	Description
Other requirements may overlap	
Concentration required	Yes
Minimum 500-level hours required overall:	12
Minimum GPA:	3.0

Learning Outcomes: Musicology, MMUS

Learning Outcomes for the degree of Master of Music in Music, Musicology Concentration

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Students in the Master of Music with a concentration in (1) Musicology (thesis option) and (2) Musicology (non-thesis option) will:

1. Acquire a familiarity with the methodological and interpretative conventions of the discipline (such as historiography, source study, theory, ethnography, analysis & aesthetics), while developing a foundational knowledge of specific areas of musicological study.
2. Develop an independent research topic, demonstrating fluency with primary sources and secondary scholarship, as well as showing appropriate skills in foreign language(s), communicating research objectives, methods, and conclusions in oral and written forms, and making a contribution to musicological knowledge and understanding.
3. Pursue specialized studies, developing expertise and synthesizing knowledge and ideas in areas of interest that enhance their required curriculum and/or professional goals.
4. Develop skills in musical performance by participating in a musical ensemble, demonstrating spontaneity and collaboration as appropriate.
5. Develop experience in university-level instruction and assessment in at least one area of musicology, gaining insights into classroom teaching, syllabus design, appropriate methods of evaluation, and current pedagogical issues within the discipline.
6. Gain experience of the workings of the profession and develop a foundational understanding of how to function successfully as a musicologically-trained scholar in a variety of career paths.

Music: Performance & Literature, MMUS

for the degree of Master of Music in Music, Performance and Literature Concentration

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director of school: Dr. Jeffrey Sposato
associate director of graduate studies: Dr. Reynold Tharp
program contact: Jenny Phillips
overview of school of music admissions & requirements: http://music.illinois.edu/prospective-students (http://music.illinois.edu/prospective-students/)
admissions questions: musicadmissions@illinois.edu | **(217) 244-7899**
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)

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department website: https://music.illinois.edu
department faculty: Music Faculty (https://music.illinois.edu/people/)
college website: https://faa.illinois.edu/
department office: School of Music, 2040 Music Building, 1114 West Nevada Street, Urbana, IL 61801
phone: (217) 333-3459

Graduate Degree Programs in Music

Artist Diploma in Music (p. 890)
Music, MMUS (p. 914)
concentrations:
Choral Music (p. 916)|Instrumental Conducting - Band (p. 918)|Instrumental Conducting - Orchestra (p. 921)|Jazz Performance (p. 923)|Music Composition (p. 926)|Music Theory (p. 928)|Musicology (p. 931)|Performance & Literature (p. 933)|Piano Pedagogy (p. 936)|Vocal Coaching & Accompanying (p. 938)
Music, DMA (p. 893)
concentrations:
Choral Music (p. 895)|Instrumental Conducting - Orchestra (p. 897)|Instrumental Conducting – Wind Band (p. 900)|Jazz Performance (p. 903)|Music Composition (p. 906)|Performance & Literature (p. 909)|Vocal Coaching & Accompanying (p. 911)
Music Education, MME (p. 885)
Music Education, PhD (p. 888)
Musicology, PhD (p. 941)
concentration:
Medieval Studies (p. 1101)

The School of Music has been an accredited member of the National Association of Schools of Music since 1933.

Admission

For all degree programs, consult the admission requirements stated on the School of Music's website: https://music.illinois.edu/prospective-students (https://music.illinois.edu/prospective-students/).

Requirements for admission to the **Master of Music (MM)** programs are a Bachelor of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution. Students holding other degrees may be admitted but will be expected to make up any deficiencies in addition to fulfilling all requirements for the graduate degree.

Applicants to choral music, instrumental conducting (wind band or orchestra), jazz performance, piano pedagogy, performance and literature, and vocal accompanying and coaching must pass a qualifying audition for their major area or submit satisfactory recordings. Applicants in musicology and composition must present writings or other evidence of their ability to pursue work at the graduate level. The Graduate Record Examination (GRE) is not required.

The School of Music requires all new MM students to complete entrance examinations in music theory and musicianship; all new MM students, except those in musicology, complete a musicology entrance exam as well. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/graduate-academic-affairs/) page for more information.

Prerequisite for admission to the **Artist Diploma** is a master's degree in music performance.

Applicants to the **MM and the Artist Diploma (AD)** whose native language is not English must present an iBT score of 79 for admission to the Artist Diploma (AD), 90 for the Master of Music (MM), excluding Musicology; MM in Musicology requires an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements, please see https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/). Fall admission only; other terms of entry by departmental petition approval only.

Requirements for admission to the **Master of Music in Education** (MME) are:

1. Undergraduate degree in music education from an accredited institution;
2. An overall grade average for the last 60 credit hours of undergraduate work of at least 3.0 (on a 4.0 scale). The grade average for Music Education and Education courses, when averaged separately, must also be at least 3.0 (on a 4.0 scale);
3. Recommendations from three individuals who can discuss the applicant's musicianship, ability to undertake graduate level study, and teaching ability/potential.
4. The Graduate Record Exam (GRE) is not required for application to the MME, nor do MME students take placement tests in music theory or music history.

For MME applicants with public school experience:

1. recommendation from a principal or supervisor who speaks primarily to the quality of the applicants teaching experience;
2. recommendation from an individual who speaks primarily to the quality of the applicants musicianship;
3. recommendation from an individual who speaks primarily to the applicants potential for completion of graduate level study;
4. applicants who wish to be considered for a Teaching Assistantship should ensure that at least one of their references provides specific comments on their potential to engage in university level teaching duties associated with such an appointment.

For MME applicants without public school experience:

1. recommendation from a music education professor;
2. recommendation from an applied or ensemble music professor;
3. recommendation from an individual who can speak to the applicants potential for completion of graduate study.

Applicants seeking admission to the MME + Licensure program, should review the requirements found online at https://music.illinois.edu/prospective-students (https://music.illinois.edu/prospective-students/).

Applicants to the **MME** whose native language is not English must present an iBT score of 96 for the Master of Music Education (MME). A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements, please see: https://music.illinois.edu/english-proficiency-requirement

The School of Music offers an academic year program and a Summers-only MME. For academic year applications, the School of Music offers Fall admission only; spring term of entry by departmental petition approval only.

Requirements for admission to the **Doctor of Musical Arts** and the **Doctor of Philosophy** in Musicology programs are the Master of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution.

Applicants to the **Doctor of Musical Arts** programs must have:

1. a high level of proficiency in composition, conducting, or performance - candidates in composition must submit original scores for review, and candidates in performance and literature must pass a qualifying audition or submit satisfactory recordings; and
2. appropriate experience in ensemble performance and/or score reading. Candidates in voice and vocal accompanying and coaching must have fulfilled all foreign language requirements considered prerequisites for the Master of Music degree, including 1 year of college-level study in Italian, French, and German.

The School of Music requires all new **DMA** students to complete entrance examinations in musicology, music theory, aural skills, and score reading. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/resources/) page for more information.

Applicants to the **DMA or PhD** whose native language is not English must submit an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements please see: https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/).

Fall admission only; other terms of entry by departmental petition approval only.

For information about admission to the MME and PhD in Music Education, please visit www.music.illinois.edu (https://music.illinois.edu/).

Language Requirements

For the Master of Music program, applicants in voice and vocal accompanying and coaching are required to have had at least one year each of college-level French, German, and Italian or the equivalent. Applicants in other applied music areas, composition, conducting, and musicology are required to have had one year of any language at the college level or the equivalent.

All Doctor of Musical Arts candidates will be required to demonstrate proficiency in at least one language other than English. Each area may specify which language is required or may require proficiency in more than one language. Please review the current Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/) for more details.

Proficiency is required in two languages, depending on the proposed field of specialization, for candidates in the Doctor of Philosophy in Musicology program. This may be demonstrated through two years of undergraduate study in each language.

For all Graduate Degrees:

For those students who do not meet the language requirement at the time of entrance, it may be satisfied by evidence of two years of undergraduate study or the equivalent, or by completion of a two-semester, 500-level reading course sequence at UIUC with a grade of at least B-, or by satisfactory test scores. For up-to-date information regarding language requirements of the School of Music, please see the Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/).

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience.

Financial Aid

Fellowships, teaching, graduate, and research assistantships are awarded on a one-year basis with continuation dependent upon success in the program. Specific information on application procedures is available from the Music Admissions Office, (217) 244-7899; musicadmissions@illinois.edu.

for the degree of Master of Music in Music, Performance and Literature Concentration

For additional details and requirements refer to the department's Graduate Handbook (http://publish.illinois.edu/musicresources/academic-handbooks/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
MUS 528	Res & Bibliography in Music (select from sections A1-A3)	2
500 level Applied Music Major		8-12
Choose course(s) from MUS 579 through MUS 598		
Music literature course in major applied area (select from)		8
MUS 557	Piano Literature	
MUS 558	Vocal Literature	
MUS 559	Organ Literature	
MUS 560	String Instrument Literature	
MUS 561	Wind Instrument Literature	
MUS 563	Topics in Choral Repertoire	
Electives selected in consultation with the student's advisor.		10-14
Ensembles. Students pursuing this concentration whose primary instruments are woodwinds, brass, percussion, or strings will be enrolled in an approved ensemble for ever semester of full-time study. Students seeking exemption from the requirement must petition the Performance Studies and Activities Committee following two semesters of ensemble membership. Requests for exemption should be made within the first six weeks of the semester prior to the term for which the exemption is being requested.		0-4
Graduate Recital		
Master's Comprehensive Examination		

Code	Title	Hours
Concentration requirements as listed in table above.		
Total Hours		**32**

Other Requirements

Requirement	Description
Other requirements may overlap	
Concentration required	Yes
Minimum 500-level hours required overall:	12
Minimum GPA:	3.0

Learning Outcomes: Performance & Literature, MMUS

Learning Outcomes for the degree of Master of Music in Music, Performance and Literature Concentration

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Students in the Master of Music program, with concentrations in Performance and Literature or Vocal Coaching and Accompanying will:

1. Develop performance skills at a high professional level, using creative and critical thinking to inform stylistic choices and artistic expression while demonstrating spontaneity and collaboration as appropriate, and will communicate their artistry to diverse audiences.
2. Exhibit an ability to summarize, synthesize, and discuss disciplinary content(including pedagogical material)in relation to their major area of study, and to communicate their findings, using appropriate academic conventions, in written or oral form.
3. Demonstrate an understanding of appropriate methods for library-based musical research and scholarly writing, and a facility in handling print and technology sources.
4. Pursue specialized studies, to develop expertise and an ability to synthesize knowledge in areas of interest that enhance their required curriculum and/or professional goals.
5. In addition, some Illinois MM students will develop experience and expertise in instruction, pedagogy, and student assessment in one or more areas of musical study, gaining insights into studio and/or classroom teaching and appropriate methods of evaluation.

Music: Piano Pedagogy, MMUS

for the degree of Master of Music in Music, Piano Pedagogy Concentration

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director of school: Dr. Jeffrey Sposato
associate director of graduate studies: Dr. Reynold Tharp
program contact: Jenny Phillips
overview of school of music admissions & requirements: http://music.illinois.edu/prospective-students (http://music.illinois.edu/prospective-students/)
admissions questions: musicadmissions@illinois.edu | **(217) 244-7899**
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)

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department website: https://music.illinois.edu
department faculty: Music Faculty (https://music.illinois.edu/people/)
college website: https://faa.illinois.edu/
department office: School of Music, 2040 Music Building, 1114 West Nevada Street, Urbana, IL 61801
phone: (217) 333-3459

Graduate Degree Programs in Music

Artist Diploma in Music (p. 890)
Music, MMUS (p. 914)
concentrations:
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Music, DMA (p. 893)
concentrations:
Choral Music (p. 895)|Instrumental Conducting - Orchestra (p. 897)|Instrumental Conducting – Wind Band (p. 900)|Jazz Performance (p. 903)|Music Composition (p. 906)|Performance & Literature (p. 909)|Vocal Coaching & Accompanying (p. 911)
Music Education, MME (p. 885)
Music Education, PhD (p. 888)
Musicology, PhD (p. 941)
concentration:
Medieval Studies (p. 1101)

The School of Music has been an accredited member of the National Association of Schools of Music since 1933.

Admission

For all degree programs, consult the admission requirements stated on the School of Music's website: https://music.illinois.edu/prospective-students (https://music.illinois.edu/prospective-students/).

Requirements for admission to the **Master of Music (MM)** programs are a Bachelor of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution. Students holding other degrees may be admitted but will be expected to make up any deficiencies in addition to fulfilling all requirements for the graduate degree.

Applicants to choral music, instrumental conducting (wind band or orchestra), jazz performance, piano pedagogy, performance and literature, and vocal accompanying and coaching must pass a qualifying audition for their major area or submit satisfactory recordings. Applicants in musicology and composition must present writings or other evidence of their ability to pursue work at the graduate level. The Graduate Record Examination (GRE) is not required.

The School of Music requires all new MM students to complete entrance examinations in music theory and musicianship; all new MM students, except those in musicology, complete a musicology entrance exam as well. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/graduate-academic-affairs/) page for more information.

Prerequisite for admission to the **Artist Diploma** is a master's degree in music performance.

Applicants to the **MM and the Artist Diploma (AD)** whose native language is not English must present an iBT score of 79 for admission to the Artist Diploma (AD), 90 for the Master of Music (MM), excluding Musicology; MM in Musicology requires an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois

Graduate College and School of Music. For the full English proficiency requirements, please see https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/). Fall admission only; other terms of entry by departmental petition approval only.

Requirements for admission to the **Master of Music in Education** (MME) are:

1. Undergraduate degree in music education from an accredited institution;
2. An overall grade average for the last 60 credit hours of undergraduate work of at least 3.0 (on a 4.0 scale). The grade average for Music Education and Education courses, when averaged separately, must also be at least 3.0 (on a 4.0 scale);
3. Recommendations from three individuals who can discuss the applicant's musicianship, ability to undertake graduate level study, and teaching ability/potential.
4. The Graduate Record Exam (GRE) is not required for application to the MME, nor do MME students take placement tests in music theory or music history.

For MME applicants with public school experience:

1. recommendation from a principal or supervisor who speaks primarily to the quality of the applicants teaching experience;
2. recommendation from an individual who speaks primarily to the quality of the applicants musicianship;
3. recommendation from an individual who speaks primarily to the applicants potential for completion of graduate level study;
4. applicants who wish to be considered for a Teaching Assistantship should ensure that at least one of their references provides specific comments on their potential to engage in university level teaching duties associated with such an appointment.

For MME applicants without public school experience:

1. recommendation from a music education professor;
2. recommendation from an applied or ensemble music professor;
3. recommendation from an individual who can speak to the applicants potential for completion of graduate study.

Applicants seeking admission to the MME + Licensure program, should review the requirements found online at https://music.illinois.edu/prospective-students (https://music.illinois.edu/prospective-students/).

Applicants to the **MME** whose native language is not English must present an iBT score of 96 for the Master of Music Education (MME). A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements, please see: https://music.illinois.edu/english-proficiency-requirement

The School of Music offers an academic year program and a Summers-only MME. For academic year applications, the School of Music offers Fall admission only; spring term of entry by departmental petition approval only.

Requirements for admission to the **Doctor of Musical Arts** and the **Doctor of Philosophy** in Musicology programs are the Master of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution.

Applicants to the **Doctor of Musical Arts** programs must have:

1. a high level of proficiency in composition, conducting, or performance - candidates in composition must submit original scores for review, and candidates in performance and literature must pass a qualifying audition or submit satisfactory recordings; and
2. appropriate experience in ensemble performance and/or score reading. Candidates in voice and vocal accompanying and coaching must have fulfilled all foreign language requirements considered prerequisites for the Master of Music degree, including 1 year of college-level study in Italian, French, and German.

The School of Music requires all new **DMA** students to complete entrance examinations in musicology, music theory, aural skills, and score reading. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/resources/) page for more information.

Applicants to the **DMA or PhD** whose native language is not English must submit an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements please see: https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/).

Fall admission only; other terms of entry by departmental petition approval only.

For information about admission to the MME and PhD in Music Education, please visit www.music.illinois.edu (https://music.illinois.edu/).

Language Requirements

For the Master of Music program, applicants in voice and vocal accompanying and coaching are required to have had at least one year each of college-level French, German, and Italian or the equivalent. Applicants in other applied music areas, composition, conducting, and musicology are required to have had one year of any language at the college level or the equivalent.

All Doctor of Musical Arts candidates will be required to demonstrate proficiency in at least one language other than English. Each area may specify which language is required or may require proficiency in more than one language. Please review the current Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/) for more details.

Proficiency is required in two languages, depending on the proposed field of specialization, for candidates in the Doctor of Philosophy in Musicology program. This may be demonstrated through two years of undergraduate study in each language.

For all Graduate Degrees:

For those students who do not meet the language requirement at the time of entrance, it may be satisfied by evidence of two years of undergraduate study or the equivalent, or by completion of a two-semester, 500-level reading course sequence at UIUC with a grade of at least B-, or by satisfactory test scores. For up-to-date information regarding language requirements of the School of Music, please see the Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/).

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience.

Financial Aid

Fellowships, teaching, graduate, and research assistantships are awarded on a one-year basis with continuation dependent upon success in the program. Specific information on application procedures is available from the Music Admissions Office, (217) 244-7899; musicadmissions@illinois.edu.

for the degree of Master of Music in Music, Piano Pedagogy Concentration

For additional details and requirements refer to the department's Graduate Handbook (http://publish.illinois.edu/musicresources/academic-handbooks/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
MUS 480		4
MUS 528	Res & Bibliography in Music (sections A1-A3)	2
MUS 557	Piano Literature	8
MUS 570	Prac Pno Tchg Child and Teens	4
MUS 571	Practicum in Piano Tchg Adults	4
Electives selected in consultation with the student's advisor.		10
Master's Comprehensive Examination		
Language Requirements:		
Courses taken to meet language requirements do not count toward the degree. See the departmental handbook for details.		

Code	Title	Hours
Concentration requirements as listed in table above.		
Total Hours		**32**

Other Requirements

Requirement	Description
Other requirements may overlap	
Concentration required	Yes
Minimum 500-level hours required overall:	12
Minimum GPA:	3.0

Learning Outcomes: Piano Pedagogy, MMUS

Learning Outcomes for the degree of Master of Music in Music, Piano Pedagogy Concentration

Students in the Master of Music (MM) program, with a concentration in Piano Pedagogy will:

1. Develop competencies in teaching the piano to students at a range of ability levels, and will demonstrate an advanced knowledge of appropriate pedagogical methods and techniques for both one-on-one and group piano instruction; in addition, they will gain insights into student assessment and appropriate methods of evaluation.
2. Gain and demonstrate a thorough knowledge of the traditional piano teaching literature, as well as resources pertaining to technique, theory and musicianship development, creativity, and professional development.
3. Demonstrate piano performance skills at a high level, using creative and critical thinking to inform stylistic choices and artistic expression while demonstrating spontaneity as appropriate, and will communicate their artistry to diverse audiences.
4. Exhibit an ability to summarize, synthesize, and discuss disciplinary content relating to piano repertoire and pedagogy, and to communicate their findings, using appropriate academic conventions, in written or oral form.
5. Demonstrate an understanding of appropriate methods for library-based musical research and scholarly writing, and a facility in handling print and technology sources.
6. Pursue specialized (elective) studies, to develop expertise and an ability to synthesize knowledge in areas of interest that enhance their required curriculum and/or professional goals.

Music: Vocal Coaching & Accompanying, MMUS

for the degree of Master of Music in Music, Vocal Coaching and Accompanying Concentration

director of school: Dr. Jeffrey Sposato
associate director of graduate studies: Dr. Reynold Tharp
program contact: Jenny Phillips
overview of school of music admissions & requirements: http://music.illinois.edu/prospective-students (http://music.illinois.edu/prospective-students/)
admissions questions: musicadmissions@illinois.edu | **(217) 244-7899**
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)

department website: https://music.illinois.edu
department faculty: Music Faculty (https://music.illinois.edu/people/)
college website: https://faa.illinois.edu/
department office: School of Music, 2040 Music Building, 1114 West Nevada Street, Urbana, IL 61801
phone: (217) 333-3459

Graduate Degree Programs in Music

Artist Diploma in Music (p. 890)
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concentrations:
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Music, DMA (p. 893)
concentrations:
Choral Music (p. 895)|Instrumental Conducting - Orchestra (p. 897)|Instrumental Conducting – Wind Band (p. 900)|Jazz Performance (p. 903)|Music Composition (p. 906)|Performance & Literature (p. 909)|Vocal Coaching & Accompanying (p. 911)
Music Education, MME (p. 885)
Music Education, PhD (p. 888)
Musicology, PhD (p. 941)
concentration:
Medieval Studies (p. 1101)

The School of Music has been an accredited member of the National Association of Schools of Music since 1933.

Admission

For all degree programs, consult the admission requirements stated on the School of Music's website: https://music.illinois.edu/prospective-students (https://music.illinois.edu/prospective-students/).

Requirements for admission to the **Master of Music (MM)** programs are a Bachelor of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution. Students holding other degrees may be admitted but will be expected to make up any deficiencies in addition to fulfilling all requirements for the graduate degree.

Applicants to choral music, instrumental conducting (wind band or orchestra), jazz performance, piano pedagogy, performance and literature, and vocal accompanying and coaching must pass a qualifying audition for their major area or submit satisfactory recordings. Applicants in musicology and composition must present writings or other evidence of their ability to pursue work at the graduate level. The Graduate Record Examination (GRE) is not required.

The School of Music requires all new MM students to complete entrance examinations in music theory and musicianship; all new MM students, except those in musicology, complete a musicology entrance exam as well. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/graduate-academic-affairs/) page for more information.

Prerequisite for admission to the **Artist Diploma** is a master's degree in music performance.

Applicants to the **MM and the Artist Diploma (AD)** whose native language is not English must present an iBT score of 79 for admission to the Artist Diploma (AD), 90 for the Master of Music (MM), excluding Musicology; MM in Musicology requires an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements, please see https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/). Fall admission only; other terms of entry by departmental petition approval only.

Requirements for admission to the **Master of Music in Education** (MME) are:

1. Undergraduate degree in music education from an accredited institution;
2. An overall grade average for the last 60 credit hours of undergraduate work of at least 3.0 (on a 4.0 scale). The grade average for Music Education and Education courses, when averaged separately, must also be at least 3.0 (on a 4.0 scale);
3. Recommendations from three individuals who can discuss the applicant's musicianship, ability to undertake graduate level study, and teaching ability/potential.
4. The Graduate Record Exam (GRE) is not required for application to the MME, nor do MME students take placement tests in music theory or music history.

For MME applicants with public school experience:

1. recommendation from a principal or supervisor who speaks primarily to the quality of the applicants teaching experience;
2. recommendation from an individual who speaks primarily to the quality of the applicants musicianship;
3. recommendation from an individual who speaks primarily to the applicants potential for completion of graduate level study;
4. applicants who wish to be considered for a Teaching Assistantship should ensure that at least one of their references provides specific comments on their potential to engage in university level teaching duties associated with such an appointment.

For MME applicants without public school experience:

1. recommendation from a music education professor;
2. recommendation from an applied or ensemble music professor;
3. recommendation from an individual who can speak to the applicants potential for completion of graduate study.

Applicants seeking admission to the MME + Licensure program, should review the requirements found online at https://music.illinois.edu/prospective-students (https://music.illinois.edu/prospective-students/).

Applicants to the **MME** whose native language is not English must present an iBT score of 96 for the Master of Music Education (MME). A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements, please see: https://music.illinois.edu/english-proficiency-requirement

The School of Music offers an academic year program and a Summers-only MME. For academic year applications, the School of Music offers Fall admission only; spring term of entry by departmental petition approval only.

Requirements for admission to the **Doctor of Musical Arts** and the **Doctor of Philosophy** in Musicology programs are the Master of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution.

Applicants to the **Doctor of Musical Arts** programs must have:

1. a high level of proficiency in composition, conducting, or performance - candidates in composition must submit original scores for review, and candidates in performance and literature must pass a qualifying audition or submit satisfactory recordings; and
2. appropriate experience in ensemble performance and/or score reading. Candidates in voice and vocal accompanying and coaching must have fulfilled all foreign language requirements considered prerequisites for the Master of Music degree, including 1 year of college-level study in Italian, French, and German.

The School of Music requires all new **DMA** students to complete entrance examinations in musicology, music theory, aural skills, and score reading. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/resources/) page for more information.

Applicants to the **DMA or PhD** whose native language is not English must submit an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements please see: https://music.illinois.edu/english-proficiency-requirement (https://music.illinois.edu/english-proficiency-requirement/).

Fall admission only; other terms of entry by departmental petition approval only.

For information about admission to the MME and PhD in Music Education, please visit www.music.illinois.edu (https://music.illinois.edu/).

Language Requirements

For the Master of Music program, applicants in voice and vocal accompanying and coaching are required to have had at least one year each of college-level French, German, and Italian or the equivalent. Applicants in other applied music areas, composition, conducting, and musicology are required to have had one year of any language at the college level or the equivalent.

All Doctor of Musical Arts candidates will be required to demonstrate proficiency in at least one language other than English. Each area may specify which language is required or may require proficiency in more than one language. Please review the current Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/) for more details.

Proficiency is required in two languages, depending on the proposed field of specialization, for candidates in the Doctor of Philosophy in Musicology program. This may be demonstrated through two years of undergraduate study in each language.

For all Graduate Degrees:

For those students who do not meet the language requirement at the time of entrance, it may be satisfied by evidence of two years of undergraduate study or the equivalent, or by completion of a two-semester, 500-level reading course sequence at UIUC with a grade of at least B-, or by satisfactory test scores. For up-to-date information regarding language requirements of the School of Music, please see the Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/).

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience.

Financial Aid

Fellowships, teaching, graduate, and research assistantships are awarded on a one-year basis with continuation dependent upon success in the program. Specific information on application procedures is available from the Music Admissions Office, (217) 244-7899; musicadmissions@illinois.edu.

for the degree of Master of Music in Music, Vocal Coaching and Accompanying Concentration

For additional details and requirements refer to the department's Graduate Handbook https://music.illinois.edu/graduate-handbooks (https://music.illinois.edu/graduate-handbooks/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
MUS 528	Res & Bibliography in Music (sections A1-A3)	2
MUS 577		12
MUS 558	Vocal Literature	8
Electives selected in consultation with the student's advisor.		10
Master's Comprehensive Examination		
Language Requirements:		
Courses taken to meet language requirements do not count toward the degree. See the departmental handbook for details.		

Code	Title	Hours
Concentration requirements as listed in table above.		
Total Hours		**32**

Other Requirements

Requirement	Description
Other requirements may overlap	
Concentration required	Yes
Minimum 500-level hours required overall:	12
Minimum GPA:	3.0

Learning Outcomes: Vocal Coaching & Accompanying, MMUS

Learning Outcomes for the degree of Master of Music in Music, Vocal Coaching and Accompanying Concentration

Students in the Master of Music program, with concentrations in Performance and Literature or Vocal Coaching and Accompanying will:

1. Develop performance skills at a high professional level, using creative and critical thinking to inform stylistic choices and artistic expression while demonstrating spontaneity and collaboration as appropriate, and will communicate their artistry to diverse audiences.
2. Exhibit an ability to summarize, synthesize, and discuss disciplinary content(including pedagogical material)in relation to their major

area of study, and to communicate their findings, using appropriate academic conventions, in written or oral form.
3. Demonstrate an understanding of appropriate methods for library-based musical research and scholarly writing, and a facility in handling print and technology sources.
4. Pursue specialized studies, to develop expertise and an ability to synthesize knowledge in areas of interest that enhance their required curriculum and/or professional goals.
5. In addition, some Illinois MM students will develop experience and expertise in instruction, pedagogy, and student assessment in one or more areas of musical study, gaining insights into studio and/or classroom teaching and appropriate methods of evaluation.

Musicology, PhD

for the degree of Doctor of Philosophy in Musicology

director of school: Dr. Jeffrey Sposato
associate director of graduate studies: Reynold Tharp
program contact: Jenny Phillips
overview of school of music admissions & requirements: http://music.illinois.edu/prospective-students (http://music.illinois.edu/prospective-students/)
admissions questions: musicadmissions@illinois.edu | **(217) 244-7899**
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)

department website: https://music.illinois.edu
department faculty: Music Faculty (https://music.illinois.edu/people/)
college website: https://faa.illinois.edu/
department office: School of Music, 2040 Music Building, 1114 West Nevada Street, Urbana, IL 61801
phone: (217) 244-8385

The Ph.D. in Musicology is intended for those whose interests lie in research in the history of music, systematic musicology, or ethno-musicology.

Graduate Degree Programs in Music

Artist Diploma in Music (p. 890)
Music, MMUS (p. 914)
concentrations:
Choral Music (p. 916)|Instrumental Conducting - Band (p. 918)|Instrumental Conducting - Orchestra (p. 921)|Jazz Performance (p. 923)|Music Composition (p. 926)|Music Theory (p. 928)|Musicology (p. 931)|Performance & Literature (p. 933)|Piano Pedagogy (p. 936)|Vocal Coaching & Accompanying (p. 938)
Music, DMA (p. 893)
concentrations:
Choral Music (p. 895)|Instrumental Conducting - Orchestra (p. 897)|Instrumental Conducting – Wind Band (p. 900)|Jazz Performance (p. 903)|Music Composition (p. 906)|Performance & Literature (p. 909)|Vocal Coaching & Accompanying (p. 911)
Music Education, MME (p. 885)
Music Education, PhD (p. 888)
Musicology, PhD (p. 941)
concentration:
Medieval Studies (p. 1101)

The School of Music has been an accredited member of the National Association of Schools of Music since 1933.

Admission

For all degree programs, consult the admission requirements stated on the School of Music's website: https://music.illinois.edu/prospective-students.

Requirements for admission to the **Master of Music (MM)** programs are a Bachelor of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution. Students holding other degrees may be admitted but will be expected to make up any deficiencies in addition to fulfilling all requirements for the graduate degree.

Applicants to choral music, instrumental conducting (wind band or orchestra), jazz performance, piano pedagogy, performance and literature, and vocal accompanying and coaching must pass a qualifying audition for their major area or submit satisfactory recordings. Applicants in musicology and composition must present writings or other evidence of their ability to pursue work at the graduate level. The Graduate Record Examination (GRE) is not required.

The School of Music requires all new MM students to complete entrance examinations in music theory and musicianship; all new MM students, except those in musicology, complete a musicology entrance exam as well. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/graduate-academic-affairs/) page for more information.

Prerequisite for admission to the **Artist Diploma** is a master's degree in music performance.

Applicants to the **MM and the Artist Diploma (AD)** whose native language is not English must present an iBT score of 79 for admission to the Artist Diploma (AD), 90 for the Master of Music (MM), excluding Musicology; MM in Musicology requires an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois

Graduate College and School of Music. For the full English proficiency requirements, please see: https://music.illinois.edu/english-proficiency-requirement. Fall admission only; other terms of entry by departmental petition approval only.

Requirements for admission to the **Master of Music in Education** (MME) are:

1. Undergraduate degree in music education from an accredited institution;
2. An overall grade average for the last 60 credit hours of undergraduate work of at least 3.0 (on a 4.0 scale). The grade average for Music Education and Education courses, when averaged separately, must also be at least 3.0 (on a 4.0 scale);
3. Recommendations from three individuals who can discuss the applicant's musicianship, ability to undertake graduate level study, and teaching ability/potential.
4. The Graduate Record Exam (GRE) is not required for application to the MME, nor do MME students take placement tests in music theory or music history.

For MME applicants with public school experience:

1. recommendation from a principal or supervisor who speaks primarily to the quality of the applicants teaching experience;
2. recommendation from an individual who speaks primarily to the quality of the applicants musicianship;
3. recommendation from an individual who speaks primarily to the applicants potential for completion of graduate level study;
4. applicants who wish to be considered for a Teaching Assistantship should ensure that at least one of their references provides specific comments on their potential to engage in university level teaching duties associated with such an appointment.

For MME applicants without public school experience:

1. recommendation from a music education professor;
2. recommendation from an applied or ensemble music professor;
3. recommendation from an individual who can speak to the applicants potential for completion of graduate study.

Applicants seeking admission to the MME + Licensure program, should review the requirements found online at: https://music.illinois.edu/prospective-students

Applicants to the **MME** whose native language is not English must present an iBT score of 96 for the Master of Music Education (MME). A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements, please see: https://music.illinois.edu/english-proficiency-requirement

The School of Music offers an academic year program and a Summers-only MME. For academic year applications, the School of Music offers Fall admission only; spring term of entry by departmental petition approval only.

Requirements for admission to the **Doctor of Musical Arts** and the **Doctor of Philosophy** in Musicology programs are the Master of Music degree from the University of Illinois at Urbana-Champaign or an equivalent degree from another accredited institution.

Applicants to the **Doctor of Musical Arts** programs must have:

1. a high level of proficiency in composition, conducting, or performance - candidates in composition must submit original scores for review, and candidates in performance and literature must pass a qualifying audition or submit satisfactory recordings; and
2. appropriate experience in ensemble performance and/or score reading. Candidates in voice and vocal accompanying and coaching must have fulfilled all foreign language requirements considered prerequisites for the Master of Music degree, including 1 year of college-level study in Italian, French, and German.

The School of Music requires all new **DMA** students to complete entrance examinations in musicology, music theory, aural skills, and score reading. These exams take place the week before the fall term begins. See the School of Music's Graduate Resources (https://music.illinois.edu/resources/) page for more information.

Applicants to the **DMA or PhD** whose native language is not English must submit an iBT score of 96. A TOEFL iBT of 103 or higher is required for Full Status Admission to the University of Illinois Graduate College and School of Music. For the full English proficiency requirements please see: https://music.illinois.edu/english-proficiency-requirement

Fall admission only; other terms of entry by departmental petition approval only.

For information about admission to the MME and PhD in Music Education, please visit www.music.illinois.edu (https://music.illinois.edu/).

Language Requirements

For the Master of Music program, applicants in voice and vocal accompanying and coaching are required to have had at least one year each of college-level French, German, and Italian or the equivalent. Applicants in other applied music areas, composition, conducting, and musicology are required to have had one year of any language at the college level or the equivalent.

All Doctor of Musical Arts candidates will be required to demonstrate proficiency in at least one language other than English. Each area may specify which language is required or may require proficiency in more than one language. Please review the current Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/) for more details.

Proficiency is required in two languages, depending on the proposed field of specialization, for candidates in the Doctor of Philosophy in Musicology program. This may be demonstrated through two years of undergraduate study in each language.

For all Graduate Degrees:

For those students who do not meet the language requirement at the time of entrance, it may be satisfied by evidence of two years of undergraduate study or the equivalent, or by completion of a two-semester, 500-level reading course sequence at UIUC with a grade of at least B-, or by satisfactory test scores. For up-to-date information regarding language requirements of the School of Music, please see the Graduate Music Handbook (https://music.illinois.edu/graduate-handbooks/).

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience.

Financial Aid

Fellowships, teaching, graduate, and research assistantships are awarded on a one-year basis with continuation dependent upon success in the program. Specific information on application procedures is available from the Music Admissions Office, (217) 244-7899; musicadmissions@illinois.edu.

for the degree of Doctor of Philosophy in Musicology

Code	Title	Hours
Minimum of 8 hours selected from:		8
MUS 516	Fieldwork and Ethnography	
MUS 519	Analytical Methods: Musicology	
MUS 520	Soc Theory in Ethnomusicology	
MUS 523	Seminar in Musicology	
Supporting Coursework		24
MUS 599	Thesis Research (min/max applied toward degree)	32
Total Hours		32-48

Other Requirements: [1]

Requirement	Description
Other requirements may overlap	
Students are expected to take courses in fields outside music that are appropriate to the proposed area of thesis research	
Masters Degree Required for Admission to PhD?	Yes
Qualifying Exam Required:	No
Preliminary Exam Required (taken after all coursework is completed):	Yes
Final Exam/Dissertation Defense Required:	Yes
Dissertation Deposit Required:	Yes
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the department's Graduate Handbook* https://music.illinois.edu/graduate-handbooks *(*https://music.illinois.edu/graduate-handbooks/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*)*

Learning Outcomes: Musicology, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Musicology

Students in the PhD in Musicology program will:

1. Acquire a familiarity with the methodological and interpretative conventions of the discipline (e.g. historiography, theory, ethnography, source studies, analysis & aesthetics), while developing an in-depth and discriminating knowledge of specific areas of musicological study.
2. Develop an independent area of research, demonstrating command of primary sources and secondary scholarship, as well as appropriate skills in foreign language(s), and making an original contribution to musicological knowledge and understanding at the highest professional level.
3. Develop expertise in areas of scholarship outside of musicology and apply that expertise to individual research projects.
4. Exhibit a sophisticated ability to communicate their research objectives, methods, and conclusions in written, oral, and other formats to a variety of audiences.
5. Develop experience in university-level instruction and assessment in at least one area of musicology, gaining insights into classroom teaching, syllabus design, appropriate methods of evaluation, and current pedagogical issues within the discipline.
6. Gain experience of the workings of the profession and develop a multi-faceted understanding of how to function successfully as a musicologically-trained scholar in a variety of career paths.

Natural Resources & Environmental Sciences, MS

for the degree of Master of Science in Natural Resources & Environmental Sciences(on campus & online)

department head: Robert Schooley
director of graduate programs: Jeffrey Matthews
department website: http://nres.illinois.edu
department faculty: https://nres.illinois.edu/directory/
overview of college admissions & requirements: https://nres.illinois.edu/graduate/apply (https://nres.illinois.edu/graduate/apply/)
online program admissions: https://nres.illinois.edu/online/apply (https://nres.illinois.edu/online/apply/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://aces.illinois.edu/
department office: W-503 Turner Hall, 1102 South Goodwin Avenue, Urbana, IL 61801
phone: (217) 333-2770
fax: (217) 244-3219
email: nres-ssc@illinois.edu

Graduate Degree Programs in Natural Resources and Environmental Sciences

Graduate Majors:

Natural Resources and Environmental Sciences, MS (on-campus & online) (p. 943)

Natural Resources and Environmental Sciences, PhD (p. 946)

Joint Degree Program:

Natural Resources and Environmental Sciences, MS and Law, JD (p. 1158)

The Department of Natural Resources and Environmental Sciences is a broad and diverse department offering flexible M.S. and Ph.D. degrees. The mission of the department is to establish and implement research and educational programs that enhance environmental stewardship in the management and use of natural, agricultural, and urban systems in a socially responsible manner. The department is

composed of approximately 24 faculty, 60 affiliates, and 160 graduate students. Offering education and research in a variety of disciplines, the department provides a systems-level perspective that few other departments can offer. Further illustrating the breadth of natural resources and environmental sciences, research areas include but are not limited to:

- agronomy/agroecology
- aquatic chemistry
- conservation ecology
- ecosystem science
- environmental education
- fish and wildlife ecology and management
- forest ecology
- humans dimensions of the environment
- landscape ecology
- microbial ecology
- natural resource economics
- natural resource policy
- plant ecology
- physiology and genetics
- restoration ecology
- quantitative and spatial analysis
- soil science and conservation
- sustainability

Admission

NRES graduate advisers are seeking students with strong letters of reference, evident motivation to undertake graduate study, relevant experience, and good preparation in prerequisite courses. Graduate applicants must have an undergraduate grade point average (GPA) of 3.0 (A = 4.0) calculated on the last 2 years of undergraduate coursework to be admitted with full status. Ph.D. applicants must have earned an M.S. (or expect to be awarded the degree before beginning the NRES program) with a grade point average of at least 3.5. Applicants should have adequate preparation in the fundamental sciences and courses appropriate to their proposed field of study (applicants should talk with prospective advisers about the background they expect). Those without the necessary prerequisites may be accepted conditionally, and the undergraduate courses must be completed before the degree will be awarded. The Graduate Record Examination (GRE) is required of all students applying to the campus M.S. or Ph.D. program. There is no minimum score for admission, and the results will be examined along with GPA, letters of recommendation, statement of purpose, research experience, and other information in the application package. However, successful applicants typically have a combined quantitative/verbal/analytical GRE percentile of at least 70%. Students whose native language is not English are required to submit the results of the TOEFL or IELTS as evidence of English proficiency. Official scores are required to be submitted directly from TOEFL/ETS or IELTS to the University. Minimum English test scores and other information for international applicants can be found at: www.grad.illinois.edu/admissions/apply/begin/international (http://www.grad.illinois.edu/admissions/apply/begin/international/). Applicants who are not U.S. citizens must also submit evidence that they have sufficient financial support for their program of study. Prospective graduate students are urged to apply for admission to the degree program as early as possible, preferably six to ten months before the beginning of the semester in which they expect to enroll. Prospective students must review important application information available a http://nres.illinois.edu/graduate/prospective (http://nres.illinois.edu/graduate/prospective/). Applicants to the campus programs wishing to be considered for a university-level fellowship must apply for admission to the fall semester by December 15th, and, to be considered for any college or departmental funding, the application deadline is January 1st.

Graduate Teaching Experience

Although teaching is not a Graduate College requirement, experience in teaching is considered an important part of this graduate program, particularly for Ph.D. students.

Faculty Research Interests

Graduate degree programs in NRES are informed by the major areas of faculty research, which include:

- agronomy/agroecology
- conservation ecology
- ecosystem science
- fish and wildlife ecology and management
- forest ecology
- global environmental change
- human dimensions of natural resources and ecology
- landscape ecology
- microbial ecosystems
- natural resource policy
- plant ecology
- physiology and genetics
- quantitative and spatial methods
- restoration ecology
- soil science and conservation
- sustainability
- water/biogeochemistry
- wetland ecology

Students in NRES can participate in affiliated programs like those listed below.

Program in Environmental and Resource Economics: Students involved in the program in Environmental and Resource Economics (pERE) explore the complex relationships between natural resource allocation, environmental quality and economic prosperity. Students and faculty from five other University departments in addition to NRES are using economics to analyze policy toward some of today's most critical environmental and natural resource issues.

Human Dimensions of Environmental Systems: NRES graduate students may participate in HDES, an interdisciplinary program comprised of faculty from six colleges at Illinois. Participants are united in the study of connections between humans and the environment. The program is built on the premise that the best insights are not limited to the domain of a single discipline and is interdisciplinary in all its pursuits.

Financial Aid

Several sources of financial aid are available within the department:

- research assistantships, supported by federal and grant funds made available to the natural resources and environmental sciences faculty
- teaching assistantships

- departmental fellowships
- University fellowships
- College of Agricultural, Consumer and Environmental Sciences Jonathan Baldwin Turner Fellowships
- waivers of tuition and fees

Most NRES graduate students with financial support have a research assistantship provided by the adviser. Appointments as research and teaching assistants and fellows provide a stipend and waive tuition and some fees.

Financial aid is granted on a competitive basis. Applicants are judged for academic potential based on past performance, experience, motivation, dedication to the designated area of interest and, where applicable, the potential to satisfy the objectives of a donor. Fellowships have minimum GPA and GRE score requirements. Information about the current availability of financial aid can be obtained from the graduate coordinator or, in the case of research assistantships, directly from faculty members working in the area of interest.

for the Master of Science in Natural Resources and Environmental Sciences (on campus & online)

Two options are open to students who wish to pursue a Master of Science degree in the Department of Natural Resources and Environmental Sciences. The M.S. Thesis Option program helps students develop into researchers. Coursework is no longer the primary focus, and students learn how to create, plan, and carry out independent research. The M.S. Non-Thesis Option program guides students in the acquisition of professional expertise beyond the undergraduate degree. The program requires a culminating/capstone experience, which may be satisfied in one of three ways: an individual investigative project, a collaborative, possibly interdisciplinary, group project, or a professional internship experience. The Non-Thesis Option may also be appropriate in special cases where a student executes a major special project which is equivalent to a M.S. thesis, but which does not lend itself to the thesis format. Students on campus are admitted into the thesis option and, under certain conditions, may be allowed to transfer into the non-thesis option by petitioning the Department. In contrast, all students in the online M.S. program are admitted into the non-thesis option and, under certain conditions, may be allowed to transfer into the thesis option by petitioning the Department.

The thesis option requires that the student satisfactorily complete a minimum of 32 hours of graduate coursework, of which a minimum of 12 graduate hours are 500- level courses. This coursework shall include NRES Seminar (500) each semester, minus one, that the student is enrolled, Professional Orientation (594) and 4 to 12 graduate hours of Thesis Research (599), which culminates in the completion and oral defense of a thesis.

A non-thesis option student must satisfactorily complete a minimum of 32 hours of graduate coursework, of which a minimum of 12 graduate hours are 500- level courses, Professional Orientation (594), and 3 to 8 hours of capstone experience in the form of a Capstone Research Project (503), Capstone Internship Experience (505), or Capstone Group Research Project (507). The student must prepare and submit a report analyzing the capstone learning experience and perform satisfactorily on written and oral final examinations.

The online M. S. graduate program in NRES enables students to continue their education in disciplines related to natural resources and environmental sciences through part-time study at locations away from the Urbana-Champaign campus. This program meets the needs of persons currently working or wanting to work in the areas of conservation, ecology, restoration ecology, soil science, sustainable development, urban ecology, urban forestry, urban wildlife management, and water resources management. Students can enroll in individual courses for professional and/or academic advancement, or apply for admission to the M.S. degree program. All online M.S. students are admitted to the non-thesis option, though, under certain conditions, a degree-seeking online student may petition the Department to transfer to the thesis option. Application deadlines and other important information are available at https://nres.illinois.edu/online/apply (https://nres.illinois.edu/online/apply/).

for the Master of Science in Natural Resources and Environmental Sciences

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For additional details and requirements refer to the department's Graduate Handbook *(*http://nres.illinois.edu/graduate/handbook/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

This degree program can be completed either on campus or online; with or without a thesis, the requirements are listed below:

Thesis Option

Code	Title	Hours
Thesis Option:		
NRES 594	NRES Professional Orientation	1
Electives		19-27
NRES 599	Thesis Research (min/max applied toward degree)	4-12
Completion, defense and deposit of thesis		
Total Hours	**Thesis Option**	**32**
Non-Thesis Option:		
NRES 594	NRES Professional Orientation	1
Select one of the following:		
NRES 503	Capstone Research Project	
NRES 505	Capstone Internship Experience	
NRES 507	Capstone Group Research Project	
Electives		23-28
Written final examination; preparation, presentation, oral exam, and approval of a capstone project report		
Total Hours	**Non-Thesis Option**	**32**

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	3.0

Learning Outcomes: Natural Resources & Environmental Sciences, MS

Learning Outcomes for the degree of Master of Science in Natural Resources & Environmental Sciences(on campus & online)

Thesis

1. Mastery of core knowledge in major field of study and specialized knowledge related to concentration/specialization
2. Understanding the logic of science, including the philosophy of science and research design
3. Facility with research tools/techniques and data analysis techniques relevant for major and concentration/specialization
4. Strong communication skills in conversation, presentation, and writing, particularly scientific/technical writing
5. Ability to function well professionally, with good leadership skills, well-developed problem-solving abilities, and ethical thinking

Non-Thesis

Completing the non-thesis M.S. program requires a broad grasp of current scholarly understanding of natural resources and environmental sciences. In particular, students are responsible for demonstrating adequate mastery in four core areas of study:

1. Statistics and Research Design,
2. Spatial Analysis and Modeling,
3. Ecosystem Science and Conservation Biology, and
4. Human Dimensions of the Environment, Stewardship, and Management.

Students must take at least one course in each of these four areas and pass a final written exam that covers them.

In order to graduate, students must demonstrate, at a masters level, the following learning objectives:

1. Broad grasp of current scholarly understanding of natural resources and environmental sciences,
2. Understanding and application of the scientific process,
3. Skills in the analysis and interpretation of relevant scientific information, and
4. Proficiency in communicating scientific information

Progress of each student is evaluated through course performance, a written final examination, the capstone paper, and a final oral examination.

Natural Resources & Environmental Sciences, PhD

for the degree of Doctor of Philosophy in Natural Resources & Environmental Sciences

department head: Robert Schooley
director of graduate programs: Jeffrey Matthews
department website: http://nres.illinois.edu
department faculty: https://nres.illinois.edu/directory/
overview of college admissions & requirements: https://nres.illinois.edu/graduate/apply (https://nres.illinois.edu/graduate/apply/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://aces.illinois.edu/
department office: W-503 Turner Hall, 1102 South Goodwin Avenue, Urbana, IL 61801
phone: (217) 333-2770
fax: (217) 244-3219
email: nres-ssc@illinois.edu

Graduate Degree Programs in Natural Resources and Environmental Sciences

Graduate Majors:

Natural Resources and Environmental Sciences, MS (on-campus & online) (p. 943)
Natural Resources and Environmental Sciences, PhD (p. 946)

Joint Degree Program:

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- agronomy/agroecology
- aquatic chemistry
- conservation ecology
- ecosystem science
- environmental education
- fish and wildlife ecology and management
- forest ecology
- humans dimensions of the environment
- landscape ecology
- microbial ecology
- natural resource economics
- natural resource policy
- plant ecology
- physiology and genetics
- restoration ecology
- quantitative and spatial analysis
- soil science and conservation
- sustainability

Admission

NRES graduate advisers are seeking students with strong letters of reference, evident motivation to undertake graduate study, relevant experience, and good preparation in prerequisite courses. Graduate applicants must have an undergraduate grade point average (GPA) of 3.0 (A = 4.0) calculated on the last 2 years of undergraduate coursework to be admitted with full status. Ph.D. applicants must have earned an M.S. (or expect to be awarded the degree before beginning the NRES program) with a grade point average of at least 3.5. Applicants should have adequate preparation in the fundamental sciences and courses appropriate to their proposed field of study (applicants should talk with prospective advisers about the background they expect). Those without the necessary prerequisites may be accepted conditionally, and the undergraduate courses must be completed before the degree will be awarded. The Graduate Record Examination (GRE) is required of all students applying to the campus M.S. or Ph.D. program. There is no minimum score for admission, and the results will be examined along with GPA, letters of recommendation, statement of purpose, research experience, and other information in the application package. However, successful applicants typically have a combined quantitative/verbal/analytical GRE percentile of at least 70%. Students whose native language is not English are required to submit the results of the TOEFL or IELTS as evidence of English proficiency. Official scores are required to be submitted directly from TOEFL/ETS or IELTS to the University. Minimum English test scores and other information for international applicants can be found at: www.grad.illinois.edu/admissions/apply/begin/international (http://www.grad.illinois.edu/admissions/apply/begin/international/). Applicants who are not U.S. citizens must also submit evidence that they have sufficient financial support for their program of study. Prospective graduate students are urged to apply for admission to the degree program as early as possible, preferably six to ten months before the beginning of the semester in which they expect to enroll. Prospective students must review important application information available a http://nres.illinois.edu/graduate/prospective (http://nres.illinois.edu/graduate/prospective/). Applicants to the campus programs wishing to be considered for a university-level fellowship must apply for admission to the fall semester by December 15th, and, to be considered for any college or departmental funding, the application deadline is January 1st.

Graduate Teaching Experience

Although teaching is not a Graduate College requirement, experience in teaching is considered an important part of this graduate program, particularly for Ph.D. students.

Faculty Research Interests

Graduate degree programs in NRES are informed by the major areas of faculty research, which include:

- agronomy/agroecology
- conservation ecology
- ecosystem science
- fish and wildlife ecology and management
- forest ecology
- global environmental change
- human dimensions of natural resources and ecology
- landscape ecology
- microbial ecosystems
- natural resource policy
- plant ecology
- physiology and genetics
- quantitative and spatial methods
- restoration ecology
- soil science and conservation
- sustainability
- water/biogeochemistry
- wetland ecology

Students in NRES can participate in affiliated programs like those listed below.

Program in Environmental and Resource Economics: Students involved in the program in Environmental and Resource Economics (pERE) explore the complex relationships between natural resource allocation, environmental quality, and economic prosperity. Students and faculty from five other University departments in addition to NRES are using economics to analyze policy toward some of today's most critical environmental and natural resource issues.

Human Dimensions of Environmental Systems: NRES graduate students may participate in HDES, an interdisciplinary program comprised of faculty from six colleges at Illinois. Participants are united in the study of connections between humans and the environment. The program is built on the premise that the best insights are not limited to the domain of a single discipline and is interdisciplinary in all its pursuits.

Financial Aid

Several sources of financial aid are available within the department:

- research assistantships, supported by federal and grant funds made available to the natural resources and environmental sciences faculty
- teaching assistantships
- departmental fellowships
- University fellowships
- College of Agricultural, Consumer and Environmental Sciences Jonathan Baldwin Turner Fellowships
- waivers of tuition and fees

Most NRES graduate students with financial support have a research assistantship provided by the adviser. Appointments as research and teaching assistants and fellows provide a stipend and waive tuition and some fees.

Financial aid is granted on a competitive basis. Applicants are judged for academic potential based on past performance, experience, motivation, dedication to the designated area of interest and, where applicable, the potential to satisfy the objectives of a donor. Fellowships have minimum GPA and GRE score requirements. Information about the current availability of financial aid can be obtained from the graduate coordinator or, in the case of research assistantships, directly from faculty members working in the area of interest.

for the degree of Doctor of Philosophy in Natural Resources & Environmental Sciences

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The Ph.D. program prepares students to be an expert in their fields. Earning a Ph.D. involves mastering a field of study and increasing the knowledge and understanding in that field through the completion of a dissertation that makes a contribution to existing research. Students working toward the Ph.D. degree are required demonstrate competency

in at least three content areas by passing a general examination (the preliminary examination) before admission to candidacy for the doctoral degree. Students consult with their advisers to identify their competency content areas and the courses they will take, which are recorded on the Doctoral Plan of Study. The NRES Ph.D. program requires students to register for NRES Seminar (500) each semester, minus two, that the student is enrolled. To earn the doctorate, students must successfully complete a final oral examination (thesis defense). In most cases, students earn a M.S. before starting work on a Ph.D. However, in certain cases, it is possible to take the coursework required for the M.S. as part of a Ph.D. program. Details of the B.S. to Ph.D. program are available from the graduate coordinator.

For additional details and requirements refer to the department's Graduate Handbook (http://nres.illinois.edu/graduate/handbook/)and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
NRES 594	NRES Professional Orientation (need not be repeated if taken as an NRES M.S. student)	1
Graded Coursework (not including NRES 501, 512 or other independent study or readings course)		12
Electives		0-51
NRES 599	Thesis Research (max applied toward degree)	0-51
Total Hours		64

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum GPA:	3.0
Masters Degree Required for Admission to PhD?	Yes
Qualifying Exam Required	No
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes

Learning Outcomes: Natural Resources & Environmental Sciences, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Natural Resources & Environmental Sciences

1. Mastery of core knowledge in major field of study and specialized knowledge related to concentration/specialization
2. Understanding the logic of science, including the philosophy of science and research design
3. Facility with research tools/techniques and data analysis techniques relevant for major and concentration/specialization
4. Strong communication skills in conversation, presentation, and writing, particularly scientific/technical writing
5. Ability to function well professionally, with good leadership skills, well-developed problem-solving abilities, and ethical thinking
6. Ability to function effectively as an independent researcher and college/university teacher

Neuroscience, PhD

for the degree of Doctor of Philosophy in Neuroscience

program director: Martha Gillette
program coordinator: Michelle Tomaszycki
email: nsp@life.illinois.edu
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
overview of program admissions requirements:
program website: http://neuroscience.illinois.edu
college website: https://las.illinois.edu/
program office: 2325 Beckman Institute, 405 North Mathews Avenue, Urbana, IL 61801
phone: (217) 300-7978

Because of the breadth of the fields in this program, the coursework is tailored to the student's fields of interest as declared by a major and at least two minor areas of concentration from among those listed above. A faculty committee of representatives from the major and minor areas will then meet regularly with the student to plan coursework and research experience. The goal of this plan is to allow maximum flexibility while providing students with close guidance. Courses and laboratory research experience are supplemented by weekly seminars in neuroscience.

Graduate Degree Programs in Neuroscience

Neuroscience, PhD (p. 948)

The Neuroscience Program is an interdisciplinary and highly individualized Ph.D. program. Students have varied backgrounds but typically have undergraduate degrees in psychology, biology, electrical engineering, or computer science. The Neuroscience Program guides students to become productive, scholarly neuroscientists with access to careers in academic research, medicine, industry or non-research careers such as law, policy, or journalism. The faculty have broad and diverse research interests; areas of particular strength include aging, brain plasticity, cognitive functions, neurogenomics, molecular bases of development and disease and neuroengineering. Integrative and collaborative studies that bridge two or more labs are encouraged.

Admission

Applications are considered individually by the admissions committee, usually for the fall semester. Graduate Record Examination (GRE) scores are optional. International applicants must meet the minimum Test of English as a Foreign Language (TOEFL) requirement set by the Graduate College. Admission and financial aid are considered together.

Financial Aid

The Neuroscience Program is committed to supporting its students and makes every effort to ensure that students who remain in good academic standing receive full support including tuition waiver and stipend throughout their tenure in the program. Support may come in the form of fellowships, traineeships, research assistantships, or teaching assistantships according to the student's qualifications.

for the degree of Doctor of Philosophy in Neuroscience

Because of the breadth of the fields in this program, the coursework is tailored to the student's fields of interest as declared by a major and at least two minor areas of concentration from among those listed above. A faculty committee of representatives from the major and minor areas will then meet regularly with the student to plan coursework and research experience. The goal of this plan is to allow maximum flexibility while providing students with close guidance. Courses and laboratory research experience are supplemented by weekly seminars in neuroscience.

For additional details and requirements refer to the department's Program for Graduate Study *(*https://neuroscience.illinois.edu/academics/graduate-program/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Code	Title	Hours
NEUR 520	Advanced Topics in Neuroscience (Section 1, Seminar - each of first 4 semesters)	4
NEUR 500	Topics in Neuroscience	2
NEUR 520	Advanced Topics in Neuroscience (Section 2, Professional Development Program.)	1
NEUR 599	Thesis Research (0 min applied toward degree)	0
Total Hours		96

Other Requirements

Requirement	Description
Other requirements may overlap	
All students must complete a minimum of one semester of service as a teaching assistant (one semester @50% or 2 semesters @25% appointment) or the requirement may be met by education outreach activity under the supervision of a Neuroscience Program faculty member.	
Masters Degree Required Before Admission to Ph.D.?	No
Qualifying Exam Required:	Yes
Preliminary Exam Required:	Yes
Final Exam/Defense Required:	Yes
Disseration Deposit Required:	Yes
Minimum GPA:	3.0

Learning Outcomes: Neuroscience, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Neuroscience

1. **Knowledge of chosen research area:** Students are expected to be acquainted with the full breadth of neuroscience research, but for assessment purposes, each student chooses one major and two minor areas of concentration that form the core of their professional knowledge and are tested on the Qualifying Exam. We believe neuroscience is too broad for every student to master the same core knowledge and be successful; instead, students plan their own programs of study (with committee guidance) and develop independence in building their expertise.
2. **Mastery of experimental design and methods:** Students plan, design, carry out and interpret experiments; they are expected to be fully competent in the standard techniques of their field and to learn cutting-edge techniques where possible.
3. **Analytical and quantitative skills:** All students are encouraged to take statistics courses appropriate to their research area and to become experts in the treatment, analysis, and interpretation of data. Most students learn to code their own data management and statistical procedures.
4. **Writing and presentation skills:** All students must demonstrate strong skills in writing manuscripts for publication and grant proposals, and in giving oral presentations. Students are expected to communicate their research effectively to general scientific and to lay audiences
5. **Teaching and mentoring:** Students are required to be Teaching Assistants for one semester at 50% (or two semesters at 25%). Some students are able to petition the program to waive the teaching requirement if they can demonstrate equivalent preparation time and direct contact time with another group of students. Most students mentor one or more undergraduate students, or more junior graduate students, during their time in the program.
6. **Professional skills and ethics:** The program requires completion of a course in Professional Skills and Ethics that covers career planning, grant writing and review, oral presentations, time management, different career stages (postdoc, junior faculty, tenured professor) and non-academic careers, and an introduction to research and professional ethics. Additional required workshops cover standard Responsible Conduct of Research topics mandated by NIH and NSF. We are in the process of requiring completion of this training prior to the Qualifying Exam.
7. **Citizenship and organizational skills:** Students are expected to have strong interpersonal and collegial skills for collaborations, networking, etc. Neuroscience students have an exceptional culture of participation, volunteering and organizing program events, including our Brain Awareness Day (annual public outreach event) and Open House for visiting recruits. The skills acquired in these experiences are not “scientific”, but they have a major impact on students’ effectiveness in their varied roles and in the impression they make on visitors to the program and the university.

Nuclear, Plasma & Radiological Engineering, MS

for the degree of Master of Science in Nuclear, Plasma & Radiological Engineering

department head: Rizwan Uddin (rizwan@illinois.edu)
associate head for graduate programs: Yang Zhang (zhyang@illinois.edu)

overview of admissions & requirements: https://npre.illinois.edu/admissions/graduate (https://npre.illinois.edu/admissions/graduate/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: http://npre.illinois.edu (https://npre.illinois.edu/)
program website: https://npre.illinois.edu/academics/graduate (https://npre.illinois.edu/academics/graduate/)
department faculty: https://npre.illinois.edu/people/faculty (https://npre.illinois.edu/people/faculty/)
college website: https://grainger.illinois.edu/
contact: Kristie Stramaski (kstram20@illinois.edu)
address: 218 Talbot Laboratory, 104 S Wright St, Urbana, IL 61801
phone: (217) 300-5517
email: nuclear@illinois.edu

Opportunity exists for specializing in computational science and engineering via the Computational Science & Engineering (p. 1089) optional graduate concentration.

Admission Requirements

Application for admissions to the master's and doctoral degree programs is open to all graduates in engineering, mathematics, and the physical sciences with a grade point average of at least 3.00 (A = 4.00) for the last two years of undergraduate work and any graduate work completed. Prerequisites for admission include a course in ordinary differential equations plus one other mathematics course beyond calculus; an intermediate course in atomic and nuclear physics or interaction of radiation with matter; a course in electrical circuit theory; a course in thermodynamics; a course in fluid mechanics or continuum mechanics; and a course introducing nuclear engineering. A student may be admitted before completion of these prerequisites, but he or she must allow additional time to make up for these deficiencies; courses taken to make up such deficiencies will not count toward the number of units required for the graduate degree. Transcripts and letters of recommendation are required. The Graduate Record Exam (GRE) (http://www.ets.org/) is required. Information such as undergraduate class rank is recommended.

For full consideration of fall admission with financial aid, application receipt deadline is January 1st. Students who wish to enter in the spring term should contact the Department before applying. For full consideration of spring admission with financial aid, application receipt deadline is October 15th.

All applicants whose native language is not English are required to submit TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) scores as evidence of English proficiency. Minimum admission requirements (https://grad.illinois.edu/admissions/instructions/04c/) are set by the Graduate College.

Financial Aid

Most graduate students receive some form of financial aid. Fellowships (https://grad.illinois.edu/fellowships/about/) are available to support the best applicants. Other students are supported on teaching or research assistantships (https://grad.illinois.edu/assistantships/). Financial aid includes federally sponsored traineeships and fellowships and University and industry fellowships. The University is approved for several fellowships including those from the Department of Energy, Nuclear Regulatory Commission, the National Science Foundation, the Hertz Foundation and others. Part- and full-time assistantships include tuition and partial fee waivers.

All applicants, regardless of US citizenship, whose native language is not English and who wish to be considered for teaching assistantships must demonstrate spoken English language proficiency (http://grad.illinois.edu/admissions/taengprof.htm) by achieving a minimum score of 24 on the speaking subsection of the TOEFL iBT or 8 on the speaking subsection of the IELTS. For students who are unable to take the iBT or IELTS, a minimum score of 4CP is required on the EPI test (http://cte.illinois.edu/testing/oral_eng/epi_overview.html), offered on campus. All new teaching assistants are required to participate in the Graduate Academy for College Teaching (https://citl.illinois.edu/citl-101/teaching-learning/grad-academy-for-college-teaching/) conducted prior to the start of the semester.

Department Research

Research activities in the Department of NPRE encompass a diverse range of investigation and challenge areas as described on the department's research area website (https://npre.illinois.edu/research/areas/), these include but are not limited to: nuclear science and engineering, radiation processes and transport, materials science, thermal sciences, systems engineering, energy conversion processes and systems, plasma sciences and processing, fusion energy, radiation-based medical imaging and therapy, dosimetry and radiation protection, radiation detection analysis, reliability and risk analysis, energy systems, and international security. Graduate students in the Department are active participants and contributors to these areas of education and research and typically pursue careers in one of these areas. Graduate students in the Department are also encouraged to take part in course work and research activities in other engineering and science departments to complement their professional development in the nuclear engineering field. Faculty in other related fields are available to supervise research for students through formal "affiliate faculty" appointments.

A wide range of major research resources are available for nuclear engineering research. These are described at the department's research facilities website (https://npre.illinois.edu/research/facilities/).

Other Graduate Programs in the Department of Nuclear, Plasma & Radiological Engineering

degrees:

Nuclear, Plasma, & Radiological Engineering, PhD (p. 951)
optional concentrations:
Computational Science & Engineering (p. 1089)

concentrations:

Energy Systems (p. 749)
available for:
Engineering, MENG (p. 745)
Plasma Engineering (p. 748)
available for:
Engineering, MENG (p. 745)

The Department of Nuclear, Plasma & Radiological Engineering (NPRE) offers programs leading to degrees of Master of Science and Doctor of Philosophy in Nuclear, Plasma & Radiological Engineering, as well as Master of Engineering in Engineering with a Concentration in Energy Systems or a Concentration in Plasma Engineering. The Master of

Science and Doctor of Philosophy degree programs are centered around five theme areas:

- nuclear power
- plasma physics and fusion
- radiological science
- materials science
- reliability and risk

Advanced course work and active research programs are offered in all of these areas.

Opportunity also exists for specializing in energy and sustainability engineering via the

Energy and Sustainability Engineering (EaSE) Graduate Certificate Option (http://ease.illinois.edu/)

for the degree of Master of Science in Nuclear, Plasma & Radiological Engineering

The MS degree takes at least two semesters and a summer session to complete and normally takes three semesters and a summer session. The curriculum requires courses covering the fundamentals of nuclear engineering and interaction of radiation with matter, plus additional courses in an area of concentration chosen by the student in consultation with an advisor. Typical areas are:

- fission engineering including reactor physics and radiation transport
- reactor analysis, thermal hydraulics, and reactor safety
- fuel cycles, radiation effects, and radioactive waste management
- fusion engineering and technology
- plasma engineering and processing
- nuclear materials, corrosion, and irradiation damage
- neutron scattering
- nuclear nonproliferation and public policy issues
- radiation detector development and homeland security applications
- biomedical imaging, MRI applications, radiation protection, radiation-based therapy, and health physics
- reliability and risk analysis and probabilistic risk assessment
- computational methods including Lie Group, integral-differential equation, Monte Carlo, big data and fuzzy logic applications.

For additional details and requirements refer to the department's printed handbook and the Graduate College Handbook *(*http://grad.illinois.edu/gradhandbook/*).*

Requirements

Code	Title	Hours
NPRE 599	Thesis Research (min-max applied toward degree)	4-8
NPRE 501 & NPRE 521	Fundamentals of Nuclear Engrg and Interact of Radiation w/Matter	8
NPRE 596	Seminar in Nuclear Sci & Engrg (registration for 1 hour every semester while in residence; credit does not apply toward the degree.)	0
Two or more NPRE courses in an area of concentration		8
Additional 500-level courses		8
Elective courses (subject to Other Requirements and Conditions below)		0-4
Total Hours		32

Other Requirements and Conditions

Requirement	Description
Other Requirements and Conditions may overlap	
Credit in NPRE 402 or NPRE 446 does not count toward the degree.	
Minimum GPA:	2.75

Learning Outcomes: Nuclear, Plasma & Radiological Engineering, MS

Learning Outcomes for the degree of Master of Science in Nuclear, Plasma & Radiological Engineering

1. Ability to apply knowledge of mathematics, science and engineering
2. Ability to design and conduct experiments and/or computational projects; analyze and interpret data
3. Ability to communicate effectively
4. Demonstrate ability to conduct independent research in a nuclear, plasma or radiological field
5. Ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety

Nuclear, Plasma & Radiological Engineering, PhD

for the degree of Doctor of Philosophy in Nuclear, Plasma & Radiological Engineering

department head: Rizwan Uddin (rizwan@illinois.edu)
associate head for undergraduate program: Yang Zhang (zhyang@illinois.edu)

overview of admissions & requirements: https://npre.illinois.edu/admissions/graduate (https://npre.illinois.edu/admissions/graduate/)
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department website: http://npre.illinois.edu (https://npre.illinois.edu/)
program website: https://npre.illinois.edu/academics/graduate (https://npre.illinois.edu/academics/graduate/)
department faculty: https://npre.illinois.edu/people/faculty (https://npre.illinois.edu/people/faculty/)
college website: https://grainger.illinois.edu/
contact: K (kstram20@illinois.edu)ristie Stramaski (kstram20@illinois.edu)
address: 218 Talbot Laboratory, 104 S Wright St, Urbana, IL 61801
phone: (217) 300-5517
email: nuclear@illinois.edu

Opportunity exists for specializing in computational science and engineering via the Computational Science & Engineering (p. 1089) optional graduate concentration.

The Department of Nuclear, Plasma and Radiological Engineering offers both a traditional doctoral program and a direct doctoral program. The traditional doctoral program requires candidates enter with an approved master's degree. The direct doctoral program allows highly qualified applicants with a baccalaureate degree to be admitted directly into the PhD program without an MS degree. The direct PHD program has the same coursework requirements as the MS plus PhD route, however students in the direct PhD do not write an MS thesis and do not receive an MS degree.

Admission Requirements

Application for admissions to the master's and doctoral degree programs is open to all graduates in engineering, mathematics, and the physical sciences with a grade point average of at least 3.00 (A = 4.00) for the last two years of undergraduate work and any graduate work completed. Prerequisites for admission include a course in ordinary differential equations plus one other mathematics course beyond calculus; an intermediate course in atomic and nuclear physics or interaction of radiation with matter; a course in electrical circuit theory; a course in thermodynamics; a course in fluid mechanics or continuum mechanics; and a course introducing nuclear engineering. A student may be admitted before completion of these prerequisites, but he or she must allow additional time to make up for these deficiencies; courses taken to make up such deficiencies will not count toward the number of units required for the graduate degree. Transcripts and letters of recommendation are required. The Graduate Record Exam (GRE) (http://www.ets.org/) is required. Information such as undergraduate class rank is recommended.

For full consideration of fall admission with financial aid, application receipt deadline is January 1st. Students who wish to enter in the spring term should contact the Department before applying. For full consideration of spring admission with financial aid, application receipt deadline is October 15th.

All applicants whose native language is not English are required to submit TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) scores as evidence of English proficiency. Minimum admission requirements (https://grad.illinois.edu/admissions/instructions/04c/) are set by the Graduate College.

Financial Aid

Most graduate students receive some form of financial aid. Fellowships (https://grad.illinois.edu/fellowships/about/) are available to support the best applicants. Other students are supported on teaching or research assistantships (https://grad.illinois.edu/assistantships/). Starting in Fall 2020, Grainger Engineering PhD students in their first five years of enrollment who meet the minimum eligibility requirements (https://grainger.illinois.edu/academics/graduate/phd-funding-guarantee/) are guaranteed a funded appointment for fall and spring that includes a full tuition waiver, a partial fee waiver, and a stipend. Financial aid includes federally sponsored traineeships and fellowships and University and industry fellowships. The University is approved for several fellowships including those from the Department of Energy, Nuclear Regulatory Commission, the National Science Foundation, , the Hertz Foundation and others.

All applicants, regardless of US citizenship, whose native language is not English and who wish to be considered for teaching assistantships must demonstrate spoken English language proficiency (http://grad.illinois.edu/admissions/taengprof.htm) by achieving a minimum score of 24 on the speaking subsection of the TOEFL iBT or 8 on the speaking subsection of the IELTS. For students who are unable to take the iBT or IELTS, a minimum score of 4CP is required on the EPI test (http://cte.illinois.edu/testing/oral_eng/epi_overview.html), offered on campus. All new teaching assistants are required to participate in the Graduate Academy for College Teaching (https://citl.illinois.edu/citl-101/teaching-learning/grad-academy-for-college-teaching/) conducted prior to the start of the semester.

Department Research

Research activities in the Department of NPRE encompass a diverse range of investigation and challenge areas as described on the department's research area website (https://npre.illinois.edu/research/areas/), these include but are not limited to: nuclear science and engineering, radiation processes and transport, materials science, thermal sciences, systems engineering, energy conversion processes and systems, plasma sciences and processing, fusion energy, radiation-based medical imaging and therapy, dosimetry and radiation protection, radiation detection analysis, reliability and risk analysis, energy systems, and international security. Graduate students in the Department are active participants and contributors to these areas of education and research and typically pursue careers in one of these areas. Graduate students in the Department are also encouraged to take part in course work and research activities in other engineering and science departments to complement their professional development in the nuclear engineering field. Faculty in other related fields are available to supervise research for students through formal "affiliate faculty" appointments. For a detailed list of current research interests of the faculty, visit the department's Research web site (https://npre.illinois.edu/research/).

A wide range of major research resources are available for nuclear engineering research. These are described at the department's Research Facilities website (https://npre.illinois.edu/research/facilities/).

Other Graduate Programs in the Department of Nuclear, Plasma & Radiological Engineering

degrees:

Nuclear, Plasma, & Radiological Engineering, MS (p. 949)
optional concentrations:
Computational Science & Engineering (p. 1089)

concentrations:

Energy Systems (p. 749)
available for:
Engineering, MENG (p. 745)
Plasma Engineering (p. 748)
available for:
Engineering, MENG (p. 745)

The Department of Nuclear, Plasma & Radiological Engineering (NPRE) offers programs leading to degrees of Master of Science and Doctor of Philosophy in Nuclear, Plasma & Radiological Engineering, as well as Master of Engineering in Engineering with a Concentration in Energy Systems or a Concentration in Plasma Engineering. The Master of

Science and Doctor of Philosophy degree programs are centered around five theme areas:

- nuclear power
- plasma physics and fusion
- radiological science
- materials science
- reliability and risk

Advanced course work and active research programs are offered in all of these areas.

Opportunity also exists for specializing in energy and sustainability engineering via the

Energy and Sustainability Engineering (EaSE) Graduate Certificate Option (http://ease.illinois.edu/)

for the degree of Doctor of Philosophy in Nuclear, Plasma & Radiological Engineering

The doctoral candidate must complete course work, pass a qualifying examination, a preliminary doctoral examination, write a doctoral thesis, and successfully defend the thesis at a final examination before a doctoral faculty committee. A doctoral student typically takes several courses in NPRE plus additional courses that support a specialized research area and provide background in mathematics and science. Under exceptional circumstances and by approved petition, doctoral research may be undertaken off campus.

For additional details and requirements refer to the department's printed handbook and the Graduate College Handbook *(*http://grad.illinois.edu/gradhandbook/*). Learn more on the* Q *(*http://npre.illinois.edu/academics/graduate-program/qualifying-examination/*)*ualifying Exam *(*http://npre.illinois.edu/academics/graduate-program/qualifying-examination/*).*

Entering with an approved Master's Degree:

Code	Title	Hours
NPRE 599	Thesis Research (min-max applied toward degree)	40
NPRE 501 & NPRE 521	Fundamentals of Nuclear Engrg and Interact of Radiation w/Matter (if not taken while completing the M.S. degree)	0-8
NPRE 596	Seminar in Nuclear Sci & Engrg (registration for 1 hour every semester while in residence; credit does not apply toward the degree.)	0
Elective Courses (subject to Other Requirements and Conditions below)		16
8 hours of 500-level courses (not including NPRE 501 and NPRE 521)		
4-8 hours of NPRE graduate level courses, not counting 402, 446, 501, 521, 596, or 599		
Total Hours		64

Other Requirements and Conditions

Requirement	Description
Other Requirements and Conditions may overlap	
Consult department for details of minimum hours required within the unit.	
Credit in NPRE 402 or NPRE 446 does not count toward the degree.	
A Master's degree or equivalent is required for admission to the Ph.D. program.	
Ph.D. exam and dissertation requirements:	
Qualifying exam:	
Preliminary exam	
Final exam or dissertation defense	
Dissertation deposit	
Minimum GPA:	3.0

Entering with an approved Baccalaureate Degree:

Code	Title	Hours
NPRE 599	Thesis Research (min-max applied toward degree)	40-48
NPRE 501 & NPRE 521	Fundamentals of Nuclear Engrg and Interact of Radiation w/Matter	8
NPRE 596	Seminar in Nuclear Sci & Engrg (registration for 1 hour every semester while in residence; credit does not apply toward the degree.)	0
Elective Courses (subject to Other Requirements and Conditions below)		40-48
16 hours of 500-level courses (not including NPRE 501 and NPRE 521)		
12-16 hours of NPRE graduate level courses, not counting 402, 446, 501, 521, 596, or 599		
Total Hours		96

Other Requirements and Conditions

Requirement	Description
Other Requirements and Conditions may overlap	
Consult department for details of minimum hours required within the unit.	
Credit in NPRE 402 or NPRE 446 does not count toward the degree.	
Students not completing an MS thesis may only count 40 credit hours of NPRE 599.	
Ph.D. exam and dissertation requirements:	
Qualifying exam:	
Preliminary exam	
Final exam or dissertation defense	
Dissertation deposit	
Minimum GPA:	3.0

Learning Outcomes: Nuclear, Plasma & Radiological Engineering, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Nuclear, Plasma & Radiological Engineering

1. Ability to apply knowledge of mathematics, science and engineering
2. Ability to design and conduct experiments; and/or computational projects; analyze and interpret data
3. Ability to communicate effectively
4. Demonstrate the ability to conduct independent research in a nuclear, plasma or radiological field
5. Demonstrate scholarly research by understanding the state-of-the-art and extending new knowledge from and into open-ended questions and presenting work under peer-reviewed constructs

Nutritional Sciences, MS

for the Master of Science in Nutritional Sciences

departmental website: http://www.nutritionalsciences.illinois.edu
director of the division and of graduate studies: Elvira de Mejia
correspondence and admission Information: Ashley Negangard
department address: 240 Edward R. Madigan Laboratory, 1201 W. Gregory Drive, Urbana, IL 61801
phone: (217) 333-4177
email: nutritionalsciences@illinois.edu

Graduate Degree Programs in Nutritional Sciences

Graduate Programs:

degree: Nutritional Sciences, MS (p. 954)
degree: Nutritional Sciences, PhD (p. 956)
joint degree: Nutritional Sciences, PhD and Master of Public Health (p. 1160)

The Division of Nutritional Sciences is the interdisciplinary program for graduate education in nutrition at the University of Illinois at Urbana-Champaign. More than 60 faculty, representing 15 different departments in seven colleges on the Urbana and Chicago campuses, are members of the Division. The Division is a comprehensive program of study leading to the M.S. and Ph.D. degrees, alone or in combination with either the M.D. or M.P.H. degrees or the registration in dietetics (R.D.). Flexible graduate programs of study enable students to individualize their coursework and professional training. In addition, extensive research opportunities are available that address the spectrum from research at the level of the genome and proteome to clinical and population-based intervention studies. Specialties are classified into six broad theme areas in which our faculty and students are most active (see Research Interests (http://nutrsci.illinois.edu/research/)). These themes best reflect the areas of nutrition research for which the Division is recognized both nationally and internationally.

Admission

Applicants are expected to have an admission grade point average of 3.0 (A = 4.0) for the last two years of coursework and basic courses in chemistry, biology and mathematics. Deficiencies in these subjects must be removed during the first year of graduate study. The Graduate Record Examination (GRE) is required. Applicants whose native language is not English must achieve a minimum paper-based Test of English as a Foreign Language (TOEFL) score of 550, 213 on the computer-based test or 79 on the iBT TOEFL. Admission in the fall, spring or summer will be considered.

Internship in Dietetics

Students in the Division of Nutritional Sciences can participate in an Academy of Nutrition and Dietetics (AND) accredited graduate dietetic internship program administered through the Department of Food Science and Human Nutrition. The program includes defined graduate course requirements and a six-month dietetic clinical internship. In order to be eligible for the graduate internship program, students must complete all undergraduate course competencies required by the AND for the Registration in Dietetics (R.D.). Students are accepted into the internship by computer matching through the standard dietetic internship application process. More information on the graduate dietetic internship program can be obtained at fshn.illinois.edu/graduate/dietetic-internship/prospective (http://fshn.illinois.edu/graduate/dietetic-internship/prospective/) or from the Department of Food Science and Human Nutrition (260 Bevier Hall; (217)-244-4498).

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program.

Faculty Research Interests

The Division is composed of faculty whose research interests cover many disciplines within nutrition. Descriptions of faculty research interests and a listing of recent publications are available at the Division website. Six broad theme areas are:

- Animal Nutrition
- Biochemical and Molecular Nutrition
- Community Nutrition, Nutrition Education and Consumer Acceptance
- Dietary Bioactive Components
- Food Safety and Toxicology
- Human and Clinical Nutrition

Facilities and Resources

The Division (http://www.nutrsci.illinois.edu/) office is located in room 240 Edward R. Madigan Laboratory. Office and research laboratory facilities utilized by graduate students in Nutritional Sciences are administered by the home department of the student's adviser.

Financial Aid

Financial assistance is available in the form of assistantships, scholarships and fellowships. Applicants seeking fall admission and expecting to be considered for financial assistance should file their applications before the preceding December 15th. Later applications may be considered, depending on the space and support available.

for the Master of Science in Nutritional Sciences

Additional courses are available in:

- human and animal nutrition
- biochemistry
- physiology
- immunology
- endocrinology
- food science
- education
- anthropology
- psychology
- sociology
- statistics
- agricultural economics

The non-thesis degree also requires an oral final exam. Students are not admitted directly into the non-thesis program.

Thesis Option

Code	Title	Hours
NUTR 500	Nutritional Sciences Seminar (Enrollment each semester a student is registered in the program)	0
Statistics		4
FSHN 593	Seminar in Foods and Nutrition (One semester of seminar)	2
or NUTR 590	Disciplinary Seminar	
NUTR 510	Topics in Nutrition Research	3-5
or NUTR 561	Advanced Clinical Nutrition	
Biochemistry (if not taken within 2 years of entry)		3-8
Research/Project/Independent Study Hours (2 max applied toward degree)		0-2
One additional course in general nutrition		4
NUTR 599	Thesis Research (min/max applied toward degree)	8
Total Hours		32

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum Hours Required Within the Unit:	8, 500 level
Minimum Number of 500-level Hours Required Overall in Program:	12, not including 599
Not more than 4 hours of coursework taken on a Credit-No Credit basis will be counted towards the 32 hours total for the M.S. degree	
Nutritional Sciences courses may NOT be taken on a Credit-No Credit option	
Minimum GPA:	3.0
Oral final exam	

[1] *For additional details and requirements refer to the department's* Graduate Programs information *(*http://nutrsci.illinois.edu/about_us/program_description/degree_types/*) and the* Graduate College Handbook *(*http://www.grad.uiuc.edu/gradhandbook/*).*

Non-Thesis Option

Code	Title	Hours
NUTR 500	Nutritional Sciences Seminar (Enrollment each semester a student is registered in the program)	0
Statistics		4
FSHN 593	Seminar in Foods and Nutrition (One semester of seminar)	2
or NUTR 590	Disciplinary Seminar	
NUTR 510	Topics in Nutrition Research	3-5
or NUTR 561	Advanced Clinical Nutrition	
Biochemistry (if not taken within 2 years of entry)		3-8
At least two additional courses in general nutrition		8
Research/Project/Independent Study Hours (4 max applied toward degree)		0-4
Total Hours		32

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum Hours Required Within the Unit:	8, 500 level
Minimum Number of 500-level Hours Required Overall in Program:	12
Not more than 4 hours of coursework taken on a Credit-No Credit basis will be counted towards the 32 hours total for the M.S. degree	
Nutritional Sciences courses may NOT be taken on a Credit-No Credit option	
Minimum GPA:	3.0
Oral final exam	

[1] *For additional details and requirements refer to the department's* Graduate Programs information *(*http://nutrsci.illinois.edu/about_us/program_description/degree_types/*) and the* Graduate College Handbook *(*http://www.grad.uiuc.edu/gradhandbook/*).*

Learning Outcomes: Nutritional Sciences, MS

Learning outcomes for the Master of Science in Nutritional Science

1. MS students in the Division of Nutritional Sciences will develop specialized knowledge and advanced training in a signature interdisciplinary research area that will equip them to identify and help solve the complex issues facing the highly interdisciplinary field of nutritional sciences.

2. MS students in the Division of Nutritional Sciences will be able to analyze and interpret data from research and scientific literature and apply experimental results to improve health and well-being.
3. MS students in the Division of Nutritional Sciences will develop an understanding of professional and scientific ethics and the impact of nutritional sciences research methods and outcomes in a societal and global context.
4. MS students in the Division of Nutritional Sciences will develop strong oral and written communication skills to facilitate the dissemination of scientific knowledge or interdisciplinary research findings to technical and non-technical audiences.
5. MS students in the Division of Nutritional Sciences will combine interdisciplinary research with robust professional development and leadership training, distinguishing themselves from other students with a nutritional sciences degree and facilitating a highly successful transition to a career as a leader in academia, industry or policy.

Nutritional Sciences, PhD

for the Doctor of Philosophy in Nutritional Sciences

departmental website: http://www.nutritionalsciences.illinois.edu
director of the division and of graduate studies: Elvira de Mejia
correspondence and admission Information: Ashley Negangard
department address: 240 Edward R Madigan Laboratory, 1201 W. Gregory Drive, Urbana, IL 61801
phone: (217) 333-4177
email: nutritionalsciences@illinois.edu

Graduate Degree Programs in Nutritional Sciences

Graduate Programs:

degree: Nutritional Sciences, MS (p. 954)
degree: Nutritional Sciences, PhD (p. 956)
joint degree: Nutritional Sciences, PhD and Master of Public Health (p. 1160)

The Division of Nutritional Sciences is the interdisciplinary program for graduate education in nutrition at the University of Illinois at Urbana-Champaign. More than 60 faculty, representing 15 different departments in seven colleges on the Urbana and Chicago campuses, are members of the Division. The Division is a comprehensive program of study leading to the M.S. and Ph.D. degrees, alone or in combination with either the M.D. or M.P.H. degrees or the registration in dietetics (R.D.). Flexible graduate programs of study enable students to individualize their coursework and professional training. In addition, extensive research opportunities are available that address the spectrum from research at the level of the genome and proteome to clinical and population-based intervention studies. Specialties are classified into six broad theme areas in which our faculty and students are most active (see Research Interests (http://nutrsci.illinois.edu/research/)). These themes best reflect the areas of nutrition research for which the Division is recognized both nationally and internationally.

Admission

Applicants are expected to have an admission grade point average of 3.0 (A = 4.0) for the last two years of coursework and basic courses in chemistry, biology and mathematics. Deficiencies in these subjects must be removed during the first year of graduate study. The Graduate Record Examination (GRE) is required. Applicants whose native language is not English must achieve a minimum paper-based Test of English as a Foreign Language (TOEFL) score of 550, 213 on the computer-based test or 79 on the iBT TOEFL. Admission in the fall, spring or summer will be considered.

Internship in Dietetics

Students in the Division of Nutritional Sciences can participate in an Academy of Nutrition and Dietetics (AND) accredited graduate dietetic internship program administered through the Department of Food Science and Human Nutrition. The program includes defined graduate course requirements and a six-month dietetic clinical internship. In order to be eligible for the graduate internship program, students must complete all undergraduate course competencies required by the AND for the Registration in Dietetics (R.D.). Students are accepted into the internship by computer matching through the standard dietetic internship application process. More information on the graduate dietetic internship program can be obtained at fshn.illinois.edu/graduate/dietetic-internship/prospective (http://fshn.illinois.edu/graduate/dietetic-internship/prospective/) or from the Department of Food Science and Human Nutrition (260 Bevier Hall; (217)-244-4498).

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program.

Faculty Research Interests

The Division is composed of faculty whose research interests cover many disciplines within nutrition. Descriptions of faculty research interests and a listing of recent publications are available at the Division website. Six broad theme areas are:

- Animal Nutrition
- Biochemical and Molecular Nutrition
- Community Nutrition, Nutrition Education and Consumer Acceptance
- Dietary Bioactive Components
- Food Safety and Toxicology
- Human and Clinical Nutrition

Facilities and Resources

The Division (http://www.nutrsci.illinois.edu/) office is located in room 240 Edward R. Madigan Laboratory. Office and research laboratory facilities utilized by graduate students in Nutritional Sciences are administered by the home department of the student's adviser.

Financial Aid

Financial assistance is available in the form of assistantships, scholarships and fellowships. Applicants seeking fall admission and expecting to be considered for financial assistance should file their applications before the preceding December 15th. Later applications may be considered, depending on the space and support available.

for the Doctor of Philosophy in Nutritional Sciences

In addition to maintaining a 3.0 average in formal coursework, Ph.D. students are required to take a qualifying examination, an oral preliminary examination and a final thesis examination. There is no foreign language requirement, but students whose native language is not English are required to demonstrate competence in English.

Code	Title	Hours
NUTR 500	Nutritional Sciences Seminar (enrollment each semester and one presentation during program)	1
Select one or both of the following, unless taken during M.S. degree (max 4):		4
FSHN 593	Seminar in Foods and Nutrition	
NUTR 590	Disciplinary Seminar	
NUTR 510	Topics in Nutrition Research	1
or NUTR 561	Advanced Clinical Nutrition	
NUTR 511	Regulation of Metabolism	4
Two additional courses in general nutrition		6-8
Research/Project/Independent Study Hours (2 max applied toward degree)		2
NUTR 599	Thesis Research (min/max applied toward degree)	40 or 48
Total Hours		64

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Coursework total: with M.S. degree in Nutritional Science (16) or with MS in other field (24)	
Masters Degree Required for Admission to PhD?	No, but Masters level requirements must be met (32 additional hours min)
Qualifying Exam Required	Yes
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Final Exam/Dissertation Defense Required	Yes
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the department's* Graduate Programs information *(*http://nutrsci.illinois.edu/about_us/program_description/degree_types/*) and the* Graduate College Handbook *(*http://www.grad.uiuc.edu/gradhandbook/*).*

Learning Outcomes: Nutritional Sciences, PhD

Learning outcomes for the Doctor of Philosophy in Nutritional Science

1. Doctoral students in the Division of Nutritional Sciences will integrate scientific reasoning and advanced knowledge of the principles of nutritional sciences to effectively explain key concepts of nutrition and metabolism and discuss a broad range of nutritional sciences issues.
2. Doctoral students in the Division of Nutritional Sciences will develop expert level knowledge and training in a signature interdisciplinary research area that will equip them to identify and solve the complex issues facing the highly interdisciplinary field of nutritional sciences.
3. Doctoral students in the Division of Nutritional Sciences will be able to analyze and interpret data from research and scientific literature and apply experimental results to improve health and well-being at the local, national and international levels.
4. Doctoral students in the Division of Nutritional Sciences will develop an understanding of professional and scientific ethics and the impact of nutritional sciences research methods and outcomes in a societal and global context.
5. Doctoral students in the Division of Nutritional Sciences will develop outstanding oral and written communication skills to facilitate effective dissemination of scientific knowledge or interdisciplinary research findings to technical and non-technical audiences.
6. Doctoral students in the Division of Nutritional Sciences will combine interdisciplinary research with robust professional development and leadership training, distinguishing themselves from other students with a nutritional sciences degree and facilitating a highly successful transition to a career as a leader in academia, industry or policy.

Philosophy, MA

for the degree of Master of Arts in Philosophy

chair of the department: Kirk Sanders
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
overview of program admissions requirements:
program website: https://philosophy.illinois.edu/
college website: https://las.illinois.edu/
program office: 200 Gregory Hall, 810 South Wright Street, Urbana, IL 61801
phone: (217) 333-2889
email: phildept@illinois.edu

Graduate Degree Programs in Philosophy

Philosophy, MA (p. 957)
optional concentrations:
Medieval Studies (p. 1101)
Philosophy, PhD (p. 959)
optional concentrations:
Medieval Studies (p. 1101)

The normal program of graduate study in philosophy is directed toward the Ph.D. The M.A. degree is awarded after completing Stage One. Only under exceptional circumstances and without any commitment of financial aid, students may be allowed to seek only the Master of Arts degree. This happens only rarely. Students seeking solely an M.A. degree are encouraged to apply elsewhere.

Admission

The Graduate College admission requirements apply. Applicants should have had a course in symbolic logic and general courses in the history of ancient and early modern philosophy. Students deficient in these areas may be admitted, but they are required to remedy their deficiencies by taking such courses in their first year. Applicants should also have done some coursework in such central areas of philosophical inquiry as ethics and the theory of knowledge. All applications for admission

must be supported by three letters of recommendation from persons qualified to comment on the applicant's aptitude for graduate study in philosophy. They are further required to submit a sample of their written work in philosophy (10-20 pages). International applicants whose native language is not English must take the Test of English as a Foreign Language (TOEFL) and submit their scores; a score of at least 600 on the paper-based test (115 on the computer-based test) is required for regular admission. In addition, these students must demonstrate competence in oral English before they will be allowed to assist as preceptors for the department, as described in the information for teaching assistants. (http://cte.illinois.edu/testing/oral_eng/main.html)

The deadline for applications is January 1 for admission in the following fall semester. Students are not normally permitted to start the program in the spring semester. For additional information see the department's information for prospective graduate students (http://philosophy.illinois.edu/grad/admissions/).

Language Requirement

Every student must demonstrate competence in one of the four basic philosophical languages (French, German, Latin, or Greek) or else satisfy an alternative requirement (as described below), before advancing to the Third Stage of the program. In the case of French this may be done by passing with a grade of B or better or by passing an examination administered by the Department of French. In the case of German this may be done by passing with a grade of B or better or by passing an examination administered by the Department of German. In the case of Latin this may be done by passing with a grade of B or better any LAT course at the 300-, 400-, or 500-level. In the case of Greek this may be done by passing with a grade of B or better any GRK course at the 400- or 500-level (with the exception of and). Alternatively students may pass a proficiency examination in Latin or Greek administered by the Department of the Classics, the form of which must be approved by the Director of Graduate Studies.

To substitute a language other than one of the basic four, a student must first obtain approval of his or her adviser and of the Graduate Program Committee. Such approval normally will be granted only where the language is directly relevant to the student's work in philosophy.

The student may petition the Graduate Program Committee to replace the language requirement by an approved program of study in her or his area of research. This petition must include a written justification by the student or the advisor. If written by the student, the justification must be approved by the student's advisor. This program of study should be deemed more useful to the student's research than a study of one the philosophical languages. It may, for example, involve intensive study of specific methods that will greatly enhance the student's research, such as scientific, mathematical, or statistical methods, or it may involve obtaining crucial knowledge of some field outside of philosophy, such as concentrated studies in law, psychology, or religion.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program.

Financial Aid

Students admitted to the Ph.D. program are offered financial aid, in the form of fellowships or assistantships, which cover living expenses and include a waiver of tuition and service fees. This aid will usually be continued for up to five years provided the student is making normal progress. Further details are qualifications are given in the department's graduate regulations (http://philosophy.illinois.edu/grad/regulations/).

for the degree of Master of Arts in Philosophy

The M.A. degree is awarded after completing Stage I. Students may not apply to the M.A. degree program. Students qualify for the M.A.degree by earning at least 32 hours of graduate credit with at least a 3.25 grade point average (A = 4.0), as specified below.

Code	Title	Hours
Hours in regularly scheduled courses (excluding PHIL 583 and PHIL 590)		24-32
PHIL 590	Directed Research	0-8
or PHIL 583	Individual Topics	
Total Hours		32

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum Number of 500-level Hours Required Overall (excluding 583 and 590):	12
A one-year residence requirement	
Submission of a substantial essay and passing an oral examination on this essay OR admission to Stage II.	
Minimum GPA:	3.25

[1] *For additional details and requirements refer to the department's* Graduate Program Regulations *(*http://www.philosophy.illinois.edu/grad/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Philosophy, MA

Learning Outcomes for the degree of Master of Arts in Philosophy

The Philosophy Department aims to produce four main learning outcomes.

1. **Philosophical Knowledge:** Students will have advanced familiarity with major figures and movements in the history of western philosophy; with central topics, theories, and debates in epistemology and metaphysics, in ethics and value theory, and in logic; and with current developments in professional philosophy.
2. **Philosophical Reading:** Students will develop advanced ability to analyze persuasive and argumentative prose: identifying the main claims asserted, the reasons alleged to support those claims, and the logical relations between the claims and the reasons, including identifying any gaps in the arguments.
3. **Philosophical Inquiry:** Students will have advanced ability to formulate abstract principles in epistemology and metaphysics, in ethics and value theory, in logic, and in related special topic areas in philosophy; they will have advanced ability to identify consequences of the principles they formulate, and they will have advanced ability to construct arguments for those principles and compare them to competing principles.

4. **Philosophical Writing**: Students will have advanced ability to write clearly and with logical precision on a wide range of important issues, including (but not limited to): civic and social challenges at local, national, and global levels; social and cultural issues related to race, indigeneity, gender, class, sexuality, language, and disability; and the ways that complex, interdependent global systems—natural, environmental, social, cultural, economic, and political—affect and are affected by the local identities and ethical choices of individuals and institutions.

Philosophy, PhD

for the degree of Doctor of Philosophy in Philosophy

chair of the department: Kirk Sanders
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
overview of program admissions requirements:
program website: https://philosophy.illinois.edu/
college website: https://las.illinois.edu/
program office: 200 Gregory Hall, 810 South Wright Street, Urbana, IL 61801
phone: (217) 333-2889
email: phildept@illinois.edu

Graduate Degree Programs in Philosophy

Philosophy, MA (p. 957)
optional concentrations:
Medieval Studies (p. 1101)
Philosophy, PhD (p. 959)
optional concentrations:
Medieval Studies (p. 1101)

The normal program of graduate study in philosophy is directed toward the Ph.D. The M.A. degree is awarded after completing Stage One. Only under exceptional circumstances and without any commitment of financial aid, students may be allowed to seek only the Master of Arts degree. This happens only rarely. Students seeking solely an M.A. degree are encouraged to apply elsewhere.

Admission

The Graduate College admission requirements apply. Applicants should have had a course in symbolic logic and general courses in the history of ancient and early modern philosophy. Students deficient in these areas may be admitted, but they are required to remedy their deficiencies by taking such courses in their first year. Applicants should also have done some coursework in such central areas of philosophical inquiry as ethics and the theory of knowledge. All applications for admission must be supported by three letters of recommendation from persons qualified to comment on the applicant's aptitude for graduate study in philosophy. They are further required to submit a sample of their written work in philosophy (10-20 pages). International applicants whose native language is not English must take the Test of English as a Foreign Language (TOEFL) and submit their scores; a score of at least 600 on the paper-based test (115 on the computer-based test) is required for regular admission. In addition, these students must demonstrate competence in oral English before they will be allowed to assist as preceptors for the department, as described in the information for teaching assistants. (http://cte.illinois.edu/testing/oral_eng/main.html)

The deadline for applications is January 1 for admission in the following fall semester. Students are not normally permitted to start the program in the spring semester. For additional information see the department's information for prospective graduate students (http://philosophy.illinois.edu/grad/admissions/).

Language Requirement

Every student must demonstrate competence in one of the four basic philosophical languages (French, German, Latin, or Greek) or else satisfy an alternative requirement (as described below), before advancing to the Third Stage of the program. In the case of French this may be done by passing with a grade of B or better or by passing an examination administered by the Department of French. In the case of German this may be done by passing with a grade of B or better or by passing an examination administered by the Department of German. In the case of Latin this may be done by passing with a grade of B or better any LAT course at the 300-, 400-, or 500-level. In the case of Greek this may be done by passing with a grade of B or better any GRK course at the 400- or 500-level (with the exception of and). Alternatively students may pass a proficiency examination in Latin or Greek administered by the Department of the Classics, the form of which must be approved by the Director of Graduate Studies.

To substitute a language other than one of the basic four, a student must first obtain approval of his or her adviser and of the Graduate Program Committee. Such approval normally will be granted only where the language is directly relevant to the student's work in philosophy.

The student may petition the Graduate Program Committee to replace the language requirement by an approved program of study in her or his area of research. This petition must include a written justification by the student or the advisor. If written by the student, the justification must be approved by the student's advisor. This program of study should be deemed more useful to the student's research than a study of one the philosophical languages. It may, for example, involve intensive study of specific methods that will greatly enhance the student's research, such as scientific, mathematical, or statistical methods, or it may involve obtaining crucial knowledge of some field outside of philosophy, such as concentrated studies in law, psychology, or religion.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program.

Financial Aid

Students admitted to the Ph.D. program are offered financial aid, in the form of fellowships or assistantships, which cover living expenses and include a waiver of tuition and service fees. This aid will usually be continued for up to five years provided the student is making normal progress. Further details are qualifications are given in the department's graduate regulations (http://philosophy.illinois.edu/grad/regulations/).

for the degree of Doctor of Philosophy in Philosophy

Code	Title	Hours
	A course distribution requirement: Two graduate-level courses must be taken in each of the department's main areas of concentration: value theory, history of philosophy, and metaphysics-epistemology-philosophy of mind. (Some hours may be completed during Stage I)	0-24

Students must demonstrate competence in symbolic logic, either by passing an approved course in the subject or by passing a proficiency examination administered by the department.		0-4
Regular Seminars (Some hours may be completed during Stage I)		12-24
Graduate-level study outside of Philosophy: Max hours allowed 8 (see department page for details)		0-8
Language Requirement: Students must demonstrate competence in one of the four basic philisophical languages: German, French, Greek, or Latin. See the department for details.		0
PHIL 599	Thesis Research (16 min applied toward degree)	16
Total Hours		64

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum Hours Required Within the Unit:	88
The max. limit of PHIL 583 (Independent Study) hours that can be used to satisfy Ph.D. requirements:	12
Participation in a dissertation seminar is required each term in the Third Stage, as is participation in one regular seminar per year.	
Masters Degree Required for Admission to PhD?	No, but Masters level requirements must be met (32 hours)
Qualifying Exam Required	No
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.25

[1] *For additional details and requirements refer to the department's* Graduate Program Regulations *(*http://www.philosophy.illinois.edu/grad/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

The Ph.D. program has three stages. The first stage is completed when a student has earned 32 hours of graduate credit. The second stage is completed when the student has earned 32 additional hours (or, having received a master's degree previously, has earned and has been allowed transfer credit for a total of 64 hours) and has satisfied the preliminary examination requirement, a course distribution requirement, a foreign language requirement, and a logic requirement (see department website for details). Of the 64 hours required for the Ph.D. (beyond the MA level requirements), only 12 can be in Independent Study courses (PHIL 583), and at least 20 must be earned in regular seminars. The third stage is completed when the student has earned another 32 hours of graduate credit (usually in seminars and thesis research) and has satisfied the thesis and doctoral oral examination requirements (see below). Also required in the Third Stage is participation in a dissertation-writing seminar each term and participation in one regular seminar per year. Third-stage regular seminar participation is typically for 2 hours credit, thus totaling 4 hours beyond the 20 hours (min) of seminars required for Stage 2. A minimum grade point average of 3.33 (A = 4.0) is required for the Ph.D. degree. Candidates must also satisfy the Graduate College residence requirement.

Candidates need not take work in a minor field outside the department. In cases in which advanced study in philosophy would be enhanced by study in a related discipline, students may use such related coursework to satisfy the credit requirements for the degree, limited to 8 hours. If a student wishes the work to count as an extra-departmental minor, the minimum number of hours accepted is 8 and the maximum is 16. Courses applied toward the completion of a minor may not be applied toward the completion of the Course Distributions Requirement for the Philosophy Ph.D.

After satisfying these requirements, a candidate for the Ph.D. must submit an acceptable dissertation and pass a final, oral examination on the thesis. The acceptability of the thesis is judged and the final examination administered by the candidate's doctoral committee.

Ph.D. candidates who wish simultaneously to pursue advanced degrees in other disciplines (e.g., medicine or law) are permitted to do so.

Learning Outcomes: Philosophy, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Philosophy

The Philosophy Department aims to produce five main learning outcomes.

1. **Philosophical Knowledge:** Students will have expert-level familiarity with major figures and movements in the history of western philosophy; with central topics, theories, and debates in epistemology and metaphysics, in ethics and value theory, and in logic; and with current developments in professional philosophy.
2. **Philosophical Reading:** Students will have expert-level ability to analyze persuasive and argumentative prose: identifying the main claims asserted, the reasons alleged to support those claims, and the logical relations between the claims and the reasons, including identifying any gaps in the arguments.
3. **Philosophical Inquiry**: Students will expert-level ability to formulate abstract principles in epistemology and metaphysics, in ethics and value theory, in logic, and in related special topic areas in philosophy; they will have expert-level ability to identify consequences of the principles they formulate, and they will have expert-level ability to construct arguments for those principles and compare them to competing principles.
4. **Philosophical Writing:** Students will have expert-level ability to write clearly and with logical precision on a wide range of important issues, including (but not limited to): civic and social challenges at local, national, and global levels; social and cultural issues related to race, indigeneity, gender, class, sexuality, language, and disability; and the ways that complex, interdependent global systems—natural, environmental, social, cultural, economic, and political—affect and are affected by the local identities and ethical choices of individuals and institutions.
5. **Professional Development:** Students are familiar with conference norms, journal publication standards, and venues, and the requirements for teaching college-level courses in philosophy.

Physics, MS

for the degree of Master of Science in Physics

This program is not currently accepting applications.

department head: Matthias Grosse Perdekamp (mgp@illinois.edu)
director of graduate studies: Lance Cooper (slcooper@illinois.edu)
overview of admissions & requirements: https://physics.illinois.edu/admissions/graduates/admissions-requirements.html
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: http://physics.illinois.edu
program website: https://physics.illinois.edu/academics/graduates/
department faculty: https://physics.illinois.edu/people/directory/
college website: https://grainger.illinois.edu/
contact: Wendy R Wimmer (wwimmer@illinois.edu)
address: 227 Loomis Lab, 1110 W Green St, Urbana, IL 61801
phone: (217) 333-3645
email: grad@physics.illinois.edu

Other Graduate Programs in the Department of Physics

degrees:

Physics, PhD (p. 961)
optional concentrations:
Computational Science and Engineering (p. 1089)
Teaching of Physics, MS (p. 1044)

The Department of Physics offers graduate programs leading to the degrees of Master of Science and Doctor of Philosophy in Physics and Master of Science in Teaching Physics. The Department is actively developing a new paradigm for graduate physics education and research for the 21st century, aimed at enhancing interdisciplinary interactions and creating an integrated approach to educational and research training. Outstanding graduate research opportunities are available in many subdisciplines of physics, including condensed matter physics, high energy and nuclear physics, astrophysics, atomic physics, molecular and optical physics, complex systems, quantum information, biological physics, physics education research.

Students may select experimental, theoretical, or computational thesis projects. Multidisciplinary projects are especially encouraged, and, with the consent of other departments, students may earn master's degrees in areas such as materials science and engineering, or computer science, simultaneously with their PhD degrees in physics.

Opportunity also exists for specializing in energy and sustainability engineering via the

Energy and Sustainability Engineering (EaSE) Graduate Certificate Option (http://ease.illinois.edu/)

for the degree of Master of Science in Physics

The M.S. degree is usually completed in 1.5 years of full-time study by students entering in full standing. Students entering with deficiencies may require up to two years to complete the degree requirements.

For additional details and requirements refer to the department's Degree Requirements *(*http://physics.illinois.edu/grad/degree-requirements.asp*) and the* Graduate College Handbook *(*http://grad.illinois.edu/gradhandbook/*).*

Requirements

Code	Title	Hours
Elective courses (subject to Other Requirements and Conditions below)		32
Total Hours		32

Other Requirements and Conditions

Requirement	Description
Other Requirements and Conditions may overlap	
A minimum of 12 500-level credit hours applied toward the degree.	
A minimum of 16 PHYS credit hours, with 8 at the 500 level.	
A maximum of 8 hours of PHYS 597 (or other individual study) may be applied toward the elective course work requirement.	
Minimum GPA:	2.75

Physics, PhD

for the degree of Doctor of Philosophy in Physics

department head: Matthias Grosse Perdekamp (mgp@illinois.edu)
director of graduate studies: Lance Cooper (slcooper@illinois.edu)
overview of admissions & requirements: https://physics.illinois.edu/admissions/graduates/admissions-requirements.html
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: http://physics.illinois.edu
program website: https://physics.illinois.edu/academics/graduates/
department faculty: https://physics.illinois.edu/people/directory/
college website: https://grainger.illinois.edu/
contact: Wendy R Wimmer (wwimmer@illinois.edu)
address: 227 Loomis Lab, 1110 W Green St, Urbana, IL 61801
phone: (217) 333-3645
email: grad@physics.illinois.edu

Opportunity exists for specializing in computational science and engineering via the Computational Science & Engineering (p. 1089) optional graduate concentration.

Admission Requirements

Admission to the physics graduate program requires an outstanding record of accomplishment in an undergraduate physics program and clear evidence of considerable academic promise, as judged by test scores, letters of recommendation, and strong intellectual achievements. A bachelor's degree or its equivalent from an accredited college or university in the U.S. or an approved institution of higher learning abroad, with at least 20 semester hours (30 quarter hours) of intermediate and advanced undergraduate physics course work, is required for admission. Course preparation in electricity and magnetism, optics, mechanics,

atomic and nuclear physics, quantum mechanics, mathematical physics, differential equations, and analysis is essential. Any deficiency in these areas may delay degree completion by as much as a year. (Students are expected to make up deficiencies during the first graduate year.)

A minimum GPA of 3.00 (A = 4.00) for the last two years of undergraduate work is required; however, because of space limitations, applicants with GPAs below 3.50 are rarely admitted. Students with prior graduate course work must have a minimum GPA of 3.50 for those courses. All applicants must provide test scores from the General GRE Graduate Record Examination (GRE) (http://www.ets.org/). The Physics GRE subject test is optional.

Graduates of curricula in the physical and biological sciences, mathematics, or computer science may be admitted with limited standing if they are judged to have the necessary aptitudes to profit from graduate work in physics. Such students are admitted to full standing after completing course work to remove deficiencies in physics preparation.

All applicants whose native language is not English are required to submit TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) scores as evidence of English proficiency. Minimum admission requirements (https://grad.illinois.edu/admissions/instructions/04c/) are set by the Graduate College.

A few applicants may be admitted for the spring semester, in addition to the customary fall semester admissions. See the Physics graduate admissions Web site (http://physics.illinois.edu/grad/apply.asp) for lists of deadlines and application materials.

Financial Aid

Fellowships, research assistantships, and teaching assistantships (all of which include waivers of tuition and some fees) are available for the majority of admitted students. Starting in Fall 2020, Grainger Engineering PhD students in their first five years of enrollment who meet the minimum eligibility requirements (https://grainger.illinois.edu/academics/graduate/phd-funding-guarantee/) are guaranteed a funded appointment for fall and spring that includes a full tuition waiver, a partial fee waiver, and a stipend.

All applicants, regardless of US citizenship, whose native language is not English and who wish to be considered for teaching assistantships must demonstrate spoken English language proficiency (http://grad.illinois.edu/admissions/taengprof.htm) by achieving a minimum score of 24 on the speaking subsection of the TOEFL iBT or 8 on the speaking subsection of the IELTS. For students who are unable to take the iBT or IELTS, a minimum score of 4CP is required on the EPI test (http://cte.illinois.edu/testing/oral_eng/epi_overview.html), offered on campus. All new teaching assistants are required to participate in the Graduate Academy for College Teaching (https://citl.illinois.edu/citl-101/teaching-learning/grad-academy-for-college-teaching/) conducted prior to the start of the semester.

Department Research

The research specialties of Physics faculty fall into the broad categories described in the graduate programs section of this document. Details of each individual's specific interests are available at the department's faculty research Web site. (http://physics.illinois.edu/research/) Included are faculty whose primary appointments are in other departments but who supervise Physics students.

The Department of Physics offers world-class research facilities in traditional areas of physics, including condensed matter, nuclear, particle, and optical physics, as well as state-of-the-art instruments for quantum information, nanoscale science and engineering, and biological physics. For a complete description of physics facilities, please consult the department's research facilities Web site (https://physics.illinois.edu/research/facilities/).

Other Graduate Programs in the Department of Physics

degrees:

Physics, MS (p. 961)
Teaching of Physics, MS (p. 1044)

The Department of Physics offers graduate programs leading to the degrees of Master of Science and Doctor of Philosophy in Physics and Master of Science in Teaching Physics. The Department is actively developing a new paradigm for graduate physics education and research for the 21st century, aimed at enhancing interdisciplinary interactions and creating an integrated approach to educational and research training. Outstanding graduate research opportunities are available in many subdisciplines of physics, including condensed matter physics, high energy and nuclear physics, astrophysics, atomic physics, molecular and optical physics, complex systems, quantum information, biological physics, physics education research.

Students may select experimental, theoretical, or computational thesis projects. Multidisciplinary projects are especially encouraged, and, with the consent of other departments, students may earn master's degrees in areas such as materials science and engineering, or computer science, simultaneously with their PhD degrees in physics.

Opportunity also exists for specializing in energy and sustainability engineering via the

Energy and Sustainability Engineering (EaSE) Graduate Certificate Option (http://ease.illinois.edu/)

for the degree of Doctor of Philosophy in Physics

For additional details and requirements refer to the department's Degree Requirements *(*http://physics.illinois.edu/grad/degree-requirements.asp*) and the* Graduate College Handbook *(*http://grad.illinois.edu/gradhandbook/*). Learn more about the* Qualifying Exam *(*https://physics.illinois.edu/academics/graduates/qualifying-examination/*).*

Entering with approved M.S. degree

Code	Title	Hours
PHYS 599	Thesis Research (min applied toward the degree)	6
Select two of the following breadth courses:		8
PHYS 513	Quantum Optics & Information	
or PHYS 514	Modern Atomic Physics	
PHYS 540	Astrophysics	
PHYS 550	Biomolecular Physics	
PHYS 560	Condensed Matter Physics I	
or PHYS 569	Emergent States of Matter	
PHYS 570	Subatomic Physics	

PHYS 597	Individual Study (prior to the preliminary exam)	1-16
Elective courses – chosen in consultation with advisor (subject to Other Requirements and Conditions below)		49 max
Total Hours		64

Other Requirements and Conditions

Requirement	Description
Other Requirements and Conditions may overlap	
Recommended elective courses: PHYS 504, 505, 508 & 509, 580 & 581 (& denotes sequence)	
PHYS 599 (thesis research) cannot be taken until after the preliminary exam is passed.	
Ph.D. exam and dissertation requirements:	
Qualifying exam:[2]	
Preliminary exam	
Final exam or dissertation defense	
Dissertation deposit	
Minimum GPA:	2.75

Entering with approved B.S. degree

Code	Title	Hours
PHYS 599	Thesis Research (min applied toward the degree)	6
Select two of the following breadth courses:		8
PHYS 513	Quantum Optics & Information	
or PHYS 514	Modern Atomic Physics	
PHYS 540	Astrophysics	
PHYS 550	Biomolecular Physics	
PHYS 560	Condensed Matter Physics I	
or PHYS 569	Emergent States of Matter	
PHYS 570	Subatomic Physics	
PHYS 597	Individual Study (prior to the preliminary exam)	1-16
Elective courses – chosen in consultation with advisor (subject to Other Requirements and Conditions below)		81 max
Total Hours		96

Other Requirements and Conditions

Requirement	Description
Other Requirements and Conditions may overlap	
Recommended elective courses: PHYS 504, 505, 508 & 509, 580 & 581 (& denotes sequence)	
A minimum of 12 500-level credit hours applied toward the degree.	
A minimum of 16 PHYS credit hours, with 8 at the 500 level.	
PHYS 599 (thesis research) cannot be taken until after the preliminary exam is passed.	
An additional maximum of 8 hours of PHYS 597 (or other individual study) may be applied toward the elective course work requirement.	
These students may earn a Master of Science degree during the Ph.D. program	
Ph.D. exam and dissertation requirements:	
Qualifying exam:[2]	
Preliminary exam	
Final exam or dissertation defense	
Dissertation deposit	
Minimum GPA:	2.75

Learning Outcomes: Physics, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Physics

Illinois Physics PhD graduates will have:

1. a firm foundation in core physics, math, and current physics research topics;
2. an ability to design and conduct original experiments, model physical phenomena, and analyze and interpret data;
3. an ability to work collaboratively with a diverse team;
4. a mastery of the concepts, techniques, and literature associated with the student's specific research subfield (e.g., theoretical condensed matter physics, experimental high energy physics, etc.);
5. an ability to teach and mentor others effectively;
6. an ability to communicate—both orally and in writing—scientific topics effectively to specialists in the student's research subfield, to scientifically literate non-specialists, and to the general public(outreach);
7. an understanding of the student's professional and scientific ethical responsibilities;
8. an ability to identify important scientific problems and to use modern experimental, computational, and/or analytical techniques to solve scientifically and societally relevant problems.

Plant Biology, MS

for the degree of Master of Science in Plant Biology

head of the department: Andrew Leakey
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
overview of program admissions requirements:
program website: http://sib.illinois.edu/plantbio/
college website: https://las.illinois.edu/
program office: 286 Morrill Hall, 505 South Goodwin Avenue, Urbana, IL 61801
phone: (217) 333-3261
fax: (217) 244-9952
email: plants@life.illinois.edu

Graduate Degree Programs in Plant Biology

Plant Biology, MS (p. 963)
Plant Biology, PhD (p. 965)

The Department of Plant Biology offers two graduate degrees, the Master of Science and the Doctor of Philosophy. There are two paths to completing the Master of Science degree, the traditional thesis and a non-thesis option. Students accepted directly into the MS program are expected to complete an MS thesis. The department also participates in the interdepartmental graduate program: the Program in Ecology, Evolution and Conservation Biology (http://sib.illinois.edu/peec/).

The Department teaches and conducts foundational research in plant biology. Its focus is integrative. Biological processes are investigated at multiple levels of organization using molecular, biochemical, physiological, morphological, and ecological approaches.

Areas of specialization within the department include:

- biochemistry
- biodiversity
- bioinformatics
- cell biology
- conservation biology
- development
- ecology
- environmental physiology
- evolution
- genetics
- genomics
- modeling
- molecular biology
- mycology
- paleobotany
- paleoecology
- photosynthesis
- phytochemistry
- population biology
- biotechnology
- systems biology
- systematics

Graduate students receive broad biological and professional training and acquire expertise in their areas of specialization.

The Plant Biology Departmental website (http://www.life.illinois.edu/plantbio/) provides additional information about the department, its admissions procedures, degree requirements, facilities, and the research interests of its faculty.

Admission

Prospective students are encouraged to identify faculty member(s) whose research specialty(ies) most closely coincide(s) with their interests and to correspond directly with them. Acceptance the Master of Science graduate program is based on the applicant's academic achievement and research potential. While departmental requirements do not specify particular courses as prerequisites for admission, applicants should have had undergraduate coursework in biology or related sciences. Admission to the graduate program requires an undergraduate grade point average of at least 3.0 (A = 4.0). Graduate Record Examination (GRE) scores (or approved equivalent) are not required but may be submitted to strengthen application package; however no minimum scores are specified for admission. International students should have a Test of English as a Foreign Language (TOEFL) score of 600 or above on the paper-based test, or 102 or above on the internet-based test (iBT). The IELTS exam is also accepted, and applicants should have a score of 7.0 or higher.

Facilities and Resources

The Plant Biology Department's diverse state-of-the-art research laboratories are located in Morrill Hall, Edward R. Madigan Laboratory, and the Institute for Genomic Biology. In addition, the department maintains extensive plant growth-chamber facilities, environmentally controlled greenhouses, a conservatory with live teaching and research collections, herbaria, a center for paleobotanical collections, and diverse local and remote field sites including SoyFACE (http://soyface.illinois.edu/). The University also offers exceptional research support services including the Roy J. Carver Biotechnology Center (http://www.biotech.illinois.edu/), service laboratories in the Institute for Genomic Biology (http://www.igb.illinois.edu/facilities-services/), the Beckman Institute (http://www.beckman.illinois.edu/), and the University Library (http://www.library.illinois.edu/), one of the world's largest.

Financial Aid

Fellowships, teaching assistantships, and research assistantships are available for qualified MS and PhD students in Plant Biology. Fellowships are awarded on a competitive basis.

for the degree of Master of Science in Plant Biology

Thesis Option

Plant Biology Thesis option: The requirement of a thesis for the M.S. degree in Plant Biology is determined in consultation with the candidate's adviser. The program is normally completed within two years. Candidates are expected to complete at least 32 semester hours of graduate coursework and research agreed upon with a faculty adviser.

Code	Title	Hours
Course hours distributed among three of the following areas: anatomy, biochemistry, development, ecology, evolution, genetics, molecular biology, physiology, and systematics (4 of these hours must be outside the immediate research interests of the student)		12
Electives in consultation with and by permission of advisor		12-20

PBIO 599	Thesis Research (8 max applied toward degree)	8
Total Hours		32

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	3.0

[1] *For additional details and requirements, please refer to the Plant Biology Department's online* Graduate Handbook *(*http://www.life.illinois.edu/plantbio/gradhandbook.htm*) and the University's* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Non-Thesis Option

Code	Title	Hours
Course hours distributed among three of the following areas: anatomy, biochemistry, development, ecology, evolution, genetics, molecular biology, physiology, and systematics (4 of these hours must be outside the immediate research interests of the student)		12
IB 590	Individual Topics (8 max applied toward degree)	8
Electives in consultation with and by permission of advisor		12-20
Total Hours		32

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	3.0

[1] *For additional details and requirements, please refer to the Plant Biology Department's online* Graduate Handbook *(*http://www.life.illinois.edu/plantbio/gradhandbook.htm*) and the University's* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Plant Biology, MS

Learning Outcomes for the degree of Master of Science in Plant Biology

1. Design and implement independent research and integrate and apply core knowledge related to their field in 3 approved core areas out of 9 (anatomy, biochemistry, development, ecology, evolution, genetics, molecular biology, physiology, and systematics)
2. Demonstrate effective oral and written communication skills
   a. Presentations
   b. Publications
3. Apply rigorous statistics/analytical methods that typify their area of study
4. Professional skills
   a. Data management
   b. Citation management
   c. Mentoring
   d. Ethics
   e. Professionalism
   f. Networking

Plant Biology, PhD

for the degree of Doctor of Philosophy in Plant Biology

head of the department: Andrew Leakey
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
overview of program admissions requirements:
program website: http://sib.illinois.edu/plantbio/
college website: https://las.illinois.edu/
program office: 286 Morrill Hall, 505 South Goodwin Avenue, Urbana, IL 61801
phone: (217) 333-3261
fax: (217) 244-9952
email: plants@life.illinois.edu

Graduate Degree Programs in Plant Biology

Plant Biology, MS (p. 963)
Plant Biology, PhD (p. 965)

The Department of Plant Biology offers two graduate degrees, the Master of Science and the Doctor of Philosophy. The department also participates in the interdepartmental graduate program: the Program in Ecology, Evolution and Conservation Biology (http://sib.illinois.edu/peec/).

The Department teaches and conducts foundational research in plant biology. Its focus is integrative. Biological processes are investigated at multiple levels of organization using molecular, biochemical, physiological, morphological, and ecological approaches.

Areas of specialization within the department include:

- biochemistry
- biodiversity
- bioinformatics
- cell biology
- conservation biology
- development
- ecology
- environmental physiology
- evolution
- genetics
- genomics
- modeling

- molecular biology
- mycology
- paleobotany
- paleoecology
- photosynthesis
- phytochemistry
- population biology
- biotechnology
- systems biology
- systematics

Graduate students receive broad biological and professional training and acquire expertise in their areas of specialization.

The Plant Biology Departmental website (http://www.life.illinois.edu/plantbio/) provides additional information about the department, its admissions procedures, degree requirements, facilities, and the research interests of its faculty.

Admission

Prospective students are encouraged to identify faculty member(s) whose research specialty(ies) most closely coincide(s) with their interests and to correspond directly with them. Acceptance to the Doctor of Philosophy graduate program is based on the applicant's academic achievement and research potential. While departmental requirements do not specify particular courses as prerequisites for admission, applicants should have had undergraduate coursework in biology or related sciences. Admission to the graduate program requires an undergraduate grade point average of at least 3.0 (A = 4.0). Graduate Record Examination (GRE) scores (or approved equivalent) are not required but may be submitted to strengthen application package; however no minimum scores are specified for admission. International students should have a Test of English as a Foreign Language (TOEFL) score of 600 or above on the paper-based test, or 102 or above on the internet-based test (iBT). The IELTS exam is also accepted, and applicants should have a score of 7.0 or higher.

Facilities and Resources

The Plant Biology Department's diverse state-of-the-art research laboratories are located in Morrill Hall, Edward R. Madigan Laboratory, and the Institute for Genomic Biology. In addition, the department maintains extensive plant growth-chamber facilities, environmentally controlled greenhouses, a conservatory with live teaching and research collections, herbaria, a center for paleobotanical collections, and diverse local and remote field sites including SoyFACE (http://soyface.illinois.edu/). The University also offers exceptional research support services including the Roy J. Carver Biotechnology Center (http://www.biotech.illinois.edu/), service laboratories in the Institute for Genomic Biology (http://www.igb.illinois.edu/facilities-services/), the Beckman Institute (http://www.beckman.illinois.edu/), and the University Library (http://www.library.illinois.edu/), one of the world's largest.

Financial Aid

Fellowships, teaching assistantships, and research assistantships are available for qualified MS and PhD students in Plant Biology. Fellowships are awarded on a competitive basis.

for the degree of Doctor of Philosophy in Plant Biology

Candidates for the Ph.D. are expected to complete a minimum of 96 hours of graduate coursework and research. A formal evaluation (the Two-Year Review) of the student's academic progress is made prior to the end of the second year of study (end of Stage I). Departmental approval must be obtained at this juncture in order to continue in the graduate program. A Preliminary Examination is taken during the second year (if the student entered with an M.S. degree) or the third year (if the student entered with a B.S. degree) (end of Stage 2). This consists of an oral examination of general knowledge in three of nine broadly-defined areas of plant biology and defense of a written research proposal on the thesis research topic prepared by the student. Experience in teaching is considered a vital part of the graduate program and is required as part of the academic work of all Ph.D. candidates. The final stage (Stage 3) of the program consists of preparing an acceptable thesis based on independent research designed in consultation with a faculty advisor and approved by a graduate faculty thesis committee. A final oral examination, in which the student defends the thesis, a public seminar, and deposit of an approved thesis complete the program. The Ph.D. degree program is expected to be completed within five years. See the Plant Biology Department's online Graduate Student Handbook (http://www.life.illinois.edu/plantbio/gradhandbook.htm) for a detailed description of the Stages and Requirements of the Ph.D. program.

Entering with approved M.S./M.A. degree

Code	Title	Hours
Research/Project/Independent Study Hours (no max applied toward degree)		
PBIO 599	Thesis Research (no max applied toward degree)	
Total Hours		**64**

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Teaching:	at least the equivalent of one semester as a half-time teaching assistant
Masters Degree Required or Admission to PhD?	No, but Masters level requirements (32 hours minimum) must be met in order to enter State 2 of Ph.D. program.
Preliminary Exam Required:	Yes, at the end of State 2, in order to enter Stage 3
Final Exam/Dissertation Defense Required:	Yes, at end of Stage 3
Dissertation Deposit Required:	Yes, at end of Stage 3
Minimum GPA:	3.0

[1] *For additional details and requirements, please refer to the Plant Biology Department's online* Graduate Handbook *(*http://www.life.illinois.edu/plantbio/gradhandbook.htm*) and the University's* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Entering with approved B.S./B.A. degree

Code	Title	Hours
Research/Project/Independent Study Hours (no max applied toward degree):		
PBIO 599	Thesis Research (no max applied toward degree)	
Total Hours		**96**

Other Requirements

Requirement	Description
Other Requirements:[2]	
Teaching:	at least the equivalent of one semester as a half-time teaching assistant
Minimum GPA:	3.0
Masters Degree Required or Admission to PhD?	No, but Masters level requirements (32 hours minimum) must be met in order to enter State 2 of Ph.D. program.
Preliminary Exam Required:	Yes, at the end of State 2, in order to enter Stage 3
Final Exam/Dissertation Defense Required:	Yes, at end of Stage 3
Dissertation Deposit Required:	Yes, at end of Stage 3

[1] *For additional details and requirements, please refer to the Plant Biology Department's online* Graduate Handbook *(*http://www.life.illinois.edu/plantbio/gradhandbook.htm*) and the University's* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Plant Biology, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Plant Biology

1. Design and implement independent research and integrate and apply core knowledge related to their field in 3 approved core areas out of 9 (anatomy, biochemistry, development, ecology, evolution, genetics, molecular biology, physiology, and systematics)
2. Demonstrate effective oral and written communication skills
   a. Presentations
   b. Publications
3. Apply rigorous statistics/analytical methods that typify their area of study
4. Professional skills
   a. Data management
   b. Citation management
   c. Mentoring
   d. Ethics
   e. Professionalism
   f. Networking
5. Teaching experience

Plant Biotechnology, MS - Professional Science Master's

for the degree of Master of Science in Plant Biotechnology, Professional Science Master's Concentration

department head: Adam Davis
advisor: Nathan Schroeder
department website: https://psm.illinois.edu/plant-biotechnology (https://psm.illinois.edu/plant-biotechnology/)
email: cptomlin@illinois.edu
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://aces.illinois.edu/
department office: AW-101 Turner Hall, 1102 South Goodwin Avenue, Urbana, IL 61801
phone:(217) 244-0396

Admission

Applicants are considered for admission to the Professional Science Master's in Plant Biotechnology if they have a bachelor's or equivalent degree comparable to that granted by the University of Illinois. Strong letters of reference, evident motivation to undertake graduate study, and good preparation in basic science courses enhance an applicant's credentials. A grade point average equivalent to at least a B in the last 60 semester hours of undergraduate course work plus any graduate level work completed is required. All applicants whose native language is not English are required to submit the results of the TOEFL or IELTS as evidence of English proficiency. Official scores are required to be submitted directly from TOEFL/ETS or IELTS to the University. Additional information for international applicants can be found at: www.grad.illinois.edu/prospective/international.htm (http://www.grad.illinois.edu/prospective/international.htm).

Financial Aid

Illinois PSM students may not hold assistantships or other tuition and fee waiver-generating appointments; however, statutory waivers and tuition scholarships are accepted.

for the degree of Master of Science in Plant Biotechnology, Professional Science Master's Concentration

For additional details and requirements refer to the department's graduate handbook (http://cropsci.illinois.edu/sites/cropsci.illinois.edu/files/pdf/Grad_Student_Handbook_2013.pdf) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
Business courses prescribed by the Illinois PSM program		**10**
PSM 501	PSM Industry Seminar I	0
PSM 502	PSM Industry Seminar II	0
PSM 503	PSM Industry Seminar III	0
PSM 555	PSM Internship	0

Code	Title	Hours
CPSC 593	Adv Studies in Crop Sciences (8 max applied toward degree; optional and found in the Science Electives list)	1 to 8

CPSC 598	Seminar (Biotechnology section, 3 semesters)	3
Science electives selected in consultation with advisor:		**29**
CPSC 431	Plants and Global Change	
CPSC 440	Applied Statistical Methods I	
CPSC 452	Advanced Plant Genetics	
CPSC 453	Principles of Plant Breeding	
CPSC 462	Plant Molecular Biology	
CPSC 466	Genomics for Plant Improvement	
CPSC 541	Regression Analysis	
CPSC 542		
CPSC 543	Appl. Multivariate Statistics	
CPSC 564		
CPSC 565	Perl & UNIX for Bioinformatics	
CPSC 566	Plant Gene Regulation	
CPSC 567	Bioinformatics & Systems Biol	
CPSC 588	Plant Biochemistry	
HORT 447	Horticultural Plant Breeding	
IB 420	Plant Physiology	
IB 421	Photosynthesis	
IB 473	Plant Genomics	
IB 513	Disc in Plant Physiology	
IB 542	Environmental Plant Physiology	
Toward 10 hours of Business courses as listed below, take one of the following:		
BADM 567	Process Management	
TE 567	Venture Funded Startups (1 hr plus an additional business-related class for 1 or more hours)	
Total Hours required for graduation		**42**

Other Requirements

Requirement	Description
Students can opt to take the PSM seminar series for 0 credit (pass/fail) or 1 credit hour (letter grade). Credit hours for these courses do not apply towards either the 32 science hours or 10 business course hours required for the degree.	
Other requirements may overlap	
The PSM concentration is required.	
Minimum 500-level Hours Required Overall:	12
Students must enroll full-time (12 or more hours) in the fall and spring semesters	
Transfer credit from Illinois or other institutions is not permitted	
Minimum GPA:	3.0

Political Science, MA

for the degree of Master of Science in Political Science

head of department: Thomas Rudolph
director of graduate studies: Matthew Winters
department website: http://www.pol.illinois.edu/
college website: https://las.illinois.edu/
overview of graduate college admissions & requirements: Graduate Admissions (https://grad.illinois.edu/admissions/apply/)
overview of college admissions & requirements:
department office: 420 David Kinley Hall, 1407 W. Gregory Drive, Urbana, IL 61801
phone: (217) 333-3881
fax: (217) 244-5712
email: gradpol@illinois.edu

Graduate Degree Programs in Political Science

Political Science, MA (p. 968)
concentrations:
Civic Leadership (p. 971)|African American Studies (p. 1075)
Political Science, PhD (p. 969)
concentration:
African American Studies (p. 1075)
Joint Programs:
Political Science, PhD & Law, JD (p. 1162)
Political Science: Civic Leadership, MA & Law, JD (p. 1162)

The Department of Political Science offers graduate programs leading to the degrees of Master of Arts and Doctor of Philosophy. Students are not admitted to the master's degree program in Political Science, except for the Civic Leadership concentration. The department is not accepting applications to the Public Administration program.

Admission

Admission to the Ph.D. Program

The Graduate College admission requirements apply. The student should have a minimum of 20 hours of undergraduate work in political science and cognate disciplines such as economics, psychology, finance, sociology, or history. All applicants are required to submit Graduate Record Examination (GRE) scores, a personal statement, and an example of written work. Applicants whose native language is not English must submit the TOEFL iBT or IELTS score. The Ph.D. program typically admits students for the fall semester. Application deadline is December 15th.

Admission to the Master of Arts with Concentration in Civic Leadership

Admission is restricted to students who were accepted to the Civic Leadership Program as undergraduates at the University of Illinois. Application deadline is December 15. Applicants who wish to obtain a joint MA-JD degree program must apply separately for admission to the Law School.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program and is essential for students whose career goals include college teaching.

Financial Aid

Students accepted into the department's Ph.D. program are eligible to apply for financial aid. Most incoming students with good credentials and continuing students demonstrating satisfactory progress will receive some type of financial aid, but the type and amount will vary. The Department of Political Science provides, on a competitive basis, aid packages up to $22,000, plus waivers of tuition and some fees. Financial aid is usually a combination of fellowship money and assistantships. Limited amounts of aid are also available for dissertation field research, internships, and the presentation of papers at professional meetings.

for the degree of Master of Science in Political Science

Students enrolled in the Ph.D. program can usually earn a Master of Arts in Political Science within three semesters. It entails the completion of 32 graduate hours and the achievement of a 3.0 GPA in all courses taken. A master's paper is required.

For additional details and requirements refer to the department's graduate handbook (http://www.pol.illinois.edu/graduates/handbook/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Thesis Option

Code	Title	Hours
Tools of Inquiry Coursework		24-32
PS 599	Thesis Research (min/max applied toward degree)	0-8
Total Hours		32

Other Requirements

Requirement	Description
Other requirements may overlap	
A concentration is not required.	
Minimum Hours Required Within the Unit:	24
Minimum 500-level Hours Required Overall:	24
Minimum GPA:	3.0

Non-Thesis Option

Code	Title	Hours
Tools of Inquiry Coursework		24-32
Research/Project/Independent Study Hours (min/max applied toward degree):		0-8
Total Hours		32

Other Requirements

Requirement	Description
Other requirements may overlap	
A concentration is not required.	
A master's paper is required	
Minimum Hours Required Within the Unit:	24
Minimum 500-level Hours Required Overall:	24
Minimum GPA:	3.0

Political Science, PhD

for the degree of Doctor of Philosophy in Political Science

head of department: Thomas Rudolph
director of graduate studies: Matthew Winters
department website: http://www.pol.illinois.edu/
college website: https://las.illinois.edu/
overview of graduate college admissions & requirements: Graduate Admissions (https://grad.illinois.edu/admissions/apply/)
overview of college admissions & requirements:
department office: 420 David Kinley Hall, 1407 W. Gregory Drive, Urbana, IL 61801
phone: (217) 333-3881
fax: (217) 244-5712
email: gradpol@illinois.edu

The course of study leading to a Ph.D. in Political Science requires a minimum of three years of full-time study, culminating in the successful defense of a doctoral dissertation. A minimum of 96 graduate hours of academic credit is required, 32 of which may be graduate hours of dissertation research. At least 64 of the 96 graduate hours must be taken in residence. A grade of B or better is required in all courses.

In addition to meeting Graduate College requirements, the Department of Political Science requires that students complete a "scope and methods" sequence, acquire proficiency in analytic skills, and demonstrate expertise in several subfields within the discipline. The progress of doctoral candidates is monitored at various points in the program. In addition to an interim evaluation, students must pass a set of qualifying examinations and present a dissertation proposal. Once the doctoral dissertation is completed, the candidate must successfully complete an oral final defense.

Graduate Degree Programs in Political Science

Political Science, MA (p. 968)
concentrations:
Civic Leadership (p. 971)|African American Studies (p. 1075)
Political Science, PhD (p. 969)
concentration:
African American Studies (p. 1075)
Joint Programs:
Political Science, PhD & Law, JD (p. 1162)
Political Science: Civic Leadership, MA & Law, JD (p. 1162)

The Department of Political Science offers graduate programs leading to the degrees of Master of Arts and Doctor of Philosophy. Students are not admitted to the master's degree program in Political Science, except for the Civic Leadership concentration. The department is not accepting applications to the Public Administration program.

Admission

Admission to the Ph.D. Program

The Graduate College admission requirements apply. The student should have a minimum of 20 hours of undergraduate work in political science and cognate disciplines such as economics, psychology, finance, sociology, or history. All applicants are required to submit Graduate Record Examination (GRE) scores, a personal statement, and an example of written work. Applicants whose native language is not English must

submit the TOEFL iBT or IELTS score. The Ph.D. program typically admits students for the fall semester. Application deadline is December 15th.

Admission to the Master of Arts with Concentration in Civic Leadership

Admission is restricted to students who were accepted to the Civic Leadership Program as undergraduates at the University of Illinois. Application deadline is December 15. Applicants who wish to obtain a joint MA-JD degree program must apply separately for admission to the Law School.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program and is essential for students whose career goals include college teaching.

Financial Aid

Students accepted into the department's Ph.D. program are eligible to apply for financial aid. Most incoming students with good credentials and continuing students demonstrating satisfactory progress will receive some type of financial aid, but the type and amount will vary. The Department of Political Science provides, on a competitive basis, aid packages up to $22,000, plus waivers of tuition and some fees. Financial aid is usually a combination of fellowship money and assistantships. Limited amounts of aid are also available for dissertation field research, internships, and the presentation of papers at professional meetings.

for the degree of Doctor of Philosophy in Political Science

The course of study leading to a Ph.D. in Political Science requires a minimum of three years of full-time study, culminating in the successful defense of a doctoral dissertation. A minimum of 96 graduate hours of academic credit is required, 32 of which may be graduate hours of dissertation research. At least 64 of the 96 graduate hours must be taken in residence. A grade of B or better is required in all courses.

In addition to meeting Graduate College requirements, the Department of Political Science requires that students complete a "scope and methods" sequence, acquire proficiency in analytic skills, and demonstrate expertise in several subfields within the discipline. The progress of doctoral candidates is monitored at various points in the program. In addition to an interim evaluation, students must pass a set of qualifying examinations and present a dissertation proposal. Once the doctoral dissertation is completed, the candidate must successfully complete an oral final defense.

For additional details and requirements refer to the department's graduate handbook (http://www.pol.illinois.edu/graduates/handbook/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Entering with approved M.S./M.A. degree

Code	Title	Hours
Tools of Inquiry: two-course sequence in statistical methods, three additional courses in statistical methods, formal theory or qualitative methods (PS 523 may be taken in partial fulfillment of the Tools of Inquiry requirement, providing it is not also used to satisfy the Scope and Methods requirement).		20
PS 521	Phil Bases of Pol Inquiry	4
PS 522	Research Design and Techniques	4
or PS 523	The Comparative Method	
Course work in one substantive area of political science		20
Course work in a minor area.		8
PS 598	Dissertation Design Seminar	0
PS 599	Thesis Research (min/max applied toward degree)	32
Total Hours		64

Other Requirements

Requirement	Description
Other requirements may overlap	
Qualifying Exam Required:	Yes
Preliminary Exam Required:	Yes
Final Exam/Dissertation Defense Required:	Yes
Dissertation Deposit Required:	Yes
Minimum GPA:	3.0

Entering with approved B.S./B.A. degree

Code	Title	Hours
Master's Equivalency: Hours of 500 level coursework in PS		24-32
Tools of Inquiry: two-course sequence in statistical methods, three additional courses in statistical methods, formal theory or qualitative methods (PS 523 may be taken in partial fulfillment of the Tools of Inquiry requirement, providing it is not also used to satisfy the Scope and Methods requirement).		20
PS 521	Phil Bases of Pol Inquiry	4
PS 522	Research Design and Techniques	4
or PS 523	The Comparative Method	
Course work in one substantive area of political science		20
Course work in a minor area.		8
PS 598	Dissertation Design Seminar	0
PS 599	Thesis Research (min/max applied toward degree)	32-40
Total Hours		96

Other Requirements

Requirement	Description
Other requirements may overlap	
Qualifying Exam Required:	Yes
Preliminary Exam Required:	Yes
Final Exam/Dissertation Defense Required:	Yes
Dissertation Deposit Required:	Yes
Minimum GPA:	3.0

Learning Outcomes: Political Science, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Political Science

The Political Science doctoral program is designed to produce broadly educated and well-trained scholars and teachers. Our aim is to produce Ph.D.s who have the breadth and vision to grapple with large questions, the training to make original contributions to research that addresses

those questions, and the ability to communicate research results to students, their peers, and society at large. We thus strive to strike an appropriate balance between:

1. Exposure to theoretical models in political and social research,
2. Sophisticated training in the methods and techniques of social science,
3. The development of expertise within a student's primary area of interest,
4. Exposure to classroom teaching, and
5. Exposure to the discipline's professional norms and practices.

More specifically, every Illinois Ph.D. should:

1. Be well-grounded in the social sciences. This includes familiarity with the philosophy of science issues that underlie social scientific inquiry. It also includes exposure to or an acquaintance with the literature and approaches of at least one other discipline as they pertain to inquiries in political science and specifically to students' particular areas of interest.
2. Be familiar with the breadth and diversity of models, approaches, and intellectual traditions within a student's major subfield of expertise (major fields in the department are American politics, comparative politics, international relations, and political theory).
3. Be competent in at least a second substantive area of political science(minor fields in the department are the same as the four major fields, with the addition of political methodology).
4. Be highly competent in research skills appropriate to his or her research endeavors. An Illinois Ph.D. should be exposed to a broad range of methodologies (including both quantitative and qualitative approaches) and have some deeper familiarity with particular sets of research skills (e.g. statistical analysis, formal modeling, game theory, the comparative case study method).
5. Fully understand the research enterprise. This includes an ability to critique others' work and an ability to be a contributing scholar by producing original research.
6. Be prepared to teach graduate courses in his or her primary subfield and undergraduate courses in at least two subfields of the discipline, and understand best practices for student engagement.
7. Be familiar with disciplinary norms and standards, including understanding issues related to ethical practices in research, professional and public engagement, and instruction.

Political Science: Civic Leadership, MA

for the degree of Master of Arts in Political Science, Civic Leadership Concentration

head of department: Thomas Rudolph
director of graduate studies: Matthew Winters
department website: http://www.pol.illinois.edu/
college website: https://las.illinois.edu/
overview of graduate college admissions & requirements: Graduate Admissions (https://grad.illinois.edu/admissions/apply/)
overview of college admissions & requirements:
department office: 420 David Kinley Hall, 1407 W. Gregory Drive, Urbana, IL 61801
phone: (217) 333-3881
fax: (217) 244-5712
email: gradpol@illinois.edu

Students who have completed undergraduate coursework in the Civic Leadership Program and are admitted into the Graduate College can usually earn a Master of Arts in Political Science, with a Concentration in Civic Leadership within one year. It entails the completion of 32 graduate hours and the achievement of a 3.0 GPA in all courses taken. A master's paper is required, which is fulfilled by the completion of a collaborative project undertaken as part of the Practicum in Civic Leadership.

Only UIUC students who have participated in the undergraduate portion of the Civic Leadership Program are eligible for admission in the graduate concentration in Civic Leadership. For information contact the Director, Civic Leadership Program, Department of Political Science.

Graduate Degree Programs in Political Science

Political Science, MA (p. 968)
concentrations:
Civic Leadership (p. 971)|African American Studies (p. 1075)
Political Science, PhD (p. 969)
concentration:
African American Studies (p. 1075)
Joint Programs:
Political Science, PhD & Law, JD (p. 1162)
Political Science: Civic Leadership, MA & Law, JD (p. 1162)

The Department of Political Science offers graduate programs leading to the degrees of Master of Arts and Doctor of Philosophy. Students are not admitted to the master's degree program in Political Science, except for the Civic Leadership concentration. The department is not accepting applications to the Public Administration program.

Admission

Admission to the Ph.D. Program

The Graduate College admission requirements apply. The student should have a minimum of 20 hours of undergraduate work in political science and cognate disciplines such as economics, psychology, finance, sociology, or history. All applicants are required to submit Graduate Record Examination (GRE) scores, a personal statement, and an example of written work. Applicants whose native language is not English must submit the TOEFL iBT or IELTS score. The Ph.D. program typically admits students for the fall semester. Application deadline is December 15th.

Admission to the Master of Arts with Concentration in Civic Leadership

Admission is restricted to students who were accepted to the Civic Leadership Program as undergraduates at the University of Illinois. Application deadline is December 15. Applicants who wish to obtain a

joint MA-JD degree program must apply separately for admission to the Law School.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program and is essential for students whose career goals include college teaching.

Financial Aid

Students accepted into the department's Ph.D. program are eligible to apply for financial aid. Most incoming students with good credentials and continuing students demonstrating satisfactory progress will receive some type of financial aid, but the type and amount will vary. The Department of Political Science provides, on a competitive basis, aid packages up to $22,000, plus waivers of tuition and some fees. Financial aid is usually a combination of fellowship money and assistantships. Limited amounts of aid are also available for dissertation field research, internships, and the presentation of papers at professional meetings.

for the degree of Master of Arts in Political Science, Civic Leadership Concentration

Students who have completed undergraduate coursework in the Civic Leadership Program and are admitted into the Graduate College can usually earn a Master of Arts in Political Science, with a Concentration in Civic Leadership within one year. It entails the completion of 32 graduate hours and the achievement of a 3.0 GPA in all courses taken. A master's paper is required, which is fulfilled by the completion of a collaborative project undertaken as part of the Practicum in Civic Leadership.

Only UIUC students who have participated in the undergraduate portion of the Civic Leadership Program are eligible for admission in the graduate concentration in Civic Leadership. For information contact the Director, Civic Leadership Program, Department of Political Science.

For additional details and requirements refer to the department's graduate handbook (http://www.pol.illinois.edu/graduates/handbook/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
Practicum in Civic Leadership		4-8
Total Hours		32

Other Requirements

Requirement	Description
Other Requirements may overlap	
A concentration is not required.	
A master's paper is required	
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	3.0

Portuguese, MA

for the degree of Master of Arts in Portuguese

head of department: Mariselle Meléndez
director of graduate studies: Javier Irigoyen-García
email: span-port@illinois.edu
department website: http://www.spanport.illinois.edu
department faculty:
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department office: 4080 Foreign Languages Building, 707 South Mathews, Urbana, IL 61801
phone: (217) 244-3250

Graduate Degree Programs in Spanish & Portuguese

Spanish, MA (p. 1012)
optional concentrations:
Medieval Studies (p. 1101)|Spanish Linguistics (p. 1013)|Spanish Literatures & Cultures (p. 1015)
Spanish, PhD (p. 1016)
optional concentrations:
Medieval Studies (p. 1101)|Romance Linguistics (p. 1106)|Second Language Acquisition & Teacher Education (p. 1106)
Portuguese, MA (p. 972)
concentration:
Brazilian Studies (p. 975)
Portuguese, PhD (p. 973) (***Please note: Until further notice, we are accepting applications only to the M.A. in Portuguese, not to the Ph.D.)***

The Department of Spanish and Portuguese offers work leading to the Master of Arts and Doctor of Philosophy in Spanish and Portuguese, and to a Concentration in Second Language Acquisition and Teacher Education (SLATE).
Fields of specialization are:

- **Spanish linguistics**
- **Romance linguistics**
- **Spanish literature and cultural studies**
- **Latin American literature and cultural studies**
- **Brazilian Studies**
- **Luso-Brazilian literature and cultural studies**

A graduate course in Catalan literature is available. Also, the department is affiliated with the Latina/Latino Studies Program. Students in the area of Latina/Latino studies may be able to work with experts in the other disciplines in Latina/Latino studies such as anthropology, history, political science, sociology, and so forth in order to design and complete a program of studies in a particular area.

Admission

The normal prerequisite for a graduate major is an undergraduate major in the corresponding Romance language or consent of the department. Students doing graduate work for any advanced degree in Spanish or Portuguese must possess a command of the language. Applicants should apply online (www.grad.illinois.edu/admissions/apply (http://www.grad.illinois.edu/admissions/apply/)) and submit a statement of purpose, three letters of recommendation and a writing sample of approximately 10-20 pages in the form of one or two papers, at least one of which must be written in Spanish or Portuguese (as applicable). Original transcripts (with English translations if applicable) showing all undergraduate and graduate work completed should also

be uploaded. Graduate Record Examination (GRE) scores are required of all domestic applicants and should be submitted to institution code 1836. International applicants who have taken the GRE are encouraged to submit their scores as well. Applicants whose native language is not English are required to take the Test of English as a Foreign Language (TOEFL) and must score at least 88 on the internet-based test (iBT); they must also pass the speaking sub-section of the iBT with a minimum score of 24 (see www.grad.illinois.edu/Admissions/instructions/04c (http://www.grad.illinois.edu/Admissions/instructions/04c/)). Applications are accepted for fall admission only. Application questions may be directed to SLCL Graduate Student Services at slclgradservices@illinois.edu.

Centers, Programs, and Institutes

The option to pursue a concentration in SLATE (Second Language Acquisition and Teacher Education) is available to doctoral students in the department's programs in linguistics. Candidates selecting this option are required to complete courses in linguistics, psycholinguistics/sociolinguistics, second language studies, and research methodology in addition to advanced study in linguistics of the particular language. For information about SLATE go to www.slate.illinois.edu (http://www.slate.illinois.edu/).

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, this department requires degree candidates to teach as part of their academic work. Such experience is considered a vital part of the graduate program. Non-native English speakers must first pass a test of their oral English ability (see www.grad.illinois.edu/admissions/taengprof.htm (http://www.grad.illinois.edu/admissions/taengprof.htm)).

Financial Aid

The department offers financial aid (in the form of fellowships, teaching assistantships, and research assistantships) to all of the students it admits. Other kinds of fellowships and research support are also available on a competitive basis to qualified candidates; they include dissertation research and travel grants, conference travel grants, and summer fellowships.

for the degree of Master of Arts in Portuguese

The M.A. in Portuguese is administered through the Department of Spanish and Portuguese. Its goal is to provide to provide breadth in the various areas of Luso-Brazilian Studies as well as develop the student's ability to interpret and analyze literature, culture, and history. It requires a minimum of 32 graduate hours. Students must also successfully complete a master's thesis, developed in consultation with their advisor.

For additional details and requirements refer to the department's guidelines *(*https://spanport.illinois.edu/academics/graduate-program/graduate-guidelines/#degrees*) for graduate students and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Degree Requirements:

Code	Title	Hours
Coursework in Luso-Brazilian literature/cultural studies selected in consultation with advisor.		24
PORT 595	Special Topics Port & Braz Lit	4
PORT 599	Thesis Research	4
Total Hours		**32**

Other Requirements

Requirement	Description
Other requirements may overlap	
PORT 571 is required of all teaching assistants	4 hours
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	3.0

Learning Outcomes: Portuguese, MA

Learning Outcomes for the degree of Master of Arts in Portuguese

1. Students will possess a breadth of knowledge about social, cultural, and historical issues in Brazil and the Portuguese-speaking world, as well as a depth of knowledge about a cluster of research questions corresponding to students' individual interests.
2. Students will develop a familiarity with multiple disciplinary approaches to the study of Brazil specifically and social, cultural, and historical phenomena more generally.
3. Students will possess the ability to identify research questions, develop a research project, and see that project (MA thesis) to completion through sustained engagement with both existing scholarship and novel research.
4. Students will acquire the ability to communicate research findings in a variety of academic venues in spoken and written English and Portuguese.
5. Students will acquire knowledge and experience of teaching methodologies and will be able to teach at the undergraduate level.

Portuguese, PhD

for the degree of Doctor of Philosophy in Portuguese

head of department: Mariselle Meléndez
director of graduate studies: Javier Irigoyen-García
email: span-port@illinois.edu
department website: http://www.spanport.illinois.edu
department faculty:
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department office: 4080 Foreign Languages Building, 707 South Mathews, Urbana, IL 61801
phone: (217) 244-3250

Not currently accepting applications.

Graduate Degree Programs in Spanish & Portuguese

Spanish, MA (p. 1012)
optional concentrations:
Medieval Studies (p. 1101)|Spanish Linguistics (p. 1013)|Spanish Literatures & Cultures (p. 1015)
Spanish, PhD (p. 1016)
optional concentrations:
Medieval Studies (p. 1101)|Romance Linguistics (p. 1106)|Second Language Acquisition & Teacher Education (p. 1106)
Portuguese, MA (p. 972)
concentration:
Brazilian Studies (p. 975)
Portuguese, PhD (p. 973) (***Please note: Until further notice, we are accepting applications only to the M.A. in Portuguese, not to the Ph.D.)***

The Department of Spanish and Portuguese offers work leading to the Master of Arts and Doctor of Philosophy in Spanish and Portuguese, and to a Concentration in Second Language Acquisition and Teacher Education (SLATE).
Fields of specialization are:

- **Spanish linguistics**
- **Romance linguistics**
- **Spanish literature and cultural studies**
- **Latin American literature and cultural studies**
- **Brazilian Studies**
- **Luso-Brazilian literature and cultural studies**

A graduate course in Catalan literature is available. Also, the department is affiliated with the Latina/Latino Studies Program. Students in the area of Latina/Latino studies may be able to work with experts in the other disciplines in Latina/Latino studies such as anthropology, history, political science, sociology, and so forth in order to design and complete a program of studies in a particular area.

Admission

The normal prerequisite for a graduate major is an undergraduate major in the corresponding Romance language or consent of the department. Students doing graduate work for any advanced degree in Spanish or Portuguese must possess a command of the language. Applicants should apply online (www.grad.illinois.edu/admissions/apply (http://www.grad.illinois.edu/admissions/apply/)) and submit a statement of purpose, three letters of recommendation and a writing sample of approximately 10-20 pages in the form of one or two papers, at least one of which must be written in Spanish or Portuguese (as applicable). Original transcripts (with English translations if applicable) showing all undergraduate and graduate work completed should also be uploaded. Graduate Record Examination (GRE) scores are required of all domestic applicants and should be submitted to institution code 1836. International applicants who have taken the GRE are encouraged to submit their scores as well. Applicants whose native language is not English are required to take the Test of English as a Foreign Language (TOEFL) and must score at least 88 on the internet-based test (iBT); they must also pass the speaking sub-section of the iBT with a minimum score of 24 (see www.grad.illinois.edu/Admissions/instructions/04c (http://www.grad.illinois.edu/Admissions/instructions/04c/)). Applications are accepted for fall admission only. Application questions may be directed to SLCL Graduate Student Services at slclgradservices@illinois.edu.

Centers, Programs, and Institutes

The option to pursue a concentration in SLATE (Second Language Acquisition and Teacher Education) is available to doctoral students in the department's programs in linguistics. Candidates selecting this option are required to complete courses in linguistics, psycholinguistics/sociolinguistics, second language studies, and research methodology in addition to advanced study in linguistics of the particular language. For information about SLATE go to www.slate.illinois.edu (http://www.slate.illinois.edu/).

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, this department requires degree candidates to teach as part of their academic work. Such experience is considered a vital part of the graduate program. Non-native English speakers must first pass a test of their oral English ability (see www.grad.illinois.edu/admissions/taengprof.htm (http://www.grad.illinois.edu/admissions/taengprof.htm)).

Financial Aid

The department offers financial aid (in the form of fellowships, teaching assistantships, and research assistantships) to all of the students it admits. Other kinds of fellowships and research support are also available on a competitive basis to qualified candidates; they include dissertation research and travel grants, conference travel grants, and summer fellowships.

for the degree of Doctor of Philosophy in Portuguese

Code	Title	Hours
PORT 571 is required of all teaching assistants		4
PORT 599	Thesis Research (32 max applied toward degree)	0 to 16
Coursework selected in consultation with advisor		
Language Requirement: Students in all doctoral programs except SLATE must demonstrate reading proficiency in two languages besides the foreign language of specialization (not including English).		
Total Hours		**64**

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall:	16
Masters Degree Required for Admission to PhD?	Yes
Qualifying Exam Required	No
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the department's* guidelines for graduate students *(*http://www.spanport.illinois.edu/graduate/guidelines/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Portuguese: Brazilian Studies, MA

for the degree of Master of Arts in Portuguese, Brazilian Studies Concentration

head of department: Mariselle Meléndez
director of graduate studies: Javier Irigoyen-García
email: span-port@illinois.edu
department website: http://www.spanport.illinois.edu
department faculty:
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department office: 4080 Foreign Languages Building, 707 South Mathews, Urbana, IL 61801
phone: (217) 244-3250

Graduate Degree Programs in Spanish & Portuguese

Spanish, MA (p. 1012)
optional concentrations:
Medieval Studies (p. 1101)|Spanish Linguistics (p. 1013)|Spanish Literatures & Cultures (p. 1015)
Spanish, PhD (p. 1016)
optional concentrations:
Medieval Studies (p. 1101)|Romance Linguistics (p. 1106)|Second Language Acquisition & Teacher Education (p. 1106)
Portuguese, MA (p. 972)
concentration:
Brazilian Studies (p. 975)
Portuguese, PhD (p. 973) (***Please note: Until further notice, we are accepting applications only to the M.A. in Portuguese, not to the Ph.D.)***

The Department of Spanish and Portuguese offers work leading to the Master of Arts and Doctor of Philosophy in Spanish and Portuguese, and to a Concentration in Second Language Acquisition and Teacher Education (SLATE).
Fields of specialization are:

- **Spanish linguistics**
- **Romance linguistics**
- **Spanish literature and cultural studies**
- **Latin American literature and cultural studies**
- **Brazilian Studies**
- **Luso-Brazilian literature and cultural studies**

A graduate course in Catalan literature is available. Also, the department is affiliated with the Latina/Latino Studies Program. Students in the area of Latina/Latino studies may be able to work with experts in the other disciplines in Latina/Latino studies such as anthropology, history, political science, sociology, and so forth in order to design and complete a program of studies in a particular area.

Admission

The normal prerequisite for a graduate major is an undergraduate major in the corresponding Romance language or consent of the department. Students doing graduate work for any advanced degree in Spanish or Portuguese must possess a command of the language. Applicants should apply online (www.grad.illinois.edu/admissions/apply (http://www.grad.illinois.edu/admissions/apply/)) and submit a statement of purpose, three letters of recommendation and a writing sample of approximately 10-20 pages in the form of one or two papers, at least one of which must be written in Spanish or Portuguese (as applicable). Original transcripts (with English translations if applicable) showing all undergraduate and graduate work completed should also be uploaded. Graduate Record Examination (GRE) scores are required of all domestic applicants and should be submitted to institution code 1836. International applicants who have taken the GRE are encouraged to submit their scores as well. Applicants whose native language is not English are required to take the Test of English as a Foreign Language (TOEFL) and must score at least 88 on the internet-based test (iBT); they must also pass the speaking sub-section of the iBT with a minimum score of 24 (see www.grad.illinois.edu/Admissions/instructions/04c (http://www.grad.illinois.edu/Admissions/instructions/04c/)). Applications are accepted for fall admission only. Application questions may be directed to SLCL Graduate Student Services at slclgradservices@illinois.edu.

Centers, Programs, and Institutes

The option to pursue a concentration in SLATE (Second Language Acquisition and Teacher Education) is available to doctoral students in the department's programs in linguistics. Candidates selecting this option are required to complete courses in linguistics, psycholinguistics/sociolinguistics, second language studies, and research methodology in addition to advanced study in linguistics of the particular language. For information about SLATE go to www.slate.illinois.edu (http://www.slate.illinois.edu/).

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, this department requires degree candidates to teach as part of their academic work. Such experience is considered a vital part of the graduate program. Non-native English speakers must first pass a test of their oral English ability (see www.grad.illinois.edu/admissions/taengprof.htm (http://www.grad.illinois.edu/admissions/taengprof.htm)).

Financial Aid

The department offers financial aid (in the form of fellowships, teaching assistantships, and research assistantships) to all of the students it admits. Other kinds of fellowships and research support are also available on a competitive basis to qualified candidates; they include dissertation research and travel grants, conference travel grants, and summer fellowships.

for the degree of Master of Arts in Portuguese, Brazilian Studies Concentration

In the MA program in Portuguese with a concentration in Brazilian Studies, students broaden and deepen their knowledge of Brazil-related topics and themes, working closely with core and affiliated faculty members in Portuguese. Students draw on the many upper-level course offerings across departments and disciplines to create an individualized plan of study. All students must take SPAN 572 on theory and criticism or an equivalent course. Students with TAships are also required to complete PORT 571, the pro-seminar for language teaching required of all TAs in the department. Beginning in their second semester, students will enroll in PORT 595 with one of the Portuguese faculty members or affiliate faculty to develop a master's thesis. In their third or fourth semester(s), students can then sign up for PORT 599 (repeatable for up to 16 hours), to produce the thesis, which will be of publishable quality, working with Portuguese core and affiliated faculty. Four independent study hours in PORT 595 and four thesis research hours in PORT 599

count toward the 20 required hours in the Department of Spanish and Portuguese.

For additional details and requirements refer to the department's guidelines *(*https://spanport.illinois.edu/academics/graduate-program/graduate-guidelines/#degrees*) for graduate students and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Code	Title	Hours
Course work within the Department of Spanish and Portuguese in Brazilian Studies selected in consultation with advisor.		12
PORT 595	Special Topics Port & Braz Lit	4
PORT 599	Thesis Research	4
Coursework in disciplines related to the students' focus with themes relevant to Brazil.		12
Total Hours		**32**

Other Requirements

Requirement	Description
Other requirements may overlap	
SPAN 572 or equivalent methods course must be taken by students	4 hours
Minimum 500-level Hours Required Overall:	12
PORT 571 is required of all teaching assistants	4 hours
Minimum GPA:	3.0

Psychological Science, MS

for the Master of Science in Psychological Science

head of department: Nicole Allen (acting Head)
director of graduate studies: Diane Beck
director of admissions committee: Ashley Ramm
email: psych-gradstdy@illinois.edu
department website: http://www.psychology.illinois.edu
department faculty: Psychology Faculty (https://psychology.illinois.edu/directory/faculty/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department office: 309 Psychology Building, 603 East Daniel Street, Champaign, IL 61820
phone: (217) 333-2169

A two-year, in-person research-based program designed for students who want research experience augmented by advanced courses in experimental techniques and professional development within a top-rated department at a world-class university. Each student admitted to the program is paired with a faculty advisor/mentor based on research interests. A Master's thesis is not required.

Graduate Degree Programs in Psychology

Psychology, MS (p. 977)
Psychological Science, MS (p. 976)
Psychology, PhD (p. 980)
optional concentrations:
Developmental Psychopathology (p. 982) | Second Language Acquisition & Teacher Education (p. 1106)

Admission

The Graduate College admission requirements apply for all programs. All candidates for admission must have a minimum grade point average of 3.0 (or B) on a 4.0 scale in courses representing the last 60 hours of work completed for the bachelor's degree. The candidate for admission to the graduate program should ordinarily have the following preparation: a minimum of 15 semester hours in psychology, a laboratory research methods course in psychology, and a course in statistics. Departmental committees also consider Graduate Record Examination (GRE) scores and letters of recommendation. Preference is given to students who have taken mathematics beyond college algebra and to those who have some research experience. Students are accepted only for fall admission. The M.S. in Psychological Science application deadline is February 6, 2022.

In addition to the aforementioned criteria, applicants are evaluated on their supporting documents, career goals, career promise, and research interests. Additional weight is given to the quality and extent of prior research and other relevant experience.

All applicants whose native language is not English or who are from any country other than the US, the United Kingdom, Canada, Australia, or New Zealand (even if they are native English speakers) are required by the University to submit the results of an English language proficiency test. The university will accept the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS) to determine admission eligibility.

- The minimum total TOEFL iBT score for admission (including all four sections): 79
- Minimum total TOEFL iBT score for exemption from the English as a Second Language Placement Test (EPT) for admission (including all four sections): 103
- Minimum total IELTS score for admission: 6.5, including a minimum subscore of 6 on all four modules. Students receiving scores below 7 will be required to take the EPT for placement in English as Second Language courses.

Refer to www.psychology.illinois.edu (http://www.psychology.illinois.edu/) (MS in Psychological Science) for additional information about the Department of Psychology's admission requirements.

Faculty Research Interests

The program is designed to prepare students for academic and research-oriented careers. Students become actively involved in research throughout the program.

For the most part, we view graduate education as an apprenticeship. Our task is to provide an environment where mature young scholars can gain experience in research as they collaborate with faculty and with other graduate students. Faculty research interests can be viewed here (https://psychology.illinois.edu/directory/faculty/).

Facilities and Resources

Students have designated work and study areas, access to research, library, and computing services. In some cases, student may collaborate with the Psychological Services Center, Illinois NeuroBehavioral Assessment Laboratory, Beckman Institute for Advanced Science and Technology, Educational Psychology, and the School of Labor and Employee Relations.

Financial Aid

The M.S. in Psychological Science program is self-supporting. The program does not accept non-statuatory tuition waivers, and students enrolled in this program are ineligible to hold waiver-generating appointments.

Please refer to this link for the current graduate tuition and fees: https://registrar.illinois.edu/tuition-fee-rates (https://registrar.illinois.edu/tuition-fee-rates/)

Enrollment for this program spans 4 semesters. Credit hours will range from 6–12 (or more) each semester, depending on course availability, international/domestic status, and student goals. International students are required to register for 12 credit hours to maintain F-1/J-1 student status.

Information regarding fees depends on the individual applicant. Fees are explained at http://registrar.illinois.edu/fee-info (http://registrar.illinois.edu/fee-info/). Please note that these costs do not include housing, transportation or other costs of living expenses.

for the Master of Science in Psychological Science

For additional details and requirements refer to the department's graduate handbook (https://psychology.illinois.edu/department-psychology-master-science-psychological-science-handbooks/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
PSYC 500	Professional Develop for Psych	1 to 4
PSYC 501	Best Psych Research Practices	2 to 4
PSYC 506	Statistical Methods I	4
PSYC 507	Statistical Methods II	4
PSYC 590	Individual Research	0 to 16
Electives		12
Total Hours		32

Other requirements

Requirement	Description
Other requirements may overlap.	
Minimum 500-level Hours Required Overall	12
Minimum GPA	2.75

Learning Outcomes: Psychological Science, MS

Learning Outcomes for the Master of Science in Psychological Science

1. Students will demonstrate an advanced level of knowledge about topics in psychological science (e.g., current debates in the field, current methods and measurement practices, and new issues in research ethics).
2. Students will demonstrate depth of knowledge of content and methods in their program of study (e.g., attention and perception, cognitive neuroscience, social psychology, industrial/organizational psychology). Depth of knowledge will be acquired through participation in active research labs, production of a lab report, selection of specialized electives, and the successful practice of critically evaluating research in psychological science. Critical evaluation includes considering internal and external validity, implications for theory, and methodological and analytical integrity.
3. Students will demonstrate research skills (design, analysis, and interpretation of research reports) in major and subfields of psychological science through coursework is statistics and research practices, and through participation in active research laboratories. In courses and in lab contexts, students will use appropriate statistical techniques to analyze data and interpret results.
4. Students will identify and communicate independent research interests. Students will identify independent research interests through discussion with their advisor and through a review of the literature. Students will communicate independent interests through a formal presentation of their ideas as part of a public speaking requirement in core courses. Students will communicate these interests through a written report, or successful submission of a proposal to the OPRS, or the submission of a pre-registered report, or by contributing to the creation of a manuscript.
5. Students will produce examples of academic writing that reflect independent research interests. Students will demonstrate writing competency through a written report, or submission of a pre-registered report, or successful submission of a proposal to the OPRS, or the creation of a manuscript.
6. Students will set academic goals and design action plans for pursuing doctoral work or jobs in the industry through the construction of professional development materials (e.g., the creation of a CV, resume, cover letter, professional profile, personal statement, and research plan).

Psychology, MS

for the Master of Science in Psychology

head of department: Nicole Allen (acting Head)
director of graduate studies: Diane Beck
director of admissions committee: Ashley Ramm
email: psych-grad@illinois.edu (psych-gradstdy@illinois.edu)
department website: http://www.psychology.illinois.edu
department faculty: Psychology Faculty (https://psychology.illinois.edu/directory/faculty/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department office: 309 Psychology Building, 603 East Daniel Street, Champaign, IL 61820
phone: (217) 333-2169

This degree is not designed to prepare a student for a professional position. As part of the doctoral program, students must earn the Master of Science in Psychology degree or submit a master's-level research report to the department.

Graduate Degree Programs in Psychology

Psychology, MS (p. 977)
Psychological Science, MS (p. 976)
Psychology, PhD (p. 980)
optional concentrations:
Developmental Psychopathology (p. 982) | Second Language Acquisition & Teacher Education (p. 1106)

The Department of Psychology offers graduate programs leading to the degrees of Master of Science and Doctor of Philosophy. Doctor of Philosophy programs are offered in the following areas of psychology:

- Attention & Perception
- Behavioral Neuroscience
- Clinical-Community
- Cognitive Neuroscience
- Cognitive
- Developmental
- Industrial-Organizational
- Quantitative
- Social-Personality

An optional Master of Science in Psychology degree is awarded to students in the doctoral program as an intermediate degree.

Admission

The Graduate College admission requirements apply for all programs. All candidates for admission must have a minimum grade point average of 3.0 (or B) on a 4.0 scale in courses representing the last 60 hours of work completed for the bachelor's degree. The candidate for admission to the graduate program should ordinarily have the following preparation: a minimum of 15 semester hours in psychology, a laboratory research methods course in psychology, and a course in statistics. Departmental committees also consider letters of recommendation. Graduate Record Examination (GRE) scores are required for application to the following areas: Attention & Perception, Cognitive, Developmental, Industrial-Organizational, Quantitative, and Social-Personality. Preference is given to students who have taken mathematics beyond college algebra and to those who have some research experience. Applications for admission to part-time study are usually not approved. Students are accepted only for fall admission. Application deadlines for the Ph.D. program are listed below.

Fall 2022 Application Deadlines:

- Attention & Perception: **December 1, 2021**
- Behavioral Neuroscience: **December 1, 2021**
- Clinical-Community: **November 15, 2021**
- Cognitive Neuroscience: **December 1, 2021**
- Cognitive: **December 1, 2021**
- Developmental: **December 1, 2021**
- Industrial-Organizational: **December 1, 2021**
- Quantitative: **December 1, 2021**
- Social-Personality: **December 1, 2021**

In addition to the aforementioned criteria, applicants are evaluated on their supporting documents, career goals, career promise, and research interests. Substantial additional weight is given to the quality and extent of prior research and other relevant experience.

All applicants whose native language is not English or who are from any country other than the US, the United Kingdom, Canada, Australia, or New Zealand (even if they are native English speakers) are required by the University to submit the results of an English language proficiency test. The university will accept the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS) to determine admission eligibility.

- The minimum total TOEFL iBT score for admission (including all four sections): 79
- Minimum total TOEFL iBT score for exemption from the English as a Second Language Placement Test (EPT) for admission (including all four sections): 103
- Minimum total IELTS score for admission: 6.5, including a minimum subscore of 6 on all four modules. Students receiving scores below 7 will be required to take the EPT for placement in English as Second Language courses.

In addition to the general requirement for English proficiency testing described above, the University of Illinois is also required by state law and University policy to give teaching appointments only to international graduate students who have more specifically passed an English language SPEAKING proficiency test. Applicants have the following options to satisfy this requirement:

- Minimum score of 24 on the speaking section of the TOEFL iBT
- Minimum score of 8 on the speaking section of the IELTS
- Minimum score of 50 on the TSE
- Minimum score of 5 on the EPI (English Proficiency Interview) test.

International applicants to the Ph.D. program must present documentation for one of the above-listed tests of spoken English at the time of application to the Psychology Department. The teaching English proficiency requirements do not apply to the M.S. in Psychological Science applicants.

Refer to www.psychology.illinois.edu (http://www.psychology.illinois.edu/) (Graduate Program) for additional information about the Department of Psychology's admission requirements.

Graduate Teaching Experience

The department requires Ph.D. candidates to gain teaching experience as part of their academic work. Such experience is considered a vital part of the graduate program and usually takes the form of a teaching assistantship. Students have the option of teaching two class sections (50% TA) for one semester or one class section (25% TA) for two semesters in order to meet the requirement.

Faculty Research Interests

The program is designed to prepare students for academic and research-oriented careers. Students become actively involved in research during their first semester, devoting an increasing percent of time toward independent research throughout their graduate careers.

For the most part, we view graduate education as an apprenticeship. Our task is to provide an environment where mature young scholars can gain experience in research as they collaborate with faculty and with other graduate students. The program encourages interdisciplinary study both within psychology and between psychology and other fields. Faculty research interests can be viewed here (https://psychology.illinois.edu/directory/faculty/).

Facilities and Resources

Students have everything they need, including personal office space and full access to research, library, and computing services, as well as to a large pool of research participants. The excellent cooperation between program areas in the department and with other units in the University provides access to expertise and methodology in a variety of areas including but not limited to:

- the Psychological Services Center
- the Counseling Center
- the Beckman Institute for Advanced Science and Technology
- the Center for the Study of Reading
- the Institute of Communications Research
- the School of Labor and Employee Relations
- the Family Resiliency Program
- the Neuroscience Program
- the Institute for Genomic Biology
- the Departments of Computer Science
- Educational Psychology
- Linguistics
- Molecular and Cellular Biology and Statistics
- the Colleges of Law and Medicine

Financial Aid

Students generally complete the doctoral degree in 4-6 years, and the Psychology Department makes financial support available to all Ph.D. students in good standing for up to 6 years. The University application form and supplemental application materials provide all the information that is required by the committees administering various funding sources, which include teaching assistantships, research assistantships, and fellowships.

The M.S. in Psychological Science is self-supporting. The program does not accept non-statuatory tuition waivers, and students enrolled in this program are ineligible to hold waiver-generating appointments.

for the Master of Science in Psychology

For additional details and requirements refer to the department's graduate handbook *(*https://psychology.illinois.edu/admissions/current-students/doctoral/archives/handbooks/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Thesis Option

Code	Title	Hours
PSYC 599	Thesis Research	0 to 8
Prescribed graduate hours of graduate work in selected area		26 - 32
Total Hours		**32**

Other Requirements

Requirement	Description
Other requirements may overlap	
The Master of Science in Psychology degree is awarded as an intermediate degree to candidates for the Doctor of Philosophy degree who have satisfactorily completed 32 graduate hours of graduate work and written an acceptable research report.	
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	2.75

Non-Thesis Option

Code	Title	Hours
PSYC 590	Individual Research	0 to 8
Prescribed graduate hours of graduate work in selected area		26 - 32
Total Hours		**32**

Other Requirements

Requirement	Description
Other requirements may overlap	
The Master of Science in Psychology degree is awarded as an intermediate degree to candidates for the Doctor of Philosophy degree who have satisfactorily completed 32 graduate hours of graduate work and written an acceptable research report.	
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	2.75

Learning Outcomes: Psychology, MS

Learning Outcomes for the Master of Science in Psychology

Students will:

1. Have the requisite knowledge to conduct independent research in academic and/or applied settings, including:
   a. Knowledge of research methodology appropriate to a specific area of study
   b. Knowledge of data analytic techniques
   c. Knowledge of a specific area of study within the field of psychology
2. Have effective written communication skills to disseminate research and scholarship and/or pursue funding opportunities.
3. Have effective oral communication skills to disseminate research and scholarship (e.g., as instructors, as conference presenters)

4. Have the knowledge to adhere to professional standards and expectations. Specifically, this learning outcome will attend to the degree to which students:
   a. Develop the knowledge and skills to engage diversity and inclusion in psychological science (as researchers, teachers, practitioners when applicable, and mentors)
   b. Develop the knowledge and skills to engage in ethical research and practice (when applicable)
   c. Develop the knowledge and skills to remain abreast of "cutting edge" issues in their respective program areas (e.g., replicability)

Psychology, PhD

for the Doctor of Philosophy in Psychology

head of department: Nicole Allen (acting Head)
director of graduate studies: Diane Beck
director of admissions committee: Ashley Ramm
email: psych-grad@illinois.edu (psych-gradstdy@illinois.edu)
department website: http://www.psychology.illinois.edu
department faculty: Psychology Faculty (https://psychology.illinois.edu/directory/faculty/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department office: 309 Psychology Building, 603 East Daniel Street, Champaign, IL 61820
phone: (217) 333-2169

The Doctor of Philosophy degree is awarded to candidates who complete an approved program in their area of specialization and meet departmental and Graduate College requirements for the degree. These must include at least 64 or 96 graduate hours of graduate work; satisfactory performance in courses or examinations dealing with quantitative methods and chosen areas of specialization; a master's thesis or equivalent; appropriate advanced courses and seminars in the area of specialization and in related and supporting areas; satisfactory performance on a doctoral qualifying examination; satisfactory performance on an oral preliminary examination; completion of an acceptable Ph.D. thesis; and satisfactory performance on an oral examination in defense of the thesis.

Graduate Degree Programs in Psychology

Psychology, MS (p. 977)
Psychological Science, MS (p. 976)
Psychology, PhD (p. 980)
optional concentrations:
Developmental Psychopathology (p. 982) | Second Language Acquisition & Teacher Education (p. 1106)

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- Cognitive
- Cognitive Neuroscience
- Developmental
- Quantitative
- Social-Personality
- Industrial-Organizational

An optional Master of Science in Psychology degree is awarded to students in the doctoral program as an intermediate degree.

Admission

The Graduate College admission requirements apply for all programs. All candidates for admission must have a minimum grade point average of 3.0 (or B) on a 4.0 scale in courses representing the last 60 hours of work completed for the bachelor's degree. The candidate for admission to the graduate program should ordinarily have the following preparation: a minimum of 15 semester hours in psychology, a laboratory research methods course in psychology, and a course in statistics. Departmental committees also consider letters of recommendation. Graduate Record Examination (GRE) scores are required for application to the following areas: Attention & Perception, Cognitive, Developmental, Industrial-Organizational, Quantitative, and Social-Personality. Preference is given to students who have taken mathematics beyond college algebra and to those who have some research experience. Applications for admission to part-time study are usually not approved. Students are accepted only for fall admission. Application deadlines for the Ph.D. program are listed below.

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- Quantitative: **December 1, 2021**
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- Minimum total IELTS score for admission: 6.5, including a minimum subscore of 6 on all four modules. Students receiving scores below

7 will be required to take the EPT for placement in English as Second Language courses.

In addition to the general requirement for English proficiency testing described above, the University of Illinois is also required by state law and University policy to give teaching appointments only to international graduate students who have more specifically passed an English language SPEAKING proficiency test. Applicants have the following options to satisfy this requirement:

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- Minimum score of 50 on the TSE
- Minimum score of 5 on the EPI (English Proficiency Interview) test.

International applicants to the Ph.D. program must present documentation for one of the above-listed tests of spoken English at the time of application to the Psychology Department. The teaching English proficiency requirements do not apply to the M.S. in Psychological Science applicants.

Refer to www.psychology.illinois.edu **(**http://www.psychology.illinois.edu/**) (Graduate Program) for additional information about the Department of Psychology's admission requirements.**

Graduate Teaching Experience

The department requires Ph.D. candidates to gain teaching experience as part of their academic work. Such experience is considered a vital part of the graduate program and usually takes the form of a teaching assistantship. Students have the option of teaching two class sections (50% TA) for one semester or one class section (25% TA) for two semesters in order to meet the requirement.

Faculty Research Interests

The program is designed to prepare students for academic and research-oriented careers. Students become actively involved in research during their first semester, devoting an increasing percent of time toward independent research throughout their graduate careers.

For the most part, we view graduate education as an apprenticeship. Our task is to provide an environment where mature young scholars can gain experience in research as they collaborate with faculty and with other graduate students. The program encourages interdisciplinary study both within psychology and between psychology and other fields. Faculty research interests can be viewed here (https://psychology.illinois.edu/directory/faculty/).

Facilities and Resources

Students have everything they need, including personal office space and full access to research, library, and computing services, as well as to a large pool of research participants. The excellent cooperation between program areas in the department and with other units in the University provides access to expertise and methodology in a variety of areas including but not limited to:

- the Psychological Services Center
- the Counseling Center
- the Beckman Institute for Advanced Science and Technology
- the Center for the Study of Reading
- the Institute of Communications Research
- the School of Labor and Employee Relations
- the Family Resiliency Program
- the Neuroscience Program
- the Institute for Genomic Biology
- the Departments of Computer Science
- Educational Psychology
- Linguistics
- Molecular and Cellular Biology and Statistics
- the Colleges of Law and Medicine

Financial Aid

Students generally complete the doctoral degree in 4-6 years, and the Psychology Department makes financial support available to all Ph.D. students in good standing for up to 6 years. The University application form and supplemental application materials provide all the information that is required by the committees administering various funding sources, which include teaching assistantships, research assistantships, and fellowships.

The M.S. in Psychological Science is self-supporting. The program does not accept non-statuatory tuition waivers, and students enrolled in this program are ineligible to hold waiver-generating appointments.

for the Doctor of Philosophy in Psychology

Entering with approved M.S./M.A. degree

Code	Title	Hours
PSYC 506	Statistical Methods I	4
PSYC 507	Statistical Methods II (or an approved equivalent quantitative course sequence)	4
Completion of "core courses" within program area and departmental requirements		
At least two different psychology seminar courses, taken for at least 2 hours each (4 min)		4
Approved minor courses		12-16
Distribution courses: general graduate survey courses in at least two other Program Areas.		0-4
PSYC 599	Thesis Research (min/max applied toward degree)	0-24
Total Hours		64

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall:	24
Teaching experience is required:	Yes
A master's thesis or a master's-level research report is required:	Yes
Qualifying Exam Required:	Yes
Preliminary Exam Required:	Yes
Final Exam/Dissertation Defense Required:	Yes
Dissertation Deposit Required:	Yes
Minimum GPA:	2.75

[1] *For additional details and requirements refer to the department's* graduate handbook *(*http://www.psychology.illinois.edu/graduate/current/handbook/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Entering with approved B.S./B.A. degree

Code	Title	Hours
Master's level equivalent course work		32
Completion of "core courses" within program area and departmental requirements		
At least two different psychology seminar courses, taken for at least 2 hours each (4 min)		4
PSYC 506	Statistical Methods I	4
PSYC 507	Statistical Methods II (PSYC 507 (or an approved equivalent quantitative course sequence))	4
Approved minor courses		12-16
Distribution courses: general graduate survey courses in at least two other Divisions.		0-4
PSYC 599	Thesis Research (min/max applied toward degree)	0-24
Total Hours		96

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall:	24
Teaching experience is required:	Yes
A master's thesis or a master's-level research report is required:	Yes
Qualifying Exam Required:	Yes
Preliminary Exam Required:	Yes
Final Exam/Dissertation Defense Required:	Yes
Dissertation Deposit Required:	Yes
Minimum GPA:	2.75

[1] *For additional details and requirements refer to the department's* graduate handbook *(*http://www.psychology.illinois.edu/graduate/current/handbook/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Psychology, PhD

Learning Outcomes for the Doctor of Philosophy in Psychology

Students will:

1. Have the requisite knowledge to conduct independent research in academic and/or applied settings, including:
   a. Knowledge of research methodology appropriate to a specific area of study
   b. Knowledge of data analytic techniques
   c. Knowledge of a specific area of study within the field of psychology
2. Have effective written communication skills to disseminate research and scholarship and/or pursue funding opportunities.
3. Have effective oral communication skills to disseminate research and scholarship (e.g., as instructors, as conference presenters)
4. Have the knowledge to adhere to professional standards and expectations. Specifically, this learning outcome will attend to the degree to which students:
   a. Develop the knowledge and skills to engage diversity and inclusion in psychological science (as researchers, teachers, practitioners when applicable, and mentors)
   b. Develop the knowledge and skills to engage in ethical research and practice (when applicable)
   c. Develop the knowledge and skills to remain abreast of "cutting edge" issues in their respective program areas (e.g., replicability)

Psychology: Developmental Psychopathology, PhD

for the Doctor of Philosophy in Psychology Developmental Psychopathology Concentration

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head of department: Nicole Allen (acting Head)
director of graduate studies: Diane Beck
director of admissions committee: Ashley Ramm
email: Psych-Grad@illinois.edu
department website: http://www.psychology.illinois.edu
department faculty: Psychology Faculty (https://psychology.illinois.edu/directory/faculty/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department office: 309 Psychology Building, 603 East Daniel Street, Champaign, IL 61820
phone: (217) 333-2169

This concentration is available to students in the developmental and clinical-community areas within the Psychology PhD program. The field of developmental psychopathology has grown exponentially in the past twenty years to become a major area of interest in the field of Psychology. This concentration will provide specialized training and professional development guidance within the field of developmental psychopathology; provide exposure to multiple theoretical perspectives and research methods that are used across different labs; facilitate opportunities to be involved in research with multiple faculty, broadening the scope of training and allowing for stronger letters of recommendation when entering the job market; facilitate successful job searches in this area of specialization, for which specific certification in the field would be of benefit.

Students wishing to pursue the concentration should contact the Psychology Graduate Studies Office (psych-grad@illinois.edu).

Graduate Degree Programs in Psychology

Psychology, MS (p. 977)
Psychological Science, MS (p. 976)
Psychology, PhD (p. 980)
optional concentrations:
Developmental Psychopathology (p. 982) | Second Language Acquisition & Teacher Education (p. 1106)

for the Doctor of Philosophy in Psychology Developmental Psychopathology Concentration

Code	Title	Hours
PSYC 538	Intro to Clin-Comm Psych I	4
Select one of the following		4
PSYC 540	Social Development	
PSYC 544	Developmental Cognitive Neuroscience	
Select one of the following		4
PSYC 501	Best Psych Research Practices	
PSYC 588	Covar Struct and Factor Models	
HDFS 597	Advanced Statistical Analysis	
EPSY 584	Multivar Anlys in Psych and Ed	
EPSY 587	Hierarchical Linear Models	
EPSY 590	Advanced Seminar in Educational Psychology [2]	
Select one of the following		4
PSYC 598	Proseminar in Psychology [1]	
PSYC 537	Development & Psychopathology	
PSYC 545	Intro to Clin-Comm Psych IV	
PSYC 546	Intervention & Assessment [1]	
PSYC 593	Seminar [1]	
HDFS 503	Social-Emotional Development	
HDFS 505	Advanced Adolescence	
EPSY 430	Early Adolescent Development	
Dissertation Research		
PSYC 599	Thesis Research [3]	0 to 16

[1] For these courses, only sections taught by faculty affiliated with the concentration and approved by the concentration coordinator will count toward the concentration (i.e., sections related to developmental psychopathology).

[2] EPSY 590 sections can be taken with concentration coordinator approval.

[3] Dissertation research must be completed with a faculty member doing research on developmental psychopathology and must be approved by the concentration coordinator.

Public Health, MPH

for the Master of Public Health in Public Health

Department Head: Kim Graber
Director of Graduate Studies: Steven Petruzzello
Interim Director of Program: Laura Rice
MPH Admissions Questions: mph-admissions@ahs.illinois.edu
Graduate Office: Julie Jenkins
Graduate Office Address: 906 South Goodwin Ave, 112 Freer Hall MC-052, Urbana, IL 61801
Graduate Phone: (217) 333-1083
Graduate Email: jjenkns@illinois.edu
Department Website: https://ahs.illinois.edu/community-health (https://ahs.illinois.edu/community-health/)
Program Website: https://ahs.illinois.edu/mph-home (https://ahs.illinois.edu/mph-home/)

Joint Programs:
Public Health, MPH & Community Health, PhD (p. 1162)
Public Health, MPH & Food Science & Human Nutrition, PhD (p. 1152)
Public Health, MPH & Human Development & Family Studies, PhD (p. 1154)
Public Health, MPH & Kinesiology, PhD (p. 1162)
Public Health, MPH & Nutritional Science, PhD (http://catalog.illinois.edu/graduate/aces_ahs/nutritional-science-phd-public-health-mph/)
Public Health, MPH & Social Work, PhD (p. 1163)
Public Health, MPH & Urban Planning, MUP (p. 1164)

Admissions: https://ahs.illinois.edu/application-requirements (https://ahs.illinois.edu/application-requirements/)

How to Apply for MPH: https://ahs.illinois.edu/how-to-apply (https://ahs.illinois.edu/how-to-apply/)

How to Apply for BS-MPH: https://ahs.illinois.edu/how-to-apply-bs-mph (https://ahs.illinois.edu/how-to-apply-bs-mph/)

for the Master of Public Health in Public Health

The MPH degree program requires a minimum of 48 hours. The program includes:

1. six required core courses in basic content areas of public health
2. three required courses in the Health Behavior and Promotion concentration, as well as one additional concentration course from an approved list
3. a required applied practice experience
4. a required integrative learning experience
5. seminars and electives

MPH students must complete all core coursework before enrolling in the MPH applied practice experience. It is highly preferable for the applied practice experience to occur during summer term. The integrative learning experience must be completed in the last term of study. There is no thesis requirement. A pre-requisite for applying to the MPH program is a college level course in mathematics, statistics, biostatistics, or epidemiology. Applications for the Master of Public Health (MPH) are only accepted for Fall admission, and are accepted until **April 1**. The program generally takes 1.5 to 2 years to complete. University of Illinois undergraduate students who major in Kinesiology, Community Health, or I-Health are eligible to apply for a 5 year joint BS-MPH degree program after their 3rd (junior) year of undergraduate study. Students in the BS-MPH program begin some MPH coursework in their 4th (senior) year of

undergraduate study, and take MPH coursework in a 5th year of study in fall, spring, and summer terms.

For additional details and requirements refer to the department's Graduate Handbook *(*http://kch.illinois.edu/kch-grad-handbook/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Code	Title	Hours
CHLH 410	Public Health Practice	4
CHLH/ENVS 469	Environmental Health	4
CHLH/KIN 540	Health Behavior: Theory	4
CHLH 550	Health Policy: United States	4
CHLH 572	Principles of Epidemiology	4
CHLH 573	Biostatistics in Public Health	4
CHLH 575	Chronic Disease Prevention	4
CHLH 577	Health Program Evaluation	4
CHLH 587	MPH Applied Practice Experience	4
CHLH 589	MPH Integrative Learning Experience	2
CHLH 594	Special Topics	1 to 4
Area of concentration coursework from approved list (min 3)		3
Electives and seminars (min 3)		3
Total Hours		48

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall:	12 (8 within the unit)
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the department's* Graduate Handbook *(*http://kch.illinois.edu/kch-grad-handbook/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Public Health, MPH

Learning Outcomes for the Master of Public Health

1. **Content Knowledge:** Students will demonstrate an advanced understanding of current and historically significant theories, models, themes, and ideas related to health promotion, the prevention of chronic illnesses, and the reduction of health disparities.
2. **Critical Thinking and Discovery:** Students will demonstrate ethical practices while applying advanced quantitative and/or qualitative methods in collecting, analyzing, and interpreting data which could then be disseminated through publications and/or oral presentations.
3. **Awareness and Understanding:** Students will understand and appreciate the diverse environmental, biological, psychological, socioeconomic, sociocultural, philosophical, and historical factors that influence health promotion, chronic illness prevention, and the reduction of health disparities.
4. **Programming and Assessment:** Students will apply best practices in developing, implementing, assessing, and evaluating programs and interventions related to health promotion, chronic illness prevention, and the reduction of health disparities within culturally diverse populations.
5. **Leadership and Engagement:** Students will demonstrate leadership and effective communication skills, while promoting effective public health practices as they develop and sustain productive relationships and work for the common good at local, national, and global levels.

Recreation, Sport & Tourism, MS

for the degree of Master of Science in Recreation, Sport & Tourism (on campus & online)

Department Head: Carla Santos
Director of Graduate Studies: Monika Stodolska
Graduate Coordinator: Tim Tiger
overview of admissions & requirements:
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: http://rst.illinois.edu
college website: http://ahs.illinois.edu
Department office: 219 Huff Hall, 1206 South Fourth Street, Champaign, IL 61821
Phone: (217) 333-4410
email: stodolsk@illinois.edu **and ttiger@illinois.edu**

The M.S. degree may be undertaken as a terminal professional track program or serve as the first step toward the Ph.D. program.

Graduate Degree Programs in Recreation, Sport & Tourism

Recreation, Sport & Tourism, MS (p. 984) **(on campus & online)**
Recreation, Sport & Tourism, PhD (p. 986)

The Department of Recreation, Sport & Tourism offers programs of study leading to the Master of Science and Doctor of Philosophy degrees. The Master of Science program educates students about leisure behavior, public parks and recreation systems, sport and tourism, in various private, public and semi-public settings providing leisure services. The Ph.D. program is designed to develop researchers and educators in the study of leisure behavior, the management of recreation, tourism, and sport systems that provide leisure services, or both.

Admission

The Graduate College admission requirements apply. Specifically, the admission requirements are a minimum grade point average of 3.0 (A = 4.0) for the last two years of undergraduate work and any graduate work completed. The Graduate Record Examination (GRE) is required for all campus-based graduate degrees. In accordance with Graduate College requirements, scores on the TOEFL must be greater than 102 and scores on the IELTS must be greater than 7.5. Students are also required to provide a statement of purpose outlining their area of study, and three letters of reference (at least one should be an academic reference). Preference is given to applicants who will be full-time students and active degree candidates. Students may be admitted for the fall, spring, or summer semesters.

Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate

experience in this program. It is also anticipated that doctoral students will engage in research activities and scholarly communication under the guidance of their advisor.

Financial Aid

The department offers quarter-time and half-time assistantships in teaching, administration, and research, as well as tuition and fee waivers and the opportunity to apply for fellowships.

for the degree of Master of Science in Recreation, Sport & Tourism

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A candidate for the M.S. degree must spend at least one semester on campus. A full-time student can complete the program in three or four semesters.

Students in the online program complete the Non-Thesis option. See below.

For additional details and requirements for all degrees, please refer to the department's website *(*http://rst.illinois.edu/grad-overview/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Thesis Option

Code	Title	Hours
RST 501	Concepts & Applications in Recreation, Sport & Tourism	4
Select two of the following:		8
RST 512	Managing Recreation, Sport & Tourism Organizations	
RST 515	Marketing in RST	
RST 516	Finance & Budgeting in RST	
Select one Option Area Course from:		4
RST 502	Critical Issues Recreation Mgt	
RST 520	Critical Issues Sport Mgt	
RST 530	Critical Issues Tourism Mgt	
Additional Coursework		
Support Option		8
Research Methods		8
RST 599	Thesis Research	4
Total Hours		36

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum Hours Overall Required Within the Unit:	12 at the 500 level
Minimum 500-level Hours Required overall:	16
Minimum GPA:	3.0

[1] *For additional details and requirements for all degrees, please refer to the department's* website *(*http://rst.illinois.edu/grad-overview/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Non-Thesis Option

Code	Title	Hours
RST 501	Concepts & Applications in Recreation, Sport & Tourism	4
RST 512	Managing Recreation, Sport & Tourism Organizations	4
RST 515	Marketing in RST	4
RST 516	Finance & Budgeting in RST	4
RST 594	Special Topics in Leisure (Section SM)	4
Select one Option Area Course from:		4
RST 502	Critical Issues Recreation Mgt	
RST 520	Critical Issues Sport Mgt	
RST 530	Critical Issues Tourism Mgt	
Additional Coursework		**12**
Total Credit Hours		**36**

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum Hours Overall Required Within the Unit:	12 at the 500 level
Minimum 500-level Hours Required overall:	16
Minimum GPA:	3.0

[1] *For additional details and requirements for all degrees, please refer to the department's* website *(*http://rst.illinois.edu/grad-overview/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Recreation, Sport & Tourism, MS

Learning outcomes for the degree of Master of Science in Recreation, Sport & Tourism

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1. Graduates will have an in-depth understanding of the conceptual and theoretical foundations (i.e., concepts, theories, applications, and principles) of recreation, sport, and tourism.
2. Graduates will have an in-depth understanding of societal issues and how recreation, sport, and tourism is integral to addressing contemporary societal issues.
3. Graduates will have an in-depth understanding of managing recreation, sport and tourism organizations.
4. Graduates will develop understanding and competence in marketing planning, strategy, implementation and evaluation in recreation, sport and tourism.
5. Graduates will develop understanding and competence in budgeting and finance in recreation, sport, and tourism.
6. Graduates will develop understanding and competence in strategic planning and management in recreation, sport and tourism organizations.

Recreation, Sport & Tourism, PhD

for the degree of Doctor of Philosophy in Recreation, Sport and Tourism

department head: Carla Santos
director of graduate studies: Monika Stodolska
graduate coordinator: Tim Tiger
overview of admissions & requirements:
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: http://rst.illinois.edu
college website: http://ahs.illinois.edu
department office: 219 Huff Hall, 1206 South Fourth Street, Champaign, IL 61821
phone: (217) 333-4410
email: stodolsk@illinois.edu **and ttiger@illinois.edu**

The Ph.D. program is designed to develop researchers and educators in the study of leisure behavior, the management of recreation, tourism, and sport systems that provide leisure services, or both.

Graduate Degree Programs in Recreation, Sport & Tourism

Recreation, Sport & Tourism, MS (p. 984) **(on campus & online)**
Recreation, Sport & Tourism, PhD (p. 986)

The Department of Recreation, Sport & Tourism offers programs of study leading to the Master of Science and Doctor of Philosophy degrees. The Master of Science program educates students about leisure behavior, public parks and recreation systems, sport and tourism, in various private, public and semi-public settings providing leisure services.

Admission

The Graduate College admission requirements apply. Specifically, the admission requirements are a minimum grade point average of 3.0 (A = 4.0) for the last two years of undergraduate work and any graduate work completed. The Graduate Record Examination (GRE) is required for all campus-based graduate degrees. In accordance with Graduate College requirements, scores on the TOEFL must be greater than 102 and scores on the IELTS must be greater than 7.5. Students are also required to provide a statement of purpose outlining their area of study, and three letters of reference, preferably from academic sources. Preference is given to applicants who will be full-time students and active degree candidates. Students may be admitted for the fall, spring, or summer semesters.

Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program. It is also anticipated that doctoral students will engage in research activities and scholarly communication under the guidance of their advisor.

Financial Aid

The department offers quarter-time and half-time assistantships in teaching, administration, and research, as well as tuition and fee waivers and the opportunity to apply for fellowships.

for the degree of Doctor of Philosophy in Recreation, Sport and Tourism

Departmental requirements include satisfactory performance on the written preliminary examination at the completion of formal coursework, the oral preliminary examination on the proposed research for the thesis, and a final examination in defense of the doctoral thesis.

Code	Title	Hours
RST 503	Adv Leisure Research Methods	4
RST 550	Theory and Methods of Leisure	4
RST 551	Contemporary Issues in Leisure	4
RST 590	Doctoral Research Seminar and Colloquium (required for four semesters)	4
Coursework to support specialization (of the 28 required hours, a student must complete a minimum of 12 hours of RST coursework)		28
Advanced research methods to support specialization		16+
RST 599	Thesis Research (min/max applied toward degree)	20
Total Hours		80

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Two years in residence	
Masters Degree Required for Admission to PhD?	Yes
Qualifying Exam Required:	No
Preliminary Exam Required:	Yes
Final Exam/Dissertation Defense Required:	Yes
Dissertation Deposit Required:	Yes
Minimum GPA:	3.0

[1] *For additional details and requirements for all degrees, please refer to the department's* website (http://rst.illinois.edu/grad-overview/) *and the* Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Learning Outcomes: Recreation, Sport & Tourism, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Recreation, Sport and Tourism

1. Graduates will have an in-depth understanding of the philosophical, historical and scientific foundations and developments of leisure, recreation, sport and tourism theory.
2. Graduates will have an in-depth understanding of the concepts, theories, methods and problems of research that are common to recreation, sport and tourism.
3. Graduates will have an in-depth understanding of research from neighboring disciplines to determine how their research may inform and influence research in recreation, sport and tourism.

4. Graduates will have an in-depth knowledge of the concepts, principles and practices that guide their areas of concentration in leisure behavior, recreation, sport or tourism.
5. Graduates will have an in-depth knowledge of advanced research methods, the ethical conduct of research, and the ability to independently conduct research and interpret results.
6. Graduates will develop in-depth knowledge and application in the science of teaching and learning.

Regional Planning, PhD

for the degree of Doctor of Philosophy in Regional Planning

department head: Rolf Pendall
director of the MUP program: Bumsoo Lee
MUP admissions director: Andrew Greenlee
director of the PhD program: Faranak Miraftab
overview of admissions & requirements: https://urban.illinois.edu/programs-applying/phd-regional-planning/how-to-apply-phd/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: Urban + Regional Planning (https://urban.illinois.edu/)
program website: https://urban.illinois.edu/programs-applying/phd-regional-planning/
department faculty: https://urban.illinois.edu/people/meet-our-faculty/
college website: College of Fine & Applied Arts (https://faa.illinois.edu/)
department office: 111 Temple Buell Hall, 611 Taft Drive, Champaign, IL 61820
phone: (217) 333-3890
email: urbplan@illinois.edu

Students, together with their faculty adviser and program committee, select theory, methods, and specialization courses to meet the Ph.D. requirements and prepare for a successful career of advanced research and teaching.

A successful dissertation in planning reports original research on a subject appropriate to the field, the results of which produce significant advances in knowledge. Each student takes a Preliminary Examination, which is an oral examination based on the dissertation proposal and is administered by the student's dissertation committee. Upon approval of the dissertation proposal, the candidate can proceed with the research, written analysis, and findings. When the candidate and the supervisor agree that the research and writing are complete, the candidate is ready for the final examination, which is a defense of the dissertation before the committee.

Please consult the department's website (https://urban.illinois.edu/) for additional information about doctoral requirements.

Graduate Degree Programs in Urban Planning

Sustainable Urban Management, MS (p. 1032)
Urban Planning, MUP (p. 1060)
Regional Planning, PhD (p. 987)
joint programs:
- Urban Planning, MUP & (p. 1151) Architecture, MARCH (p. 1151)
- Urban Planning, MUP & Law, JD (p. 1168)
- Urban Planning, MUP & Landscape Architecture, MLA (p. 1157)
- Urban Planning, MUP & Public Health, MPH (p. 1164)
- Urban Planning, MUP & any Illinois master's degree in related field (p. 1168)

The Department of Urban and Regional Planning offers graduate programs leading to the degrees of Master of Urban Planning and Doctor of Philosophy in Regional Planning as well as a Master of Science in Sustainable Urban Management. Students can also apply to obtain a joint degree with another graduate degree simultaneously. The most popular joint degrees are with Architecture, Landscape Architecture, Law and Agricultural and Applied Economics. Joint degrees with any related field are possible. In addition, a small number of the department's Bachelor of Arts in Urban Studies and Planning (B.A.U.S.P.) students participate in the highly selective 4+1 program (http://catalog.illinois.edu/undergraduate/faa/urban-studies-planning-ba-mup/) to complete the B.A.U.S.P. and M.U.P. in five years.

Admission

We welcome applications from people from a wide variety of backgrounds who have demonstrated potential for extraordinary professional achievement. Students seeking a graduate degree in planning come from a diverse range of academic backgrounds. The most frequent are sociology, economics, political science, geography, environmental sciences, architecture, engineering, public administration, urban planning, and public policy, but the natural sciences, humanities, and other fields also provide excellent foundations for graduate study in planning. Prospective students must have a grade point average (GPA) of at least 3.0 computed from the last 60 hours of undergraduate work and any subsequent graduate study, but the average GPA of admitted students is considerably higher. International applicants must meet additional minimum requirements (http://www.grad.illinois.edu/admissions/countries/) based on their country of origin, including the Test of English as a Foreign Language (TOEFL).

We place particular emphasis on each applicant's statement of purpose. Applicants should use the statement to convey information about their backgrounds, professional and personal experience, and intellectual perspectives, in the context of articulating why a Master's in Urban Planning or Ph.D. in Regional Planning from the University of Illinois will help them achieve their professional goals. We seek an applicant pool that represents a mix of racial and ethnic populations, a range of social and economic backgrounds, different philosophies and perspectives, and a variety of life experiences. We are especially interested in applicants with professional experience, though that experience need not be in planning or closely related fields.

Applicants to the Ph.D. program are admitted when they meet the standards of the Department and have a faculty member prepared to serve as their mentor and, if necessary, primary source of financial support. Students interested in pursuing a Ph.D. in Regional Planning should communicate with the Director of the Ph.D. Program and faculty

most closely aligned with their interests, in addition to completing the formal application process.

Consult the M.U.P. admissions (https://urban.illinois.edu/programs-applying/master-urban-planning/) and Ph.D. admissions (https://urban.illinois.edu/programs-applying/phd-regional-planning/) web pages for more information.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the doctoral experience in this program and is strongly encouraged for those intending to pursue an academic career.

Faculty Research Interests

The mission of the Department of Urban and Regional Planning is to teach and conduct research to improve understanding of human settlements and of planning situations. The department's faculty studies the ecological, economic, social, and institutional aspects of urban and regional development, and the theory and practice of planning processes. Planning is viewed as the achievement of outcomes based on interrelated actions over time and space, and close communication and collaboration with a wide range of disciplines and professions is inherent in the department's approach. The basis of that collaboration is a faculty whose academic training and degrees are in architecture, economics, geography, history, law, political science, regional science, and zoology, in addition to planning. Planning faculty and doctoral students pursue interdisciplinary research and make scholarly contributions to planning and fields closely allied with planning.

Facilities and Resources

The Department of Urban and Regional Planning shares Temple Hoyne Buell Hall (TBH) with the Department of Landscape Architecture and the School of Architecture. The majority of urban planning classes are held in TBH. The department has a 24-hour instructional computing laboratory. Research project and doctoral student workspace is provided in Noble Hall.

The City Planning and Landscape Architecture Reference and Resource Center is located in Funk Library (http://www.library.uiuc.edu/agx/). The planning collection is one of the finest in the world, with books and reports gathered since the collection started over eighty years ago.

Financial Aid

Students compete for departmental and Graduate College fellowships and departmental teaching and research assistantships. Selection is based on the academic achievement and qualifications of the student.

for the degree of Doctor of Philosophy in Regional Planning

For additional details and requirements refer to the department's Web site *(*https://urban.illinois.edu/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Entering with approved Master's Degree

Code	Title	Hours
Planning theory (UP 501 and UP 580; UP 501 may be waived for students with a PAB-accredited master's in planning)		4-8
Research design (min)		4
Research methods (min)		12
Electives including areas of specialization		28
UP 599	Thesis Research (min/max applied toward degree)	1-16
Total Hours		64

Other Requirements

Requirement	Description
Other requirements may overlap	
Master's Degree Required for Admission to PhD?	No
Plan of Study Required	Yes
Two Synthesis Papers Required	Yes
Qualifying Exam or Qualifying Research Paper Required	Yes
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

Entering with approved Bachelor's Degree

Code	Title	Hours
Planning theory (UP 501 and UP 580; UP 501 may be waived for students with a PAB-accredited master's in planning)		8
Research design (min)		4
Research methods (min)		12
Electives including areas of specialization		56
UP 599	Thesis Research (min/max applied toward degree)	1-16
Total Hours		96

Other Requirements

Requirement	Description
Other requirements may overlap	
Master's Degree Required for Admission to PhD?	No
Plan of Study Required	Yes
Two Synthesis Papers Required	Yes
Qualifying Exam or Qualifying Research Paper Required	Yes
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

Learning Outcomes: Regional Planning, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Regional Planning

1. Theories, debates, practices, and contemporary issues in planning:
2. Proficiency to conduct independent research: Scoping, Framing, Designing, and Conducting research:
3. Subject matter expertise:

4. Ability to communicate research and publish:
5. Pedagogy:

Rehabilitation, MS

for the Master of Science in Rehabilitation

Department Head: Kim Graber
Director of Program & Graduate Studies: Steven Petruzzello
Graduate Office: Julie Jenkins
Graduate Office Address: 906 South Goodwin Ave, 112 Freer Hall MC-052, Urbana, IL 61801
Graduate Phone: (217) 333-1083
Graduate Email: jjenkns@illinois.edu
Department Website: https://ahs.illinois.edu/community-health (https://ahs.illinois.edu/community-health/)

Not accepting applications at this time.

for the Master of Science in Rehabilitation

Candidates for the M.S. in Rehabilitation will be expected to have completed an undergraduate degree in a rehabilitation-related discipline and/or have a strong background in the social and biological sciences, and a course in introductory statistics. A full-time student can complete the program in three or four semesters. As with all programs, the Graduate College allows students to petition to transfer up to 12 hours of coursework completed prior to admittance to the department. Any approved graduate courses taken on campus in the summer immediately prior to admission count toward the degree and do not have to be transferred.

Thesis Option

Code	Title	Hours
REHB 401	Introduction to Rehabilitation	4
REHB 402	Medical Aspects of Disability	4
REHB 501	Rehabilitation Research	4
REHB 585	Rehabilitation Practicum	4
Specialization coursework from approved list		20-23
Seminar		4
REHB 599	Thesis Research (min/max applied toward degree)	8
or CHLH 599	Thesis Research	
Total Hours		48

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum Hours Required Within the Unit:	30
Minimum 500-level Hours Required Overall:	12 (8 within the unit)
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the department's* Graduate Handbook *(*http://kch.illinois.edu/kch-grad-handbook/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Non-Thesis Option

Code	Title	Hours
REHB 401	Introduction to Rehabilitation	4
REHB 402	Medical Aspects of Disability	4
REHB 501	Rehabilitation Research	4
REHB 585	Rehabilitation Practicum	4
Specialization coursework from approved list		20-23
Seminar		4
Total Hours		40

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum Hours Required Within the Unit:	30
Minimum 500-level Hours Required Overall:	12 (8 within the unit)
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the department's* Graduate Handbook *(*http://kch.illinois.edu/kch-grad-handbook/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Rehabilitation, MS

Learning Outcomes for the Master of Science in Rehabilitation

1. **Content Knowledge:** Students will demonstrate an advanced understanding of current and historically significant theories, models, themes, and ideas within the area of rehabilitation counseling.
2. **Critical Thinking and Discovery:** Students will demonstrate ethical practices while applying advanced quantitative and/or qualitative methods in collecting, analyzing, and interpreting data which could then be disseminated through publications and/or oral presentations.
3. **Awareness and Understanding:** Students will understand and appreciate the diverse array of mental health or disability-related problems impacting the individual and the family, in a variety of clinical settings and with respect for the influences of multicultural factors such as culture, ethnicity, race, religion, gender, and sexual orientation.
4. **Programming and Assessment:** Students will apply best practices in developing, implementing, assessing, and evaluating programs and interventions related to rehabilitation counseling within diverse populations.
5. **Leadership and Engagement:** Students will demonstrate leadership and effective communication skills, showcasing respect and sensitivity for people with disabilities as they develop and sustain productive relationships and work for the common good at local, national, and global levels.

Religion, MA

for the degree of Master of Arts in Religion

head of department: Jonathan Ebel
director of graduate studies: Bruce Rosenstock
email: religion@illinois.edu
department website: http://www.religion.illinois.edu
department faculty:
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department office: 2090 Foreign Language Building, MC-166, 707 South Mathews, Urbana, IL 61801
phone: (217) (217) 333-0473
fax: (217) 244-4019

Graduate Degree Programs in Religion

Religion, MA (p. 990)
Religion Graduate Minor (p. 1142)

Admission

The Graduate College admission requirements apply. Applicants need not have an undergraduate major in the study of religion, but they must demonstrate a capacity to undertake advanced study in this area of inquiry. All applications for admission must be supported by three letters of recommendation from persons qualified to comment on the applicant's aptitude for graduate study in religion. Applicants are required to submit a sample of their written work. The Graduate Record Examination (GRE) is required. International applicants whose native language is not English must take the IELTS or the Test of English as a Foreign Language (TOEFL) and have their scores submitted to Institution Code #1836, Dept. #00. A score of at least 600 on the paper-based test (PBT), or 250 on the computer-based test (CBT), or 100 on the internet-based test (iBT) is required for admission to this program.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program.

Facilities and Resources

The extraordinary University Library is the department's main research facility; within it, the History, Philosophy & Newspaper Library, the Rare Book Room, and the International and Area Studies Library all serve faculty and students with expert bibliographers and focused collections. Among other special collections that are likely to be useful to our students are Afro-Americana and Women's Studies; the library is also a major repository for government documents.

Financial Aid

Financial aid is available to many students in the form of fellowships or assistantships. More information is available on the Graduate College web site, http://www.grad.illinois.edu/fellowship/finaid (http://www.grad.illinois.edu/fellowship/finaid/).

for the degree of Master of Arts in Religion

For additional details and requirements refer to the department's graduate degree requirements and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Religion, MA

Thesis Option

Code	Title	Hours
REL 510	Graduate Intro to Religion	4
Two additional 500-level courses at least one of which must be in Religion		8
Each student will establish a primary field of study in consultation with the Director of Graduate Studies and the student's advisor. Two courses must be taken within that field. In most cases, the primary field of study will be a particular field such as Buddhism, Christianity, Hinduism, Islam, Judaism, Philosophy of Religion, or Religion in America, min. 8		8
Language Requirement: Students will demonstrate reading comprehension in one language other than English that is appropriate for research in the main field of the student's interest. The student will demonstrate that competence by completing a fourth-semester (or more advanced) course in a foreign language or by passing a reading comprehension test administered by the department. Credit does not apply to requirements		0
REL 599	Thesis Research	8
Total Hours		32

Other Requirements

Requirement	Description
Other requirements may overlap	
Students may take up to two of the required eight courses in departments other than Religion. Courses must be relevant to the student's curriculum in Religion.	
Minimum 500-level Hours Required Overall:	12
Minimum 500-level Hours Required Within the Unit:	8
Student's must pass the MA examination	
Minimum GPA:	2.75

Non-Thesis Option

Code	Title	Hours
REL 510	Graduate Intro to Religion	4
Two additional 500-level courses at least one of which must be in Religion		8
Each student will establish a primary field of study in consultation with the Director of Graduate Studies and the student's advisor. Two courses must be taken within that field. In most cases, the primary field of study will be a particular field such as Buddhism, Christianity, Hinduism, Islam, Judaism, Philosophy of Religion, or Religion in America, min. 8		8

Language Requirement: Students will demonstrate reading comprehension in one language other than English that is appropriate for research in the main field of the student's interest. The student will demonstrate that competence by completing a fourth-semester (or more advanced) course in a foreign language or by passing a reading comprehension test administered by the department. Credit does not apply to requirements.	0
Total Hours	32

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall:	12
Minimum 500-level Hours Required Within the Unit:	8
Students may take up to two of the required eight courses in departments other than Religion. Courses must be relevant to the student's curriculum in Religion.	
Two Revised research papers in the student's primary field of study are required.	
Student's must pass the MA examination	
Minimum GPA:	2.75

Learning Outcomes: Religion, MA

Learning Outcomes for the degree of Master of Arts in Religion

1. Describe the central problems in the teaching of world religions courses and some strategies for addressing those problems.
2. Describe the state of scholarship in the field of concentration and assess its strengths and weaknesses.
3. Articulate academic growth by identifying key issues for future research in the field of concentration.
4. Describe desired research contributions and connect research interests to current scholarship in the field

Russian, East European, and Eurasian Studies, MA

for the degree of Master of Arts in Russian, East European, and Eurasian Studies

director of center and graduate studies: John Randolph
email: reec@illinois.edu
department website: https://reeec.illinois.edu/
department faculty: REEEC Faculty (https://reeec.illinois.edu/people/groups/faculty/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department office: 104 International Studies Building, 910 South Fifth Street, Champaign, IL 61820
phone: (217) 333-1244

About the Major

Electives outside Russian, East European, and Eurasian Studies should complement the student's core courses, research, and professional interests. A master's thesis or major research paper is required, to be based on research using primary sources, including sources in the language used to meet the competency requirement.

Graduate Degree Programs in Russian, East European, and Eurasian Studies

The Russian, East European, and Eurasian Center offers a two-year program of language and area studies courses leading to an interdisciplinary Master of Arts degree. The program is designed to meet the needs of students proceeding to disciplinary-based doctoral work and those planning non-academic professional careers with area expertise. Programs offered by the Center:

Russian, East European, and Eurasian Studies, MA (p. 991)
Russian, East European, and Eurasian Studies Minor (p. 1142)
Balkan Studies Minor (p. 1127)
Joint Degree in Russian, East European, & Eurasian Studies, MA and Library & Information Science, MS (p. 1166)

Admission

Prospective graduate students should have completed at least two years of Russian or another language of Eastern Europe or Eurasia. Applicants must submit the Graduate College application for admission, certified transcripts of all undergraduate and graduate work, Graduate Record Examination (GRE) scores (verbal, quantitative, and written), three letters of reference, and a writing sample. International students must submit Test of English as a Foreign Language (TOEFL) scores. All applicants must meet the requirements of the Graduate College. Admission is ordinarily in the fall semester, but occasional exceptions are made for spring and summer admission.

Faculty Research Interests

The faculty (https://reeec.illinois.edu/people/groups/faculty/) affiliated with the Center represent a broad range of interests and methodological approaches in the social sciences and the humanities, as well as the professional schools.

Facilities and Resources

The Russian, East European, and Eurasian Center was founded in 1959 and designated a National Resource Center by the U.S. Department of Education. It serves as an intellectual and institutional hub for the University community and the public through conferences, lectures,

colloquia, visiting scholars, study groups, exhibits, films, and other activities.

The annual Summer Research Laboratory on Russia, Eastern Europe, and Eurasia features special workshops, seminars, lectures, films, and other events, most of which are free and open to the public.

The International and Area Studies Library (https://www.library.illinois.edu/ias/) at the University of Illinois has one of the country's three outstanding Slavic library collections (https://www.library.illinois.edu/ias/spx/). The Slavic Reference Service (https://www.library.illinois.edu/ias/spx/srs/) serves all faculty and students with expert bibliographers.

Language training is provided by the Departments of Germanic Languages & Literatures (https://germanic.illinois.edu/), Linguistics (https://linguistics.illinois.edu/), and Slavic Languages & Literatures (https://slavic.illinois.edu/) in:

- Bulgarian
- Bosnian, Croatian, Serbian
- Czech
- Old Church Slavonic
- Polish
- Russian
- Turkish
- Ukrainian
- Yiddish

Financial Aid

Financial aid is awarded on an academic-year basis. All fellowships and assistantships include a stipend plus tuition and fee waiver. Qualified incoming students who are U.S. citizens or permanent residents should also apply for U.S. Department of Education Title VI Foreign Language and Area Studies (FLAS) fellowships (http://publish.illinois.edu/illinoisflas/) offered through REEEC or other FLAS-granting campus centers.

Qualified students may also be eligible for other fellowships at the campus or departmental level. A limited number of teaching and graduate assistantships, which include a tuition and fee waiver, may also be available to outstanding students through REEEC and other units.The Graduate College maintains a list of available assistantships (https://grad.illinois.edu/clearinghouse/); additional information on need-based financial aid may be obtained from the Graduate College Fellowships Office (https://grad.illinois.edu/fellowships/about/).

for the degree of Master of Arts in Russian, East European, and Eurasian Studies

Electives outside Russian, East European, and Eurasian Studies should complement the student's core courses, research, and professional interests. A master's thesis or major research paper is required, to be based on research using primary sources, including sources in the language used to meet the competency requirement.

For additional details and requirements refer to the department's Graduate Programs (https://reeec.illinois.edu/academics/ma-program/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Thesis Option

Code	Title	Hours
REES 550	Seminar in REEE Studies	4
IS 530	Collection Development (Section C: REEES Bibliog Research Methods)	4
Core courses in Russian, East European, or Eurasian studies (4 hours at the 500 level, exclusive of REES 599), selected from the list of approved courses, found on the Course List tab, and including coursework earned in at least three disciplines outside REEES. Up to 8 hours of REES 599 (Thesis Research) may count toward the 24 hour core.		24
Electives, at least one at the 500 level.		6
Language Requirement: third-year competency in Russian or another language of Eastern Europe or Eurasia. Language courses cannot count toward the 24 hour core, but those taken beyond the third-year requirement can count as electives. Approved language courses that focus on literature (see list maintained by REEEC) may also meet the core or elective requirement.		
REES 599	Thesis Research	8
Total Hours		38

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	3.25

Non-Thesis Option

Code	Title	Hours
REES 550	Seminar in REEE Studies	4
IS 530	Collection Development (Section C: REEES Bibliog Research Methods)	4
Core courses in Russian, East European, or Eurasian studies (4 hours at the 500 level), selected from the list of approved courses, found on the Course List tab, and including coursework earned in at least three disciplines outside REEES.		24
Electives, at least one at the 500 level.		6
Language Requirement: third-year competency in Russian or another language of Eastern Europe or Eurasia. Language courses cannot count toward the 24 hour core, but those taken beyond the third-year requirement can count as electives. Approved language courses that focus on literature (see list maintained by REEEC) may also meet the core or elective requirement.		
Total Hours		38

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	3.25

The requirement for Core courses in Russian, East European, or Eurasian studies can be met by selecting from the list of approved courses

maintained by REEEC, shown below. Coursework must be earned in at least three disciplines outside REEES. For students writing a thesis, up to 8 hours of REES 599 (Thesis Research) may count toward the 24 hour core.

The requirement for Core courses in Russian, East European, or Eurasian studies can be met by selecting from the list of approved courses maintained by REEEC, shown below. Coursework must be earned in at least three disciplines outside REEES. For students writing a thesis, up to 8 hours of REES 599 (Thesis Research) may count toward the 24 hour core.

Code	Title	Hours
ANTH 488	Modern Europe	4
ARTH 541	Seminar in Modern Art	4
CWL 436	Problems of Polish Literature	3 or 4
CWL 440	Russian Culture Studies	3 or 4
CWL 444	Problems in Romanticism	3 or 4
CWL 445	Problems in Realism	3 or 4
CWL 453	Slavic Cultural Studies	3 or 4
CWL 457	Russian Modernism	3 or 4
HIST 439	The Ottoman Empire	2 to 4
HIST 461	Russia- Peter the Great to Rev	2 to 4
HIST 462	Soviet Union Since 1917	2 to 4
HIST 466	The Balkans	3 or 4
HIST 467	Eastern Europe	3 or 4
HIST 560	Problems in Russian History	4
HIST 561	Research Seminar: Russia	4
MACS 410	Media Ethics	3 or 4
MACS 419	Russian & East European Film	3 or 4
POL 446	Problems of Polish Literature	3 or 4
PS 546	Comparative Political Behavior	4
REES 477	Post-Communist Fiction	3 or 4
REES 493	Honors Senior Thesis	3
REES 495	Senior Seminar	3
REES 496	Topics in REEE Studies	3 or 4
REES 550	Seminar in REEE Studies	4
REES 590	Individual Study or Research	1 to 8
REES 596	Topics in REEE Studies	4
REES 599	Thesis Research	0 to 8
RST 530	Critical Issues Tourism Mgt	4
RUSS 418	18th Century Literature	3 or 4
RUSS 424	Russian Modernism	3 or 4
RUSS 438	Modern Russian Poetry	3 or 4
RUSS 444	Problems in Romanticism	3 or 4
RUSS 445	Problems in Realism	3 or 4
RUSS 460	Russian Culture Studies	3 or 4
RUSS 461	Russia and the Other	3 or 4
RUSS 465	Russian-Jewish Culture	3 or 4
RUSS 466	Russian Women's Writing	3 or 4
RUSS 474	Russian Translation	3 or 4
RUSS 511	Russian Literature 1800-1855	4
RUSS 512	Russian Literature 1855-1905	4
RUSS 520	Russian Writers	4
RUSS 521	Gogol	4
RUSS 522	Dostoevsky	4
RUSS 523	Tolstoy	4
RUSS 524	Pushkin	4
RUSS 535	Nabokov	4
SLAV 417	11th-17thC Russ Lit & Lang	3 or 4
SLAV 418	Language & Minorities in Europe	3 or 4
SLAV 419	Russian & East European Film	3 or 4
SLAV 430	History of Translation	3 or 4
SLAV 452	Slavic Cultural Studies	3 or 4
SLAV 477	Post-Communist Fiction	3 or 4
SLAV 525	Problems in Slavic Literature	4
SLAV 576	Methods in Slavic Grad Study	4
SLAV 591	Individual Topics	1 to 8
UKR 498	Problems in Ukrainian Lit	3 or 4

Learning Outcomes: Russian, East European, and Eurasian Studies, MA

Learning Outcomes for the degree of Master of Arts in Russian, East European, and Eurasian Studies

The Master of Arts in Russian, East European, and Eurasian Studies (REEES) is a two-year program designed to prepare students for further academic study in a particular discipline or for careers in government, NGOs, business, the media, international law, private foundations, or cultural exchanges. The program provides broad exposure to the history, cultures, societies, and politics of the area as well as to the variety of disciplinary and interdisciplinary approaches to its study. For individuals planning non-academic careers, such study is essential in preparing to respond to the growing opportunities and challenges presented by this region. The program also provides students pursuing academic careers with necessary language skills, disciplinary exploration, and an expanded knowledge base about the REEE region.

By the end of our program, students will have:

1. An advanced understanding of the REEE region achieved through analyzing original scholarship and primary sources (or data) from Russia, East Europe, and Eurasia.
2. An interdisciplinary perspective on the REEES field achieved through required coursework in at least three disciplines, together with exposure to pertinent approaches, paradigms, forms of data and their interpretation, and regional issues and content.
3. An ability to begin to engage with REEES scholarship, cultures, and communities by achieving an intermediate-high proficiency (third-year competency)in at least one regional language.
4. Advanced research skills developed through expert rigorous regional bibliographic and research training.
5. Essential analytical writing skills developed through the production of a thesis or other extensive original research work mentored by a faculty expert.

Secondary Education, EdM

for the degree of Master of Education in Secondary Education with teaching licensure

head of the department: Sarah McCarthey
director of graduate studies: Gloriana Gonzalez
graduate admissions information: Mitzi Koeberlein
overview of admissions & requirements: College of Education (https://education.illinois.edu/programs/grad/how-to-apply/?url=/programs/grad)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: http://education.illinois.edu/ci (http://education.illinois.edu/ci/)
program website: College of Education Programs (https://education.illinois.edu/faceted-search/programs/)
department faculty: Curriculum & Instruction Faculty (https://education.illinois.edu/faculty-finder/ci/)
college website: http://education.illinois.edu/
department office: 142 Education Building, 1310 South Sixth Street, Champaign, IL 61820
phone: (217) 244-3542
email: gradservices@education.illinois.edu

Graduate Degree Programs in Curriculum & Instruction

Curriculum and Instruction, EdM (p. 693) **(on campus, off-campus & online)**
- **optional concentrations:** Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)

Curriculum and Instruction, MA (p. 695)
- **optional concentrations:** Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)

Curriculum and Instruction, MS (p. 697)
- **optional concentrations:** Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)

Curriculum and Instruction, CAS (p. 689) **(on campus, off-campus & online)**
- **optional concentration:** Bilingual-Bicultural Education (p. 1076)

Curriculum and Instruction, EdD (p. 691) **(on campus, off-campus & online)**
- **optional concentrations:** Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)

Curriculum and Instruction, PhD (p. 699)
- **optional concentrations (PhD only):**
  - Digital Learning (p. 1093)|Second Language Acquisition and Teacher Education (http://www.slate.illinois.edu/)
  - Writing Studies (p. 1111)

Early Childhood Education, EdM (p. 703) **with teacher licensure**
- **optional concentrations:** Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)

Elementary Education, EdM (p. 742) **with teacher licensure**
- **optional concentrations:** Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)

Secondary Education, EdM (p. 994) **with teacher licensure**
- **concentrations:** English (p. 996)|Mathematics (p. 997)|Sciences (p. 997)|Social Science: History (p. 999)
- **optional concentrations:** Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)

Through the Master of Education and the Certificate of Advanced Study, experienced teachers are prepared to become more competent and better informed practitioners who serve as leaders for educational reform in local schools and school districts.

Also offered are master's degree programs leading to teacher licensure for individuals who have a degree in a field other than education and wish to become teachers. The three majors leading to licensure are Early Childhood Education (Birth - Grade 2), Elementary Education (Grades 1 - 6), and Secondary Education (Grades 9 - 12). In addition to completing the courses required for an Ed.M. degree, students in these programs follow the same sequence of professional education courses as undergraduate students.

Only master's students wishing to become licensed teachers in one of these three areas should apply to the Early Childhood Education, Elementary Education, or Secondary Education majors. Master's candidates who do not wish to become teachers, or are already teachers, should apply to the major in Curriculum and Instruction.

Two doctoral degree programs are offered. The Ph.D. program prepares degree candidates for careers involving research and scholarship, including those in colleges and universities where research is generally

combined with teacher education. The Ed.D. Program prepares scholarly practitioners for leadership positions in teacher training institutions, state education agencies, and public school districts.

Length of time for a degree: an Ed.M. program can be completed in a calendar year, while the M.S. or M.A. often takes longer. The Ed.M. with licensure typically takes two years to complete. Doctoral programs usually require four to five years of full time study.

Admission

Interested applicants should start at http://education.illinois.edu/programs/grad (http://education.illinois.edu/programs/grad/). In addition to the application, the applicant is required to submit the following information: a statement of purpose, updated resume, official transcripts from all colleges attended, and three letters of recommendation. Graduate Record Examination (GRE) scores must be submitted for all doctoral applicants. A scholarly writing sample in English, such as a master's thesis, article, or paper, is required for application to a doctoral program. Note: The master's with teacher licensure program only admits students for the fall term.

International applicants must submit TOEFL scores. The Department of Curriculum and Instruction's TOEFL requirement for full status admission is greater than 102; the minimum score for limited status is 550 on the paper-based test, 79 on the internet-based test and 213 on the computer-based test. International applicants must also submit a Declaration and Certification of Finances. Please note: TOEFL or IELTS scores must be less than two years old from the first day of class at the proposed term of entry in order to be valid. In addition, individual academic programs may require a higher score, or evidence of spoken English language proficiency; contact your proposed program of study office (http://www.grad.illinois.edu/admissions/depts/) for the minimum TOEFL, TSE, or IELTS requirement for admission. For additional details, refer to the Graduate College Handbook www.grad.illinois.edu/admissions/instructions/04c (http://www.grad.illinois.edu/admissions/instructions/04c/).

Faculty Research Interests

For information about specific faculty research interests, current grants, and publications, please visit the Faculty Finder (https://education.illinois.edu/faculty-finder/).

Facilities and Resources

Departmental resources consist of cooperation with Children's Research Center, Center for Small Urban Communities, as well as other resources in the College. Students who are interested in second language acquisition can become a part of the SLATE program. The department is connected to the University of Illinois Writing Project and the following journals: *International Journal of Education & the Arts, Journal of Curriculum Studies*, and *American Educational Research Journal.* The department also has available resources and some workshops provided during the academic year. Program areas including DELTA, CREATE, Language & Literacy, and MSE offer discipline-specific resources.

The College of Education also has many resources to assist graduate students through their academic career. The Bureau of Educational Research works with students to secure research funding. The Council on Teacher Education (http://cote.illinois.edu/) entitles candidates seeking a Professional Educator License and provides accreditation of professional education programs. Each student completing a degree program is assigned a graduate adviser, who is available to assist the student with planning the program of study and determining degree requirements, courses and timelines for degree completion.

Information on University resources can be found at http://www.grad.illinois.edu/current-students (http://www.grad.illinois.edu/current-students/).

Financial Aid

Financial aid in the form of assistantships, scholarships, fellowships, and tuition waivers can be found throughout the college (https://education.illinois.edu/current-students/graduate/financial-aid/) and campus. Campus opportunities can be found at the Graduate College (http://www.grad.illinois.edu/funding-jobs/) and the Office of Student Financial Aid (http://www.osfa.illinois.edu/). **Please note: Graduate students employed as Staff by the University of Illinois at Urbana-Champaign are not eligible for a College of Education Award or Scholarship.**

for the degree of Master of Education in Secondary Education with teaching licensure

Students interested in receiving licensure choose a concentration in English (p. 996), Mathematics (p. 997), Science (p. 997), or Social Science: History (p. 999).

Concentration/licensure requirements are separate from degree requirements, although they may count toward the degree as well.

Students may also select a concentration in Bilingual-Bicultural Education (http://catalog.illinois.edu/graduate/education/concentration/bilingual-bicultural-education/) or Digital Learning (http://catalog.illinois.edu/graduate/education/concentration/digital-learning/).

Additional requirements can be found on the program's website, (https://education.illinois.edu/ci/programs-degrees/secondary-education-with-licensure/) the College of Education Graduate Programs Handbook (https://education.illinois.edu/current-students/graduate/coe-graduate-handbook/), and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
Psychological Foundations Courses in Educational Psychology		
Select one of the following:		4
EPSY 400	Psychology of Learning in Education	
EPSY 401	Child Language and Education	
EPSY 402	Sociocultural Influence on Learning	
EPSY 404	Adjustment in School Settings	
EPSY 405	Personality and Soc Dev	
EPSY 406	Psychology of Classroom Management	
EPSY 407	Adult Learning and Development	
EPSY 408	Learning and Human Development with Educational Technology	
EPSY 430	Early Adolescent Development	
EPSY 485	Assessing Student Performance	
EPSY 490	Developments in Educational Psychology	
EPSY 553	Global Issues in Learning	
Philosophical and Social Foundations Courses in Education Policy, Organization and Leadership		

Select one of the following:		4
EPOL 401	History of American Education	
EPOL 402	Asian American Education	
EPOL 403	Historical and Social Barriers	
EPOL 405	School and Society	
EPOL 406	Professional Ethics in Education	
EPOL 407	Critical Thinking in Education	
EPOL 408	Aesthetic Education	
EPOL 409	Sociology of Education	
EPOL 410	Racial and Ethnic Families	
EPOL 412	Politics of Education	
EPOL 413	Economics of Education	
EPOL 480	Technology and Educational Reform	
EPOL 539		
Elective Hours:		24
400/500-Level Hours Required: 12 hours (Independent Study included)		
500-Level Hours Required in Education:12 hours		
Research/Project/Independent Study Hours (min/max applied toward degree):		0-8
Total Hours		32

Other Requirements:

Requirement	Description
Field Placement Information	http://education.illinois.edu/sce (http://education.illinois.edu/sce/)
Choose a Concentration	English, Mathematics, Science, Social Science: History
Minimum GPA	3.0

Learning Outcomes: Secondary Education, EdM

Learning Outcomes for the degree of Master of Education in Secondary Education with teaching licensure

1. Students will acquire deep knowledge of content in the field of Education.
2. Students will effectively plan and implement relevant, culturally responsive and developmentally appropriate instruction for high school students, grades 9-12.
3. Students will use data to drive decisions and solve problems in and out of the classroom.
4. Students will display the expectations of professionalism related to success in the field of education and beyond (fairness, commitment to collaboration, community, reflective practice, and attention to 21st century skills and practices).
5. Students will display a deep understanding of educational philosophy and reflective practice.

Secondary Education: English Language Arts Entitlement

The following are required to meet the Illinois Approved Program for an Illinois Professional Educator License with a secondary education (grades 9-12) English Language Arts entitlement. Please note these requirements are separate from degree requirements, although they may count toward the degree as well.

The Council on Teacher Education (https://cte-s.education.illinois.edu/dotnet/webpages/webpage.aspx) oversees licensure requirements. School and Community Experiences (http://education.illinois.edu/sce/) coordinates all aspects of field placement.

Course Requirements*

Foundation Courses:

Code	Title	Hours
Psychological Foundations Courses in Educational Psychology		
EPSY 485 meets this requirement		
Philosophical and Social Foundations Courses in Education Policy, Organization and Leadership		
Select one of the following:		4
EPOL 401	History of American Education	
EPOL 402	Asian American Education	
EPOL 403	Historical and Social Barriers	
EPOL 405	School and Society	
EPOL 406	Professional Ethics in Education	
EPOL 407	Critical Thinking in Education	
EPOL 408	Aesthetic Education	
EPOL 409	Sociology of Education	
EPOL 410	Racial and Ethnic Families	
EPOL 412	Politics of Education	
EPOL 413	Economics of Education	
EPOL 480	Technology and Educational Reform	
EPOL 539		

Content-Area Courses:

Code	Title	Hours
A major in English or 32 semester hours of Language Arts are required. Either option must include coursework from the following content-area courses:		
One course in introductory study of literature		
One course in English (British) literature		
One course in American literature		
One course in multicultural literature		
One course in study of works of Shakespeare		
One advanced course in descriptive grammar		

Professional Education Courses:

Code	Title	Hours
CI 401	Introductory Teaching in a Diverse Society (Section E)	3
CI 403	Teaching a Diverse High School Student Population (Section E)	3
CI 404	Teaching and Assessing Secondary School Students (Section E)	3
CI 473	Disciplinary Literacy	3
EDPR 442	Educational Practice in Secondary Education	12

EPSY 485	Assessing Student Performance	4
SPED 405	General Educator's Role in Special Education	3
or SPED 517	Disability Issues in Special Education	

Other Requirements

Requirement	Description
Content & Professional Education GPA	2.5
Graduate GPA	3.0

*State rules mandate that no course with a grade lower than a C- be used toward licensure, endorsement, or approvals. This means courses lower than a C- cannot be used.

Requirements are subject to change without notice due to changes in State law and/or rule.

Secondary Education: Mathematics Entitlement

The following are required to meet the Illinois Approved Program for an Illinois Professional Educator License with a secondary education (grades 9-12) Mathematics entitlement. Please note these requirements are separate from degree requirements, although they may count toward the degree as well.

The Council on Teacher Education oversees licensure requirements. School and Community Experiences coordinates all aspects of field placement.

Course Requirements*

Foundation Courses:

Code	Title	Hours
Psychological Foundations Courses in Educational Psychology		
EPSY 485 meets this requirement		
Philosophical and Social Foundations Courses in Education Policy, Organization and Leadership		
Select one of the following:		4
EPOL 401	History of American Education	
EPOL 402	Asian American Education	
EPOL 403	Historical and Social Barriers	
EPOL 405	School and Society	
EPOL 406	Professional Ethics in Education	
EPOL 407	Critical Thinking in Education	
EPOL 408	Aesthetic Education	
EPOL 409	Sociology of Education	
EPOL 410	Racial and Ethnic Families	
EPOL 412	Politics of Education	
EPOL 413	Economics of Education	
EPOL 480	Technology and Educational Reform	
EPOL 539		

Content-Area Courses:

Code	Title	Hours
A major in Mathematics or 32 semester hours of math is required. Either option must include from the following:		
Standard 3-course calculus sequence		
Real Analysis		
Linear Algebra (matrices)		
Probability or statistics		
Geometry		

Professional Education Courses:

Code	Title	Hours
CI 401	Introductory Teaching in a Diverse Society (Section M)	3
CI 403	Teaching a Diverse High School Student Population (Section M)	3
CI 404	Teaching and Assessing Secondary School Students (Section M)	3
CI 473	Disciplinary Literacy	3
EDPR 442	Educational Practice in Secondary Education	12
EPSY 485	Assessing Student Performance	4
SPED 405	General Educator's Role in Special Education	3
or SPED 517	Disability Issues in Special Education	

Other Requirements

Requirement	Description
Content & Professional Education GPA	2.5
Graduate GPA	3.0

*State rules mandate that no course with a grade lower than a C- be used toward licensure, endorsement, or approvals. This means courses lower than a C- cannot be used.

Requirements are subject to change without notice due to changes in State law and/or rule.

Secondary Education: Sciences Entitlement

The following are required to meet the Illinois Approved Program for an Illinois Professional Educator License with a secondary education (grades 9-12) Sciences entitlement. Please note these requirements are separate from degree requirements, although they may count toward the degree as well.

The Council on Teacher Education (https://cte-s.education.illinois.edu/dotnet/webpages/webpage.aspx) oversees licensure requirements. School and Community Experiences (http://education.illinois.edu/sce/) coordinates all aspects of field placement.

Course Requirements*

Foundations Courses:

Code	Title	Hours
Psychological Foundations Courses in Educational Psychology		
EPSY 485 meets this requirement		
Philosophical and Social Foundations Courses in Education Policy, Organization and Leadership		
Select one of the following:		4
EPOL 401	History of American Education	
EPOL 402	Asian American Education	
EPOL 403	Historical and Social Barriers	
EPOL 405	School and Society	
EPOL 406	Professional Ethics in Education	
EPOL 407	Critical Thinking in Education	
EPOL 408	Aesthetic Education	
EPOL 409	Sociology of Education	
EPOL 410	Racial and Ethnic Families	
EPOL 412	Politics of Education	
EPOL 413	Economics of Education	
EPOL 480	Technology and Educational Reform	
EPOL 539		

Content-Area Courses:

Science: Biology

Code	Title	Hours
A major in Biology or 32 semester hours in the sciences is required. In either instance, it must include coursework from the following:		
One year (2 semesters) introductory Biology		
Two advanced courses in biology or related fields, including one laboratory		
One course in Calculus		
Two courses in Chemistry		
One course in Physics		
One course in Earth Science		
One course in Astronomy		

Science: Chemistry

Code	Title	Hours
A major in Chemistry or 32 semester hours in the sciences is required. In either instance, it must include coursework from the following:		
one year (two semesters) of introductory college chemistry		
two courses in organic chemistry, including lab		
one course in analytical chemistry, including quantative analysis		
one course in physical chemistry		
one course in biochemistry or inorganic chemistry		
Related required coursework:		
two courses in calculus		
two courses in physics		
one course in biological science		
one course in earth science		
one course in astronomy		

Science: Earth and Space Science

Code	Title	Hours
A major in earth & space science or 32 semester hours in the sciences is required. Either option must include coursework from the following:		
One course in astronomy		
One course in atmospheric science or meteorology		
One year of introductory geology, including physical and historical (GEOL 107 and GEOL 208)		
One introductory course in history of life (GEOL 143) OR advanced course in paleontology		
One course in earth materials (GEOL 333 or GEOL 432) OR mineralogy & petrology (GEOL 436)		
One course in sedimentary geology (GEOL 440) OR sedimentology		
One course in structural geology (GEOL 411)		
Additional Science Required:		
One course in biology		
One course in calculus		
One course in chemistry		
One course in physics		

Science: Physics

Code	Title	Hours
A major in Physics or 32 semester hours in the sciences is required. In either instance, the coursework must include the following:		
One year introductory physics sequences similar to UIUC PHYS 211, PHYS 212, PHYS 213, PHYS 214 (this includes study in electricity and magnetism, mechanics, thermal, and quantum physics)		
Advanced course in classical mechanics		
Advanced course in electricity and magnetism		
Advanced course in quantum physics		
One course in advanced physics laboratory		
Related required coursework		
Two courses in calculus		
One course in chemistry, including lab		
At least one biological science course		
One course in earth science		
One course in astronomy		

Professional Education Courses:

Code	Title	Hours
CI 401	Introductory Teaching in a Diverse Society (Section S)	3
CI 403	Teaching a Diverse High School Student Population (Section S)	3
CI 404	Teaching and Assessing Secondary School Students (Section S)	3
CI 473	Disciplinary Literacy	3

EDPR 442	Educational Practice in Secondary Education	12
EPSY 485	Assessing Student Performance	4
SPED 405	General Educator's Role in Special Education	3
or SPED 517	Disability Issues in Special Education	

Other Requirements

Requirement	Description
Content & Professional Education GPA	2.5
Graduate GPA	3.0

*State rules mandate that no course with a grade lower than a C- be used toward licensure, endorsement, or approvals. This means courses lower than a C- cannot be used.

Requirements are subject to change without notice due to changes in State law and/or rule.

Secondary Education: Social Science: History Entitlement

The following are required to meet the Illinois Approved Program for an Illinois Professional Educator License with a secondary education (grades 9-12) Social Science: History entitlement. Please note these requirements are separate from degree requirements, although they may count toward the degree as well.

The Council on Teacher Education (https://cte-s.education.illinois.edu/dotnet/webpages/webpage.aspx) oversees licensure requirements. School and Community Experiences (http://education.illinois.edu/sce/) coordinates all aspects of field placement.

Course Requirements*

Foundation Courses:

Code	Title	Hours
Psychological Foundations Courses in Educational Psychology		
EPSY 485 meets this requirement		
Philosophical and Social Foundations Courses in Education Policy, Organization and Leadership		
Select one of the following:		4
EPOL 401	History of American Education	
EPOL 402	Asian American Education	
EPOL 403	Historical and Social Barriers	
EPOL 405	School and Society	
EPOL 406	Professional Ethics in Education	
EPOL 407	Critical Thinking in Education	
EPOL 408	Aesthetic Education	
EPOL 409	Sociology of Education	
EPOL 410	Racial and Ethnic Families	
EPOL 412	Politics of Education	
EPOL 413	Economics of Education	
EPOL 480	Technology and Educational Reform	
EPOL 539		

Content-Area Courses:

Code	Title	Hours
A major in History or 32 semester hours in the social sciences is required. Either option must include the following courses:		
At least 24 hours of history including:		
U.S. Survey course		
Western Civilization survey course		
Global or world history		
Illinois history		
One course in Psychology		
At least one course in 2 other social science disciplines (Sociology, Anthropology, Economics, Geography, and Political Science)		

Professional Education Courses:

Code	Title	Hours
CI 401	Introductory Teaching in a Diverse Society (Section T)	3
CI 403	Teaching a Diverse High School Student Population (Section T)	3
CI 404	Teaching and Assessing Secondary School Students (Section T)	3
CI 473	Disciplinary Literacy	3
EDPR 442	Educational Practice in Secondary Education	12
EPSY 485	Assessing Student Performance	4
SPED 405	General Educator's Role in Special Education	3
or SPED 517	Disability Issues in Special Education	

Other Requirements

Requirement	Description
Content & Professional Education GPA	2.5
Graduate GPA	3.0

*State rules mandate that no course with a grade lower than a C- be used toward licensure, endorsement, or approvals. This means courses lower than a C- cannot be used.

Requirements are subject to change without notice due to changes in State law and/or rule.

Slavic Languages & Literatures, MA

for the degree of Master of Arts in Slavic Languages & Literatures

head of department: Valeria Sobol
director of graduate studies: Richard Tempest
email: slavic@illinois.edu
department website: http://www.slavic.illinois.edu
department faculty: https://slavic.illinois.edu/directory/faculty (https://slavic.illinois.edu/directory/faculty/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department office: 2090 Foreign Languages Building, 707 South Mathews, Urbana, IL 61801
phone: (217) 333-0680

Graduate Degree Programs in Slavic Languages and Literatures

Slavic Languages & Literatures, MA (p. 999)
Slavic Languages & Literatures, PhD (p. 1001)

The Department of Slavic Languages and Literatures offers graduate work leading to the degrees of Master of Arts and Doctor of Philosophy in Slavic Languages and Literatures. Scope of the department includes Bulgarian, Czech, Polish, Russian, Bosnian/Croatian/Serbian, Yiddish and Ukrainian.

Admission

Prospective graduate students of Slavic languages and literatures should have had the equivalent of at least three years of college study in the language of their proposed specialization and advanced coursework in that literature. Applicants should apply online (www.grad.illinois.edu/admissions/apply/ (http://www.grad.illinois.edu/admissions/apply/)) and submit a statement of purpose, three letters of recommendation and a writing sample. Original transcripts (with English translations if applicable) showing all undergraduate and graduate work completed should be sent to:

SLCL Graduate Student Services
3070 Foreign Languages Bldg.
707 S. Mathews Ave.
Urbana, IL 61801

Graduate Record Examination (GRE) scores are required for all students. The applicant should ask the ETS to submit scores to institution 1836. Applicants whose native language is not English are required to take the Test of English as a Foreign Language (TOEFL) and must score at least 79 on the internet-based test (iBT); they must also pass the speaking sub-section of the iBT with a minimum score of 24 (see www.grad.illinois.edu/Admissions/instructions/04c (http://www.grad.illinois.edu/Admissions/instructions/04c/)).

Graduate Teaching Experience

Experience in teaching is considered a vital part of the graduate program and is expected as part of the academic work of all Ph.D. candidates in this program. Non-native English speakers must first pass a test of their oral English ability (see www.grad.illinois.edu/admissions/taengprof.htm (http://www.grad.illinois.edu/admissions/taengprof.htm)).

Faculty Research Interests

The faculty represent a broad range of interests and methodological approaches, including:

- **the intersections of literature and law, empire studies, and medicine**
- **Russian-Jewish Studies**
- **gender, sexuality, and the body**
- **Stalinist culture**
- **film history and theory**
- **Czech revival culture**
- **nationalism and literature**
- **Polish modernism, postmodernism, and visual culture**
- **exilic and emigre literature**
- **East European pop culture**

Graduate courses are offered in:

- **Russian**
- **Polish**
- **Ukrainian**
- **Bosnian/Serbian/Croatian**
- **Yiddish**
- **Czech**
- **Bulgarian**

Facilities and Resources

The University of Illinois at Urbana-Champaign has one of the country's three outstanding Slavic library collections (http://www.library.illinois.edu/spx/). The Illinois Summer Research Laboratory on Russia and Eastern Europe brings to the campus more than one hundred postdoctoral researchers from all over the country every year to take advantage of the Slavic library resources. The University houses *Slavic Review*, the premier journal in Slavic studies.

There are also opportunities for part-time related work in the Slavic and East European Division of the University Library, *Slavic Review,* and elsewhere on campus.

Centers, Programs and Institutes

The federally-funded Russian, East European, and Eurasian Center (http://www.reeec.illinois.edu/) (established in 1959) is an important funding source for our graduate students and hosts a variety of conferences and speakers every year.

Financial Aid

Students may receive various forms of financial assistance, including University fellowships, Foreign Language and Area Studies (FLAS) Fellowships, teaching assistantships, and research assistantships. There are also opportunities for part-time related work in the Slavic and East European Division of the University Library and elsewhere on the campus. Most students are awarded multiple-year support packages that include a mixture of teaching and fellowship, conditional on satisfactory progress through the program (see www.grad.illinois.edu/admissions/taengprof.htm (http://www.grad.illinois.edu/admissions/taengprof.htm)).

for the degree of Master of Arts in Slavic Languages & Literatures

In addition to fulfilling the requirements of the Graduate College, candidates must pass written examinations, which are largely based on survey courses in the respective fields. All students must complete

32 graduate hours of advanced courses including at least 20 in Slavic Languages and Literatures. No master's thesis is required.

For additional details and requirements refer to the department's Graduate Programs Web pages (http://www.slavic.uiuc.edu/graduate/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
RUSS 501	Russian for Grad Students I	4
RUSS 502	Russian for Grad Students II	4
SLAV 576	Methods in Slavic Grad Study	4
Select one of the following:		2 or 4
HIST 560	Problems in Russian History	
HIST 551	Prob European Hist Since 1789 (Section A)	
REES 550	Seminar in REEE Studies	
IS 461	Russian, East European, and Eurasian Bibliography & Research Methods	
Two 400- or 500- level literature or culture courses offered by the Slavic Department		8
Total Hours		32

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum Hours Required Within the Unit:	20
Minimum Number of 500-level Hours Required Overall in Program:	12
Candidates must pass a written examination	
Minimum GPA:	2.75

Learning Outcomes: Slavic Languages and Literatures, MA

Learning Outcomes for the degree of Master of Arts in Slavic Languages & Literatures

1. Students will be capable of theoretically informed analytical engagement with the literature of their specialization.
2. Students will be familiar with contemporary literary-historical and theoretical research methods in Slavic studies and able to produce major research output.
3. Students will advance in proficiency in the language of their major fields to the Superior level, enabling professional work in the language. Students will acquire some proficiency in a second relevant regional language.
4. Students will be introduced to current literature and language teaching methodologies and gain practical mentored experience in both.
5. Students will be savvy professionals, able to produce successful grant applications, negotiate in the job market, at professional conferences, and confidently pursue publication.

Slavic Languages & Literatures, PhD

for the degree of Doctor of Philosophy in Slavic Languages & Literatures

head of department: Valeria Sobol
director of graduate studies: Richard Tempest
email: slavic@illinois.edu
department website: http://www.slavic.illinois.edu
department faculty: https://slavic.illinois.edu/directory/faculty (https://slavic.illinois.edu/directory/faculty/)
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- **Bulgarian**

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for the degree of Doctor of Philosophy in Slavic Languages & Literatures

All candidates for the Ph.D. degree must fulfill the general requirements of the Graduate College and must have a reading knowledge of at least one non-Slavic, research related language, most often French or German. A student entering the program with a Master of Arts degree from another department or university must complete SLAV 576. In consultation with the graduate advisor, the Ph.D. student designs an individualized program of study that includes a major field in one Slavic-area literature (any national literature currently offered by the department), study in a second Slavic-area language, and a minor field. A Ph.D. preliminary examination, consisting of written and oral portions on both major and minor fields, is required. A thesis is required for the degree of Doctor of Philosophy.

For additional details and requirements refer to the department's Graduate Programs Web pages (http://www.slavic.uiuc.edu/graduate/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
Graduate-level courses in a minor field (three courses in a single area, or two courses each in two distinct areas) and may be completed outside the department.		12-14
SLAV 576	Methods in Slavic Grad Study (if not taken during MA program)	4
Language Requirement: Demonstration of knowledge of a second Slavic-area language and a research language; can be satisfied through four semesters of language study or the successful completion of a translation examination.		
SLAV 577	Slavic Languages Pedagogy Seminar (2 credit hour course, students take the course twice)	4
SLAV 599	Thesis Research (min/max applied toward degree)	24
Total Hours		64

Other Requirements

Requirement	Description
Other Requirements may overlap	
Minimum Hours Required Within the Unit:	20
Minimum Hours Required in Major Field:	20
Masters Degree Required Before Admission to PhD?	Yes
Qualifying Exam Required	No
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	2.75

Learning Outcomes: Slavic Languages and Literatures, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Slavic Languages & Literatures

1. Students will be capable of theoretically informed analytical engagement with the literature of their specialization.
2. Students will be familiar with contemporary literary-historical and theoretical research methods in Slavic studies and able to produce major research output.

3. Students will advance in proficiency in the language of their major fields to the Superior level, enabling professional work in the language. Students will acquire some proficiency in a second relevant regional language.
4. Students will be introduced to current literature and language teaching methodologies and gain practical mentored experience in both.
5. Students will be savvy professionals, able to produce successful grant applications, negotiate in the job market, at professional conferences, and confidently pursue publication.

Social Work, MSW

for the degree of Master of Social Work Major in Social Work on campus, online & blended (online/face-to-face)

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school office: 1010 W. Nevada St., Urbana, IL 61801
director of graduate studies: Associate Dean Min Zahn
email: socialwork@illinois.edu
phone: (217) 244-5246
school website: https://socialwork.illinois.edu/
school faculty: School of Social Work Faculty (http://socialwork.illinois.edu/about-ssw/faculty-and-staff-directory/?doing_wp_cron=1546290133.2576510906219482421875)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)

Graduate Degree Programs in Social Work

Social Work, MSW (p. 1003) **(on campus, online & blended (online/face-to-face)**
concentration required:
Advanced Clinical Practice (p. 1004)
Leadership & Social Change (p. 1006)
Social Work, PhD (p. 1007)

The MSW program is accredited by the Council on Social Work Education (CSWE). The MSW program offers courses on the Urbana campus and off-campus through its MSW Outreach program.

The master's degree provides specialized study for advanced social work practice. Students take foundation and advanced courses in social work practice methods with individuals, families and organization, in policy and services, in research, and in human behavior and the social environment. A two-semester field placement/internship (minimum 900 hours) in a social service agency is required. A total of 64-72 hours of graduate coursework is required for the M.S.W. degree. The determination of the number of hours needed within the range is determined on a case-by-case basis after considering each student's prior coursework and experience. The curriculum may be completed in 16 to 24 months of full-time study.

MSW students choose from one of these two concentrations:

- In the **Advanced Clinical Practice concentration**, students prepare for clinical practice with individuals, families and groups, and in one of the focus areas. These students' Methods coursework has a clinical focus.
- Students in the **Leadership & Social Change (LSC) concentration** prepare for advanced macro practice which focuses on work with communities and organizations rather than work with individuals and families. In the LSC concentration students are prepared to work in either leadership/administration or advocacy/policy. Methods coursework for this concentration has a Macro focus.

Admission

MSW program applicants must meet the following minimum requirements:

1. a baccalaureate degree from an accredited college or university in the United States or from a recognized institution of higher learning abroad;
2. a grade point average of 3.0 (A = 4.0) or greater for the last 60 semester hours of undergraduate work;
3. 20 hours of completed coursework in a liberal arts core consisting of social and behavioral sciences, the humanities, and biological sciences
4. evidence of personal attributes that are suitable for the profession of social work;
5. a score of 103 or above on the TOEFL test;
6. provision of a written supplementary statement.

Advanced Standing MSW applicants who meet all above requirements who have earned a Bachelor of Social Work (BSW) degree from a CSWE-accredited program in the past seven years are considered for admission into the Advanced Standing MSW program. This is a three semester/44 hour program that may be completed in 12 months by most students. Students with a concentration in school social work participate in a one semester internship during their second Fall semester for a 3 semester/44 hour program completed in 16 months.

Ph.D. program applicants must meet the following minimum requirements:

1. a master degree in social work or in related disciplines;
2. a GRE score within the last 5 years;
3. demonstrating a potential for research and other scholarly work;
4. aptitude for leadership in the field of social work

for the degree of Master of Social Work Major in Social Work on campus, online, and blended (online/face-to-face)

Students pursuing the Master of Social Work must apply to and complete a graduate concentration. The concentration selected determines the courses needed to fulfill the requirements below. Select a concentration in:

Advanced Clinical Practice (p. 1005), or
Leadership & Social Change (p. 1006) (LSC)

Learning Outcomes: Social Work, MSW

Learning Outcomes for the degree of Master of Social Work Major in Social Work on campus, online & blended (online/face-to-face)

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1. Demonstrate Ethical and Professional Behavior
   a. Demonstrate Self-Awareness for Ethical Macro Practice
   b. Demonstrate Critical Self-Awareness for Ethical Clinical Practice

2. Engage Diversity and Difference in Practice
   a. Engage Diversity in Social Change Interventions
   b. Engage Diversity in Clinical Practice
3. Advance Human Rights and Social, Economic, and Environmental Justice
   a. Advance Human Rights and Justice in Social Policies and Programs
   b. Advance Human Rights and Justice in Clinical Practice
4. Engage In Practice-informed Research and Research-informed Practice
   a. Engage in Research for Social Change Interventions
   b. Engage in Research for Clinical Interventions
5. Engage in Policy Practice
   a. Engage in Advanced Policy Practice.
   b. Engage in Policy for Clinical Practice Settings.
6. Engage with Individuals, Families, Groups, Organizations, and Communities
   a. Engage with Groups, Organizations and Communities to Promote Social Change
   b. Engage with Individuals, Families, and Groups in Clinical Practice.
7. Assess Individuals, Families, Groups, Organizations, and Communities
   a. Assess Specialized Policies and Programs
   b. Assess and Diagnose Individuals, Families and Groups
8. Intervene with Individuals, Families, Groups, Organizations, and Communities
   a. Lead Change Interventions through Social Policies and Programs
   b. Intervene Clinically with Individuals, Families and Groups
9. Evaluate Practice with Individuals, Families, Groups, Organizations, and Communities
   a. Evaluate Specialized Social Policies and Programs
   b. Evaluate Individuals, Families and Groups in Clinical Settings

Social Work: Advanced Clinical Practice, MSW

for the degree of Master of Social Work Major in Social Work, Advanced Clinical Practice Concentration

school office: 1010 W. Nevada St., Urbana, IL 61801
director of graduate studies: Associate Dean Min Zahn
email: socialwork@illinois.edu
phone: (217) 244-5246
school website: https://socialwork.illinois.edu/
school faculty: School of Social Work Faculty (http://socialwork.illinois.edu/about-ssw/faculty-and-staff-directory/?doing_wp_cron=1546290133.2576510906219482421875)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)

Graduate Degree Programs in Social Work

Social Work, MSW (p. 1003) **(on campus, online & blended (online/face-to-face)**
concentration required:
Advanced Clinical Practice (p. 1004)
Leadership & Social Change (p. 1006)
Social Work, PhD (p. 1007)

The MSW program is accredited by the Council on Social Work Education (CSWE). The MSW program offers courses on the Urbana campus and off-campus through its MSW Outreach program.

The master's degree provides specialized study for advanced social work practice. Students take foundation and advanced courses in social work practice methods with individuals, families and organization, in policy and services, in research, and in human behavior and the social environment. A two-semester field placement/internship (minimum 900 hours) in a social service agency is required. A total of 64-72 hours of graduate coursework is required for the M.S.W. degree. The determination of the number of hours needed within the range is determined on a case-by-case basis after considering each student's prior coursework and experience. The curriculum may be completed in 16 to 24 months of full-time study.

MSW students choose from one of these two concentrations:

- In the **Advanced Clinical Practice concentration**, students prepare for clinical practice with individuals, families and groups, and in one of the focus areas. These students' Methods coursework has a clinical focus.
- Students in the **Leadership & Social Change (LSC) concentration** prepare for advanced macro practice which focuses on work with communities and organizations rather than work with individuals and families. In the LSC concentration students are prepared to work in either leadership/administration or advocacy/policy. Methods coursework for this concentration has a Macro focus.

Admission

MSW program applicants must meet the following minimum requirements:

1. a baccalaureate degree from an accredited college or university in the United States or from a recognized institution of higher learning abroad;
2. a grade point average of 3.0 (A = 4.0) or greater for the last 60 semester hours of undergraduate work;
3. 20 hours of completed coursework in a liberal arts core consisting of social and behavioral sciences, the humanities, and biological sciences
4. evidence of personal attributes that are suitable for the profession of social work;
5. a score of 103 or above on the TOEFL test;
6. provision of a written supplementary statement.

Advanced Standing MSW applicants who meet all above requirements who have earned a Bachelor of Social Work (BSW) degree from a CSWE-accredited program in the past seven years are considered for admission into the Advanced Standing MSW program. This is a three semester/44 hour program that may be completed in 12 months by most students. Students with a concentration in school social work participate in

a one semester internship during their second Fall semester for a 3 semester/44 hour program completed in 16 months.

Ph.D. program applicants must meet the following minimum requirements:

1. a master degree in social work or in related disciplines;
2. a GRE score within the last 5 years;
3. demonstrating a potential for research and other scholarly work;
4. aptitude for leadership in the field of social work

for the degree of Master of Social Work Major in Social Work, Advanced Clinical Practice Concentration

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This program is available on campus, online, and blended (online/face-to-face)

For additional details and requirements refer to the department's Graduate Handbook *(*http://socialwork.illinois.edu/academics/master-of-social-work/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Advanced Standing (Entering With a BSW)

Code	Title	Hours
Methods		**12**
SOCW 509	Adv Clin Assess & Interviewing	
Choose two courses from:		8
SOCW 500	SW Practice with Indiv and Fam	
SOCW 501	SW Practice with Groups	
SOCW 502	Brief Motivational Interventions for Substance Use	
SOCW 503	Trauma Informed Social Work with Children and Adolescents	
SOCW 505	Behav and Cogn Methods for SW	
SOCW 506	SW Practice with Child/Adol	
SOCW 507	School Social Work Practice	
SOCW 508	Family Therapy Seminar	
SOCW 516	Child, Youth and Family Svcs	
SOCW 553	Integrated Behavorial Health & Health Care	
Policy		**8**
SOCW 589	Social Work and the Law	
Choose one course from:		4
SOCW 514	Mental Health Pol and Svcs	
SOCW 515	Integrated Health Care Policy and Services	
SOCW 519	Public School Policy/Services	
SOCW 580	Advanced Child Welfare	
Research		**4**
SOCW 541	Clinical Research Seminar	
or SOCW 542	Program Evaluation	
HBSE		**4**
SOCW 552	HBSE II: Mental Disorders	
Field Education		**12-24**
SOCW 531	Field Practicum and Integrative Seminar I	
SOCW 532	Field Practicum and Integrative Seminar II	
Electives/Focus Area		**4**
Total Hours:		**44-56**

Other Requirements

Requirement	Description
A concentration is required.	
Minimum 500-level Hours Required Overall:	36
Minimum GPA:	3.0

Entering Without a BSW

Code	Title	Hours
Methods		**16**
SOCW 400	Generalist SW Practice Methods	
SOCW 509	Adv Clin Assess & Interviewing	
Choose two courses from:		8
SOCW 500	SW Practice with Indiv and Fam	
SOCW 501	SW Practice with Groups	
SOCW 502	Brief Motivational Interventions for Substance Use	
SOCW 503	Trauma Informed Social Work with Children and Adolescents	
SOCW 505	Behav and Cogn Methods for SW	
SOCW 506	SW Practice with Child/Adol	
SOCW 507	School Social Work Practice	
SOCW 508	Family Therapy Seminar	
SOCW 516	Child, Youth and Family Svcs	
SOCW 553	Integrated Behavorial Health & Health Care	
Policy		**12**
SOCW 410	Social Welfare Pol and Svcs	
SOCW 589	Social Work and the Law	
Choose one course from:		4
SOCW 514	Mental Health Pol and Svcs	
SOCW 515	Integrated Health Care Policy and Services	
SOCW 519	Public School Policy/Services	
SOCW 580	Advanced Child Welfare	
Research		**8**
SOCW 427	Social Work Research Methods	
SOCW 541	Clinical Research Seminar	
or SOCW 542	Program Evaluation	
HBSE		**8**
SOCW 451	HBSE I: Human Development	
SOCW 552	HBSE II: Mental Disorders	
Field Education		**24**
SOCW 531	Field Practicum and Integrative Seminar I	
SOCW 532	Field Practicum and Integrative Seminar II	
Electives/Focus Area		**4-8**
Total Hours		**64-72**

Other Requirements

Requirement	Description
A concentration is required.	
Minimum 500-level Hours Required Overall:	48
Minimum GPA:	3.0

Social Work: Leadership & Social Change, MSW

for the degree of Master of Social Work, Leadership & Social Change Concentration

school office: 1010 W. Nevada St., Urbana, IL 61801
director of graduate studies: Associate Dean Min Zahn
email: socialwork@illinois.edu
phone: (217) 244-5246
school website: https://socialwork.illinois.edu/
school faculty: School of Social Work Faculty (http://socialwork.illinois.edu/about-ssw/faculty-and-staff-directory/?doing_wp_cron=1546290133.2576510906219482421875)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)

Graduate Degree Programs in Social Work

Social Work, MSW (p. 1003) **(on campus, online & blended (online/face-to-face)**
concentration required:
Advanced Clinical Practice (p. 1004)
Leadership & Social Change (p. 1006)
Social Work, PhD (p. 1007)

The MSW program is accredited by the Council on Social Work Education (CSWE). The MSW program offers courses on the Urbana campus and off-campus through its MSW Outreach program.

The master's degree provides specialized study for advanced social work practice. Students take foundation and advanced courses in social work practice methods with individuals, families and organization, in policy and services, in research, and in human behavior and the social environment. A two-semester field placement/internship (minimum 900 hours) in a social service agency is required. A total of 64-72 hours of graduate coursework is required for the M.S.W. degree. The determination of the number of hours needed within the range is determined on a case-by-case basis after considering each student's prior coursework and experience. The curriculum may be completed in 16 to 24 months of full-time study.

MSW students choose from one of these two concentrations:

- In the **Advanced Clinical Practice concentration**, students prepare for clinical practice with individuals, families and groups, and in one of the focus areas. These students' Methods coursework has a clinical focus.
- Students in the **Leadership & Social Change (LSC) concentration** prepare for advanced macro practice which focuses on work with communities and organizations rather than work with individuals and families. In the LSC concentration students are prepared to work in either leadership/administration or advocacy/policy. Methods coursework for this concentration has a Macro focus.

Admission

MSW program applicants must meet the following minimum requirements:

1. a baccalaureate degree from an accredited college or university in the United States or from a recognized institution of higher learning abroad;
2. a grade point average of 3.0 (A = 4.0) or greater for the last 60 semester hours of undergraduate work;
3. 20 hours of completed coursework in a liberal arts core consisting of social and behavioral sciences, the humanities, and biological sciences
4. evidence of personal attributes that are suitable for the profession of social work;
5. a score of 103 or above on the TOEFL test;
6. provision of a written supplementary statement.

Advanced Standing MSW applicants who meet all above requirements who have earned a Bachelor of Social Work (BSW) degree from a CSWE-accredited program in the past seven years are considered for admission into the Advanced Standing MSW program. This is a three semester/44 hour program that may be completed in 12 months by most students. Students with a concentration in school social work participate in a one semester internship during their second Fall semester for a 3 semester/44 hour program completed in 16 months.

Ph.D. program applicants must meet the following minimum requirements:

1. a master degree in social work or in related disciplines;
2. a GRE score within the last 5 years;
3. demonstrating a potential for research and other scholarly work;
4. aptitude for leadership in the field of social work

for the degree of Master of Social Work Major in Social Work Leadership & Social Change Concentration

This program is available on campus, online, and blended (online/face-to-face)

For additional details and requirements refer to the department's Graduate Handbook (http://socialwork.illinois.edu/academics/master-of-social-work/*) and the* Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/*).*

Advanced Standing (Entering With a BSW)

Code	Title	Hours
Methods		**12**
SOCW 521	Leadership and Social Change	
SOCW 520	Social Welfare Planning	
SOCW 526	Managing Human Service Orgs	
Policy		**4**
SOCW 589	Social Work and the Law	
Research		**4**
SOCW 542	Program Evaluation	
HBSE		**4**

SOCW 554	Inequalities In A Diverse Society	
Field Education		**12-24**
SOCW 531	Field Practicum and Integrative Seminar I	
SOCW 532	Field Practicum and Integrative Seminar II	
Electives		**8**
Total Hours:		**44-56**

Other Requirements

Requirement	Description
A concentration is required.	
Minimum 500-level Hours Required Overall:	36
Minimum GPA:	3.0

Entering Without a BSW

Code	Title	Hours
Methods		**16**
SOCW 400	Generalist SW Practice Methods	
SOCW 521	Leadership and Social Change	
SOCW 520	Social Welfare Planning	
SOCW 526	Managing Human Service Orgs	
Policy		**8**
SOCW 410	Social Welfare Pol and Svcs	
SOCW 589	Social Work and the Law	
Research		**8**
SOCW 427	Social Work Research Methods	
SOCW 542	Program Evaluation	
HBSE		**8**
SOCW 451	HBSE I: Human Development	
SOCW 554	Inequalities In A Diverse Society	
Field Education		**24**
SOCW 531	Field Practicum and Integrative Seminar I	
SOCW 532	Field Practicum and Integrative Seminar II	
Electives/Focus Area		**4-8**
Total Hours		**64-72**

Other Requirements

Requirement	Description
A concentration is required.	
Minimum 500-level Hours Required Overall:	48
Minimum GPA:	3.0

Social Work, PhD

for the degree of Doctor of Philosophy in Social Work

school office: 1010 W. Nevada St., Urbana, IL 61801
director of graduate studies: Associate Dean Min Zahn
email: socialwork@illinois.edu
phone: (217) 244-5246
school website: https://socialwork.illinois.edu/
school faculty: School of Social Work Faculty (http://socialwork.illinois.edu/about-ssw/faculty-and-staff-directory/?doing_wp_cron=1546290133.2576510906219482421875)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)

The Ph.D. program is typically a 64 graduate hour program for students who enter with an MSW or other master's degree. The program is interdisciplinary and has a strong research emphasis. The Ph.D. program is organized around five curricular components: (1) seminars in social welfare policy, social work practice theories, and teaching; (2) research methodology and statistics; (3) an interdisciplinary area of study; (4) a qualifying exam; and (5) the dissertation. While the curriculum focuses on issues of relevance to social work and social welfare policy, students select courses not just in the School of Social Work but also from the full range of graduate courses offered, for example: educational psychology, human and community development, sociology, labor and industrial relations, psychology and anthropology. Candidates prepare for teaching, research, policy analysis, and leadership in social services.

Graduate Degree Programs in Social Work

Social Work, MSW (p. 1003) **(on campus, online & blended (online/face-to-face)**
concentration required:
Advanced Clinical Practice (p. 1004)
Leadership & Social Change (p. 1006)
Social Work, PhD (p. 1007)

Admission

MSW program applicants must meet the following minimum requirements:

1. a baccalaureate degree from an accredited college or university in the United States or from a recognized institution of higher learning abroad;
2. a grade point average of 3.0 (A = 4.0) or greater for the last 60 semester hours of undergraduate work;
3. 20 hours of completed coursework in a liberal arts core consisting of social and behavioral sciences, the humanities, and biological sciences
4. evidence of personal attributes that are suitable for the profession of social work;
5. a score of 103 or above on the TOEFL test;
6. provision of a written supplementary statement.

Advanced Standing MSW applicants who meet all above requirements who have earned a Bachelor of Social Work (BSW) degree from a CSWE-accredited program in the past seven years are considered for admission into the Advanced Standing MSW program. This is a three semester/44 hour program that may be completed in 12 months by most students. Students with a concentration in school social work participate in a one semester internship during their second Fall semester for a 3 semester/44 hour program completed in 16 months.

Ph.D. program applicants must meet the following minimum requirements:

1. a master degree in social work or in related disciplines;
2. a GRE score within the last 5 years;
3. demonstrating a potential for research and other scholarly work;
4. aptitude for leadership in the field of social work

for the degree of Doctor of Philosophy in Social Work

Code	Title	Hours
SOCW 579	Social Work Practice Theories	4
SOCW 585	National Social Welfare Policy	4
SOCW 593	Applied Qualitative Research	4
SOCW 595	Quantitative Research Designs	4
SOCW 575	Social Work Teaching Seminar	4
SOCW 594	Individual Research (2 semesters of enrollment required)	8
Focus Area (2-3 courses outside of Social Work)		12
3 courses in statistics and research methodology, 2-3 from outside of Social Work		12
SOCW 599	Dissertation Research	12
Total Hours		**64**

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Masters Degree Required for Admission to PhD?	Yes
Qualifying Exam Required:	Yes
Preliminary Exam Required:	Yes
Final Exam/Dissertation Defense Required:	Yes
Dissertation Deposit Required:	Yes
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the department's* Graduate Handbook *(*http://socialwork.illinois.edu/academics/doctoral-program-ph-d/degree-and-course-requirements/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Social Work, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Social Work

1. Obtain knowledge of Social Work as a profession and discipline
   a. Graduates will be able to:
      i. Locate their work in the intellectual landscape of social work.
      ii. Understand the relations among social work education, research, and practice.
      iii. Understand how knowledge in social work is relevant to public issues, including promoting social justice and increasing equity.
      iv. Understand the role and importance of social work values and ethics in research and knowledge development.
      v. Develop expertise in at least one specialized area of knowledge.
2. 2.Develop Core Quantitative and Qualitative Research Skills
   a. Graduates will be able to:
      i. Conceptualize significant, meaningful, and relevant social work research questions.
      ii. Understand both the technical aspects and conceptual underpinnings of a broad range of methodological and statistical techniques.
      iii. Demonstrate in-depth knowledge in the selection and application of the most rigorous, feasible, and appropriate methodological and data analyses for the research question(s) posed.
      iv. Design and implement appropriate procedures for sampling and data collection.
3. 3.Engage in academic scholarship
   a. Graduates will be able to:
      i. Critically evaluate and review published work in students' areas of expertise.
      ii. Identify the strengths and limitations of their own research.
      iii. Conduct research that is guided by theory.
      iv. Proactively and consistently implementing plans for the responsible and ethical conduct of research.
      v. Widely disseminate knowledge that contributes to the advancement of social work research, practice, and policy, including writing publishable, peer-reviewed manuscripts; presenting at local, national and international conferences; and producing policy briefs /white papers.
4. 4.Develop Teaching Skills
   a. Graduates will be able to:
      i. Understand and apply theories of adult learning.
      ii. Design and teach a course in a social work curriculum.
      iii. Create a learning culture and classroom climate that is inclusive of a diverse population of students and diverse learning styles.
      iv. Address ethical dilemmas that might arise in teaching.
      v. Understand the place of social work education within the larger context of higher education.
5. 5.Develop analytical skills to critically assess social policy and social science theories
   a. Graduates will be able to:
      i. Critically analyze paradigms and methods for social work knowledge building.
      ii. Evaluate representative theories for and studies of social work practice.
      iii. Understand the current research on practice effectiveness and methods for integrating research and practice.
      iv. Understand theoretical approaches to analyzing social policy development and implementation.
      v. Understand selected theories and models that have been influential in the substantive development of broad-scale social policies and programs.
      vi. Develop skills in empirically assessing policy issues and trends.

Sociology, MA

for the degree of Master of Science in Sociology

head of department: Tim Liao
director of graduate studies: Brian Dill
department website: http://www.sociology.illinois.edu
college website: https://las.illinois.edu/
overview of graduate college admissions & requirements: Graduate Admissions (https://grad.illinois.edu/admissions/apply/)
overview of college admissions & requirements:
department office: 3120 Lincoln Hall, 702 S. Wright St., Urbana, IL 61801
phone: (217) 333-1950
fax: (217) 333-5225
email: soc@illinois.edu

The master's degree is granted as an intermediate step on the way to the Ph.D. Students should ordinarily complete the requirements during their second year of residence.

Graduate Degree Programs in Sociology

Sociology, MA (p. 1009)
concentration: African American Studies (p. 1075)
Sociology, PhD (p. 1009)
concentration: African American Studies (p. 1075)

Admission

The Graduate College admission requirements apply. Students applying for admission should have a background in one of the social sciences, preferably sociology. Applicants must submit Graduate Record Examination (GRE) scores on the tests of verbal ability, quantitative ability, and analytical ability. The advanced test in sociology is optional. A writing sample is required. Non-native English speakers must also submit Teaching of English as a Foreign Language (TOEFL) scores and the Test of Spoken English (TSE) scores. The department does not accept applications to the M.A. program.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program.

Financial Aid

Financial support is provided for most graduate students through teaching assistantships, research assistantships, tuition and fee waivers, fellowships, and other University and external financial support.

for the degree of Master of Science in Sociology

For additional details and requirements refer to the department's graduate handbook (http://www.sociology.illinois.edu/grad/current/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
SOC 510	Professionalization Seminar (2 semesters)	4
SOC 500	Classical Sociological Theory	4
or SOC 501	Contemp Sociological Theory	
SOC 485	Intermediate Social Statistics (or equivalent)	4
Select one of the following:		4
SOC 581	Survey Research Methods	
SOC 583	Qualitative Research Methods	
SOC 587	Adv Social Statistics II	
SOC 590	Individual Topics in Sociology	
Six additional courses at 400 or 500 level (at least 4 in SOC and 4 at the 500 level)		24
Total Hours		40

Other Requirements

Requirement	Description
Other requirements may overlap	
At least two semesters in residence and 5 UIUC courses minimum are required.	
A Master's paper is required.	
Minimum Hours Required Within the Unit:	32
Minimum 500-level Hours Required Overall:	28
Minimum GPA:	3.25

Learning Outcomes: Sociology, MS

Learning Outcomes for the degree of Master of Science in Sociology

1. Summarize and explain major theories and theoretical debates in the discipline of sociology
2. Design and complete data collection and analysis for an original piece of research
3. Demonstrate competence with qualitative and quantitative methods and research design
4. Develop professional writing and communicating skills
5. Develop and apply effective and appropriate pedagogical skills

Sociology, PhD

for the degree of Doctor of Philosophy in Sociology

head of department: Tim Liao
director of graduate studies: Brian Dill
department website: http://www.sociology.illinois.edu
college website: https://las.illinois.edu/
overview of graduate college admissions & requirements: Graduate Admissions (https://grad.illinois.edu/admissions/apply/)
overview of college admissions & requirements:
department office: 3120 Lincoln Hall, 702 S. Wright St., Urbana, IL 61801
phone: (217) 333-1950
fax: (217) 333-5225
email: soc@illinois.edu

The graduate program is small and cohesive with a high faculty-student ratio. All students are required to take a small core of required courses in theory and methods. Each term that students are in residence, they

participate in at least one of a series of professional development workshops. Doctoral candidates must pass specialty examinations and write and defend a dissertation proposal and final dissertation.

Graduate Degree Programs in Sociology

Sociology, MA (p. 1009)
concentration: African American Studies (p. 1075)
Sociology, PhD (p. 1009)
concentration: African American Studies (p. 1075)

Admission

The Graduate College admission requirements apply. Students applying for admission should have a background in one of the social sciences, preferably sociology. Applicants must submit Graduate Record Examination (GRE) scores on the tests of verbal ability, quantitative ability, and analytical ability. The advanced test in sociology is optional. A writing sample is required. Non-native English speakers must also submit Teaching of English as a Foreign Language (TOEFL) scores and the Test of Spoken English (TSE) scores. The department does not accept applications to the M.A. program.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program.

Financial Aid

Financial support is provided for most graduate students through teaching assistantships, research assistantships, tuition and fee waivers, fellowships, and other University and external financial support.

for the degree of Doctor of Philosophy in Sociology

Entering with approved B.S./B.A. Degree

Code	Title	Hours
SOC 510	Professionalization Seminar (2 semesters)	4
SOC 500 & SOC 501	Classical Sociological Theory and Contemp Sociological Theory	8
SOC 485	Intermediate Social Statistics (or equivalent)	0-4
SOC 583	Qualitative Research Methods	4
SOC 586	Adv Social Statistics I	4
Select one of the following:		4
SOC 581	Survey Research Methods	
SOC 583	Qualitative Research Methods	
SOC 587	Adv Social Statistics II	
SOC 590	Individual Topics in Sociology	
An additional 5 substantive courses at the 500 level		12
Electives to bring coursework total to 72		32-36
SOC 599	Thesis Research (min/max applied toward degree)	3-24
Total Hours		96

Other Requirements

Requirement	Description
Other requirements may overlap	
Students must earn a B or better in every required course.	
Minimum Hours Required Within the Unit:	43
Minimum 500-level Hours Required Overall:	43
Qualifying Exam Required	Yes
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.25

Entering with approved M.S./M.A. Degree

Code	Title	Hours
SOC 510	Professionalization Seminar (2 semesters)	4
SOC 500 & SOC 501	Classical Sociological Theory and Contemp Sociological Theory	8
SOC 485	Intermediate Social Statistics (or equivalent)	0-4
SOC 583	Qualitative Research Methods	4
SOC 586	Adv Social Statistics I	4
Select one of the following:		4
SOC 581	Survey Research Methods	
SOC 583	Qualitative Research Methods	
SOC 587	Adv Social Statistics II	
SOC 590	Individual Topics in Sociology	
An additional 5 substantive courses at the 500 level		12
Electives to bring coursework total to 48		8-12
SOC 599	Thesis Research (min/max applied toward degree)	3-24
Total Hours		64

Other Requirements

Requirement	Description
Other requirements may overlap	
Students must earn a B or better in every required course.	
Minimum Hours Required Within the Unit:	43
Minimum 500-level Hours Required Overall:	43
Qualifying Exam Required	Yes
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.25

Learning Outcomes: Sociology, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Sociology

1. Summarize and explain major theories and theoretical debates in the discipline of sociology
2. Design and complete data collection and analysis for an original piece of research
3. Demonstrate competence with qualitative and quantitative methods and research design
4. Develop professional writing and communicating skills
5. Develop and apply effective and appropriate pedagogical skills

South Asian & Middle Eastern Studies, MA

for the degree of Master of Arts in South Asian & Middle Eastern Studies

center director: Hadi Salehi Esfahani
associate director: Angela Williams
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
center website: http://www.cws.illinois.edu/
center faculty: Center for South Asian & Middle Eastern Studies Faculty (http://www.csames.illinois.edu/people/)
center office: 221 International Studies Building, Urbana, IL 61801
phone: (217) 244-7331
email: csames@illinois.edu

The Center for South Asian and Middle Eastern Studies offers an MA in South Asian Studies and an MA in Middle Eastern Studies. The MA program provides preparation in language and area studies for students intending either to pursue a Ph.D. in a related field or to enter a career requiring language and regional expertise, such as in government, an NGO , business, media, international law, private foundations, or cultural exchanges.

Graduate Degree Programs in South Asian & Middle Eastern Studies

South Asian & Middle Eastern Studies, MA (p. 1011)

Admission

Applicants to the graduate program must submit an application for admission online (www.grad.illinois.edu/admissions/apply (http://www.grad.illinois.edu/admissions/apply/)) and submit a statement of purpose, three letters of reference completed by teachers, advisers, or recent employers, and a 10-20 page writing sample. Also required are original transcripts (with English translations if applicable) showing all undergraduate and graduate work completed. Applicants are expected to have a strong background in at least one South Asian or Middle Eastern language; normally, this means a minimum of two years of formal study. Graduate Record Examination (GRE) scores are required and should be submitted to institution code 1836. Applicants whose native language is not English are required to take the Test of English as a Foreign Language (TOEFL) and must score at least 103 on the internet-based test (iBT) for admission with full standing; they must also pass the speaking sub-section of the iBT with a minimum score of 24 (see www.grad.illinois.edu/Admissions/instructions/04c (http://www.grad.illinois.edu/Admissions/instructions/04c/)). Applicants must have a BA or a BS degree to apply to the MA program. Applications are accepted for fall admission only.

Financial Aid

The Center makes every effort to assist graduate students in securing financial aid. Financial aid packages usually combine some form of fellowship support with teaching or research assistantships in a manner that allows for both teaching experience and timely completion of the degree. Financial aid may include: University Fellowships, Foreign Language and Area Studies (FLAS) Fellowships, Minority Academic Partnership Plan (MAPP) Fellowships, teaching assistantships, and research assistantships. All awards of financial aid are made following competitive application.

www.csames.illinois.edu/program/ma (http://www.csames.illinois.edu/program/ma/)/
www.flas.illinois.edu (http://www.flas.illinois.edu/)/

Master of Arts in South Asian and Middle Eastern Studies

Code	Title	Hours
Three 500-level courses in the major field in area related courses		12
Elective hours		20
Language Requirement: Third-year competency in South Asian or Middle Eastern language, demonstrated by satisfactory completion of appropriate coursework or by proficiency examination.		0
Total Hours		32

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall:	12
Upon completion of their coursework, candidates will complete a Master's thesis. Candidates may take up to 8 hours of SAME 599 (Thesis Research), which may be counted toward their elective hours.	
Minimum GPA:	3.25

[1] *For additional details and requirements refer to the department's* Graduate Programs *(*http://www.csames.illinois.edu/program/ma/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

[2] *For a list of approved courses, see the SAME* course archive *(*http://www.csames.illinois.edu/program/courses/archive/all/*) and visit the CSAMES website to see* current course offerings *(*http://www.csames.illinois.edu/program/courses/*) each semester.*

Learning Outcomes: South Asian & Middle Eastern Studies, MA

Learning Outcomes for the degree of Master of Arts in South Asian & Middle Eastern Studies

1. Interdisciplinary knowledge of South Asian (SA) or Middle Eastern (ME) area studies in terms of the cultures and societies of these regions in a broader international and global context
   a. Students should have a good understanding of the various historical, cultural, social, economic and political conditions that shaped the development of SA or ME region
   b. Students should be able to place their knowledge of SA or ME studies in a broader world context and from a multidisciplinary perspective.
2. Proficiency in SA or ME languages and knowledge of research methodologies
   a. Students should develop appropriate expertise in a region or country in SA or ME, acquire proficiency in a relevant language of that region or country, and equip themselves with a good understanding of the appropriate research tools to study that region/country.
3. Although international experience is not a requirement for the MA program, experience through study abroad is an integral part of the graduate experience, especially when fellowship opportunities for SA and ME language study are available. Students should demonstrate commitment to conduct fieldwork when opportunities for study abroad are available.
4. Students should demonstrate adequate research skills at MA level. Currently, this is tested through term papers and an MA Exam. We are in the process of replacing the Exam with a thesis or two research papers. Completion of such requirements, as well as courses that require research papers and participation in conferences are good indications that the student has acquired good research skills.

Spanish, MA

for the degree of Master of Arts in Spanish, Spanish Literatures & Cultures Concentration

head of department: Mariselle Meléndez
director of graduate studies: Javier Irigoyen-García
email: span-port@illinois.edu
department website: http://www.spanport.illinois.edu
department faculty:
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department office: 4080 Foreign Languages Building, 707 South Mathews, Urbana, IL 61801
phone: (217) 244-3250

Graduate Degree Programs in Spanish & Portuguese

Spanish, MA (p. 1012)
optional concentrations:
Medieval Studies (p. 1101)|Spanish Linguistics (p. 1013)|Spanish Literatures & Cultures (p. 1015)
Spanish, PhD (p. 1016)
optional concentrations:
Medieval Studies (p. 1101)|Romance Linguistics (p. 1106)|Second Language Acquisition & Teacher Education (p. 1106)
Portuguese, MA (p. 972)
concentration:
Brazilian Studies (p. 975)
Portuguese, PhD (p. 973) (***Please note: Until further notice, we are accepting applications only to the M.A. in Portuguese, not to the Ph.D.)***

The Department of Spanish and Portuguese offers work leading to the Master of Arts and Doctor of Philosophy in Spanish and Portuguese, and to a Concentration in Second Language Acquisition and Teacher Education (SLATE).
Fields of specialization are:

- **Spanish linguistics**
- **Romance linguistics**
- **Spanish literature and cultural studies**
- **Latin American literature and cultural studies**
- **Brazilian Studies**
- **Luso-Brazilian literature and cultural studies**

A graduate course in Catalan literature is available. Also, the department is affiliated with the Latina/Latino Studies Program. Students in the area of Latina/Latino studies may be able to work with experts in the other disciplines in Latina/Latino studies such as anthropology, history, political science, sociology, and so forth in order to design and complete a program of studies in a particular area.

Admission

The normal prerequisite for a graduate major is an undergraduate major in the corresponding Romance language or consent of the department. Students doing graduate work for any advanced degree in Spanish or Portuguese must possess a command of the language. Applicants should apply online (www.grad.illinois.edu/admissions/apply (http://www.grad.illinois.edu/admissions/apply/)) and submit a statement of purpose, three letters of recommendation and a writing sample of approximately 10-20 pages in the form of one or two papers, at least one of which must be written in Spanish or Portuguese (as applicable). Original transcripts (with English translations if applicable) showing all undergraduate and graduate work completed should also be uploaded. Graduate Record Examination (GRE) scores are required of all domestic applicants and should be submitted to institution code 1836. International applicants who have taken the GRE are encouraged to submit their scores as well. Applicants whose native language is not English are required to take the Test of English as a Foreign Language (TOEFL) and must score at least 88 on the internet-based test (iBT); they must also pass the speaking sub-section of the iBT with a minimum score of 24 (see www.grad.illinois.edu/Admissions/instructions/04c (http://www.grad.illinois.edu/Admissions/instructions/04c/)). Applications are accepted for fall admission only. Application questions may be directed to SLCL Graduate Student Services at slclgradservices@illinois.edu.

Centers, Programs, and Institutes

The option to pursue a concentration in SLATE (Second Language Acquisition and Teacher Education) is available to doctoral students in the department's programs in linguistics. Candidates selecting this option are required to complete courses in linguistics, psycholinguistics/sociolinguistics, second language studies, and research methodology in addition to advanced study in linguistics of the particular language. For information about SLATE go to www.slate.illinois.edu (http://www.slate.illinois.edu/).

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, this department requires degree candidates to teach as part of their academic work. Such experience is considered a vital part of the graduate program. Non-native English speakers must first pass a test of their oral English ability (see www.grad.illinois.edu/admissions/taengprof.htm (http://www.grad.illinois.edu/admissions/taengprof.htm)).

Financial Aid

The department offers financial aid (in the form of fellowships, teaching assistantships, and research assistantships) to all of the students it admits. Other kinds of fellowships and research support are also available on a competitive basis to qualified candidates; they include dissertation research and travel grants, conference travel grants, and summer fellowships.

for the degree of Master of Arts in Spanish, Spanish Literatures & Cultures Concentration

The M.A. in Spanish, Concentration in Spanish Literatures and Cultures is administered through the Department of Spanish and Portuguese. Its goal is to provide graduate students with rigorous training in all main areas of Spanish Literatures and Cultures, as well as a working knowledge of Brazilian/Lusophone literatures and cultures. It requires coursework in both Latin American and Spanish peninsular literary and cultural production in each of the general chronological periods.

Code	Title	Hours
SPAN 572	Theory and Literary Criticism (or equivalent to ensure basic preparation)	4
To ensure broad knowledge of the field of Spanish-language literatures and cultures, choose one course from each of groups 1-5 below:		20
Group I: Pre-18th Century Peninsular		
Group 2: Colonial Spanish American (Pre-Columbian to 1810)		
Group 3: Modern and Contemporary Spanish American		
Group 4: Modern and Contemporary Peninsular		
Group 5: Luso-Brazilian Studies		
Total Spanish Literatures and Cultures-specific Hours		24

Code	Title	Hours
Concentration-specific course requirements (24 Hours)		
Two 500-level courses chosen in consultation with the advisor		8
Total Hours		**32**

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
A concentration is required.	
SPAN 571 is required of all teaching assistants	
Research paper completed in consultation with advisors.	
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the department's* guidelines for graduate students *(*http://www.spanport.illinois.edu/graduate/guidelines/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Spanish: Spanish Linguistics, MA

for the degree of Master of Arts in Spanish, Spanish Linguistics Concentration

head of department: Mariselle Meléndez
director of graduate studies: Javier Irigoyen-García
director of admissions committee: Rakesh Bhatt
email: span-port@illinois.edu
department website: http://www.spanport.illinois.edu
department faculty:
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply **(**https://grad.illinois.edu/admissions/apply/**)**
college website: https://las.illinois.edu/
department office: 4080 Foreign Languages Building, 707 South Mathews, Urbana, IL 61801
phone: (217) 244-3250

Graduate Degree Programs in Spanish & Portuguese

Spanish, MA (p. 1012)
optional concentrations:
Medieval Studies (p. 1101)|Spanish Linguistics (p. 1013)|Spanish Literatures & Cultures (p. 1015)
Spanish, PhD (p. 1016)
optional concentrations:
Medieval Studies (p. 1101)|Romance Linguistics (p. 1106)|Second Language Acquisition & Teacher Education (p. 1106)
Portuguese, MA (p. 972)
concentration:
Brazilian Studies (p. 975)
Portuguese, PhD (p. 973) (***Please note: Until further notice, we are accepting applications only to the M.A. in Portuguese, not to the Ph.D.)***

The Department of Spanish and Portuguese offers work leading to the Master of Arts and Doctor of Philosophy in Spanish and Portuguese, and to a Concentration in Second Language Acquisition and Teacher Education (SLATE).
Fields of specialization are:

- **Spanish linguistics**
- **Romance linguistics**
- **Spanish literature and cultural studies**
- **Latin American literature and cultural studies**
- **Brazilian Studies**
- **Luso-Brazilian literature and cultural studies**

A graduate course in Catalan literature is available. Also, the department is affiliated with the Latina/Latino Studies Program. Students in the area of Latina/Latino studies may be able to work with experts in the other disciplines in Latina/Latino studies such as anthropology, history, political science, sociology, and so forth in order to design and complete a program of studies in a particular area.

Admission

The normal prerequisite for a graduate major is an undergraduate major in the corresponding Romance language or consent of the department. Students doing graduate work for any advanced degree in Spanish or Portuguese must possess a command of the language. Applicants should apply online (www.grad.illinois.edu/admissions/apply (http://www.grad.illinois.edu/admissions/apply/)) and submit a statement of purpose, three letters of recommendation and a writing sample of approximately 10-20 pages in the form of one or two papers, at least one of which must be written in Spanish or Portuguese (as applicable). Original transcripts (with English translations if applicable) showing all undergraduate and graduate work completed should also be uploaded. Graduate Record Examination (GRE) scores are required of all domestic applicants and should be submitted to institution code 1836. International applicants who have taken the GRE are encouraged to submit their scores as well. Applicants whose native language is not English are required to take the Test of English as a Foreign Language (TOEFL) and must score at least 88 on the internet-based test (iBT); they must also pass the speaking sub-section of the iBT with a minimum score of 24 (see www.grad.illinois.edu/Admissions/instructions/04c (http://www.grad.illinois.edu/Admissions/instructions/04c/)). Applications are accepted for fall admission only. Application questions may be directed to SLCL Graduate Student Services at slclgradservices@illinois.edu.

Centers, Programs, and Institutes

The option to pursue a concentration in SLATE (Second Language Acquisition and Teacher Education) is available to doctoral students in the department's programs in linguistics. Candidates selecting this option are required to complete courses in linguistics, psycholinguistics/sociolinguistics, second language studies, and research methodology in addition to advanced study in linguistics of the particular language. For information about SLATE go to www.slate.illinois.edu (http://www.slate.illinois.edu/).

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, this department requires degree candidates to teach as part of their academic work. Such experience is considered a vital part of the graduate program. Non-native English speakers must first pass a test of their oral English ability (see www.grad.illinois.edu/admissions/taengprof.htm (http://www.grad.illinois.edu/admissions/taengprof.htm)).

Financial Aid

The department offers financial aid (in the form of fellowships, teaching assistantships, and research assistantships) to all of the students it admits. Other kinds of fellowships and research support are also available on a competitive basis to qualified candidates; they include dissertation research and travel grants, conference travel grants, and summer fellowships.

for the degree of Master of Arts in Spanish, Spanish Linguistics Concentration

The M.A. in Spanish, Concentration in Spanish Linguistics is administered through the Department of Spanish and Portuguese. Its goal is to provide graduate students with rigorous training in all main areas of Spanish Linguistics. It requires coursework on the phonological, morphological and syntactic structure of the Spanish language, as well as its history, sociolinguistics, and acquisition as a second language.

Code	Title	Hours
One course in each of the departmental areas (syntax, phonology, morphology, sociolinguistics and dialectology, historical linguistics, second language acquisition).		
Total Spanish Linguistics-specific Hours		24

Code	Title	Hours
Concentration-specific course requirements (24 Hours)		
Two 500-level courses chosen in consultation with the advisor		8
Total Hours		**32**

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
A concentration is required.	
SPAN 571 is required of all teaching assistants	
Research paper completed in consultation with advisors.	
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the department's* guidelines for graduate students *(*http://www.spanport.illinois.edu/graduate/guidelines/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Spanish Linguistics Concentration

Learning Outcomes for the degree of Master of Arts in Spanish, Spanish Linguistics Concentration

1. Students will acquire basic knowledge in all sub-areas of Hispanic linguistics including syntax, phonology, morphology, dialectology, sociolinguistics, diachronic linguistics, and second language acquisition and will develop a critical and reflective orientation toward the language and cultures of the people of the Spanish-speaking world
2. Students will develop understanding of the major theoretical and empirical problems in all sub-areas of Hispanic linguistics.
3. Students will acquire basic knowledge of theory and research methods in linguistics to be able to conduct linguistic analysis in syntax, phonology and morphology related to Spanish with human subjects or texts from the Spanish-speaking world.
4. Students will acquire ability to communicate research findings in a variety of academic venues in spoken and written English and in Spanish
5. Students will acquire knowledge of teaching methodologies and will be able to teach at the undergraduate level.

Spanish: Spanish Literatures & Cultures, MA

for the degree of Master of Arts in Spanish, Spanish Literatures & Cultures Concentration

head of department: Mariselle Meléndez
director of graduate studies: Javier Irigoyen-García
director of admissions committee: Rakesh Bhatt
email: span-port@illinois.edu
department website: http://www.spanport.illinois.edu
department faculty:
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department office: 4080 Foreign Languages Building, 707 South Mathews, Urbana, IL 61801
phone: (217) 244-3250

Graduate Degree Programs in Spanish & Portuguese

Spanish, MA (p. 1012)
optional concentrations:
Medieval Studies (p. 1101)|Spanish Linguistics (p. 1013)|Spanish Literatures & Cultures (p. 1015)
Spanish, PhD (p. 1016)
optional concentrations:
Medieval Studies (p. 1101)|Romance Linguistics (p. 1106)|Second Language Acquisition & Teacher Education (p. 1106)
Portuguese, MA (p. 972)
concentration:
Brazilian Studies (p. 975)
Portuguese, PhD (p. 973) (***Please note: Until further notice, we are accepting applications only to the M.A. in Portuguese, not to the Ph.D.)***

The Department of Spanish and Portuguese offers work leading to the Master of Arts and Doctor of Philosophy in Spanish and Portuguese, and to a Concentration in Second Language Acquisition and Teacher Education (SLATE).
Fields of specialization are:

- **Spanish linguistics**
- **Romance linguistics**
- **Spanish literature and cultural studies**
- **Latin American literature and cultural studies**
- **Brazilian Studies**
- **Luso-Brazilian literature and cultural studies**

A graduate course in Catalan literature is available. Also, the department is affiliated with the Latina/Latino Studies Program. Students in the area of Latina/Latino studies may be able to work with experts in the other disciplines in Latina/Latino studies such as anthropology, history, political science, sociology, and so forth in order to design and complete a program of studies in a particular area.

Admission

The normal prerequisite for a graduate major is an undergraduate major in the corresponding Romance language or consent of the department. Students doing graduate work for any advanced degree in Spanish or Portuguese must possess a command of the language. Applicants should apply online (www.grad.illinois.edu/admissions/apply (http://www.grad.illinois.edu/admissions/apply/)) and submit a statement of purpose, three letters of recommendation and a writing sample of approximately 10-20 pages in the form of one or two papers, at least one of which must be written in Spanish or Portuguese (as applicable). Original transcripts (with English translations if applicable) showing all undergraduate and graduate work completed should also be uploaded. Graduate Record Examination (GRE) scores are required of all domestic applicants and should be submitted to institution code 1836. International applicants who have taken the GRE are encouraged to submit their scores as well. Applicants whose native language is not English are required to take the Test of English as a Foreign Language (TOEFL) and must score at least 88 on the internet-based test (iBT); they must also pass the speaking sub-section of the iBT with a minimum score of 24 (see www.grad.illinois.edu/Admissions/instructions/04c (http://www.grad.illinois.edu/Admissions/instructions/04c/)). Applications are accepted for fall admission only. Application questions may be directed to SLCL Graduate Student Services at slclgradservices@illinois.edu.

Centers, Programs, and Institutes

The option to pursue a concentration in SLATE (Second Language Acquisition and Teacher Education) is available to doctoral students in the department's programs in linguistics. Candidates selecting this option are required to complete courses in linguistics, psycholinguistics/sociolinguistics, second language studies, and research methodology in addition to advanced study in linguistics of the particular language. For information about SLATE go to www.slate.illinois.edu (http://www.slate.illinois.edu/).

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, this department requires degree candidates to teach as part of their academic work. Such experience is considered a vital part of the graduate program. Non-native English speakers must first pass a test of their oral English ability (see www.grad.illinois.edu/admissions/taengprof.htm (http://www.grad.illinois.edu/admissions/taengprof.htm)).

Financial Aid

The department offers financial aid (in the form of fellowships, teaching assistantships, and research assistantships) to all of the students it admits. Other kinds of fellowships and research support are also available on a competitive basis to qualified candidates; they include dissertation research and travel grants, conference travel grants, and summer fellowships.

for the degree of Master of Arts in Spanish, Spanish Literatures & Cultures Concentration

The M.A. in Spanish, Concentration in Spanish Literatures and Cultures is administered through the Department of Spanish and Portuguese. Its goal is to provide graduate students with rigorous training in all main areas of Spanish Literatures and Cultures, as well as a working knowledge of Brazilian/Lusophone literatures and cultures. It requires coursework in both Latin American and Spanish peninsular literary and cultural production in each of the general chronological periods.

Code	Title	Hours
SPAN 572	Theory and Literary Criticism (or equivalent to ensure basic preparation)	4
To ensure broad knowledge of the field of Spanish-language literatures and cultures, choose one course from each of groups 1-5 below:		20
Group I: Pre-18th Century Peninsular		
Group 2: Colonial Spanish American (Pre-Columbian to 1810)		
Group 3: Modern and Contemporary Spanish American		
Group 4: Modern and Contemporary Peninsular		
Group 5: Luso-Brazilian Studies		
Total Spanish Literatures and Cultures-specific Hours		24

Code	Title	Hours
Concentration-specific course requirements (24 Hours)		
Two 500-level courses chosen in consultation with the advisor		8
Total Hours		**32**

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
A concentration is required.	
SPAN 571 is required of all teaching assistants	
Research paper completed in consultation with advisors.	
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the department's* guidelines for graduate students *(*http://www.spanport.illinois.edu/graduate/guidelines/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Spanish Literatures & Cultures

Learning Outcomes for the degree of Master of Arts in Spanish, Spanish Literatures & Cultures Concentration

1. Possess broad knowledge of a set of representative literary texts from all genres, different historical periods, and the different geographical contexts corresponding to the three major populations (Spain, U.S. Latino/a, Latin America) as it pertains to cultural production.
2. Possess general knowledge of critical theory and the ability to engage in the analysis of written, oral or visual texts; understand the writing and research tools of their particular disciplines including discriminate use of bibliographic sources and mechanics of style for research papers.
3. Be able to identify, analyze and discuss a text's formal configuration (e.g., tropes, rhetorical strategies, genres) as well as its historical context.
4. Students will acquire ability to communicate research findings in a variety of academic venues in spoken and written English and in Spanish.
5. Students will acquire knowledge of teaching methodologies and will be able to teach at the undergraduate level.

Spanish, PhD

for the degree of Doctor of Philosophy in Spanish

head of department: Mariselle Meléndez
director of graduate studies: Javier Irigoyen-García
email: span-port@illinois.edu
department website: http://www.spanport.illinois.edu
department faculty:
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department office: 4080 Foreign Languages Building, 707 South Mathews, Urbana, IL 61801
phone: (217) 244-3250

Graduate Degree Programs in Spanish & Portuguese

Spanish, MA (p. 1012)
optional concentrations:
Medieval Studies (p. 1101)|Spanish Linguistics (p. 1013)|Spanish Literatures & Cultures (p. 1015)
Spanish, PhD (p. 1016)
optional concentrations:
Medieval Studies (p. 1101)|Romance Linguistics (p. 1106)|Second Language Acquisition & Teacher Education (p. 1106)
Portuguese, MA (p. 972)
concentration:
Brazilian Studies (p. 975)
Portuguese, PhD (p. 973) (***Please note: Until further notice, we are accepting applications only to the M.A. in Portuguese, not to the Ph.D.)***

The Department of Spanish and Portuguese offers work leading to the Master of Arts and Doctor of Philosophy in Spanish and Portuguese, and to a Concentration in Second Language Acquisition and Teacher Education (SLATE).
Fields of specialization are:

- **Spanish linguistics**
- **Romance linguistics**
- **Spanish literature and cultural studies**
- **Latin American literature and cultural studies**
- **Brazilian Studies**
- **Luso-Brazilian literature and cultural studies**

A graduate course in Catalan literature is available. Also, the department is affiliated with the Latina/Latino Studies Program. Students in the area of Latina/Latino studies may be able to work with experts in the other disciplines in Latina/Latino studies such as anthropology, history, political science, sociology, and so forth in order to design and complete a program of studies in a particular area.
We also teach Catalan and Basque.

Admission

The normal prerequisite for a graduate major is an undergraduate major in the corresponding Romance language or consent of the department. Students doing graduate work for any advanced degree in Spanish or Portuguese must possess a command of the language. Applicants should apply online (www.grad.illinois.edu/admissions/apply (http://www.grad.illinois.edu/admissions/apply/)) and submit a statement of purpose, three letters of recommendation and a writing sample of approximately 10-20 pages in the form of one or two papers, at least one of which must be written in Spanish or Portuguese (as applicable). Original transcripts (with English translations if applicable) showing all undergraduate and graduate work completed should also be uploaded. Graduate Record Examination (GRE) scores are required of all domestic applicants and should be submitted to institution code 1836. International applicants who have taken the GRE are encouraged to submit their scores as well. Applicants whose native language is not English are required to take the Test of English as a Foreign Language (TOEFL) and must score at least 88 on the internet-based test (iBT); they must also pass the speaking sub-section of the iBT with a minimum score of 24 (see www.grad.illinois.edu/Admissions/instructions/04c (http://www.grad.illinois.edu/Admissions/instructions/04c/)). Applications are accepted for fall admission only. Application questions may be directed to SLCL Graduate Student Services at slclgradservices@illinois.edu.

Centers, Programs, and Institutes

The option to pursue a concentration in SLATE (Second Language Acquisition and Teacher Education) is available to doctoral students in the department's programs in linguistics. Candidates selecting this option are required to complete courses in linguistics, psycholinguistics/sociolinguistics, second language studies, and research methodology in addition to advanced study in linguistics of the particular language. For information about SLATE go to www.slate.illinois.edu (http://www.slate.illinois.edu/).

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, this department requires degree candidates to teach as part of their academic work. Such experience is considered a vital part of the graduate program. Non-native English speakers must first pass a test of their oral English ability (see www.grad.illinois.edu/admissions/taengprof.htm (http://www.grad.illinois.edu/admissions/taengprof.htm)).

Financial Aid

The department offers financial aid (in the form of fellowships, teaching assistantships, and research assistantships) to all of the students it admits. Other kinds of fellowships and research support are also available on a competitive basis to qualified candidates; they include dissertation research and travel grants, conference travel grants, and summer fellowships.

for the degree of Doctor of Philosophy in Spanish

For additional details and requirements refer to the department's guidelines for graduate students *(*http://www.spanport.illinois.edu/graduate/guidelines/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Code	Title	Hours
SPAN 571 is required of all teaching assistants		4
SPAN 599	Thesis Research (32 max applied toward degree)	0 to 16
Coursework selected in consultation with advisor		
Language Requirement: Students in all doctoral programs except SLATE must demonstrate reading proficiency in two languages besides the foreign language of specialization (not including English).		
Total Hours		**64**

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall:	16
Masters Degree Required for Admission to PhD?	Yes
Qualifying Exam Required	No
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

Learning Outcomes: Spanish, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Spanish

1. Possess in-depth knowledge of the three major populations (Spain, U.S. Latino/a, Latin America) as it pertains to cultural production.
2. Be able to make original scholarly contributions that engage previous research and advance the field.
3. Be able to critically analyze and evaluate scholarly works and debates produced in different contexts.
4. Students will acquire ability to communicate research findings in a variety of academic venues in spoken and written English and in Spanish.5. Be able to teach at the undergraduate level.

Special Education, EdM

for the degree of Master of Education in Special Education

department head: Michaelene Ostrosky
director of graduate studies: Stacy Dymond
graduate admissions information: Linda Stimson
overview of admissions & requirements: College of Education (https://education.illinois.edu/programs/grad/how-to-apply/?url=/programs/grad)
overview of graduate college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: http://education.illinois.edu/sped (http://education.illinois.edu/sped/)
program website: College of Education Programs (https://education.illinois.edu/faceted-search/programs/)
department faculty: Special Education Faculty (https://education.illinois.edu/faculty-finder/sped/)
college website: http://education.illinois.edu/
department office: 142 Education Building, 1310 South Sixth Street, Champaign, IL 61820
phone: (217) 244-3542
email: gradservices@education.illinois.edu

The Department of Special Education offers several master's program areas of emphasis and licensure: Infancy and Early Childhood Special Education, Learning and Behavior Specialist I (LBS-I), and Learning and Behavior Specialist II (LBS-II). LBS-I is the master's program that prepares teachers for their initial teaching licensure. The other master's programs are available for practicing teachers and other professionals interested in graduate studies. Several of these programs can be completed on a full or part-time basis. In most cases, full-time students take two years to complete their program of studies.

Graduate Degree Programs in Special Education

Special Education, EdM (p. 1018) **(on campus & off-campus)**
optional concentrations: Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)
Special Education, MS (p. 1020)
optional concentrations: Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)
Special Education, PhD (p. 1022)

Admission

Applicants must submit a complete application for admission. The applicant must submit three letters of reference and transcripts of all previous undergraduate and graduate work. A 3.0 grade point average (A = 4.0) for the last two years of the undergraduate program and for any previous graduate work is a minimum requirement for admission. The applicant must also submit a goal statement indicating his/her interests, experiences, and goals for pursuing graduate study in special education. In addition to the above items, international students must submit a Test of English as a Foreign Language (TOEFL) score (taken within two years of the start of the semester for which the student is requesting admission). International students must have a total iBT score greater than 102 (72nd-79th percentile). The minimum speaking score is 24 (79th percentile).

Off-Campus Program

The Department of Special Education offers master's degree programs off-campus in coordination with Federal Personnel Preparation Grant awards. The focus of the off-campus program changes depending on the type of grant award. For example, past emphases have been on behavior intervention and multiple disabilities. For information on currently available off-campus programs, please visit the Department's website at https://education.illinois.edu/sped.

Licensure

The Council on Teacher Education (http://cote.illinois.edu/) functions as the all-University governance system for licensure. Graduate students who wish to qualify for the council's recommendation for a teaching or administrative license must complete the appropriate graduate program. The Department of Special Education offers graduate-level licensure programs in Learning and Behavior Specialist I (LBS-I), and Learning and Behavior Specialist II (LBS-II). Early Childhood Special Education master's students who already hold a Professional Educator License who went through an Early Childhood approved program qualify for the Illinois ECSE approval.

Faculty Research Interests

The Department of Special Education faculty have a variety of research interests. There are multiple opportunities for graduate students to engage in research activities with faculty. For information about specific faculty research interests, current grants, and publications, please visit the Faculty Finder (https://education.illinois.edu/faculty-finder/sped/).

Facilities and Resources

The College of Education also has many resources to assist graduate students through their academic career. The Bureau of Educational Research works with students to secure research funding. The Council on

Teacher Education (http://cote.illinois.edu/) entitles candidates seeking a Professional Educator License and provides accreditation of professional education programs. Each student completing a degree program is assigned a graduate adviser, who is available to assist the student with planning the program of study and determining degree requirements, courses and timelines for degree completion.

Information on University resources can be found at http://www.grad.illinois.edu/current-students (http://www.grad.illinois.edu/current-students/).

Financial Aid

Students engaged in graduate study and research at the University of Illinois at Urbana-Champaign find an environment where collaboration among faculty members and students is nurtured and rewarded and where the students' contributions are recognized and valued. In many cases, this recognition comes in the form of financial awards that enable students to devote concentrated attention to their studies. Virtually all doctoral candidates receive assistantships/ traineeships. Traineeships are grant funded and are available for full-time students pursuing initial teacher licensure and leadership preparation in specific areas. Other financial aid opportunities (e.g., fellowships and assistantships) are available on a competitive basis. Students receiving traineeships, assistantships, and fellowships are exempt from payment of tuition and some fees.

Financial aid in the form of assistantships, scholarships, fellowships, and tuition waivers can be found throughout the college (https://education.illinois.edu/current-students/graduate/financial-aid/) and campus. Campus opportunities can be found at the Graduate College (http://www.grad.illinois.edu/funding-jobs/) and the Office of Student Financial Aid (http://www.osfa.illinois.edu/). **Please note: Graduate students employed as Staff by the University of Illinois at Urbana-Champaign are not eligible for a College of Education Award or Scholarship.**

for the degree of Master of Education in Special Education

The Department of Special Education offers many programs leading to the degree of Master of Education (Ed.M.). A list of programs and additional requirements can be found on the program's website, (https://education.illinois.edu/faceted-search/programs/?degree=edm&department=sped) the College of Education Graduate Programs Handbook (https://education.illinois.edu/current-students/graduate/coe-graduate-handbook/), and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Students may select a concentration in Bilingual-Bicultural Education (http://catalog.illinois.edu/graduate/education/concentration/bilingual-bicultural-education/) or Digital Learning (http://catalog.illinois.edu/graduate/education/concentration/digital-learning/).

Code	Title	Hours
Psychological Foundations Courses in Educational Psychology		
Select one of the following:		4
EPSY 400	Psychology of Learning in Education	
EPSY 401	Child Language and Education	
EPSY 402	Sociocultural Influence on Learning	
EPSY 404	Adjustment in School Settings	
EPSY 405	Personality and Soc Dev	
EPSY 406	Psychology of Classroom Management	
EPSY 407	Adult Learning and Development	
EPSY 408	Learning and Human Development with Educational Technology	
EPSY 430	Early Adolescent Development	
EPSY 485	Assessing Student Performance	
EPSY 490	Developments in Educational Psychology	
EPSY 553	Global Issues in Learning	
Philosophical and Social Foundations Courses in Education Policy, Organization and Leadership		
Select one of the following:		4
EPOL 401	History of American Education	
EPOL 402	Asian American Education	
EPOL 403	Historical and Social Barriers	
EPOL 405	School and Society	
EPOL 406	Professional Ethics in Education	
EPOL 407	Critical Thinking in Education	
EPOL 408	Aesthetic Education	
EPOL 409	Sociology of Education	
EPOL 410	Racial and Ethnic Families	
EPOL 412	Politics of Education	
EPOL 413	Economics of Education	
EPOL 480	Technology and Educational Reform	
EPOL 539		
Select a minimum of 18 hours from the following:		18
SPED 517	Disability Issues in Special Education	
SPED 524	Supervised Practice in Special Education	
SPED 526	Collaborative Leaders in Special Education	
or SPED 566	Leadership in Early Childhood Special Education	
SPED 591	Field Study and Thesis Seminar	
Elective Hours:		6
400/500-Level Hours Required: 6 hours (Independent Study included)		
Research/Project/Independent Study Hours (min/max applied toward degree):		0-6
Total Hours		32

Other Requirements:

Requirement	Description
Program/Licensure Requirements	10-61 hours depending on emphasis, http://education.illinois.edu/sped/programs (http://education.illinois.edu/sped/programs/)
Minimum GPA	3.0

Learning Outcomes: Special Education, EdM

Learning Outcomes for the degree of Master of Education in Special Education

All students who complete a master's degree in the Department of Special Education will:

1. Students who complete a master's degree resulting in teacher certification (e.g., LBS I or LBS II) or endorsement/credential (ECSE/EI) will demonstrate the acquisition of the knowledge and skills required to be competent novice special education teachers by meeting the indicators addressed in several sets of standards. These indicators are embedded in coursework, field-based activities, and other related professional experiences.
2. Graduate students who complete the LBS II Multiple Disabilities or ECSE course sequence will demonstrate expertise and leadership in their respective areas of specialization by engaging in: a) collaborative leadership activities, b) mentoring other educators, c) practicing effective communication skills, d) acting as change agents, and e) advocating for learners with disabilities.
3. Graduate students will expand and deepen their attitudes, knowledge and skills about evidence-based practices that result in improved learning and successful outcomes for students with disabilities.
4. Graduate students will acquire the knowledge and skills to understand multiple research methodologies and how research is used to inform instructional practices with persons with disabilities by engaging in a capstone research project.
5. Graduate students will become reflective practitioners who problem solve and change their practice to improve services provided to individuals with disabilities and their families.

Special Education, MS

for the degree of Master of Science in Special Education

department head: Michaelene Ostrosky
director of graduate studies: Stacy Dymond
graduate admissions information: Linda Stimson
overview of admissions & requirements: College of Education (https://education.illinois.edu/programs/grad/how-to-apply/?url=/programs/grad)
overview of graduate college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: http://education.illinois.edu/sped (http://education.illinois.edu/sped/)
program website: College of Education Programs (https://education.illinois.edu/faceted-search/programs/)
department faculty: Special Education Faculty (https://education.illinois.edu/faculty-finder/sped/)
college website: http://education.illinois.edu/
department office: 142 Education Building, 1310 South Sixth Street, Champaign, IL 61820
phone: (217) 244-3542
email: gradservices@education.illinois.edu

The Department of Special Education offers several master's program areas of emphasis and licensure: Infancy and Early Childhood Special Education, Learning and Behavior Specialist I (LBS-I), and Learning and Behavior Specialist II (LBS-II). LBS-I is the master's program that prepares teachers for their initial teaching licensure. The other master's programs are available for practicing teachers and other professionals interested in graduate studies. Several of these programs can be completed on a full or part-time basis. In most cases, full-time students take two years to complete their program of studies.

Graduate Degree Programs in Special Education

Special Education, EdM (p. 1018) **(on campus & off-campus)**
optional concentrations: Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)
Special Education, MS (p. 1020)
optional concentrations: Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)
Special Education, PhD (p. 1022)

Admission

Applicants must submit a complete application for admission. The applicant must submit three letters of reference and transcripts of all previous undergraduate and graduate work. A 3.0 grade point average (A = 4.0) for the last two years of the undergraduate program and for any previous graduate work is a minimum requirement for admission. The applicant must also submit a goal statement indicating his/her interests, experiences, and goals for pursuing graduate study in special education. In addition to the above items, international students must submit a Test of English as a Foreign Language (TOEFL) score (taken within two years of the start of the semester for which the student is requesting admission). International students must have a total iBT score greater than 102 (72nd-79th percentile). The minimum speaking score is 24 (79th percentile).

Off-Campus Program

The Department of Special Education offers master's degree programs off-campus in coordination with Federal Personnel Preparation Grant awards. The focus of the off-campus program changes depending on the type of grant award. For example, past emphases have been on behavior intervention and multiple disabilities. For information on currently available off-campus programs, please visit the Department's website at https://education.illinois.edu/sped.

Licensure

The Council on Teacher Education (http://cote.illinois.edu/) functions as the all-University governance system for licensure. Graduate students who wish to qualify for the council's recommendation for a teaching or administrative license must complete the appropriate graduate program. The Department of Special Education offers graduate-level licensure programs in Learning and Behavior Specialist I (LBS-I), and Learning and Behavior Specialist II (LBS-II). Early Childhood Special Education master's students who already hold a Professional Educator License who went through an Early Childhood approved program qualify for the Illinois ECSE approval.

Faculty Research Interests

The Department of Special Education faculty have a variety of research interests. There are multiple opportunities for graduate students to engage in research activities with faculty. For information about specific faculty research interests, current grants, and publications, please visit the Faculty Finder (https://education.illinois.edu/faculty-finder/sped/).

Facilities and Resources

The College of Education also has many resources to assist graduate students through their academic career. The Bureau of Educational Research works with students to secure research funding. The Council on Teacher Education (http://cote.illinois.edu/) entitles candidates seeking a Professional Educator License and provides accreditation of professional education programs. Each student completing a degree program is assigned a graduate adviser, who is available to assist the student with

planning the program of study and determining degree requirements, courses and timelines for degree completion.

Information on University resources can be found at http://www.grad.illinois.edu/current-students (http://www.grad.illinois.edu/current-students/).

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Students engaged in graduate study and research at the University of Illinois at Urbana-Champaign find an environment where collaboration among faculty members and students is nurtured and rewarded and where the students' contributions are recognized and valued. In many cases, this recognition comes in the form of financial awards that enable students to devote concentrated attention to their studies. Virtually all doctoral candidates receive assistantships/ traineeships. Traineeships are grant funded and are available for full-time students pursuing initial teacher licensure and leadership preparation in specific areas. Other financial aid opportunities (e.g., fellowships and assistantships) are available on a competitive basis. Students receiving traineeships, assistantships, and fellowships are exempt from payment of tuition and some fees.

Financial aid in the form of assistantships, scholarships, fellowships, and tuition waivers can be found throughout the college (https://education.illinois.edu/current-students/graduate/financial-aid/) and campus. Campus opportunities can be found at the Graduate College (http://www.grad.illinois.edu/funding-jobs/) and the Office of Student Financial Aid (http://www.osfa.illinois.edu/). **Please note: Graduate students employed as Staff by the University of Illinois at Urbana-Champaign are not eligible for a College of Education Award or Scholarship.**

for the degree of Master of Science in Special Education

The Department of Special Education offers many programs leading to the degree of Master of Science (M.S.). A list of programs and additional requirements can be found on the program's website, (https://education.illinois.edu/faceted-search/programs/?degree=edm&department=sped) the College of Education Graduate Programs Handbook (https://education.illinois.edu/current-students/graduate/coe-graduate-handbook/), and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Students may select a concentration in Bilingual-Bicultural Education (http://catalog.illinois.edu/graduate/education/concentration/bilingual-bicultural-education/) or Digital Learning (http://catalog.illinois.edu/graduate/education/concentration/digital-learning/).

Code	Title	Hours
Psychological Foundations Courses in Educational Psychology		
Select one of the following:		4
EPSY 400	Psychology of Learning in Education	
EPSY 401	Child Language and Education	
EPSY 402	Sociocultural Influence on Learning	
EPSY 404	Adjustment in School Settings	
EPSY 405	Personality and Soc Dev	
EPSY 406	Psychology of Classroom Management	
EPSY 407	Adult Learning and Development	
EPSY 408	Learning and Human Development with Educational Technology	
EPSY 430	Early Adolescent Development	
EPSY 485	Assessing Student Performance	
EPSY 490	Developments in Educational Psychology	
EPSY 553	Global Issues in Learning	
Philosophical and Social Foundations Courses in Education Policy, Organization and Leadership		
Select one of the following:		4
EPOL 401	History of American Education	
EPOL 402	Asian American Education	
EPOL 403	Historical and Social Barriers	
EPOL 405	School and Society	
EPOL 406	Professional Ethics in Education	
EPOL 407	Critical Thinking in Education	
EPOL 408	Aesthetic Education	
EPOL 409	Sociology of Education	
EPOL 410	Racial and Ethnic Families	
EPOL 412	Politics of Education	
EPOL 413	Economics of Education	
EPOL 480	Technology and Educational Reform	
EPOL 539		
Select a minimum of 18 hours from the following:		18
SPED 517	Disability Issues in Special Education	
SPED 524	Supervised Practice in Special Education	
SPED 526	Collaborative Leaders in Special Education	
SPED 566	Leadership in Early Childhood Special Education	
SPED 591	Field Study and Thesis Seminar	
Elective Hours:		4
400/500-Level Hours Required: 4 hours (Independent Study included)		
Research/Project/Independent Study Hours (min/max applied toward degree):		0-8
SPED 599	Thesis Research (min/max applied toward degree)	2-8
Total Hours		32

Other Requirements

Requirement	Description
Human Subjects Approval	
Program/Licensure Requirements	10-61 hours depending on emphasis, http://education.illinois.edu/sped/programs (http://education.illinois.edu/sped/programs/)
Minimum GPA	3.0

Learning Outcomes: Special Education, MS

Learning Outcomes for the degree of Master of Science in Special Education

All students who complete a master's degree in the Department of Special Education will:

1. Students who complete a master's degree resulting in teacher certification (e.g., LBS I or LBS II) or endorsement/credential (ECSE/EI) will demonstrate the acquisition of the knowledge and skills required to be competent novice special education teachers by meeting the indicators addressed in several sets of standards. These indicators are embedded in coursework, field-based activities, and other related professional experiences.
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5. Graduate students will become reflective practitioners who problem solve and change their practice to improve services provided to individuals with disabilities and their families.

Special Education, PhD

for the degree of Doctor of Philosophy in Special Education

department head: Michaelene Ostrosky
director of graduate studies: Stacy Dymond
graduate admissions information: Linda Stimson
overview of admissions & requirements: College of Education (https://education.illinois.edu/programs/grad/how-to-apply/?url=/programs/grad)
overview of graduate college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: http://education.illinois.edu/sped (http://education.illinois.edu/sped/)
program website: College of Education Programs (https://education.illinois.edu/faceted-search/programs/)
department faculty: Special Education Faculty (https://education.illinois.edu/faculty-finder/sped/)
college website: http://education.illinois.edu/
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phone: (217) 244-3542
email: gradservices@education.illinois.edu

The Doctor of Philosophy (Ph.D.) degree is a research focused degree and is tailored to the individual. Each candidate works closely with an adviser to develop an integrated course of study reflecting his or her goals in the area of special education. All doctoral students have the opportunity to be involved in research, university teaching, and service to the field of special education during their doctoral studies. Doctoral students typically complete the program in four to five years of full-time resident study. Please see the Department of Special Education website https://education.illinois.edu/sped/programs-degrees/phd-sped (https://education.illinois.edu/sped/programs-degrees/phd-sped/) for more information about requirements and to view the Department of Special Education Doctoral Advisement Manual (https://education.illinois.edu/sped/programs-degrees/phd-sped/current-students/doctoral-student-manual/).

Graduate Degree Programs in Special Education

Special Education, EdM (p. 1018) **(on campus & off-campus)**
optional concentrations: Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)
Special Education, MS (p. 1020)
optional concentrations: Bilingual-Bicultural Education (p. 1076)|Digital Learning (p. 1093)
Special Education, PhD (p. 1022)

Admission

Applicants must submit a complete application for admission. The applicant must submit three letters of reference and transcripts of all previous undergraduate and graduate work. A 3.0 grade point average (A = 4.0) for the last two years of the undergraduate program and for any previous graduate work is a minimum requirement for admission. The applicant must also submit a goal statement indicating his/her interests, experiences, and goals for pursuing graduate study in special education. In addition to the above items, international students must submit a Test of English as a Foreign Language (TOEFL) score (taken within two years of the start of the semester for which the student is requesting admission). International students must have a total iBT score greater than 102 (72nd-79th percentile). The minimum speaking score is 24 (79th percentile). Doctoral program applicants are required to submit a writing sample in addition to their goal statement.

Faculty Research Interests

The Department of Special Education faculty have a variety of research interests. There are multiple opportunities for graduate students to engage in research activities with faculty. For information about specific faculty research interests, current grants, and publications, please visit the Faculty Finder (https://education.illinois.edu/faculty-finder/sped/).

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teacher licensure and leadership preparation in specific areas. Other financial aid opportunities (e.g., fellowships and assistantships) are available on a competitive basis. Students receiving traineeships, assistantships, and fellowships are exempt from payment of tuition and some fees.

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for the degree of Doctor of Philosophy in Curriculum and Instruction

A list of additional requirements can be found on the program's website, (https://education.illinois.edu/faceted-search/programs/?degree=edd&department=sped) the College of Education Graduate Programs Handbook (https://education.illinois.edu/current-students/graduate/coe-graduate-handbook/), and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Special Education, PhD

Code	Title	Hours
Completion of at least 64 hours beyond the master's degree including:		
Major Subject Coursework (minimum)		32
SPED 599	Thesis Research (min/max applied toward degree)	4-20
Independent Study (min/max applied toward degree)		0-12
Research coursework [1]		16-20
Total Hours		64

Other Requirements

Requirement	Description
Minimum GPA	3.0
Masters Degree Required for Admission to PhD	
Residency: Maintain continuous full time (12 hours) enrollment until the student takes the preliminary examination and during the graduating semester. Zero hours are required for all other semesters.	
Early Research Requirement	
Qualifying Exams	
Human Subjects Approval	
Preliminary Exam	
Final Exam/Dissertation Defense	
Dissertation Deposit	

[1] *All students will take a minimum of 16-20 credit hours, depending on area of methodology focus, in approved* research methods courses *(*http://education.illinois.edu/current-students/graduate/coe-graduate-handbook/phd/research-requirement/*).*

Learning Outcomes: Special Education, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Special Education

1. Graduates of the Department of Special Education doctoral program will be knowledgeable about the major topics and pressing issues in the special education scholarly literature (e.g., assessment, special education law and policies, universal design for curriculum, etc.) with a focus on their particular research area of interest.
2. Graduates of the Department of Special Education doctoral program will conduct and critically assess research both independently and in collaboration with others in the field of special education.
3. Graduates of the Department of Special Education doctoral program will access resources (e.g., write grants, participate in professional organizations, design policy initiatives, etc.) to enable them to engage in research, teaching, and service that positively impacts the quality of life for individuals with disabilities.
4. Graduates of the Department of Special Education doctoral program will demonstrate the knowledge and skills required to teach, supervise and mentor future special education practitioners.
5. Graduates of the Department of Special Education doctoral program will demonstrate a, ability to share their expertise through scholarly writing, conference presentations, and service activities.

Speech & Hearing Science, MA

for the degree of Master of Arts in Speech & Hearing Science

department head: Pamela Hadley, Ph.D.
director of graduate studies: Raksha Mudar, Ph.D.
overview of admissions & requirements: https://ahs.illinois.edu/master-of-arts-in-speech-&-hearing-science-clinical (https://ahs.illinois.edu/master-of-arts-in-speech-%26-hearing-science-clinical/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://ahs.illinois.edu/speech-&-hearing-science (https://ahs.illinois.edu/speech-%26-hearing-science/)
program website: https://ahs.illinois.edu/master-of-arts-in-speech-&-hearing-science-clinical (https://ahs.illinois.edu/master-of-arts-in-speech-%26-hearing-science-clinical/)
department faculty: https://ahs.illinois.edu/shs-directory (https://ahs.illinois.edu/shs-directory/)
college website: http://www.ahs.illinois.edu/
graduate support: Andrea Paceley (apaceley@illinois.edu)
department office: 901 South Sixth Street, Room 103, Champaign, IL 61820
phone: (217) 333-2230
email: shs@illinois.edu

Graduate Degree Programs in Speech & Hearing Science

Audiology, AuD (p. 611)
Speech & Hearing Science, MA (p. 1023)
Speech & Hearing Science, PhD (p. 1025)
optional concentration (PhD only):
Second Language Acquisition and Teacher Education (p. 1106)

The Department of Speech and Hearing Science offers graduate programs of study in speech-language pathology, audiology, and speech, language, and hearing science, including programs leading to the Master of Arts, Doctor of Audiology, and Doctor of Philosophy degrees, with specialization in various aspects of audiology and speech-language pathology. The department prepares scientists and professionals who specialize in the study of perception and production of spoken, written, signed, and alternative communication and communication disorders, as well as dysphagia. Graduate degrees are offered at the master's and doctoral levels.

Admission

Although a B.A./B.S. in the field is not required for admission to the clinical M.A. or Au.D. programs, recommended background includes undergraduate credit in the following areas or their equivalents: phonetics, anatomy and physiology of the speech and hearing mechanism, hearing science, speech science, speech pathology, audiology, and aural rehabilitation. The M.A. and Au.D. programs begin in the fall only.

For more information about admissions, see: https://ahs.illinois.edu/master-of-arts-in-speech-&-hearing-science-clinical (https://ahs.illinois.edu/master-of-arts-in-speech-%26-hearing-science-clinical/)

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program.

for the degree of Master of Arts in Speech & Hearing Science

In the Master of Arts degree program, students learn about speech-language pathology in medical and educational settings, as well as speech, language and hearing science. This degree may be taken as either a terminal degree or as preparation for further graduate study, including a doctoral degree. For students seeking a terminal degree, the Master of Arts program may be designed with or without clinical practicum experience.

The clinical program ensures clinical competence in speech-language pathology necessary for employment in a healthcare and educational settings, private practice, or industry. Successful completion of this program ensures that the student has met the academic and clinical requirements for the American Speech-Language-Hearing Association (ASHA) certification and can choose to pursue the Illinois state certification required for speech-language pathology in the public schools. The program is accredited by the Council on Academic Accreditation in Speech-Language Pathology and Audiology. The clinical MA program requires a minimum of 60 graduate hours. All students in the clinical program are required to take the following courses:

Clinical Program, Thesis or Non-thesis

Code	Title	Hours
SHS 410	Stuttering: Theory & Practice	4
SHS 430	Devel & Disorders Phonol Artic	4
SHS 431	Lang Disorders Preschool Child	4
SHS 470	Neural Bases Spch Lang	4
SHS 511	Assessment and Management of Voice Disorders	4
SHS 513	Assessment and Management of Dysphagia	4
SHS 514	Motor Speech Disorders	4
SHS 533	Advanced Language Diagnostics	2
SHS 534	Aphasia and Related Disorders	4
SHS 570	Quant Reasoning Spch Hear Sci	4
SHS 571	Clinical Sociolinguistics	4
SHS 579	Prof/Eth/Legal Issues AuD/SLP	3
SHS 592	Prosem Spch & Hear Sci	0
Elective hours (not including SHS 599) [1]		0-12
Required Clinical Practica		8-12
SHS 599	Thesis Research (A thesis is optional, but if completed 0-8 hrs. may be applied)	0-8
Total Hours		**60**

Other Requirements

Code	Title	Hours
Other requirements may overlap		
Minimum 500-level Hours Required Overall:		12 min
Minimum GPA:		3.0

[1] To be eligible for the Illinois state professional educator license, students must complete SHS 532, Language Disorders in School-Age Children, and SHS 575, School Speech-Language Clinical Methods. Other electives are identified by the student under the guidance and approval of their academic advisor.

Other Requirements [1]

Other requirements may overlap	
Minimum 500-level Hours Required Overall:	12 min
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the department's* graduate programs *(*http://www.shs.illinois.edu/Graduates/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Non-Clinical Program, Thesis or Non-thesis

The non-clinical MA program may prepare the student for employment in industry or for a doctoral program. This program requires 40 graduate hours. SHS 592 is required and the student must build a logical and coherent series of approved courses.

For a student seeking a non-terminal degree, the Master of Arts program enables the student to undertake fundamental coursework that will be an integral part of an overall doctoral program.

The student's program for the Master of Arts degree will be determined on an individual basis, taking into consideration the Graduate College and departmental requirements. A master's thesis should be part of a pre-doctoral student's plan of study.

Code	Title	Hours
SHS 592	Prosem Spch & Hear Sci	0-1
Elective hours		40
SHS 599	Thesis Research (A thesis is optional, but if completed 0-8 hrs. may be applied)	0-8
Total Hours		40

Other Requirements [1]

Other requirements may overlap	
Minimum Hours Required Within the Unit:	20
Minimum 500-level Hours Required Overall:	20
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the department's* graduate programs *(*http://www.shs.illinois.edu/Graduates/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Speech & Hearing Science, MA

Learning Outcomes for the degree of Master of Arts in Speech & Hearing Science

1. The student will demonstrate knowledge of **basic human communication and swallowing processes**, including the appropriate biological, neurological, acoustic, psychological, developmental, and linguistic and cultural bases. The applicant must have demonstrated the ability to integrate information pertaining to normal and abnormal human development **across the life span** (ASHA Standard IV-B).
2. The student will demonstrate knowledge of communication and swallowing disorders and differences, including the appropriate **etiologies, characteristics,** anatomical/physiological, acoustic, psychological, developmental, and linguistic and cultural correlates in the following 9 areas: articulation; fluency; voice/resonance; receptive/expressive language in speaking, listening, reading, writing; hearing; swallowing; cognitive aspects of communication; social aspects of communication; and augmentative and alternative communication modalities (Standard IV-C).
3. For each of the areas specified in #2, the student will demonstrate current knowledge of the principles and methods of prevention, **assessment, and intervention** for people with communication and swallowing disorders, including consideration of anatomical/physiological, psychological, developmental, and linguistic and cultural correlates (Standard IV-D).
4. The student will demonstrate knowledge of **standards of ethical conduct** and skills in adhering to the professional code of ethics and behaving professionally (Standard IV-E).
5. The student will demonstrate knowledge of processes used in **research** and skills in integrating research principles into **evidence-based clinical practice** (Standard IV-F).
6. The student will demonstrate knowledge and skills in applying contemporary **professional issues** in clinical practice (Standard IV-G).
7. The student will demonstrate knowledge of entry-level and advanced certifications, licensure, and other relevant professional credentials, as well as knowledge and skills in applying local, state, and national **regulations** and policies in clinical practice(Standard IV-H).
8. The student will demonstrate skills in **oral and written communication** for academic and professional purposes, including the ability to communicate effectively and complete administrative and reporting functions necessary to support evaluation and intervention (Standard V-A and V-B).
9. The student will demonstrate evaluation and intervention skills with breadth and depth, across the scope of practice, including the lifespan and culturally and linguistically diverse populations; and demonstrate **professional, interactional, and personal skills** of collaborating with other professionals and providing counseling regarding communication and swallowing (Standard V-B-1, V-B-2, V-B-3, and V-F.

Speech & Hearing Science, PhD

for the degree of Doctor of Philosophy in Speech & Hearing Science

department head: Pamela Hadley, Ph.D.
director of graduate studies: Raksha Mudar, Ph.D.
overview of admissions & requirements: https://ahs.illinois.edu/speech-&-hearing-science/phd (https://ahs.illinois.edu/speech-%26-hearing-science/phd/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://ahs.illinois.edu/speech-&-hearing-science (https://ahs.illinois.edu/speech-%26-hearing-science/)
program website: https://ahs.illinois.edu/speech-&-hearing-science/phd (https://ahs.illinois.edu/speech-%26-hearing-science/phd/)
department faculty: https://ahs.illinois.edu/shs-directory (https://ahs.illinois.edu/shs-directory/)
college website: http://www.ahs.illinois.edu/
graduate support: Andrea Paceley (apaceley@illinois.edu)
department office: 901 South Sixth Street, Room 103, Champaign, IL 61820
phone: (217) 333-2230
email: shs@illinois.edu

Graduate Degree Programs in Speech & Hearing Science

Audiology, AuD (p. 611)
Speech & Hearing Science, MA (p. 1023)
Speech & Hearing Science, PhD (p. 1025)
optional concentration (PhD only):
Second Language Acquisition and Teacher Education (p. 1106)

The department offers programs leading to the Master of Arts, Doctor of Audiology, and Doctor of Philosophy degrees, with specialization in various aspects of audiology and speech-language pathology.

The Department of Speech and Hearing Science offers graduate programs of study in speech-language pathology, audiology, and speech, language, and hearing science. The department prepares scientists and professionals who specialize in the study of perception and production of spoken, written, signed, and alternative communication and

communication disorders, as well as dysphagia. Graduate degrees are offered at the master's and doctoral levels.

Admission

Admission to the doctoral program requires completion of a bachelor's degree. The doctoral program is divided into three stages: Stage I, which includes the master's degree or its equivalent; Stage II, which is advanced course work and completion of all departmental requirements, with the exception of the dissertation defense and deposit; and Stage III, which is the conduct of the dissertation, its defense and deposit.

For more information about admissions, see: https://ahs.illinois.edu/speech-&-hearing-science/phd (https://ahs.illinois.edu/speech-%26-hearing-science/phd/)

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program.

for the degree of Doctor of Philosophy in Speech & Hearing Science

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The program may be planned with specialization in many areas of audiology, speech-language pathology, and speech, language or hearing science. Individual programs of study will be tailored to the student's area of scholarly and research interests and are planned by the student and the advisor. The minimum academic course requirements for this degree are 40 graduate hours of course work beyond those required for a master's degree or equivalent, a qualifying exam, and a dissertation.

The first two to four years of the doctoral program are typically devoted to course work, including the completion of an Early Research Project (ERP), in the area of concentration selected by the student. For students entering with a M.A./M.S., the ERP occurs early in Stage II and must be completed before the Qualifying Exam. For students entering the PhD program directly from a B.A./B.S. degree, the ERP may be undertaken and completed in Stage I or Stage II. In the middle of Stage II, students will take a Qualifying Exam. Successful completion of the Qualifying Exam provides evidence of the student's satisfactory progress toward scholarly independence and indicates the student is then qualified to begin the planning stages of a dissertation proposal. A preliminary exam on the dissertation proposal occurs at the end of Stage II and marks the transition to Stage III. The doctoral program culminations with a Final Exam/Dissertation Defense, and oral examination over a written document.

For additional details and requirements refer to the department's graduate programs (http://www.shs.illinois.edu/Graduates/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Entering with approved M.A./M.S. or Au.D. degree

Code	Title	Hours
3 courses in statistics-related areas		12
SHS 590	History of CSD	4
SHS 592	Prosem Spch & Hear Sci	2-4
SHS 594	PhD Early Research Project	6-8
One or two advanced 500-level seminars in SHS		4
Restricted elective hours, not including SHS 594, SHS 594, SHS 599 [1]		8-12
SHS 599	Thesis Research (min/max applied toward degree)	24
Total Hours		64

Other Requirements [2]

Requirement	Description
Other requirements may overlap	
Qualifying Exam Required	Yes
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

1 *Restricted elective courses, requiring approval by the mentor with input from the advising committee, are identified to support students' individualized areas of study within the broad field of communication sciences and disorders. If minimum credits are completed in* SHS 592/SHS 594*, then the maximum of restricted electives are required. If maximum credits are taken in* SHS 592/SHS 594*, then the minimum of restricted electives are required.*

2 *For additional details and requirements refer to the department's* graduate programs *(*http://www.shs.illinois.edu/Graduates/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Entering with approved B.A./B.S. degree

Code	Title	Hours
3 courses in statistics-related areas		12
SHS 590	History of CSD	4
SHS 592	Prosem Spch & Hear Sci	2-4
SHS 594	PhD Early Research Project	8
One or two advanced 500-level seminars in SHS		4
Restricted elective hours, not including SHS 592, SHS 594, SHS 599 [1]		40-42
SHS 599	Thesis Research (min/max applied toward degree)	24
Total Hours		96

Other Requirements [2]

Requirement	Description
Other requirements may overlap	
Qualifying Exam Required	Yes
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

[1] *Restricted elective courses, requiring approval by the mentor with input from the advising committee, are identified to support students' individualized areas of study within the broad field of communication sciences and disorders. If minimum credits are completed in* SHS 592/SHS 594*, then the maximum of restricted electives are required. If maximum credits are taken in* SHS 592/SHS 594*, then the minimum of restricted electives are required.*

[2] *For additional details and requirements refer to the department's* graduate programs *(*http://www.shs.illinois.edu/Graduates/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Speech & Hearing Science, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Speech & Hearing Science

1. Identify and hone a research area in communication sciences and/or disorders, mastering its scientific and theoretical knowledge base by reading and critically evaluating the literature and seeking learning opportunities with a network of interdisciplinary experts (both on and off-campus).
2. Develop expertise and independence in conducting scientific research(including statement of the problem/hypotheses, design of the experimental method, collection of data, analysis of data, interpretation of results, and ethical conduct of research), in order to solve problems related to communication science and disorders; and in seeking funding for research.
3. Develop expertise and independence in disseminating findings(oral & written) to the broader community.
4. Develop long-term research goals, layout a plan to accomplish these goals, and determine an immediate career path (post-doctoral fellow positions, faculty position, etc.).

Statistics, MS

for the degree of Master of Science in Statistics

Department Chair: Bo Li (https://stat.illinois.edu/directory/profile/libo/)
Associate Department Chair: Jeff Douglas (https://stat.illinois.edu/directory/profile/jeffdoug/)
MS Program Director: Darren Glosemeyer (https://stat.illinois.edu/directory/profile/glosemey/)
MS advisors: Tori Ellison, Hyoeun Lee (https://stat.illinois.edu/academics/advising/)
Graduate Contact: Joseph Zarnsy (stat-grad@illinois.edu)
Department Website: http://www.stat.illinois.edu/
College Website: https://las.illinois.edu/
Graduate College Admissions Info & Requirements (https://grad.illinois.edu/admissions/apply/)
Department Admissions Info & Requirements (https://stat.illinois.edu/admissions/prospective-graduate-students/)
Department Contact: Aaron Thompson
Department Office: Computing Applications Building, 605 E Springfield Ave, Champaign, IL 61820
Phone: (217) 333-2167
Email: stat-grad@illinois.edu

Specific program info here

Graduate Degree Programs in Statistics

Statistics, MS (p. 1027)
concentrations:
Analytics (p. 1028)|Applied (p. 1029)
Statistics, PhD (p. 1029)
concentration:
Computational Science & Engineering (p. 1089)
Graduate Minor in Statistics (p. 1144)

for the degree of Master of Science in Statistics

For additional details and requirements refer to the department's Graduate Programs (http://www.stat.illinois.edu/students/graduates.shtml/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
STAT 510	Mathematical Statistics	4
Select one of the following:		
STAT 425	Statistical Modeling I	4
or STAT 527	Advanced Regression Analysis	
Select one of the following:		4
STAT 424	Analysis of Variance	
STAT 426	Statistical Modeling II	
STAT 429	Time Series Analysis	
STAT 431	Applied Bayesian Analysis	
STAT 433	Stochastic Processes	
Five elective courses from Departmental List (See Course List Tab)		20
STAT 427	Statistical Consulting (or experience in applied statistics)	0-4
or STAT 593	STAT Internship	
or STAT 443	Professional Statistics	

STAT 410/ MATH 464	Statistics and Probability II (or equivalent proficiency [may be waived with approval])	4
Total hours		**32-36**

Other Requirements

Requirement	Description
Other Requirements may overlap	
A concentration is not required.	
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	2.75

for the degree of Master of Science in Statistics

Code	Title	Hours
Statistics Departmental Course List		
STAT 424	Analysis of Variance	
STAT 426	Statistical Modeling II	
STAT 427	Statistical Consulting	
STAT 428	Statistical Computing	
STAT 429	Time Series Analysis	
STAT 430	Topics in Applied Statistics	
STAT 431	Applied Bayesian Analysis	
STAT 432	Basics of Statistical Learning	
STAT 433	Stochastic Processes	
STAT 434	Survival Analysis	
STAT 440	Statistical Data Management	
STAT 443	Professional Statistics	
STAT 448	Advanced Data Analysis	
STAT 458	Math Modeling in Life Sciences	
STAT 480	Data Science Foundations	
STAT 511	Advanced Mathematical Statistics	
STAT 525	Computational Statistics	
STAT 530	Bioinformatics	
STAT 534	Advanced Survival Analysis	
STAT 538	Clinical Trials Methodology	
STAT 542	Statistical Learning	
STAT 545	Spatial Statistics	
STAT 546	Machine Learning in Data Science	
STAT 551	Theory of Probability I	
STAT 552	Theory of Probability II	
STAT 553	Probability and Measure I	
STAT 554	Probability and Measure II	
STAT 555	Applied Stochastic Processes	
STAT 571	Multivariate Analysis	
STAT 575	Large Sample Theory	
STAT 578	Topics in Statistics	
STAT 587	Hierarchical Linear Models	
STAT 588	Covar Struct and Factor Models	
STAT 590	Individual Study and Research	
STAT 593	STAT Internship	

Statistics: Analytics Concentration, MS

for the degree of Master of Science in Statistics, Analytics Concentration

Department Chair: Bo Li (https://stat.illinois.edu/directory/profile/libo/)
Associate Department Chair: Jeff Douglas (https://stat.illinois.edu/directory/profile/jeffdoug/)
MS Program Director: Darren Glosemeyer (https://stat.illinois.edu/directory/profile/glosemey/)
MS advisors: Tori Ellison, Hyoeun Lee (https://stat.illinois.edu/academics/advising/)
Graduate Contact: Joseph Zarnsy (stat-grad@illinois.edu)
Department Website: http://www.stat.illinois.edu/
College Website: https://las.illinois.edu/
Graduate College Admissions Info & Requirements (https://grad.illinois.edu/admissions/apply/)
Department Admissions Info & Requirements (https://stat.illinois.edu/admissions/prospective-graduate-students/)
Department Contact: Aaron Thompson
Department Office: Computing Applications Building, 605 E Springfield Ave, Champaign, IL 61820
Phone: (217) 333-2167
Email: stat-grad@illinois.edu

Specific program info here

Graduate Degree Programs in Statistics

Statistics, MS (p. 1027)
concentrations:
Analytics (p. 1028)|Applied (p. 1029)
Statistics, PhD (p. 1029)
concentration:
Computational Science & Engineering (p. 1089)
Graduate Minor in Statistics (p. 1144)
for the degree of Master of Science in Statistics, Analytics Concentration

For additional details and requirements refer to the department's Graduate Programs (http://www.stat.illinois.edu/students/graduates.shtml/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
STAT 440	Statistical Data Management	4
STAT 448	Advanced Data Analysis	4
STAT 510	Mathematical Statistics	4
STAT 542	Statistical Learning	4
Select one of the following:		4
STAT 425	Statistical Modeling I	
or STAT 527	Advanced Regression Analysis	
Select one of the following:		4
STAT 424	Analysis of Variance	
STAT 426	Statistical Modeling II	
STAT 429	Time Series Analysis	
STAT 431	Applied Bayesian Analysis	

STAT 433	Stochastic Processes	
Select one of the following:		4
STAT 428	Statistical Computing	
STAT 432	Basics of Statistical Learning	
STAT 480	Data Science Foundations	
CS 412	Introduction to Data Mining	
Select one of the following:		4
STAT 427	Statistical Consulting	
STAT 593	STAT Internship	
STAT 443	Professional Statistics	
STAT 410/ MATH 464	Statistics and Probability II (or equivalent proficiency [may be waived with approval])	
Select one of the following:		4
STAT 525	Computational Statistics	
STAT 546	Machine Learning in Data Science	
STAT 571	Multivariate Analysis	
CS 512	Data Mining Principles	
Total hours		**36-40**

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	2.75

Statistics: Applied, MS

for the degree of Master of Science in Statistics, Applied Statistics Concentration

Department Chair: Bo Li (https://stat.illinois.edu/directory/profile/libo/)
Associate Department Chair: Jeff Douglas (https://stat.illinois.edu/directory/profile/jeffdoug/)
MS Program Director: Darren Glosemeyer (https://stat.illinois.edu/directory/profile/glosemey/)
MS advisors: Tori Ellison, Hyoeun Lee (https://stat.illinois.edu/academics/advising/)
Graduate Contact: Joseph Zarnsy (stat-grad@illinois.edu)
Department Website: http://www.stat.illinois.edu/
College Website: https://las.illinois.edu/
Graduate College Admissions Info & Requirements (https://grad.illinois.edu/admissions/apply/)
Department Admissions Info & Requirements (https://stat.illinois.edu/admissions/prospective-graduate-students/)
Department Contact: Aaron Thompson
Department Office: Computing Applications Building, 605 E Springfield Ave, Champaign, IL 61820
Phone: (217) 333-2167
Email: stat-grad@illinois.edu

The Department of Statistics offers the Master of Science in Statistics with specialization in a variety of areas of application. The degree program consists of a core of statistics courses covering statistical theory, linear models, and statistical consulting, and further coursework in the field of application and in statistics. The program offers an additional degree for students earning an advanced degree in the area of application.

To be eligible for this program, students must be pursuing an advanced degree in a department other than Statistics at the Urbana-Champaign campus. Students interested in economic statistics should apply for the applied concentration. Full statements of degree requirements are available from the head of the unit offering a specialization or from the Graduate Advisor of the Department of Statistics.

Graduate Degree Programs in Statistics

Statistics, MS (p. 1027)
concentrations:
Analytics (p. 1028)|Applied (p. 1029)
Statistics, PhD (p. 1029)
concentration:
Computational Science & Engineering (p. 1089)
Graduate Minor in Statistics (p. 1144)

for the degree of Master of Science in Statistics, Applied Statistics Concentration

Code	Title	Hours
STAT 410/ MATH 464	Statistics and Probability II (or equivalent proficiency - may be waived with approval)	0-4
STAT 425	Statistical Modeling I	4
or STAT 527	Advanced Regression Analysis	
Select two elective STAT courses from a Departmental Course List (https://stat.illinois.edu/academics/graduate-programs/degree-programs/ms-statistics-applied/)		8
Five graduate courses must be completed in your primary field, in an area relevant to the field of Statistics. STAT electives not used to meet other requirements may also be used.		20
Total hours		**32-36**

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	2.75

Statistics, PhD

for the degree of Doctor of Philosophy in Statistics

Department Chair: Bo Li (https://stat.illinois.edu/directory/profile/libo/)
Associate Department Chair: Jeff Douglas (https://stat.illinois.edu/directory/profile/jeffdoug/)
PhD Program Director: Xiaofeng Shao (https://stat.illinois.edu/directory/profile/xshao/)
Graduate Contact: Joseph Zarnsy (stat-grad@illinois.edu)
Department Website: http://www.stat.illinois.edu/
College Website: https://las.illinois.edu/
Graduate College Admissions Info & Requirements (https://grad.illinois.edu/admissions/apply/)
Department Admissions Info & Requirements (https://stat.illinois.edu/admissions/prospective-graduate-students/)
Department Contact: Aaron Thompson
Department Office: Computing Applications Building, 605 E Springfield Ave, Champaign, IL 61820
Phone: (217) 333-2167
Email: stat-grad@illinois.edu

Graduate Degree Programs in Statistics

Statistics, MS (p. 1027)
concentrations:
Analytics (p. 1028)|Applied (p. 1029)
Statistics, PhD (p. 1029)
concentration:
Computational Science & Engineering (p. 1089)
Graduate Minor in Statistics (p. 1144)

for the degree of Doctor of Philosophy in Statistics

Statistics, PhD

Code	Title	Hours
MS Equivalent Core		
STAT 424	Analysis of Variance	4
STAT 425	Statistical Modeling I	4
STAT 426	Statistical Modeling II	4
STAT 510	Mathematical Statistics	4
Theory Core Courses		
STAT 511	Advanced Mathematical Statistics	4
STAT 553	Probability and Measure I	4
STAT 575	Large Sample Theory	4
Select one Practicum Course:		**4**
STAT 427	Statistical Consulting	
STAT 593	STAT Internship	
STAT 595	Preparing Future Faculty	
Select one Computational Theory and Methods Course:		**4**
STAT 428	Statistical Computing	
STAT 525	Computational Statistics	
STAT 530	Bioinformatics	
STAT 542	Statistical Learning	
Select one of the Stochastic Processes and Time Series Courses:		**4**
STAT 429	Time Series Analysis	
STAT 433	Stochastic Processes (Stochastic Processes)	
STAT 554	Probability and Measure II	
STAT 555	Applied Stochastic Processes	
Select at least 3 elective courses from a list within the department. At leats two courses must be at the 500-level.		**12**
Thesis and Individual Study Courses		**0-32**
STAT 590	Individual Study and Research	0 to 8
STAT 599	Thesis Research (0 min applied toward degree)	0
Total Hours		64

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Masters Degree Required for Admission to PhD?	No, but Masters level requirements must be met (32 additional hours min)
Qualifying Exam Required	Yes
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	2.75

[1] *For additional details and requirements refer to the department's* Graduate Programs *(*http://www.stat.illinois.edu/students/graduates.shtml/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Statistics, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Statistics

Statistics Ph.D. students will...

1. Have a solid foundation in Statistical Theory and Methodology;
2. Have a holistic understanding of data collection, management, processing, analysis and interpretation. Being proficient in the use of statistical software and writing statistical code;
3. Have experience in one or more application areas and work as a part of a collaborative team in analyzing real data and solving real-world problems;
4. Be able to conduct research either independently or collaboratively in a subarea of statistics and data science;
5. Be able to teach some elementary statistical courses independently.

Strategic Brand Communication, MS

for the degree of Master of Science in Strategic Brand Communication (online)

head of department of advertising: Mike Yao
academic director: Shachar Meron
program coordinator: Brooke Bear
department website: https://sbc.illinois.edu/
department faculty: https://sbc.illinois.edu/people/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://media.illinois.edu/
advertising department office: 119 Gregory Hall, 810 S. Wright Street, Urbana, IL 61801
phone: (217) 333-1602

Programs in Advertising

Undergraduate Programs:

major: Advertising, BS (http://catalog.illinois.edu/schools/media/academic-units/advertising/#undergraduatetext)
major: Computer Science & Advertising, BS (http://catalog.illinois.edu/undergraduate/media/departments/advertising/csadv/)
minor: Media (p. 513) | Public Relations (p. 519)

Graduate Programs:

degree: Advertising, MS (p. 549)
degree: Strategic Brand Communication, MS (p. 1030)

This Master of Science in Strategic Brand Communication (MS SBC) degree is an online program jointly sponsored by the Charles H. Sandage Department of Advertising in the College of Media. The degree program launched in December 2016 and graduates from this program receive the MS SBC degree awarded by the Graduate College. Strategic Brand Communication (SBC) is a data-driven, purposeful conversation with a brand's stakeholders. SBC combines traditional advertising practices with contemporary business thinking that pertains to delivering consistent, meaningful messages to consumers. In so doing, SBC seeks to integrate multiple consumer contact points that occur through the purchase of commercial messages in paid, earned, and owned media to deliver persuasive and impactful statements about brands and companies.

This management process integrates all aspects of strategic brand marketing communications such as advertising, public relations, digital media, social media, promotion, and revenue development marketing. Such integration impacts a firm's business-to-business, marketing channel, customer-focused, and strategic integrated communications.

The MS SBC degree program is designed for working professionals. The online program is designed to be completed in 16 months. The curriculum will prepare students to: be strategic leaders in an ever-changing global media environment; be analytic and integrative thinkers; be effective brand communicators and managers; respond agilely to new technologies, emerging media, new demographics, and market trends; be team-oriented in their approach to management and communications; and be prepared to continue to learn as the media environment evolves.

Admission

To be admitted into this program, applicants are expected to have a minimum grade point average of at least 3.0 (A = 4.00) for the last two years of undergraduate study and a 3.0 for any previous graduate work completed. All applicants whose native language is not English must submit a minimum Test of English as a Foreign Language (TOEFL) score of at least 102 (iBT), 253 (CBT), or 610 (PBT); or minimum International English Language Testing System (IELTS) academic exam scores of 6.5 overall and 6.0 in all subsections. Prerequisite: course in Statistics or Calculus from an accredited institution. The admissions criteria will be based upon an evaluation of each applicant's academic and professional experience, GPA, English aptitude, and letters of recommendation. A minimum GPA of 2.75 is required for continued enrollment.

for the degree of Master of Science in Strategic Brand Communication (online)

For additional details and requirements refer to the department's program information online and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
Core Courses		
SBC 500	Strategic Brand Communication Essentials	2
SBC 501	Strategic Branding: Global Perspectives	2
SBC 502	Entrepreneurship in Business	3
SBC 503	Consumer Insights I	3
SBC 504	Managing Projects & Teams	3
SBC 505	Consumer Insights II	3
SBC 506	Measurement and Evaluation	3
SBC 507	Promotional Strategy	3
SBC 508	Promotional Strategy	3
SBC 509	Strategic Media Management	3
SBC 511	Strategic Analytics & Data Visual	2
Project		
SBC 512	Professional SBC Capstone Project	2
Total Hours		32

Code	Title	Hours
Other Requirements		
Minimum 500-level Hours Required Overall		32
Minimum GPA		2.75

Sustainable Urban Design, MSUD

for the degree of Master of Sustainable Urban Design
Major in Sustainable Urban Design

Department Head: David L. Hays
department website: https://landarch.illinois.edu/
department faculty: https://landarch.illinois.edu/faculty/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department office: 101 Temple Hoyne Buell Hall, 611 Lorado Taft Drive, Champaign, IL 61820
phone: (217) 333-0176
email: LADept@illinois.edu

Graduate Degree Programs in Landscape Architecture

Landscape Architecture, PhD (p. 833)
Landscape Architecture, MLA (p.)
Sustainable Urban Design, MSUD (p. 1031)
Heritage Studies Graduate Minor (p. 1136)

joint programs:
Landscape Architecture, MLA & Urban Planning, MUP (p. 1157)

The Department of Landscape Architecture offers the Master of Landscape Architecture (MLA) degree, the Master of Sustainable Urban Design degree (MSUD), and the PhD degree. The programs enable students to gain fresh insights and to conduct new research pertaining to land and its use by people. Courses and faculty research activities range from on-site to regional scales, and include environmental planning and design as well as community design, cultural heritage, and history.

THE MSUD is a 11-month program completed in two semesters (fall and spring) plus one summer term, undertaken in that order. Matriculation is for fall semester only. The MSUD program can serve as a postprofessional degree (i.e., a degree that leads to licensure such as BLA, MLA, MARCH) or as an advanced degree to hone skills in sustainable design for those with degrees in other subject areas.

for the degree of Master of Sustainable Urban Design
Major in Sustainable Urban Design

Code	Title	Hours
LA 537	Planning & Design Studio II	5
LA 589	Sustainable Urban Design Theory	4
Choose one elective broadly related to urban design:		3-4
ARCH 423	Soc/Beh Factors for Design	
GEOG 408	Humans and River Systems	
GEOG 438	Geography of Health Care	
GEOG 466	Environmental Policy	
GEOG 479	Advanced Topics in GIS	
GEOG 496	Climate & Social Vulnerability	
LA 570	Landscapes and Human Health	
LA 587	Graduate Seminar	
LA 597	Research Design & Methods	
PSYC 472	Environmental Psychology	
Choose one elective concerning urban systems:		2-4
ARCH 418	History of the Urban Environment	
GEOG 410	Green Development	
GEOG 465	Transportation & Sustainability	
GEOG 484	Cities, Crime, and Space	
LA 480	Sustainable Design Principles	
UP 418	GIS for Planners	
LA 482	Advanced Communication in Urban Design	4
LA 538	Urban Design Research Studio	5
LA 446	Sustainable Planning Seminar	4
UP 475	Real Estate Development Fundamentals	4
LA 592	Urban Design Capstone Studio	6
Total Hours		**36**

Other Requirements

Code	Title	Hours
Minimum GPA:		2.75

Sustainable Urban Management, MS

for the degree of Master of Science in Sustainable Urban Management

department head: Rolf Pendall
director of the MUP program: Bumsoo Lee
MUP admissions director: Andrew Greenlee
director of the PhD program: Faranak Miraftab
overview of admissions & requirements: https://urban.illinois.edu/programs-applying/master-science-sustainable-urban-management/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: Urban + Regional Planning (https://urban.illinois.edu/)
program website: https://urban.illinois.edu/programs-applying/master-science-sustainable-urban-management/
department faculty: https://urban.illinois.edu/people/meet-our-faculty/
college website: College of Fine & Applied Arts (https://faa.illinois.edu/)
department office: 111 Temple Buell Hall, 611 Taft Drive, Champaign, IL 61820
phone: (217) 333-3890
email: urbplan@illinois.edu

The Master of Science in Sustainable Urban Management is a full-time degree program designed to be completed in one year providing analytical and strategic skills for professionals to help them manage change in urban areas. All students take core courses in Urban History and Theory and Urban and Regional Analysis. They also take the two-course sequence designed solely for this degree program, Urban Skills and Applications I and II, in which they integrate their skills into an urban systems framework. Students select their specialization courses from one of three areas of study: Regional Systems and Informatics, Energy and Environment, or Governance and Community.

Graduate Degree Programs in Urban Planning

Sustainable Urban Management, MS (p. 1032)
Urban Planning, MUP (p. 1060)
Regional Planning, PhD (p. 987)
joint programs:
Urban Planning, MUP & (p. 1151) Architecture, MARCH (p. 1151)
Urban Planning, MUP & Law, JD (p. 1168)
Urban Planning, MUP & Landscape Architecture, MLA (p. 1157)
Urban Planning, MUP & Public Health, MPH (p. 1164)
Urban Planning, MUP & any Illinois master's degree in related field (p. 1168)

The Department of Urban and Regional Planning offers graduate programs leading to the degrees of Master of Urban Planning and Doctor of Philosophy in Regional Planning as well as a Master of Science in Sustainable Urban Management. Students can also apply to obtain a joint degree with another graduate degree simultaneously. The most popular joint degrees are with Architecture, Landscape Architecture, Law and Agricultural and Applied Economics. Joint degrees with any related field are possible. In addition, a small number of the department's Bachelor of

Arts in Urban Studies and Planning (B.A.U.S.P.) students participate in the highly selective 4+1 program (http://catalog.illinois.edu/undergraduate/faa/urban-studies-planning-ba-mup/) to complete the B.A.U.S.P. and M.U.P. in five years.

Admission

We welcome applications from people from a wide variety of backgrounds who have demonstrated potential for extraordinary professional achievement. Students seeking a graduate degree in planning come from a diverse range of academic backgrounds. The most frequent are sociology, economics, political science, geography, environmental sciences, architecture, engineering, public administration, urban planning, and public policy, but the natural sciences, humanities, and other fields also provide excellent foundations for graduate study in planning. Prospective students must have a grade point average (GPA) of at least 3.0 computed from the last 60 hours of undergraduate work and any subsequent graduate study, but the average GPA of admitted students is considerably higher. International applicants must meet additional minimum requirements (http://www.grad.illinois.edu/admissions/countries/) based on their country of origin, including the Test of English as a Foreign Language (TOEFL).

We place particular emphasis on each applicant's statement of purpose. Applicants should use the statement to convey information about their backgrounds, professional and personal experience, and intellectual perspectives, in the context of articulating why a Master's in Urban Planning or Ph.D. in Regional Planning from the University of Illinois will help them achieve their professional goals. We seek an applicant pool that represents a mix of racial and ethnic populations, a range of social and economic backgrounds, different philosophies and perspectives, and a variety of life experiences. We are especially interested in applicants with professional experience, though that experience need not be in planning or closely related fields.

Applicants to the Ph.D. program are admitted when they meet the standards of the Department and have a faculty member prepared to serve as their mentor and, if necessary, primary source of financial support. Students interested in pursuing a Ph.D. in Regional Planning should communicate with the Director of the Ph.D. Program and faculty most closely aligned with their interests, in addition to completing the formal application process.

Consult the M.U.P. admissions (https://urban.illinois.edu/prospective-students/admissions/master-of-urban-planning/admissions-criteria/) and Ph.D. admissions (https://urban.illinois.edu/programs-applying/phd-regional-planning/) web pages for more information.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the doctoral experience in this program and is strongly encouraged for those intending to pursue an academic career.

Faculty Research Interests

The mission of the Department of Urban and Regional Planning is to teach and conduct research to improve understanding of human settlements and of planning situations. The department's faculty studies the ecological, economic, social, and institutional aspects of urban and regional development, and the theory and practice of planning processes. Planning is viewed as the achievement of outcomes based on interrelated actions over time and space, and close communication and collaboration with a wide range of disciplines and professions is inherent in the department's approach. The basis of that collaboration is a faculty whose academic training and degrees are in architecture, economics, geography, history, law, political science, regional science, and zoology, in addition to planning. Planning faculty and doctoral students pursue interdisciplinary research and make scholarly contributions to planning and fields closely allied with planning.

Facilities and Resources

The Department of Urban and Regional Planning shares Temple Hoyne Buell Hall (TBH) with the Department of Landscape Architecture and the School of Architecture. The majority of urban planning classes are held in TBH. The department has a 24-hour instructional computing laboratory. Research project and doctoral student workspace is provided in Noble Hall.

The City Planning and Landscape Architecture Reference and Resource Center is located in Funk Library (http://www.library.uiuc.edu/agx/). The planning collection is one of the finest in the world, with books and reports gathered since the collection started over eighty years ago.

Financial Aid

Students compete for departmental and Graduate College fellowships and departmental teaching and research assistantships. Selection is based on the academic achievement and qualifications of the student.

for the degree of Master of Science in Sustainable Urban Management

Code	Title	Hours
UP 504	Urban History and Theory	4
UP 512	Urban Skills & Applications I: Colloquium	4
UP 505	Urban and Regional Analysis	4
UP 513	Urban Skills & Applications II: Chicago Practicum	4
Primary Area of Study: Students will pick one (Regional Systems and Informatics, Energy and Environment, Governance and Community		12
Elective Hours		4
Total Hours		32

Learning Outcomes: Sustainable Urban Management, MS

Learning Outcomes for the degree of Master of Science in Sustainable Urban Management

Upon completion of the program students should be able to:

1. Understand the basic structures and functions of urban systems.
2. Able to perform general urban and regional analyses as well as know the major sources of urban and regional data.
3. Be comfortable working in multidisciplinary teams and solving complex urban problems.
4. Have a deeper level of understanding of a primary area of study focused on either Regional Systems and Informatics, Energy and Environment, or Governance and Community.

Systems & Entrepreneurial Engineering, MS

For the degree of Master of Science in Systems & Entrepreneurial Engineering

department head: Jeff Shamma (jshamma@illinois.edu)
associate head of graduate studies: Ramavarapu S Sreenivas (rsree@illinois.edu)
overview of admissions & requirements: https://ise.illinois.edu/graduate/admissions/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://ise.illinois.edu/
program website: https://ise.illinois.edu/graduate/index.html (https://ise.illinois.edu/graduate/)
department faculty: https://ise.illinois.edu/directory/faculty.html
college website: https://grainger.illinois.edu/
contact: Lauren Redman (lredman@illinois.edu)
address: 117 Transportation Building, 104 S Mathews Ave, Urbana, IL 61801
phone: (217) 333-2731
email: ise-grad@illinois.edu

The Department of Industrial & Enterprise Systems Engineering offers both an MS with thesis and an MS non-thesis program. Students in the MS with thesis program are required to have a research advisor and applicants are encouraged to contact department faculty (https://ise.illinois.edu/directory/faculty.html) in their areas of interest to inquire about possible research and funding opportunities.

Opportunity exists for specializing in computational science and engineering via the Computational Science & Engineering (p. 1089) optional graduate concentration.

Admission Requirements

Applicants who have completed degree requirements in an accredited engineering program or its equivalent are eligible to apply for admission. A minimum grade point average of 3.25 (A = 4.00) for the last two years of undergraduate study is required.

Scores on the Graduate Record Examination (GRE) (http://www.ets.org/) general test are recommended of all applicants. Based upon the previous preparation of the student for either program, prerequisite courses may be specified by the advisor, but the credit may not be applied toward a degree.

All applicants whose native language is not English are required to submit TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) scores as evidence of English proficiency. Minimum admission requirements (https://grad.illinois.edu/admissions/instructions/04c/) are set by the Graduate College.

Financial Aid

Qualified students may compete for financial assistance in the form of teaching/graduate/research assistantships, fellowships, grants, and tuition waiver scholarships. Under certain conditions, fellowships may be augmented by part-time assistantships.

All applicants, regardless of US citizenship, whose native language is not English and who wish to be considered for teaching assistantships must demonstrate spoken English language proficiency (http://grad.illinois.edu/admissions/taengprof.htm) by achieving a minimum score of 24 on the speaking subsection of the TOEFL iBT or 8 on the speaking subsection of the IELTS. For students who are unable to take the iBT or IELTS, a minimum score of 4CP is required on the English Proficiency Interview (http://cte.illinois.edu/testing/oral_eng/epi_overview.html) (EPI), offered on campus. All new teaching assistants are required to participate in the Graduate Academy for College Teaching (https://citl.illinois.edu/citl-101/teaching-learning/grad-academy-for-college-teaching/) conducted prior to the start of the semester.

Department Research

Faculty research by ISE faculty is pursued in the following fields:

•computer-aided design	•data analytics	•optimization	•design systems	•manufacturing systems
•nondestructive testing and evaluation	•system dynamics and simulation	•control	•robotics	•real-time decision making
•reliability engineering	•financial engineering	•operations research	•management science	•biomechanics
•human factors	•supply chain logistics			

Members of the ISE Department have access to a wide range of excellent research facilities. These laboratories support a wide range of activity and are described at the department's research laboratories Web site (https://ise.illinois.edu/research/labs/).

Graduate Programs in Industrial & Enterprise Systems Engineering

degrees:

- Industrial Engineering, MS (p. 814)
  optional concentrations:
  - Advanced Analytics in Industrial & Enterprise Systems Engineering (p. 1074) | Computational Science & Engineering (p. 1089)
- Industrial Engineering, PhD (p. 816)
  optional concentrations:
  - Computational Science & Engineering (p. 1089)
- Systems & Entrepreneurial Engineering, MS (p. 1034)
  optional concentrations:
  - Computational Science & Engineering (p. 1089)
- Systems & Entrepreneurial Engineering, PhD (p. 1035)
- Financial Engineering, MS (p. 765) **(sponsored jointly with Department of Finance)**
  optional concentrations:
  - Advanced Analytics in Industrial & Enterprise Systems Engineering (p. 1074) | Data Analytics in Finance (p. 1092)

The Department of Industrial and Enterprise Systems Engineering (ISE) offers graduate programs leading to degrees of Master of Science and Doctor of Philosophy in Industrial Engineering (IE) and Systems and Entrepreneurial Engineering (SEE), as well as (jointly with the Department of Finance) Master of Science in Financial Engineering. The ISE programs offers an approach to industrial engineering and systems engineering, engineering design, and entrepreneurial engineering that crosses

disciplinary lines. The IE program is based in advanced studies that focus on operations research, optimization, supply chain management, financial engineering, quality and reliability engineering and production management, with the aim to advance modeling, simulation, analysis and decision making for complex engineering and economic systems. The SEE program is founded on the premise of dual competency in both traditional engineering and systems integration. The SEE program offers flexibility by permitting the student to select from a menu of advanced courses and take a wide range of electives to meet individual career goals. Graduates of these programs are prepared to enter academic and professional engineering positions in universities, industry, government, and private practice.

Opportunity also exists for specializing in energy and sustainability engineering via the

> Energy and Sustainability Engineering (EaSE) Graduate Certificate Option (https://energysystemsmeng.engineering.illinois.edu/graduate-certificate-option/)

For the degree of Master of Science in Systems & Entrepreneurial Engineering

For additional details and requirements refer to the department's Graduate Programs Web site *(*http://ise.illinois.edu/graduate/*) and the* Graduate College Handbook *(*http://grad.illinois.edu/gradhandbook/*).*

Thesis Option

Code	Title	Hours
SE 599	Thesis Research A maximum of 8 credit hours of SE 599 (or other approved thesis) may be counted toward the degree	8
SE 590	Seminar (registration for 0 hours every term while in residence)	0
500-level SE Courses		12
STEM course from outside of major STEM course must be approved and be from a College of Engineering department, including ABE and CHBE (or other approved department). Excludes TE and ENG courses.		4
Electives in consultation with advisor A maximum of 4 hours of SE 594 (or other approved independent study/project design) may be applied toward the elective coursework requirement.		8
Total Hours		32

Other Requirements and Conditions (may overlap)

Requirement	Description
Minimum 500-level credit hours applied toward the degree:	12
Minimum program GPA:	3.0

Non-Thesis Option

Code	Title	Hours
SE 594	Project Design	4
SE 590	Seminar (registration for 0 hours every term while in residence)	0
500-level SE Courses		12
STEM course from outside of major STEM course must be approved and be from a College of Engineering department, including ABE and CHBE (or other approved department). Excludes TE and ENG courses.		4
Electives in consultation with advisor A maximum of 4 additional credit hours of SE 594 (or other approved project design/independent study) may be counted toward the elective coursework requirement.		16
Total Hours		36

Other Requirements and Conditions (may overlap)

Requirement	Description
Minimum 500-level credit hours applied toward the degree:	12
Minimum program GPA:	3.0

Systems & Entrepreneurial Engineering, PhD

for the degree of Doctor of Philosophy in Systems & Entrepreneurial Engineering

department head: Jeff Shamma (jshamma@illinois.edu)
associate head of graduate studies: Ramavarapu S Sreenivas (rsree@illinois.edu)
overview of admissions & requirements: https://ise.illinois.edu/graduate/admissions/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://ise.illinois.edu/
program website: https://ise.illinois.edu/graduate/index.html (https://ise.illinois.edu/graduate/)
department faculty: https://ise.illinois.edu/directory/faculty.html
college website: https://grainger.illinois.edu/
contact: Lauren Redman (lredman@illinois.edu)
address: 117 Transportation Building, 104 S Mathews Ave, Urbana, IL 61801
phone: (217) 333-2731
email: ise-grad@illinois.edu

The Department of Industrial & Enterprise Systems Engineering offers both a traditional doctoral program and a direct doctoral program. A Master's degree is not required for admission to the direct doctoral program. Students in both programs are required to have a research advisor and applicants are encouraged to contact department faculty (https://ise.illinois.edu/directory/faculty.html) in their areas of interest to inquire about possible research and funding opportunities.

Admission Requirements

Applicants who have completed degree requirements in an accredited engineering program or its equivalent are eligible to apply for admission. A minimum grade point average of 3.25 (A = 4.00) for the last two years of undergraduate study is required.

Scores on the Graduate Record Examination (GRE) (http://www.ets.org/) general test are required of all applicants. Based upon the previous preparation of the student for either program, prerequisite courses may be specified by the advisor, but the credit may not be applied toward a degree.

All applicants whose native language is not English are required to submit TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) scores as evidence

of English proficiency. Minimum admission requirements (https://grad.illinois.edu/admissions/instructions/04c/) are set by the Graduate College.

Financial Aid

Qualified students may compete for financial assistance in the form of teaching/graduate/research assistantships, fellowships, grants, and tuition waiver scholarships. Under certain conditions, fellowships may be augmented by part-time assistantships. Starting in Fall 2020, Grainger Engineering PhD students in their first five years of enrollment who meet the minimum eligibility requirements (https://grainger.illinois.edu/academics/graduate/phd-funding-guarantee/) are guaranteed a funded appointment for fall and spring that includes a full tuition waiver, a partial fee waiver, and a stipend.

All applicants, regardless of US citizenship, whose native language is not English and who wish to be considered for teaching assistantships must demonstrate spoken English language proficiency (http://grad.illinois.edu/admissions/taengprof.htm) by achieving a minimum score of 24 on the speaking subsection of the TOEFL iBT or 8 on the speaking subsection of the IELTS. For students who are unable to take the iBT or IELTS, a minimum score of 4CP is required on the English Proficiency Interview (http://cte.illinois.edu/testing/oral_eng/epi_overview.html) (EPI), offered on campus. All new teaching assistants are required to participate in the Graduate Academy for College Teaching (https://citl.illinois.edu/citl-101/teaching-learning/grad-academy-for-college-teaching/) conducted prior to the start of the semester.

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Faculty research by ISE faculty is pursued in the following fields:

•computer-aided design	•data analytics	•optimization	•design systems	•manufacturing systems
•nondestructive testing and evaluation	•system dynamics and simulation	•control	•robotics	•real-time decision making
•reliability engineering	•financial engineering	•operations research	•management science	•biomechanics
•human factors	•supply chain logistics			

Members of the ISE Department have access to a wide range of excellent research facilities. These laboratories support a wide range of activity and are described at the department's research laboratories Web site (https://ise.illinois.edu/research/labs/).

Graduate Programs in Industrial & Enterprise Systems Engineering

degrees:

Industrial Engineering, MS (p. 814)
optional concentrations:
Advanced Analytics in Industrial & Enterprise Systems Engineering (p. 1074) | Computational Science & Engineering (p. 1089)
Industrial Engineering, PhD (p. 816)
optional concentrations:
Computational Science & Engineering (p. 1089)
Systems & Entrepreneurial Engineering, MS (p. 1034)
optional concentrations:
Computational Science & Engineering (p. 1089)
Systems & Entrepreneurial Engineering, PhD (p. 1035)
Financial Engineering, MS (p. 765) **(sponsored jointly with Department of Finance)**
optional concentrations:
Advanced Analytics in Industrial & Enterprise Systems Engineering (p. 1074) | Data Analytics in Finance (p. 1092)

The Department of Industrial and Enterprise Systems Engineering (ISE) offers graduate programs leading to degrees of Master of Science and Doctor of Philosophy in Industrial Engineering (IE) and Systems and Entrepreneurial Engineering (SEE), as well as (jointly with the Department of Finance) Master of Science in Financial Engineering. The ISE programs offers an approach to industrial engineering and systems engineering, engineering design, and entrepreneurial engineering that crosses disciplinary lines. The IE program is based in advanced studies that focus on operations research, optimization, supply chain management, financial engineering, quality and reliability engineering and production management, with the aim to advance modeling, simulation, analysis and decision making for complex engineering and economic systems. The SEE program is founded on the premise of dual competency in both traditional engineering and systems integration. The SEE program offers flexibility by permitting the student to select from a menu of advanced courses and take a wide range of electives to meet individual career goals. Graduates of these programs are prepared to enter academic and professional engineering positions in universities, industry, government, and private practice.

Opportunity also exists for specializing in energy and sustainability engineering via the

Energy and Sustainability Engineering (EaSE) Graduate Certificate Option (https://energysystemsmeng.engineering.illinois.edu/graduate-certificate-option/)

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for the degree of Doctor of Philosophy in Systems & Entrepreneurial Engineering

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A Master's degree is not required for admission to the Ph.D. program.

Students in the SEE master's program must take the Qualifying Examination before obtaining the M.S. degree; students entering the program with a master's degree earned elsewhere must pass the Qualifying Examination before or during their third semester in the Ph.D. program.

The 96 graduate hours of credit may be divided into three stages of 32 hours each, consisting of 32 hours generally represented by an M.S. degree or equivalent (Stage I), 32 hours of course work beyond the M.S. degree (Stage II), and 32 hours of thesis work for the doctoral thesis (Stage III). Stage I requirements are satisfied by completion of an

M.S. degree in the Department or in a related engineering or technical discipline from the University of Illinois or other accredited university. A non-technical M.S. or MBA would normally not count toward the completion of Stage I. Such students would be required to enroll in one of the Master of Science Programs in the Department and satisfy the requirements therein in order to satisfy Stage I of the Ph.D. degree.

To advance to Stage II all students must pass the Qualifying Examination (https://ise.illinois.edu/graduate/degrees-and-programs/phd-systems-entrepreneurial-engineering.html). To advance from Stage II to Stage III the student must pass the Preliminary Exam. Stage III is comprised of a minimum of 32 hours of SE 599 credit and a written dissertation followed by a final oral thesis defense.

The Preliminary Examination is taken after the Qualifying Examination. A minimum of six months must elapse between the successful completion of the doctoral preliminary examination and the doctoral final examination (oral dissertation defense).

For additional details and requirements refer to the department's Graduate Programs Web site *(*http://ise.illinois.edu/graduate/*) and the* Graduate College Handbook *(*http://grad.illinois.edu/gradhandbook/*).*

Entering with approved M.S./M.A. degree

Code	Title	Hours
SE 599	Thesis Research A maximum of 32 credit hours of SE 599 (or other approved thesis) may be counted toward the degree	32
SE 590	Seminar (registration for 0 hours every term while in residence)	0
400/500-level SE Courses		20
STEM courses from outside of major STEM courses must be approved and be from a College of Engineering department, including ABE and CHBE (or other approved department). Excludes TE and ENG courses.		12
Total Hours		64

Other Requirements and Conditions (may overlap)

Requirement	Description
Minimum GPA:	3.25
Minimum 500-level credit hours applied toward the degree:	16
Independent study/project design do not count toward 500-level requirement.	
A maximum of 8 credit hours of SE 594 (or other approved project design/independent study) may be counted toward the degree.	
Ph.D. exam and dissertation requirements:	
Qualifying exam	
Preliminary exam	
Final exam or dissertation defense	
Dissertation deposit	

Entering with approved B.S./B.A. degree

Code	Title	Hours
SE 599	Thesis Research A maximum of 40 credit hours of SE 599 (or other approved thesis) may be counted toward the degree	40
SE 590	Seminar (registration for 0 hours every term while in residence)	0
400/500-level SE Courses		32
STEM courses from outside of major STEM courses must be approved and be from a College of Engineering department, including ABE and CHBE (or other approved department). Excludes TE and ENG courses.		12
Electives in consultation with advisor		12
Total Hours		96

Other Requirements and Conditions (may overlap)

Requirement	Description
Minimum GPA:	3.25
Minimum 500-level credit hours applied toward the degree:	28
Independent study/project design do not count toward 500-level requirement.	
A maximum of 8 credit hours of SE 594 (or other approved project design/independent study) may be counted toward the degree.	
Ph.D. exam and dissertation requirements:	
Qualifying exam	
Preliminary exam	
Final exam or dissertation defense	
Dissertation deposit	

Taxation, MS

for the degree of Master of Science in Taxation

chair of department: Theo Sougiannis
director of graduate studies:
director of admissions committee:
department website: https://giesbusiness.illinois.edu/accountancy/programs/msa/
college website: https://giesbusiness.illinois.edu/ **(**https://business.illinois.edu/**)**
overview of graduate college admissions & requirements: Graduate Admissions (https://grad.illinois.edu/admissions/apply/**)**
overview of college admissions & requirements: Gies Catalog (http://catalog.illinois.edu/schools/gies-business/academic-units/**)**
department office: 360 Wohlers Hall, 1206 South Sixth, Champaign, IL 61820
phone: (217) 333-0857
email: accy@illinois.edu

The Taxation, MS is not currently accepting applications; suspended effective Summer, 2018

The Master of Science in Taxation (M.S.T) is an executive-style degree offered only at the Illini Center in Chicago. The M.S.T. is a one-year program for students with at least two years of work experience. The program begins in May and meets weekly on Friday afternoons and all day Saturday. Students applying for admission should have acquired a background in business and an accounting undergraduate major from an accredited college or university. Graduation requires 36 graduate hours of study that consists of twelve required courses delivered in three thirteen-week semesters.

Graduate Degree Programs in Accountancy

Graduate Majors:

Accountancy, MAS (p. 542)
with optional concentrations: Business & Public Policy (p. 1087), Corporate Governance & International Business (p. 1090), Data Analytics in Accountancy (p. 1091), Finance (p. 763), Information Technology & Control (p. 1100), Real Estate (p. 1105), Supply Chain Management (p. 1109), Taxation (p. 1149)

Accountancy, MS (p. 544) **(on campus & online)**
with optional concentrations: Business & Public Policy (p. 1087), Corporate Governance & International Business (p. 1090), Data Analytics in Accountancy (p. 1091), Information Technology & Control (p. 1100), Supply Chain Management (p. 1109)

Accountancy, PhD (p. 547)

Graduate Minors:

Accountancy (p. 1122)

Graduate Concentrations:

Accountancy (p. 1073)
Data Analytics in Accountancy (p. 1091)

for the degree of Master of Science in Taxation

Code	Title	Hours
ACCY 550	Multistate Taxation	2
ACCY 551	Corporate Income Taxation	4
ACCY 552	Partnership Income Taxation	4
ACCY 554	International Taxation	4
ACCY 555	Income Tax Accounting	2
ACCY 558	Taxation of Closely-Held Bus.	4
ACCY 559	Tax Policy	2
ACCY 556	Tax Research	2
ACCY 557	Accounting Periods and Methods	2
ACCY 561	Taxes and Business Strategy	4
ACCY 562	Tax Procedures	2
ACCY 563	Consolidated Returns	2
ACCY 564	Reorganizations	2
Total Hours		36

Other Requirements [1]

Requirement	Description
Minimum 500-level Hours Required Overall:	36
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the* department's program information online *(*https://business.illinois.edu/mst/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Teaching of Biological Science, MS

for the degree of Master of Science in Teaching of Biological Science (online)

graduate director: Dr. Marianne Alleyne
overview of admissions & requirements: http://omst.sib.illinois.edu/apply/app/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
school website: School of Integrative Biology (http://sib.illinois.edu/)
program website: Online Master of Science Teaching Biology Program (http://omst.sib.illinois.edu/)
school faculty: Faculty (http://omst.sib.illinois.edu/people/)
college website: College of Liberal Arts & Sciences (https://las.illinois.edu/)
program contact: Kim Leigh
program office: 320 Morrill Hall, 505 S Goodwin, Urbana, IL 61801

phone: (217) 333-2910
email: kaleigh@illinois.edu

The Online Master of Science Teaching Biology Program (OMST-Biology) is designed for certified biology/science teachers who wish to complete a Master of Science degree in Biology. Individuals who are already certified to teach science/biology at the middle school / high school level may enter the online program to earn the MS degree while taking online courses in both biology and education.

Graduate Degree Programs in Teaching of Biological Science

Teaching of Biological Science, MS (p. 1038)

Admission

All Applicants must hold a baccalaureate degree (or equivalent) comparable in content and number of credit hours with that granted by the University of Illinois at Urbana-Champaign. Applicants must have an overall grade-point average of 3.0 (A=4.0) for the last 2 years of undergraduate study. Applicants must have proof of teacher certification in Science/Biology.

Applicants whose native language is not English are required to submit TOEFL scores. International applicants must have a TOEFL score of at least 613 (paper-based test), 257 (computer-based test), or 103-104 (internet-based test) to be considered for admission. The TOEFL must be taken within two years of the proposed term of entry; older scores are not valid. Request that official TOEFL scores be sent directly to the University of Illinois at Urbana-Champaign. The institution number is 1836.

See the Program Web Site for application deadlines, procedures, and more detailed application guidelines.

Financial Aid

Financial assistance in the form of full or partial waiver of tuition and fees is not available to online M.S. students (except statutory waivers).

for the degree of Master of Science in Teaching of Biological Science (online)

Applicants must be certified to teach science/biology. This master's program is only available online (http://omst.sib.illinois.edu/).

Graduation requirements for the OMST-Biology Program include a minimum of **32 credit hours** of coursework.

Code	Title	Hours
While specific courses are not required, previously certified candidates must complete a minimum of 8 hours of graduate-level courses offered by departments in the College of Education to be selected in consultation with the Biology advisor based on the student's interest.		8
Elective hours selected from either biology or education		8
Hours Required within the unit (Biology IB or MCB)		16
Research/Project Hours (min/max applied toward degree)		0-4
Total Hours		**32**

Other Requirements [1]

Requirement
Other requirements may overlap.
Courses taken "credit/no credit" may not be used toward degree requirements.
Deficiencies in undergraduate courses needed to satisfy the certification requirement must also be taken; these courses normally do not count toward the 32 or 51 graduate hours needed to complete the degree. Deficiencies are determined by an audit of transcripts conducted by the Teacher Certification Office.
500-level hours required overall in program: 12
Conferral of the MS degree is contingent upon the completion of all teacher certification requirements.
Qualification for teacher certification is contingent upon the completion of all MS degree requirements.
Minimum GPA: 3.0

[1] *For additional details and requirements refer to the* program requirements *(*http://omst.sib.illinois.edu/apply/graduation/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Teaching of Biological Science, MS

Learning Outcomes for the degree of Master of Science in Teaching of Biological Science (online)

The Online Master of Science in Teaching of Biological Science (OMST) is designed to give practicing teachers the opportunity to earn a M.S. in teaching biological science or graduate credits in biology while living and teaching at home. Accordingly, we offer a comprehensive curriculum consisting of six Biology courses (OMST students must complete five of the six courses) and three Curriculum & Instruction courses (including a capstone project course). Through these courses we meet the needs of today's biology teachers, giving them the tools to help their own students think like a biologist and give the tools to lead the next wave of change. The fully online format enables in-service teachers to bring the latest advances in biology and evolving pedagogy directly to the classroom.

Online Master of Science in Teaching of Biological Science Program Learning Objectives:

1. Synthesize core knowledge in the fields of Biology and the Teaching of Biology.
2. Apply modern Biology knowledge into the Middle School or High School science classroom.
3. Design and implement an action research project which integrates pedagogical and science content ideas addressed in the program courses.
4. Acquire other professional skills such as recognizing legitimate science, citation management and science communication.

Teaching of Chemistry, MS

for the degree of Master of Science in Chemistry

department head chemistry: Catherine J. Murphy
overview of admissions & requirements: https://chemistry.illinois.edu/admissions/graduate-admissions (https://chemistry.illinois.edu/admissions/graduate-admissions/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: Chemistry (https://chemistry.illinois.edu/)
department faculty: https://chemistry.illinois.edu/directory/faculty-by-type (https://chemistry.illinois.edu/directory/faculty-by-type/)
college website: https://las.illinois.edu/
department office: 109 Noyes Laboratory, 505 South Mathews Avenue, Urbana, IL 61801-3080
phone: (217) 333-0711
email: chemistry@illinois.edu

Graduate Degree Programs in Chemistry

Chemistry, MA (p. 657)
Chemistry, MS (p. 658)
Chemistry, PhD (p. 659)
concentrations:
Astrochemistry (p. 1076)|Computational Science & Engineering (p. 1089)
Chemical Physics, PhD (p. 655)
Teaching of Chemistry, MS (p. 1039)
joint programs:
Chemistry, MS & Law, JD (p. 1157)

Admission

Graduate College requirements apply. Further, applicants should have at least 25 semester hours in chemistry (properly distributed) and a grade point average of 3.0 (A = 4.0), to be considered for admission to the graduate programs. Applications from students with less than the usual preparation in chemistry or with grade point averages below 3.0 may be considered on an individual basis.

International students whose native language is not English are required to have a minimum paper-based Test of English as a Foreign Language (TOEFL) score of 580 (237 on the computer-based test). In addition,

teaching is a requirement in the chemistry graduate program, and there are special requirements for applicants whose native language is not English. The University requires a minimum Test of Spoken English (TSE) score of 50. Any applicant whose native language is not English is expected to provide TSE scores in order to receive full consideration for admission and financial aid.

Students who are currently enrolled in graduate programs at other institutions are advised that they should first complete degree work at their current institution before they will be considered for admission to the chemistry PhD program at the University of Illinois. In addition, we require a statement from the applicant and a letter from the applicant's research adviser or department head detailing the situation. Students might be admitted without a degree from their current institution under exceptional circumstances that will need to be described in detail via a letter from the applicant and a separate statement from the department head of the student's current graduate program.

Contact chemistry graduate admissions for further information.

Financial Aid

Support for graduate students is available through fellowships and assistantships. All candidates are considered for these upon application. Graduate students making normal progress toward their degrees generally receive a tuition waiver as well as a stipend.

for the degree of Master of Science in Chemistry

The Master of Science in the Teaching of Chemistry (MSTC) at the University of Illinois provides advanced studies for those interested in teaching chemistry at the secondary or community college level. The program serves two different audiences:

- Those who already have a teaching certificate or will teach in situations which do not require a certificate;
- Those who wish to obtain a master's degree and a teaching certificate simultaneously.

The MSTC degree (without certification) can be completed in one year. The MSTC degree (with certification) requires two years.

For additional details and requirements refer to the department's Graduate Programs (https://chemistry.illinois.edu/academics/graduate-studies/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
Graduate hours in education		8
Graduate hours in chemistry		16
Graduate electives in either education or physical science		8
Total Hours		32

Other Requirements

Requirement	Description
Other requirements may overlap	
The courses in chemistry and the electives must be selected with the approval of the adviser.	
Minimum 500-level Hours Required Overall:	12 (8 in CHEM)
Minimum GPA:	3.0

Learning Outcomes: Teaching of Chemistry, MS

Learning Outcomes for the degree of Master of Science in Chemistry

Note: since this Learning Outcomes Assessment focuses solely on the Master of Science in Teaching of Chemistry program, we have only 3 learning outcomes (we have 7 for the PhD program).

1. To have a deep working knowledge of the principles and concepts of contemporary chemistry.
2. To be able to educate students interested in chemical sciences using state-of-the-art technology and pedagogy.
3. To be able to communicate clearly and effectively within and across disciplinary lines.

Teaching of English as a Second Language, MA

for the Master of Arts in the Teaching of English as a Second Language

head of department: Hye Suk James Yoon
director of graduate studies: Tania Ionin
director of admissions committee: Rakesh Bhatt
email: deptling@illinois.edu
department website: https://linguistics.illinois.edu/
department faculty: Linguistics Faculty (https://linguistics.illinois.edu/directory/faculty/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department office: 4080 Foreign Languages Building, 707 South Mathews, Urbana, IL 61801
phone: (217) 333-3563

Graduate Degree Programs in Linguistics

(Including African Languages [Bamana, Lingala, Swahili, Wolof, and Zulu], Arabic, Hindi-Urdu, Modern Greek, Persian, Sanskrit, and Turkish)

Linguistics, MA (p. 854)
Teaching of English as a Second Language, MA (MATESL) (p. 1040)
Linguistics, PhD (p. 855)
optional concentrations:
Romance Linguistics (p. 1106)|Second Language Acquisition & Teacher Education (p. 1106)

Admission

Applicants to the MATESL and PhD programs in Linguistics must have completed a bachelor's degree.

For the PhD program in Linguistics, undergraduate preparation should include the study of at least one foreign language; a course equivalent to LING 400 on this campus; and a broad background in the humanities, social sciences, or mathematics.

For the MATESL program, an undergraduate major in linguistics, English, a foreign language, or education is generally recommended, though other majors are also acceptable. Applicants must present a grade point average of at least 3.0 (A = 4.0) for the last 60 hours of undergraduate work. Two years of coursework in a foreign language or the equivalent are also required.

Student may be admitted to the PhD program in Linguistics with or without a prior master's degree in linguistics or a related field. Depending on the student's prior preparation, they may be admitted either into Stage 1 of the PhD or into Stage 2 of the PhD. Students who who have completed a master's degree in linguistics or a closely related field may be considered for admission to Stage 2 of the PhD program. Students without an approved prior master's degree will only be considered for admission to Stage 1 of the PhD program. Students admitted to Stage 1 must complete 40 credit hours in the areas listed on the department website, maintain a GPA of 3.5 or better in all core courses, and earn a grade of High Pass on the qualifying examination in order to advance to Stage 2. Students who are admitted directly to Stage 2, but lack any of the core courses required for Stage 1, must complete Stage 1 requirements immediately on entry into the program; the courses will not count toward the 64 hours required for Stage 2 of the PhD.

Applicants to all Linguistics graduate programs should apply online (https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)) and submit a statement of purpose, three letters of recommendation and a writing sample of 10-20 pages in length. Original transcripts (with English translations if applicable) showing all undergraduate and graduate work completed should be sent to:

SLCL Graduate Student Services
3070 Foreign Languages Bldg.
707 S. Mathews Ave.
Urbana, IL 61801

Graduate Record Examination (GRE) scores are required. The applicant should ask the ETS to submit scores to institution 1836. Applicants whose native language is not English are required to take the Test of English as a Foreign Language (TOEFL) and must score at least 88 (100 preferred) on the internet-based test (iBT); they must also pass the speaking sub-section of the iBT with a minimum score of 24 (see www.grad.illinois.edu/Admissions/instructions/04c). Applications are accepted for fall admission only. Application questions may be directed to SLCL Graduate Student Services at slclgradservices@illinois.edu.

Financial Aid

The Linguistics department aims to provide financial aid for all graduate students in the Ph.D. program in Linguistics for up to five years, in the form of fellowships, teaching assistantships, research assistantships, or departmental assistantships. To hold a teaching assistantship non-native English speakers must first pass a test of their oral English ability (see www.grad.illinois.edu/admissions/taengprof.htm (http://www.grad.illinois.edu/admissions/taengprof.htm)). Some students receive aid through other units in the University. New applicants receive automatic consideration for financial aid within the department, including teaching assistantships for the non-Western languages taught in its programs. For details and applications, write to the above address.

For students in the MATESL program, financial assistance is offered to as many qualified applicants as possible, but cannot be awarded to all. A record of extensive experience in teaching English as a second language enhances a candidate's chance of receiving financial assistance during one's first semester. A limited number of University fellowships are available for exceptionally qualified candidates. Teaching assistants (https://grad.illinois.edu/Admissions/instructions/04c (https://grad.illinois.edu/Admissions/instructions/04c/)) teach students in the Division's ESL program and in the Intensive English Institute.

for the Master of Arts in the Teaching of English as a Second Language

The MATESL program offers two separate curricula or tracks. One track is designed for candidates whose principal interests are in language pedagogy and related research. The other track encourages candidates to concentrate more heavily on applied research in various aspects of English studies. A detailed description of the two tracks is available at www.linguistics.illinois.edu/students/grad/matesl/documents/2009-curriculum_and_cohort_system.pdf (http://www.linguistics.illinois.edu/students/grad/matesl/documents/2009-curriculum_and_cohort_system.pdf). Usually candidates can meet all degree requirements in two years.

Thesis Option

Code	Title	Hours
Thesis option is required for students in the research track, optional for students in the pedagogical track.		
Track Coursework: Students must select between the pedagogical track and the research track, and complete course requirements specified for the selected track		40
Language Requirement: Students who have not completed the equivalent of at least two years of study in a language other than their native language as an undergraduate must do so in order to complete the MATESL degree. These courses do not count toward the 40-hour total		
EIL 599	Thesis Research (min/max applied toward degree)	4-8
Total Hours		40

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Courses that satisfy curriculum prerequisites may be taken, but do not count toward graduation requirements.	
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the department's* graduate programs (http://www.linguistics.illinois.edu/students/grad/) *and the* Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Non-Thesis Option

Code	Title	Hours
Non-thesis option is available only to students in the pedagogical track.		
Track Coursework: Students must complete course requirements specified for the pedagogical track		40

Language Requirement: Students who have not completed the equivalent of at least two years of study in a language other than their native language as an undergraduate must do so in order to complete the MATESL degree. These courses do not count toward the 40-hour total	
Total Hours	40

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Courses that satisfy curriculum prerequisites may be taken, but do not count toward graduation requirements.	
Minimum 500-level Hours Required Overall:	12
Comprehensive Examination is required for the non-thesis option.	
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the department's* graduate programs *(*http://www.linguistics.illinois.edu/students/grad/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Teaching English as a Second Language, MA

Learning Outcomes for the Master of Arts in the Teaching of English as a Second Language

1. Students will receive grounding in core areas of Teaching English as a Second Language.
2. Students will receive grounding in linguistic theory.
3. Students will gain theoretical and practical grounding in pedagogy
4. Students will gain academic oral communication and presentation skills.
5. Students will gain academic writing skills.

Teaching of Latin, MA

for the Master of Arts in Teaching of Latin

chair of department: Curtis Perry (FA 2021); Craig Williams (SP 2022)
director of graduate studies: Brian Walters
department website: http://www.classics.illinois.edu
college website: https://las.illinois.edu/
overview of graduate college admissions & requirements: Graduate Admissions (https://grad.illinois.edu/admissions/apply/)
overview of college admissions & requirements:
department office: 4080 Foreign Languages Building, 707 South Mathews Avenue, Urbana, IL 61801
phone: (217) 333-1008
email: classics@illinois.edu

The Department of the Classics offers programs of study leading to the Master of Arts in Classics. Within the master's degree program, students may choose from three options: both Greek and Latin (= Classics), Greek, or Latin. In addition, the department offers the Master of Arts in the Teaching of Latin and the Doctor of Philosophy in Classical Philology. A further concentration in Medieval Studies is available to students pursuing graduate degrees in the Classics.

Graduate students in Classics at Illinois may concentrate at different stages of their study on various aspects of the Greek and Latin languages, literatures, and cultures; classical archaeology; ancient philosophy; or, in conjunction with the appropriate department, comparative literature, ancient history, or linguistics. Additional information is available on our website www.classics.illinois.edu (http://www.classics.illinois.edu/).

Graduate Degree Programs in Classics

Classics, MA (p. 666)
concentrations: Greek (p. 667) | Latin (p. 668) | Medieval Studies (p. 1101)
Teaching of Latin, MA (p. 1042)
Classical Philology, PhD (p. 664)
concentration: Medieval Studies (p. 1101)

Admission

Applicants for admission to the MA in Classics (Greek and Latin) must ordinarily present a minimum of 20 semester hours in one of the two languages (Greek or Latin) and 15 semester hours in the other language; candidates for admission to the MA with specialization in either Greek or Latin, or the MAT in Latin, must ordinarily present at least 20 semester hours in the relevant language. Previous work in ancient history, ancient art and archaeology, philosophy, literary criticism, or linguistics is desirable.

Applicants should apply online (www.grad.illinois.edu/admissions/apply (http://www.grad.illinois.edu/admissions/apply/)) and submit a personal statement of 2-3 pages, a resume or CV, transcripts showing all undergraduate and graduate work completed, and a writing sample of approximately 20 pages (one or two papers) that showcases the applicant's ability to work in the original classical languages and incorporates relevant scholarship as appropriate. Three letters of recommendation are also required.

Graduate Record Examination (GRE) scores are required and should be submitted to institution code 1836. Applicants whose native language is not English are required to take the Test of English as a Foreign Language (TOEFL) and must score at least 79 on the internet-based test (iBT); they must also pass the speaking sub-section of the iBT with a minimum score of 24 (see www.grad.illinois.edu/Admissions/instructions/04c (http://www.grad.illinois.edu/Admissions/instructions/04c/)). Applications are accepted for fall admission only. Application questions may be directed to SLCL Graduate Student Services at slclgradservices@illinois.edu.

Licensure

Students wishing to add Illinois licensure in Latin to an MAT, M.A. in Latin, or Ph.D. must apply to the Foreign Language Teacher Education Program (http://www.flte.illinois.edu).

In order to receive licensure, students must complete an M.A. in Classics with a concentration in Latin, an M.A. in Classics with a concentration in Greek and Latin, or an M.A. in the Teaching of Latin.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program, and almost all students teach. Non-native English speakers must first pass a test of their oral English ability (see www.grad.illinois.edu/admissions/taengprof.htm (http://www.grad.illinois.edu/admissions/taengprof.htm)).

Faculty Research Interests

Greek and Latin literature of all periods; gender and sexuality; Latin poetry of the imperial period; Greek historiography and ethnography; Greek and Roman drama; reception of Classics, especially in film; animal studies; pedagogy. For further details see www.classics.illinois.edu/people/ (http://www.classics.illinois.edu/people/)

Facilities and Resources

We have a renowned university library which boasts the second largest number of volumes among US university libraries after Harvard. Housed within the main library building is our first-rate Classics collection (see www.library.illinois.edu/clx/ (http://www.library.illinois.edu/clx/)) with over 60,000 volumes on open shelves. The University of Illinois Library's Rare Book Room houses the Turyn Archive of Greek manuscript photographs and the American Center of the International Photographic Archive of Papyri. The Department of the Classics also publishes the widely circulating peer-reviewed journal *Illinois Classical Studies* and its Supplements. The Krannert Art Museum and the Spurlock Museum of World Cultures have outstanding collections of ancient vases and other artifacts.

Financial Aid

University fellowships are available for the academic year. Teaching assistantships are available for both the academic year and Summer Session II.

for the Master of Arts in Teaching of Latin

Code	Title	Hours
16 hours in Latin in regular courses, including 411, with at least 12 hours at the 500 level		20
CLCV 550	Intro to Teaching of Classics	4
Education courses		4
Electives		4
Total Hours		32

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall:	12
Certification requirements if needed[2]	
Minimum GPA:	2.75

[1] *For additional details and requirements refer to the department's* graduate program requirements *(*http://www.classics.illinois.edu/programs/graduate/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

[2] Certification Requirements *(*http://www.classics.illinois.edu/programs/graduate/latincertification.pdf*)*

Learning Outcomes: Teaching of Latin, MA

Learning Outcomes for the Master of Arts in Teaching of Latin

1. Students are able to read and translate classical Latin prose and poetry and have advanced knowledge of Latin grammar.
2. Students are familiar with methods of research in Classics and can use these to generate new ideas.
3. Students are broadly familiar with the history, art, and archaeology of the Greco-Roman world and demonstrate an understanding of ancient cultural differences.
4. Students are familiar with multiple approaches to teaching the Latin language and Roman culture.
5. As a result of practical, hands-on experience teaching the Latin language and/or Roman culture, students are ready for careers in K-12 teaching.

Teaching of Mathematics, MS

for the Master of Science in Teaching of Mathematics

department chair: Vera Hur
director of graduate studies: Yuliy Baryshnikov
overview of admissions & requirements: https://math.illinois.edu/admissions/graduate-program-mathematics-admissions#MS-TeachingMath (https://math.illinois.edu/admissions/graduate-program-mathematics-admissions/#MS-TeachingMath)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: http://www.math.illinois.edu
department faculty: https://math.illinois.edu/research/faculty-research (https://math.illinois.edu/research/faculty-research/) **and** https://math.illinois.edu/directory/faculty-by-type (https://math.illinois.edu/directory/faculty-by-type/)
college website: https://las.illinois.edu/
department office: 273 Altgeld Hall, 1409 West Green Street, Urbana, IL 61801
phone: (217) 333-5749
email: math-grad@illinois.edu

The MS in the Teaching of Mathematics is intended for those who wish to teach at the high school or community college level. It does not lead to certification to teach in public schools. The program requires 32 credit hours and can normally be completed in 18 months. Applications are accepted for Fall semester.

A teaching assistantship and full tuition waiver (plus partial fee waiver) will be offered for three semesters to all admitted applicants who are native speakers of English or satisfy the English Proficiency Requirement for International Teaching Assistants (http://www.grad.illinois.edu/admissions/taengprof.htm).

Graduate Degree Programs in Mathematics

Actuarial Science, MS (p. 548)
Applied Mathematics, MS (p. 575)
Mathematics, MS (p. 866)
Mathematics, PhD (p. 867)
optional concentrations:
Actuarial Science & Risk Analytics (p. 868)
Computational Science and Engineering (p. 1089)
Teaching of Mathematics, MS (p. 1043)
Computational Science and Engineering (p. 1089)
for the Master of Science in Teaching of Mathematics

For additional details and requirements refer to the department's Guide to Graduate Studies (https://files.webservices.illinois.edu/7917/GraduateGuide18-19.pdf) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
A rigorous course in algebra at the level of MATH 417 or above		3 or 4
A rigorous course in analysis at the level of MATH 447 or above		3 or 4
Coursework from the College of Education in courses related to the teaching of mathematics at the secondary or college level, subject to the approval of the Director of Graduate Studies in Mathematics.		7-8
Total hours		**32**

Other Requirements

Requirement	Description
Other requirements may overlap	
Specific course and sequence requirements must be met.	
Two semesters of teaching under the supervision of a mentor in two categories	
MATH 405, MATH 415, MATH 444, and MATH 499 cannot be counted toward this graduate degree.	
Minimum Hours Required Within the Unit:	24
Minimum 500-level Hours Required Overall:	12 (8 in Math)
Minimum GPA:	3.0

Learning Outcomes: Teaching of Mathematics, MS

Learning Outcomes for the Master of Science in Teaching of Mathematics

1. Students will gain an understanding of the fundamentals of abstract algebra.
2. Students will gain an understanding of the fundamentals of either real or complex analysis.
3. Students will engage with scholarship about the teaching and learning of mathematics.
4. Students will gain experience in the teaching of mathematics at the college level.
5. Students will integrate the theory and practice of teaching.

Teaching of Physics, MS

for the degree of Master of Science in Teaching of Physics

This program is not currently accepting applications.

department head: Matthias Grosse Perdekamp (mgp@illinois.edu)
director of graduate studies: Lance Cooper (slcooper@illinois.edu)
overview of admissions & requirements: https://physics.illinois.edu/admissions/graduates/admissions-requirements.html
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: http://physics.illinois.edu
program website: https://physics.illinois.edu/academics/graduates/
department faculty: https://physics.illinois.edu/people/directory/
college website: https://grainger.illinois.edu/
contact: Wendy R Wimmer (wwimmer@illinois.edu)
address: 227 Loomis Lab, 1110 W Green St, Urbana, IL 61801
phone: (217) 333-3645
email: grad@physics.illinois.edu

Other Graduate Programs in the Department of Physics

degrees:

Physics, MS (p. 961)
Physics, PhD (p. 961)
optional concentrations:
Computational Science and Engineering (p. 1089)

The Department of Physics offers graduate programs leading to the degrees of Master of Science and Doctor of Philosophy in Physics and Master of Science in Teaching Physics. The Department is actively developing a new paradigm for graduate physics education and research for the 21st century, aimed at enhancing interdisciplinary interactions and creating an integrated approach to educational and research training. Outstanding graduate research opportunities are available in many subdisciplines of physics, including condensed matter physics, high energy and nuclear physics, astrophysics, atomic physics, molecular and optical physics, complex systems, quantum information, biological physics, physics education research.

Students may select experimental, theoretical, or computational thesis projects. Multidisciplinary projects are especially encouraged, and, with the consent of other departments, students may earn master's degrees in areas such as materials science and engineering, or computer science, simultaneously with their PhD degrees in physics.

Opportunity also exists for specializing in energy and sustainability engineering via the

Energy and Sustainability Engineering (EaSE) Graduate Certificate Option (http://ease.illinois.edu/)

for the degree of Master of Science in Teaching of Physics

For additional details and requirements refer to the department's Degree Requirements *(*http://physics.illinois.edu/grad/degree-requirements.asp*) and the* Graduate College Handbook *(*http://grad.illinois.edu/gradhandbook/*).*

Requirements

Code	Title	Hours
At least 2 education courses selected in consultation with the Physics Advisor based on the student's interests		8
Elective courses (subject to Other Requirements and Conditions below)		24
Total Hours		32

Other Requirements and Conditions

Requirement	Description
Other Requirements and Conditions may overlap	
A minimum 16 PHYS credit hours, with 8 at the 500 level.	
A maximum of 8 hours of PHYS 597 (or other individual study) may be applied toward the elective course work requirement.	
A minimum of 12 500-level credit hours applied toward the degree.	
Minimum GPA:	2.75

Learning Outcomes: Teaching of Physics

Learning Outcomes for the degree of Master of Science in Teaching of Physics

Illinois Physics MS Teaching in Physicsgraduates will have:

1. a firm foundation in core physics, math, and current physics research topics;
2. an ability to work collaboratively with a diverse team;
3. an ability to teach and mentor others effectively;
4. an understanding of the student's professional and scientific ethical responsibilities;
5. some exposure to modern educational methods;6) an ability to communicate—both orally and in writing—scientific topics effectively to specialists in the student's research subfield, to scientifically literate non-specialists, and to the general public (outreach).

Technical Systems Management, MS

for the degree of Master of Science in Technical Systems Management

department head: Ronaldo Maghirang
director of graduate studies: Xinlei Wang
program website: program website link
overview of admissions & requirements:
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://aces.illinois.edu/
department website: abe.illinois.edu (http://abe.illinois.edu/)
department faculty: department faculty link
department office: 338 Agricultural Engineering Sciences Building, 1304 West Pennsylvania Avenue, Urbana, IL 61801
phone: (217) 333-3570
email: abe@illinois.edu

Place Highlighted Text about specific program here if required.

Graduate Degree Programs in Agricultural & Biological Engineering

Agricultural and Biological Engineering, MS (p. 562)
Agricultural and Biological Engineering, PhD (p. 564)
Technical Systems Management, MS (p. 1045)
Technical Systems Management, MS - Professional Science Master's (p. 1047)

The Department of Agricultural and Biological Engineering offers a graduate degree program which is at the forefront of the application of engineering principles to solve problems of agricultural production, utilization, environmental control, and biological systems and to improve the quality of life. Students may concentrate study in one of the faculty research interest areas listed below. Supporting course work includes: mathematics; computer science; statistics; engineering mechanics; chemical, civil, electrical, and mechanical engineering; animal science; crop sciences; food science; and other appropriate fields. Opportunity also exists for specializing in

1. computational science and engineering and
2. energy and sustainability engineering within the department's graduate programs via the Computational Science and Engineering (CSE) Option (http://cse.illinois.edu/education/cse-educational-programs-overview/) and the Energy and Sustainability Engineering (EaSE) Option (http://ease.illinois.edu/)

Admission

Admission requirements for either master's program include completion of an undergraduate program equivalent to the Agricultural and Biological Engineering (ABE) curriculum (in the case of the ABE M.S.) or the Technical Systems Management (TSM) curriculum (in the case of the TSM M.S,) with at least a 3.0 grade point average (A = 4.0) for the last two years of undergraduate course work. Applicants must submit Graduate Record Examination (GRE) scores.

Admission to the Ph.D. program is limited to individuals who have demonstrated exceptional ability through outstanding performance in obtaining a Master of Science degree and/or through a high degree of technical and professional accomplishment. Candidates must also satisfy entrance requirements for the M.S. degree program.

All applicants whose native language is not English must submit a minimum TOEFL (http://www.toefl.org/) score of 88 (iBT), 230 (CBT) or 570 (PBT); or minimum International English Language Testing System (IELTS) (http://www.ielts.org/) academic exam scores of 6.5

overall and 6.0 in all subsections. Applicants may be exempt from the TOEFL if certain criteria (http://grad.illinois.edu/admissions/instructions/04c/) are met. For those taking the TOEFL or IELTS, full admission status (http://grad.illinois.edu/admissions/instructions/04c/) is granted for scores greater than 102 (TOEFL iBT), 253 (TOEFL CBT), 610 (TOEFL PBT), or 6.5 (IELTS). Limited status (http://grad.illinois.edu/admissions/instructions/04c/) is granted for lesser scores and requires enrollment in English as a Second Language (ESL) courses (http://linguistics.illinois.edu/students/esl/guidelines/) based on an ESL Placement Test (EPT) taken upon arrival to campus.

Graduate Teaching Experience

Experience in teaching is considered a vital part of the graduate program and is required as part of the academic work of all Ph.D. candidates in this program. For details of expectations, see the department's Graduate Handbook (http://abe.illinois.edu/graduate/handbook/).

Faculty Research Interests

Current research interests of the faculty include off-road equipment engineering (robotics and machinery automation, remote sensing and precision agriculture, machinery management systems, pesticide application technology, engines and biofuels); soil and water resources (hydrology, erosion and sediment transport, water management, wetlands, and water quality); bioenvironmental engineering (building environment and energy conservation, air quality, renewable energy, biomass to bioenergy conversion, structural analysis and facility design, building materials evaluation, environmental control and ergonomic design for plant, animal, and human housing systems and facilities); food and bioprocess engineering (engineering properties of foods, physical properties of biological products, grain drying, grain quality evaluation, dry-grind corn processing, wet and dry milling, modified bioprocesses for improved co-products, fuel and chemicals, fermentation, and transport phenomenon in biological materials); or electronic and electrical systems (biosensors and controls, energy systems, machine vision, near-infrared spectroscopy applications, bionanotechnology, microfabricated devices, bioconjugation techniques, transcriptional control, modeling life support systems, and multiscale biological processes). For more details, visit the department's graduate program Web site. (http://abe.illinois.edu/graduate/areas/)

Financial Aid

Illinois PSM students may not hold assistantships or other tuition and fee waiver-generating appointments; statutory waivers and tuition scholarships are accepted. For all other students, fellowships, supported by University, College of Agricultural, Consumer and Environmental Sciences, and College of Engineering funds, are available on a competitive basis. A limited number of assistantships, providing both teaching and research experience, are often available on a half-time basis. All applicants, regardless of U.S. citizenship, whose native language is not English and who wish to be considered for teaching assistantships must demonstrate spoken English language proficiency (http://grad.illinois.edu/admissions/taengprof.htm) by achieving a minimum score of 24 on the speaking subsection of the TOEFL iBT or 8 on the speaking subsection of the IELTS. For students who are unable to take the iBT or IELTS, a minimum score of 4CP is required on the EPI test (http://cte.illinois.edu/testing/oral_eng/epi_overview.html), offered on campus. All new teaching assistants are required to participate in the Graduate Academy for College Teaching (http://cte.illinois.edu/programs/ta_train.html) conducted prior to the start of the semester.

for the Master of Science in Technical Systems Management

Thesis Option

Code	Title	Hours
TSM 599	Thesis Research	8
TSM 594	Graduate Seminar (Registration of 0 hours required for every term while in residence)	0
One course in statistics from an approved list		3-5
One course in research methods including experimental design in consultation with advisor		3-5
One 500-level elective course chosen in consultation with advisor		3-5
Elective courses – chosen in consultation with advisor (subject to Other Requirements and Conditions below)		8-16
Total Hours		33

Other Requirements and Conditions [1]

Requirement	Description
Other Requirements and Conditions may overlap	
A minimum of 12 500-level credit hours applied toward the degree, and 8 of those must be in the TSM rubric (including research credit hours).	
Minimum GPA:	2.75

[1] *For additional details and requirements refer to the department's* Graduate Handbook *(*http://abe.illinois.edu/graduate/handbook/*) and the* Graduate College Handbook *(*http://grad.illinois.edu/gradhandbook/*).*

Non-Thesis Option

Code	Title	Hours
TSM 594	Graduate Seminar (registration for 0 hours every term while in residence for thesis and non-thesis options; every fall term in residence for the PSM concentration)	0
One course in statistics from an approved list		3-5
One course in research methods including experimental design in consultation with advisor		3-5
One 500-level elective course chosen in consultation with advisor		3-5
Elective courses – chosen in consultation with advisor (subject to Other Requirements and Conditions below)		19-27
Total Hours		36

Other Requirements and Conditions [1]

Requirement	Description
Other Requirements and Conditions may overlap	
A minimum of 12 500-level credit hours applied toward the degree, and 8 of those must be in the TSM rubric.	

The non-thesis option is only allowed with departmental approval at or before initiation of graduate study, and a final report is required.	
Minimum GPA:	2.75

[1] *For additional details and requirements refer to the department's* Graduate Handbook *(*http://abe.illinois.edu/graduate/handbook/*) and the* Graduate College Handbook *(*http://grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Technical Systems Management, MS

Learning Outcomes for the degree of Master of Science in Technical Systems Management

1. Obtain subject matter expertise
2. Identify problems and develop problem-solving abilities / critical thinking
3. Function effectively on multidisciplinary teams
4. Demonstrate professional and ethical values
5. Communicate effectively in written and oral forms
6. Engage in life-long learning skills
7. Develop leadership and interpersonal skills
8. Analyze and interpret data
9. Understand social and cultural contexts
10. Develop global perspective11.Carry out independent research with expertise in research design, methods, and analysis

Technical Systems Management, MS - Professional Science Master's

for the Master of Science in Technical Systems Management Professional Science Master's Concentration

department head: Alan Hansen
director of graduate studies: Xinlei Wang
advisors: Paul Davidson, pdavidso@illinois.edu and Richard Cooke, rcooke@illinois.edu
program website: program website link
overview of admissions & requirements:
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://aces.illinois.edu/
department website: abe.illinois.edu (http://abe.illinois.edu/)
department faculty: department faculty link
department office: 338 Agricultural Engineering Sciences Building, 1304 West Pennsylvania Avenue, Urbana, IL 61801
phone: (217) 333-3570
email: abe@illinois.edu

Place Highlighted Text about specific program here if required.

Graduate Degree Programs in Agricultural & Biological Engineering

Agricultural and Biological Engineering, MS (p. 562)
Agricultural and Biological Engineering, PhD (p. 564)
Technical Systems Management, MS (p. 1045)
Technical Systems Management, MS - Professional Science Master's (p. 1047)

Graduate Degree Programs

The Department of Agricultural and Biological Engineering offers a graduate degree program which is at the forefront of the application of engineering principles to solve problems of agricultural production, utilization, environmental control, and biological systems and to improve the quality of life. Students may concentrate study in one of the faculty research interest areas listed below. Supporting course work includes: mathematics; computer science; statistics; engineering mechanics; chemical, civil, electrical, and mechanical engineering; animal science; crop sciences; food science; and other appropriate fields. Opportunity also exists for specializing in

1. computational science and engineering and
2. energy and sustainability engineering within the department's graduate programs via the Computational Science and Engineering (CSE) Option (http://cse.illinois.edu/education/cse-educational-programs-overview/) and the Energy and Sustainability Engineering (EaSE) Option (http://ease.illinois.edu/)

Admission

Admission requirements for either master's program include completion of an undergraduate program equivalent to the Agricultural and Biological Engineering (ABE) curriculum (in the case of the ABE M.S.) or the Technical Systems Management (TSM) curriculum (in the case of the TSM M.S,) with at least a 3.0 grade point average (A = 4.0) for the last two years of undergraduate course work. Applicants must submit Graduate Record Examination (GRE) scores.

Admission to the Ph.D. program is limited to individuals who have demonstrated exceptional ability through outstanding performance in obtaining a Master of Science degree and/or through a high degree of technical and professional accomplishment. Candidates must also satisfy entrance requirements for the M.S. degree program.

All applicants whose native language is not English must submit a minimum TOEFL (http://www.toefl.org/) score of 88 (iBT), 230 (CBT) or 570 (PBT); or minimum International English Language Testing System (IELTS) (http://www.ielts.org/) academic exam scores of 6.5 overall and 6.0 in all subsections. Applicants may be exempt from the TOEFL if certain criteria (http://grad.illinois.edu/admissions/instructions/04c/) are met. For those taking the TOEFL or IELTS, full admission status (http://grad.illinois.edu/admissions/instructions/04c/) is granted for scores greater than 102 (TOEFL iBT), 253 (TOEFL CBT), 610 (TOEFL PBT), or 6.5 (IELTS). Limited status (http://grad.illinois.edu/admissions/instructions/04c/) is granted for lesser scores and requires enrollment in English as a Second Language (ESL) courses (http://linguistics.illinois.edu/students/esl/guidelines/) based on an ESL Placement Test (EPT) taken upon arrival to campus.

Graduate Teaching Experience

Experience in teaching is considered a vital part of the graduate program and is required as part of the academic work of all Ph.D. candidates in

this program. For details of expectations, see the department's Graduate Handbook (http://abe.illinois.edu/graduate/handbook/).

Faculty Research Interests

Current research interests of the faculty include off-road equipment engineering (robotics and machinery automation, remote sensing and precision agriculture, machinery management systems, pesticide application technology, engines and biofuels); soil and water resources (hydrology, erosion and sediment transport, water management, wetlands, and water quality); bioenvironmental engineering (building environment and energy conservation, air quality, renewable energy, biomass to bioenergy conversion, structural analysis and facility design, building materials evaluation, environmental control and ergonomic design for plant, animal, and human housing systems and facilities); food and bioprocess engineering (engineering properties of foods, physical properties of biological products, grain drying, grain quality evaluation, dry-grind corn processing, wet and dry milling, modified bioprocesses for improved co-products, fuel and chemicals, fermentation, and transport phenomenon in biological materials); or electronic and electrical systems (biosensors and controls, energy systems, machine vision, near-infrared spectroscopy applications, bionanotechnology, microfabricated devices, bioconjugation techniques, transcriptional control, modeling life support systems, and multiscale biological processes). For more details, visit the department's graduate program Web site. (http://abe.illinois.edu/graduate/areas/)

Financial Aid

Illinois PSM students may not hold assistantships or other tuition and fee waiver-generating appointments; statutory waivers and tuition scholarships are accepted. For all other students, fellowships, supported by University, College of Agricultural, Consumer and Environmental Sciences, and College of Engineering funds, are available on a competitive basis. A limited number of assistantships, providing both teaching and research experience, are often available on a half-time basis. All applicants, regardless of U.S. citizenship, whose native language is not English and who wish to be considered for teaching assistantships must demonstrate spoken English language proficiency (http://grad.illinois.edu/admissions/taengprof.htm) by achieving a minimum score of 24 on the speaking subsection of the TOEFL iBT or 8 on the speaking subsection of the IELTS. For students who are unable to take the iBT or IELTS, a minimum score of 4CP is required on the EPI test (http://cte.illinois.edu/testing/oral_eng/epi_overview.html), offered on campus. All new teaching assistants are required to participate in the Graduate Academy for College Teaching (http://cte.illinois.edu/programs/ta_train.html) conducted prior to the start of the semester.

for the Master of Science in Technical Systems Management Professional Science Master's Concentration

Code	Title	Hours
Business courses prescribed by the Illinois PSM program		**10**
PSM 501	PSM Industry Seminar I	0
PSM 502	PSM Industry Seminar II	0
PSM 503	PSM Industry Seminar III	0
PSM 555	PSM Internship	0
TSM 594	Graduate Seminar (0 hours registration every term while in residence every fall term for the PSM concentration)	0
One course in statistics from an approved list		3-5
One course in research methods including experimental design in consultation with advisor		3-5
One 500-level elective course chosen in consultation with advisor		3-5
Elective courses – chosen in consultation with advisor (subject to Other Requirements and Conditions below)		15-23
Total Hours		**42**

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
The PSM concentration is required	
A minimum of 12 500-level credit hours applied toward the degree.	
The minimum program GPA is 2.75.	

[1] *For additional details and requirements refer to the department's* Graduate Handbook *(*http://abe.illinois.edu/graduate/handbook/*) and the* Graduate College Handbook *(*http://grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Technical Systems Management, PSM

Learning Outcomes for the Master of Science in Technical Systems Management Professional Science Master's Concentration

1. Advanced knowledge in the management of technical systems.
2. Introduce students with strong technical undergraduate degrees to business fundamental concepts such as project management, finance, and accounting.
3. Industry experience that gives the students a realistic view of job opportunities.
4. Ability to identify career interests, career path, goals to reach career aspirations, materials and knowledge for a successful internship & career search
5. Ability to communicate science to a non-science audience; ability to work on a team

Technology Management, MS

for the Master of Science in Technology Management

interim chair of department: Cele Otnes
director of graduate studies: Deepak Somaya
director of admissions committee: Rakesh Bhatt
email: ba@business.illinois.edu
department website: https://giesbusiness.illinois.edu/mstm (https://giesbusiness.illinois.edu/mstm/)
department faculty: https://business.illinois.edu/people/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://giesbusiness.illinois.edu/
department office: 350 Wohlers Hall, 1206 S. Sixth Street, Champaign, IL 61820
phone: (217) 333-4240

The Master of Science in Technology Management is focused on understanding how to manage the dynamic environment found in a technology-based enterprise. The curriculum covers core business topics tailored to address the issues and challenges inherent in companies that depend on technology. The course work of this intensive 12-month long program includes product development, marketing, simulation and risk analysis, finance, and strategy, as well as managing processes, intellectual property, innovation, human resources, and an option of an internship or curricular practical training - all focusing on technology. This is an intensive program for those who use, deploy, shape, or create technology.

In addition to formal coursework, students participate in a series of management development seminars, which provide an overview of American business concepts and practices. Business and industry field trips, seminars with American executives, and other special activities provide another dimension to the program.

Currently, the MSTM program is offering two tracks, Graduate and Advancement. The Graduate Track is designed for students recently graduated from undergraduate programs in the sciences, mathematics, engineering, and business. The Advancement track is designed for career professionals. To reflect the experiential knowledge possessed by members of the Advancement track, coursework requirements are slightly different in each track.

Students have the option of pursuing a concentration within the 40 hours of coursework in one of five areas: Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Information Technology & Control (p. 1100), or Supply Chain Management (http://catalog.illinois.edu/graduate/bus/concentration/badm/supply-chain-managment/). Students have the option of pursuing an internship in their first or third semester, depending on the track admitted to.

Graduate Degree Programs in Business Administration

Majors:

- Business Administration, MBA (p. 642) **(online-iMBA)**
- Business Administration, MS (p. 646)
  - **with optional concentrations:** Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Corporate Governance & International Business (p. 1090), Finance (p. 1096), Supply Chain Management (p. 1109)
- Business Analytics, MS (p. 649)
- Management, MS (p. 858)
  - **with optional concentrations:** Business Data Analytics (p. 1086), Finance, (p. 1096) Corporate Governance & International Business (p. 1090)
- Technology Management, MS (p. 1048)
  - **with optional concentrations:** Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Finance (p. 1096), Information Technology & Control (p. 1100), Supply Chain Management (p. 1109)
- Business Administration, PhD (p. 647)

Minors:

- Information Technology & Control (p. 1136)
- Corporate Governance & International Business (p. 1130)
- Supply Chain Management (p. 1144)

Concentrations:

- Business Data Analytics (p. 1086)
- Corporate Governance & International Business (p. 1090)
- Information Technology & Control (p. 1100)
- Supply Chain Management (p. 1109)

Certificates:

- Digital Marketing, CERT (p. 1115)
- Entrepreneurship & Strategic Innovation, CERT (p. 1116)
- Financial Management, CERT (p. 1117)
- Global Challenges in Business, CERT (p. 1118)
- Managerial Economics & Business Analysis, CERT (p. 1119)
- Strategic Leadership Management, CERT (p. 1120)
- Value Chain Management, CERT (p. 1121)

Joint Degree Program:

- Accountancy, MS (iMSA) & Business Administration, MBA (iMBA) (http://catalog.illinois.edu/graduate/bus/joint-degree/accountancy-ms-business-mba-online/)

Admission

Admission to the MS in Technology Management program requires an undergraduate degree with a scholastic average of at least B for the last 60 hours, three letters of recommendation, and a statement of career goals. Applicants whose native language is not English are also required to submit scores from the Test of English as a Foreign Language (TOEFL), CBT, iBT or IELTS. Candidates must achieve the University minimum scores on these examinations (currently 550 on the paper-based TOEFL or 213 on the computer-based TOEFL or 79 on the iBT.

Faculty Research Interests

Faculty research interests are in the areas of marketing, organizational behavior, organization theory, decision sciences, information systems, strategic management, risk analysis, judgment under uncertainty, international business, production and operations management, accounting, economics, entrepreneurship, and finance. The Gies College of Business houses computer facilities, a behavioral science laboratory, and a separate library. The college maintains contacts with industry and government through its Survey Research Laboratory, Illinois Business Consulting, the Academy for Entrepreneurial Leadership and several professional and scholarly journals edited by its faculty.

Financial Aid

The M.S. in Business Administration, the M.S. in Management, the M.S. in Strategic Brand Communication, and the M.S. in Technology Management do not provide assistantships.

for the Master of Science in Technology Management

For additional details and requirements refer to the department's Program Curriculum *(*http://www.ms-tech.uiuc.edu/current/curriculum.aspx*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Code	Title	Hours
Required Core		32-36
Practicum		4
Electives		0-4
Total Hours		**40**

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall:	28
Minimum GPA:	2.75

[1] *For additional details and requirements refer to the department's* Program Curriculum *(*http://www.ms-tech.uiuc.edu/current/curriculum.aspx*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Theatre, MA

for the degree of Master of Arts in Theatre

head of department & director of graduate studies: Gabriel Solis
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)

department website: https://theatre.illinois.edu/
college website: https://nextcourses.illinois.edu/graduate/faa/artist-diploma-music/ (p. 890)
department office: 4-122 Krannert Center for the Performing Arts, 500 South Goodwin Avenue, Urbana, IL 61801
phone: (217) 333-2371
email: theatre@illinois.edu

A full-time student can complete this program in one academic year.

Graduate Degree Programs in Theatre

Theatre, MA (p. 1050)
Theatre, MFA (p. 1051)
concentrations: Acting (p. 1052)|Design & Technology (p. 1052)
Theatre, PhD (p. 1053)

Admission

Candidates should apply to one of the ten graduate areas offered: Master of Fine Arts in Theatre with specialization in acting, costume design, costume technology, lighting design, scenic design, sound design and technology, stage management, or scenic technology; the Master of Arts in Theatre with specialization in theatre history; or the Doctor of Philosophy in Theatre with specialization in theatre history. All applicants should present transcripts documenting undergraduate or graduate study of theatre practice, dramatic literature, and theatre history with a cumulative grade point average in these subjects of at least 3.0 (A = 4.0). Applicants whose first language is not English must submit recent Test of English as a Foreign Language (TOEFL) scores; the current minimum score for consideration is 550 on the paper-based test (213 on the computer-based version).

Candidates for the M.F.A. degree must demonstrate talent in theatrical performance or production by audition or by the presentation of a portfolio of their work to an admissions committee of the faculty, either on campus or at one of the regional University/Resident Theatre Association (U/RTA) audition sites. M.F.A. candidates are admitted in the fall term only. The M.F.A. acting program accepts applications only every three years; the next academic years in which applications will be accepted are 2020-2021 for Fall 2021 admission.

Master's and doctoral candidates should present records of at least a 3.0 grade point average in all subjects studied at the undergraduate and graduate levels, supply 1-2 samples of their scholarly writing, and submitting recent Graduate Record Examination (GRE) scores is recommended. In addition to the Test of English as a Foreign Language (TOEFL) scores required of all foreign students, master's and doctoral candidates whose first language is not English are encouraged to submit scores of the Test of Written English (TWE). Ph.D. candidates should hold a master's degree in theatre or in a related field. Master's and doctoral candidates are normally admitted in the fall term.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program.

for the degree of Master of Arts in Theatre

Thesis Option

Code	Title	Hours
Theatre history, literature, and theory to be selected from departmental list		20
Applied theatre		4
THEA 599	Thesis Research (min/max applied toward degree)	0 min
Total Hours		32

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
At least two semesters in residence	
Final comprehensive examination	
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the department's Graduate Programs and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Non-Thesis Option

Code	Title	Hours
Theatre history, literature, and theory to be selected from departmental list		20
Applied theatre		4
Electives		8
Total Hours		32

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
At least two semesters in residence	
Final comprehensive examination	
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the department's Graduate Programs and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Theatre, MA

Learning Outcomes for the degree of Master of Arts in Theatre

1. Demonstrates a broad knowledge of theatre and performance history, theory, and practice in specific contexts.
2. Shows an ability to apply a range of contemporary analytical and research methods in critical writing, dramaturgy, and creative research.
3. Understands and successfully applies contemporary practices in dramaturgy, directing/devising, playwriting, and/or new play development.
4. Demonstrates an ability to undertake, design, and complete independent research projects.

Theatre, MFA

for the degree of Master of Fine Arts in Theatre

head of department & director of graduate studies: Gabriel Solis
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)

department website: https://theatre.illinois.edu/
college website: https://faa.illinois.edu/
department office: 4-122 Krannert Center for the Performing Arts, 500 South Goodwin Avenue, Urbana, IL 61801
phone: (217) 333-2371
email: theatre@illinois.edu

Students choose a concentration:
Acting (p. 1052)
Design & Technology (p. 1052)

Graduate Degree Programs in Theatre

Theatre, MA (p. 1050)
Theatre, MFA (p. 1051)
concentrations: Acting (p. 1052)|Design & Technology (p. 1052)
Theatre, PhD (p. 1053)

Admission

Candidates should apply to one of the ten graduate areas offered: Master of Fine Arts in Theatre with specialization in acting, costume design, costume technology, lighting design, scenic design, sound design and technology, stage management, or scenic technology; the Master of Arts in Theatre with specialization in theatre history; or the Doctor of Philosophy in Theatre with specialization in theatre history. All applicants should present transcripts documenting undergraduate or graduate study of theatre practice, dramatic literature, and theatre history with a cumulative grade point average in these subjects of at least 3.0 (A = 4.0). Applicants whose first language is not English must submit recent Test of English as a Foreign Language (TOEFL) scores; the current minimum score for consideration is 550 on the paper-based test (213 on the computer-based version).

Candidates for the M.F.A. degree must demonstrate talent in theatrical performance or production by audition or by the presentation of a portfolio of their work to an admissions committee of the faculty, either on campus or at one of the regional University/Resident Theatre Association (U/RTA) audition sites. M.F.A. candidates are admitted in the fall term only. The M.F.A. acting program accepts applications only every three years; the next academic years in which applications will be accepted are 2020-21 for Fall 2021 admission.

Master's and doctoral candidates should present records of at least a 3.0 grade point average in all subjects studied at the undergraduate and graduate levels, supply samples of their scholarly writing, and submitting recent Graduate Record Examination (GRE) scores is recommended. In addition to the Test of English as a Foreign Language (TOEFL) scores required of all foreign students, master's and doctoral candidates whose first language is not English are encouraged to submit scores of the Test of Written English (TWE). Ph.D. candidates should hold a master's

degree in theatre or in a related field. Master's and doctoral candidates are normally admitted in the fall term.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program.

Theatre: Acting Concentration, MFA

for the degree of Master of Fine Arts in Theatre, Acting concentration

head of department & director of graduate studies: Gabriel Solis
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)

department website: https://theatre.illinois.edu/
college website: https://faa.illinois.edu/
department office: 4-122 Krannert Center for the Performing Arts, 500 South Goodwin Avenue, Urbana, IL 61801
phone: (217) 333-2371
email: theatre@illinois.edu

Specific program information here.

Graduate Degree Programs in Theatre

Theatre, MA (p. 1050)
Theatre, MFA (p. 1051)
concentrations: Acting (p. 1052)|Design & Technology (p. 1052)
Theatre, PhD (p. 1053)

Admission

Candidates should apply to one of the ten graduate areas offered: Master of Fine Arts in Theatre with specialization in acting, costume design, costume technology, lighting design, scenic design, sound design and technology, stage management, or scenic technology; the Master of Arts in Theatre with specialization in theatre history; or the Doctor of Philosophy in Theatre with specialization in theatre history. All applicants should present transcripts documenting undergraduate or graduate study of theatre practice, dramatic literature, and theatre history with a cumulative grade point average in these subjects of at least 3.0 (A = 4.0). Applicants whose first language is not English must submit recent Test of English as a Foreign Language (TOEFL) scores; the current minimum score for consideration is 550 on the paper-based test (213 on the computer-based version).

Candidates for the M.F.A. degree must demonstrate talent in theatrical performance or production by audition or by the presentation of a portfolio of their work to an admissions committee of the faculty, either on campus or at one of the regional University/Resident Theatre Association (U/RTA) audition sites. M.F.A. candidates are admitted in the fall term only. The M.F.A. acting program accepts applications only every three years; the next academic years in which applications will be accepted are 2020-21 for Fall 2021 admission.

Master's and doctoral candidates should present records of at least a 3.0 grade point average in all subjects studied at the undergraduate and graduate levels, supply samples of their scholarly writing, and submit recent Graduate Record Examination (GRE) scores. In addition to the Test of English as a Foreign Language (TOEFL) scores required of all foreign students, master's and doctoral candidates whose first language is not English are encouraged to submit scores of the Test of Written English (TWE). Ph.D. candidates should hold a master's degree in theatre or in a related field. Master's and doctoral candidates are normally admitted in the fall term.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program.

for the degree of Master of Fine Arts in Theatre, Acting concentration

For additional details and requirements refer to the department's Graduate Programs and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
Acting		48
Theatre History		4
Departmental approved electives		20
Total Hours		**72**

Other Requirements

Requirement	Description
Other requirements may overlap	
A concentration is not required	
Minimum 500-level Hours Required Overall:	12
Must be in residence six semesters	
Students in the MFA Program participate continuously in the production program of the Department of Theatre, which presents six to eight productions annually at Krannert Center for the Performing Arts.	
Minimum GPA:	3.0

The M.F.A. is a terminal degree in theatre practice. Approved areas of specialization include acting, costume design, costume technology, lighting design, scenic design, scenic technology, sound design and technology, and stage management. Only full-time students will be admitted to the program. With departmental and Graduate College approval, up to two semesters of residency and 32 hours of coursework may be waived on the basis of the student's prior professional experience, although such cases are rare.

Theatre: Design and Technology, MFA

for the degree of Master of Fine Arts in Theatre, Design & Technology concentration

head of department & director of graduate studies: Gabriel Solis
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)

department website: https://theatre.illinois.edu/
college website: https://faa.illinois.edu/
department office: 4-122 Krannert Center for the Performing Arts, 500 South Goodwin Avenue, Urbana, IL 61801
phone: (217) 333-2371
email: theatre@illinois.edu

Graduate Degree Programs in Theatre

Theatre, MA (p. 1050)
Theatre, MFA (p. 1051)
concentrations: Acting (p. 1052)|Design & Technology (p. 1052)
Theatre, PhD (p. 1053)

Admission

Candidates should apply to one of the ten graduate areas offered: Master of Fine Arts in Theatre with specialization in acting, costume design, costume technology, lighting design, scenic design, sound design and technology, stage management, or scenic technology; the Master of Arts in Theatre with specialization in theatre history; or the Doctor of Philosophy in Theatre with specialization in theatre history. All applicants should present transcripts documenting undergraduate or graduate study of theatre practice, dramatic literature, and theatre history with a cumulative grade point average in these subjects of at least 3.0 (A = 4.0). Applicants whose first language is not English must submit recent Test of English as a Foreign Language (TOEFL) scores; the current minimum score for consideration is 550 on the paper-based test (213 on the computer-based version).

Candidates for the M.F.A. degree must demonstrate talent in theatrical performance or production by audition or by the presentation of a portfolio of their work to an admissions committee of the faculty, either on campus or at one of the regional University/Resident Theatre Association (U/RTA) audition sites. M.F.A. candidates are admitted in the fall term only. The M.F.A. acting program accepts applications only every three years; the next academic years in which applications will be accepted are 2020-21 for Fall 2021 admission.

Master's and doctoral candidates should present records of at least a 3.0 grade point average in all subjects studied at the undergraduate and graduate levels, supply samples of their scholarly writing, and submit recent Graduate Record Examination (GRE) scores. In addition to the Test of English as a Foreign Language (TOEFL) scores required of all foreign students, master's and doctoral candidates whose first language is not English are encouraged to submit scores of the Test of Written English (TWE). Ph.D. candidates should hold a master's degree in theatre or in a related field. Master's and doctoral candidates are normally admitted in the fall term.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program.

for the degree of Master of Fine Arts in Theatre, Design & Technology concentration

For additional details and requirements refer to the department's Graduate Programs and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
Courses in a student's area of specialization		32
Theatre history and dramatic literature		12
Departmental approved electives		28
Total Hours		72

Other Requirements

Requirement	Description
Other requirements may overlap	
A concentration is not required	
Minimum 500-level Hours Required Overall:	12
Must be in residence six semesters	
Students in the MFA Program participate continuously in the production program of the Department of Theatre, which presents six to eight productions annually at Krannert Center for the Performing Arts.	
Minimum GPA:	3.0

The M.F.A. is a terminal degree in theatre practice. Approved areas of specialization include acting, costume design, costume technology, lighting design, scenic design, scenic technology, sound design and technology, and stage management. Only full-time students will be admitted to the program. With departmental and Graduate College approval, up to two semesters of residency and 32 hours of coursework may be waived on the basis of the student's prior professional experience, although such cases are rare.

Theatre, PhD

for the degree of Doctor of Philosophy in Theatre

head of department & director of graduate studies: Gabriel Solis
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)

department website: https://theatre.illinois.edu/
department faculty: Valleri Robinson, Kirsten Pullen, Jeffrey E. Jenkins
college website: https://faa.illinois.edu/
department office: 4-122 Krannert Center for the Performing Arts, 500 South Goodwin Avenue, Urbana, IL 61801
phone: (217) 333-2371
email: theatre@illinois.edu

A comprehensive oral and written examination; an oral or written special-field examination; and defense of the dissertation before a committee of the graduate faculty is required. The program can be completed in two to three years beyond the master's degree.

Graduate Degree Programs in Theatre

Theatre, MA (p. 1050)
Theatre, MFA (p. 1051)
concentrations: Acting (p. 1052)|Design & Technology (p. 1052)
Theatre, PhD (p. 1053)

Admission

Candidates should apply to one of the ten graduate areas offered: Master of Fine Arts in Theatre with specialization in acting, costume design, costume technology, lighting design, scenic design, sound design and technology, stage management, or scenic technology; the Master of Arts in Theatre with specialization in theatre history; or the Doctor of Philosophy in Theatre with specialization in theatre history. All applicants should present transcripts documenting undergraduate or graduate study of theatre practice, dramatic literature, and theatre history with a cumulative grade point average in these subjects of at least 3.0 (A = 4.0). Applicants whose first language is not English must submit recent Test of English as a Foreign Language (TOEFL) scores; the current minimum score for consideration is 550 on the paper-based test (213 on the computer-based version).

Candidates for the M.F.A. degree must demonstrate talent in theatrical performance or production by audition or by the presentation of a portfolio of their work to an admissions committee of the faculty, either on campus or at one of the regional University/Resident Theatre Association (U/RTA) audition sites. M.F.A. candidates are admitted in the fall term only. The M.F.A. acting program accepts applications only every three years; the next academic years in which applications will be accepted are 2020-21 for Fall 2021 admission.

Master's and doctoral candidates should present records of at least a 3.0 grade point average in all subjects studied at the undergraduate and graduate levels, supply samples of their scholarly writing, and submitting recent Graduate Record Examination (GRE) scores is recommended. In addition to the Test of English as a Foreign Language (TOEFL) scores required of all foreign students, master's and doctoral candidates whose first language is not English are encouraged to submit scores of the Test of Written English (TWE). Ph.D. candidates should hold a master's degree in theatre or in a related field. Master's and doctoral candidates are normally admitted in the fall term.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program.

for the degree of Doctor of Philosophy in Theatre

A comprehensive oral and written examination; an oral or written special-field examination; and defense of the dissertation before a committee of the graduate faculty is required. The program can be completed in two to three years beyond the master's degree.

Code	Title	Hours
500-level theatre seminar		16
Language Requirement: a reading knowledge of one foreign language		
Elective hours		32
THEA 599	Thesis Research (min/max applied toward degree)	32
Total Hours		64

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Masters Degree Required for Admission to PhD?	Yes
Qualifying Exam Required	No
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the department's Graduate Programs and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Theatre, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Theatre

1. Students will engage the critical and aesthetic aspects of theatrical performance in a variety of historical periods and global contexts.
2. Students will develop projects within their own areas of specialization, drawing on dramatic literature and criticism, theatre history, performance theory, and performance research methods.
3. Students will combine theory and practice in the study and production of theatrical performance.
4. Students will be prepared to offer courses in theatre history, research methods, dramaturgy, and their areas of specialization.
5. Students will be prepared to participate in disciplinary debates through professional academic engagement and performance, including conference papers, book reviews, grant proposals, and creative research projects.

Theoretical & Applied Mechanics, MS

for the degree of Master of Science in Theoretical & Applied Mechanics

department head: Anthony Jacobi (a-jacobi@illinois.edu)
director of graduate studies: P (saif@illinois.edu)**etros Sofronis**
overview of admissions & requirements: https://mechanical.illinois.edu/graduate/applying-mechse-graduate-programs (https://mechanical.illinois.edu/graduate/applying-mechse-graduate-programs/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://mechanical.illinois.edu/
program website: https://mechanical.illinois.edu/graduate/graduate-degree-programs/ms-programs (https://mechanical.illinois.edu/graduate/graduate-degree-programs/ms-programs/)
department faculty: https://mechanical.illinois.edu/people (https://mechanical.illinois.edu/people/)
college website: https://grainger.illinois.edu/
contact: Amy Cates (acate2@illinois.edu)
address: 168 Mechanical Engineering Bldg, 1206 W Green St, Urbana, IL 61801
phone: (217) 300-6722
email: mechse-grad@illinois.edu

Prospective students planning to continue for the PhD should apply to the PhD program.

Opportunity exists for specializing in i) biomechanics via the Biomechanics (p. 1085) optional graduate concentration, ii) cancer nanotechnology via the Cancer Nanotechnology (p. 1088) optional graduate concentration, and iii) computational science and engineering via the Computational Science & Engineering (p. 1089) optional graduate concentration.

Admission Requirements

An applicant for admission to the Department of Mechanical Science and Engineering must:

1. Be a graduate of an institution awarding a baccalaureate degree equivalent to that granted by the University of Illinois at Urbana-Champaign;
2. Be adequately prepared for advanced study as demonstrated by his or her previous program of study and scholastic record; and
3. Be recommended for admission by the Department of Mechanical Science and Engineering. A minimum grade point average of 3.25 (A = 4.00) for the last two years of undergraduate study is required, and a minimum grade point average of 3.50 (A = 4.00) is required for any previous graduate work completed.

Scores on the Graduate Record Examination (GRE) (http://www.ets.org/) general test are required of all applicants. Based upon the previous preparation of the student, prerequisite courses may be specified by the advisor, but the credit may not be applied toward a degree.

All applicants whose native language is not English are required to submit TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) scores as evidence of English proficiency. Minimum admission requirements (https://grad.illinois.edu/admissions/instructions/04c/) are set by the Graduate College.

The Department of Mechanical Science and Engineering accepts MS applications for both Spring and Fall terms.

Financial Aid

Students admitted to the MS program are eligible for Board of Trustees (BOT) tuition-waiver generating assistantships at the University of Illinois. All applicants whose native language is not English, regardless of US citizenship, who wish to be considered for teaching assistantships must demonstrate spoken English language proficiency (http://grad.illinois.edu/admissions/taengprof.htm) by achieving a minimum score of 24 on the speaking subsection of the TOEFL iBT or 8.0 on the speaking subsection of the IELTS. Students who are already at Illinois may request to take the on-campus EPI test (http://cte.illinois.edu/testing/oral_eng/epi_overview.html), for which the minimum passing score for TA eligibility is 4CP. All new teaching assistants are required to participate in the Graduate Academy for College Teaching (https://citl.illinois.edu/citl-101/teaching-learning/grad-academy-for-college-teaching/) prior to the start of their first semester as a teaching assistant.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in both the ME and TAM PhD programs. The TAM PhD requires that one semester of teaching assistantship be completed during the program.

Department Research

A new paradigm in research is being created in the department by integrating basic sciences such as biology, chemistry, applied mathematics, and applied physics with the traditional mechanical engineering and engineering mechanics disciplines of fluid mechanics/thermal sciences, solid mechanics/materials and controls/dynamics. This integration is fostering new directions and discoveries in nanomechanics, nanomanufacturing, biomechanics and computational science and engineering.

The goal of all research in the department is to address critical societal problems in the areas of health, security/defense, energy/environment, manufacturing, and transportation. While the basic function of departmental research is generation of new knowledge, a growing number of projects are prompted by current needs of the state of Illinois, the United States, and the world. For more information, see the department's research Web site (https://mechanical.illinois.edu/research/).

MechSE faculty are major participants in activities at the department, college, and university level via research centers and programs that are integral to the MechSE graduate program. For more information, see the department's research centers Web site (https://mechanical.illinois.edu/mechse-research-centers/).

MechSE's wealth of research laboratories allows faculty, graduate and undergraduate research assistants, and postdoctoral and visiting scholars to conduct theoretical and experimental investigations of phenomena related to materials behavior, combustion, micro- and nanomechanical systems, controls and dynamics, thermodynamics, biomechanics, and much more. For more information, see the department's research laboratories Web site (https://mechanical.illinois.edu/research/mechse-laboratories/).

Other Graduate Programs in the Department of Mechanical Science & Engineering

degree programs:

Mechanical Engineering, MENG (p. 869)
optional concentrations:
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)

Mechanical Engineering, MS (p. 870)
Mechanical Engineering, PhD (p. 872)
Theoretical & Applied Mechanics, PhD (p. 1057)
optional concentrations for MS and PhD programs:
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)|Computational Science & Engineering (p. 1089)

Opportunity also exists for specializing in energy and sustainability engineering via the

Energy and Sustainability Engineering (EaSE) Graduate Certificate Option (http://ease.illinois.edu/)

for the degree of Master of Science in Theoretical & Applied Mechanics

A full-time student can usually complete the program requirements in one academic year of study. A student who has an assistantship can usually complete the requirements in one calendar year.

For additional details and requirements refer to the department's Graduate Program Website *(*http://mechanical.illinois.edu/graduate/mechse-graduate-degrees/*) and the* Graduate College Handbook *(*https://grad.illinois.edu/gradhandbook/*).*

Thesis Option

Code	Title	Hours
TAM 599	Thesis Research (min-max applied toward the degree)	4-8
TAM 500	Seminar (registration for 1 hour every term while in residence; credit does not apply toward the degree)	0
Elective courses – chosen in consultation with advisor (subject to Other Requirements and Conditions below)		24-28
Total Hours		32

Other Requirements and Conditions

Requirement	Description
MSE 492 Lab Safety Fundamentals	
A minimum of 16 TAM credit hours, with 8 at the 500 level.	
A minimum of 12 500-level credit hours applied toward the degree	
No TAM 599 credit may be applied toward the elective course work requirement.	
A maximum of 4 hours of TAM 597 or ME 597 (or other approved independent study) may be applied toward the elective course work requirement.	
Other Requirements and Conditions may overlap	
Minimum GPA:	3.0

Non-Thesis Option

Code	Title	Hours
TAM 500	Seminar (registration for 1 hour every term while in residence; credit does not apply toward the degree)	0
Elective courses – chosen in consultation with advisor (subject to Other Requirements and Conditions below)		36
Total Hours		36

Other Requirements and Conditions

Requirement	Description
Other Requirements and Conditions may overlap	
A minimum of 16 TAM credit hours, with 8 at the 500 level.	
A minimum of 12 500-level credit hours applied toward the degree	
A maximum of 4 hours of TAM 597 or ME 597 (or other approved independent study) may be applied toward the elective course work requirement.	
Departmental approval is required to pursue the non-thesis option.	
Minimum GPA:	3.0

Learning Outcomes: Theoretical & Applied Mechanics, MS

Learning Outcomes for the degree of Master of Science in Theoretical & Applied Mechanics

Illinois MechSE TAM graduates will have:

1. A thorough understanding of the fundamentals of the engineering disciplines, namely, solid mechanics, fluid mechanics, and applied mathematics (core requirements). [MS/PhD]
2. A broad understanding of the various foundations of the engineering disciplines, including computational mechanics, mechanics of materials, biomechanics, dynamics, and nanomechanics (in the PhD program, breadth requirements). [MS/PhD]
3. Ability to identify relevant research subjects, outline strategies of inquiry, and demonstrate potential to bring the relevant research to completion. [MS/PhD]
4. Ability to communicate research results to scientific audience in conferences. [MS/PhD]
5. Ability to document research outcomes comprehensively for publication. [MS/PhD]

Theoretical & Applied Mechanics, PhD

for the degree of Doctor of Philosophy in Theoretical & Applied Mechanics

department head: Anthony Jacobi (a-jacobi@illinois.edu)
director of graduate studies: Petros Sofronis
overview of admissions & requirements: https://mechanical.illinois.edu/graduate/applying-mechse-graduate-programs (https://mechanical.illinois.edu/graduate/applying-mechse-graduate-programs/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://mechanical.illinois.edu/
program website: https://mechanical.illinois.edu/graduate/graduate-degree-programs/phd-programs (https://mechanical.illinois.edu/graduate/graduate-degree-programs/ms-programs/)
department faculty: https://mechanical.illinois.edu/people (https://mechanical.illinois.edu/people/)
college website: https://grainger.illinois.edu/
contact: Amy Cates (acate2@illinois.edu)
address: 168 Mechanical Engineering Bldg, 1206 W Green St, Urbana, IL 61801
phone: (217) 300-6722
email: mechse-grad@illinois.edu

The PhD in Theoretical and Applied Mechanics (TAM) in the Department of Mechanical Science and Engineering is one of the only of its kind in the world, offering a rigorous curriculum with structured core and breadth required courses. These course requirements ensure all TAM graduate students develop a strong and broad foundation in mechanics as well as applied mathematics.

Opportunity exists for specializing in i) biomechanics via the Biomechanics (p. 1085) optional graduate concentration, ii) cancer nanotechnology via the Cancer Nanotechnology (p. 1088) optional graduate concentration, and iii) computational science and engineering via the Computational Science & Engineering (p. 1089) optional graduate concentration.

Admission Requirements

An applicant for admission to the Department of Mechanical Science and Engineering must:

1. Be a graduate of an institution awarding a baccalaureate degree equivalent to that granted by the University of Illinois at Urbana-Champaign;
2. be adequately prepared for advanced study as demonstrated by his or her previous program of study and scholastic record; and
3. be recommended for admission by the Department of Mechanical Science and Engineering. A minimum grade point average of 3.25 (A = 4.00) for the last two years of undergraduate study is required, and a minimum grade point average of 3.50 (A = 4.00) is required for any previous graduate work completed.

Scores on the Graduate Record Examination (GRE) (http://www.ets.org/) general test are required of all applicants. Based upon the previous preparation of the student, prerequisite courses may be specified by the advisor, but the credit may not be applied toward a degree.

All applicants whose native language is not English are required to submit TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) scores as evidence of English proficiency. Minimum admission requirements (https://grad.illinois.edu/admissions/instructions/04c/) are set by the Graduate College.

The Department of Mechanical Science and Engineering accepts PhD applications for both Spring and Fall terms.

Financial Aid

Students admitted to the PhD program are eligible for Board of Trustees (BOT) tuition-waiver generating appointments at the University of Illinois, including research assistantships, teaching assistantships, and fellowships. Starting in Fall 2020, Grainger Engineering PhD students in their first five years of enrollment who meet the minimum eligibility requirements (https://grainger.illinois.edu/academics/graduate/phd-funding-guarantee/) are guaranteed a funded appointment for fall and spring that includes a full tuition waiver, a partial fee waiver, and a stipend.

All applicants whose native language is not English, regardless of US citizenship, who wish to be considered for teaching assistantships must demonstrate spoken English language proficiency (http://grad.illinois.edu/admissions/taengprof.htm) by achieving a minimum score of 24 on the speaking subsection of the TOEFL iBT or 8.0 on the speaking subsection of the IELTS. Students who are already at Illinois may request to take the on-campus EPI test (http://cte.illinois.edu/testing/oral_eng/epi_overview.html), for which the minimum passing score for TA eligibility is 4CP. All new teaching assistants are required to participate in the Graduate Academy for College Teaching (https://citl.illinois.edu/citl-101/teaching-learning/grad-academy-for-college-teaching/) prior to the start of their first semester as a teaching assistant.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in both the ME and TAM PhD programs. The TAM PhD requires that one semester of teaching assistantship be completed during the program.

Department Research

A new paradigm in research is being created in the department by integrating basic sciences such as biology, chemistry, applied mathematics, and applied physics with the traditional mechanical engineering and engineering mechanics disciplines of fluid mechanics/thermal sciences, solid mechanics/materials and controls/dynamics. This integration is fostering new directions and discoveries in nanomechanics, nanomanufacturing, biomechanics and computational science and engineering.

The goal of all research in the department is to address critical societal problems in the areas of health, security/defense, energy/environment, manufacturing, and transportation. While the basic function of departmental research is generation of new knowledge, a growing number of projects are prompted by current needs of the state of Illinois, the United States, and the world. For more information, see the department's research Web site (https://mechanical.illinois.edu/research/).

MechSE faculty are major participants in activities at the department, college, and university level via research centers and programs that are integral to the MechSE graduate program. For more information, see the department's research centers Web site (https://mechanical.illinois.edu/mechse-research-centers/).

MechSE's wealth of research laboratories allows faculty, graduate and undergraduate research assistants, and postdoctoral and visiting scholars to conduct theoretical and experimental investigations of phenomena related to materials behavior, combustion, micro- and nanomechanical systems, controls and dynamics, thermodynamics, biomechanics, and much more. For more information, see the department's research laboratories Web site (https://mechanical.illinois.edu/research/mechse-laboratories/).

Other Graduate Programs in the Department of Mechanical Science & Engineering

degree programs:

Mechanical Engineering, MENG (p. 869)

optional concentrations:
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)

Mechanical Engineering, MS (p. 870)
Mechanical Engineering, PhD (p. 872)
Theoretical & Applied Mechanics, MS (p. 1054)
optional concentrations for MS and PhD programs:
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)|Computational Science & Engineering (p. 1089)

Opportunity also exists for specializing in energy and sustainability engineering via the

Energy and Sustainability Engineering (EaSE) Graduate Certificate Option (http://ease.illinois.edu/)

for the degree of Doctor of Philosophy in Theoretical & Applied Mechanics

Candidates for the Doctor of Philosophy degree are required to complete a minimum of 32 graduate hours of course work beyond the bachelor's degree with a minimum grade point average of 3.0.

Acceptance into the doctoral program requires good academic standing and successful completion of a Qualifying Examination (http://mechanical.illinois.edu/graduate/phd-programs/#PhDTAM), which is the defense of a scholarly work, such as a master's thesis. A student must also pass an oral preliminary examination based on the proposed thesis work.

For more details of the degree requirements for the Ph.D. program, visit the department's Graduate Program Website (http://mechanical.illinois.edu/graduate/mechse-graduate-degrees/) and the Graduate College Handbook (https://grad.illinois.edu/gradhandbook/).

Requirements

Code	Title	Hours
TAM 599	Thesis Research (min-max applied toward the degree)	32-64
TAM 500	Seminar (registration for 1 hour every term while in residence; credit does not apply toward the degree)	0
Elective courses beyond core and breadth – chosen in consultation with advisor (subject to Other Requirements and Conditions below)		0-32
Credit for minimum of 16 hours of TAM breadth courses from a departmental list, or equivalent as evaluated by the Associate Head for Mechanics.		
Course work is required from each of the following major areas, totaling 16 hrs: 2 courses total from applied mathematics, fluid mechanics, and solid mechanics, 1 course in mechanics of materials, and at least 1 course in either computational mechanics or experimental mechanics.		
Total Hours		96

Other Requirements and Conditions

Requirement	Description
Other Requirements and Conditions may overlap	
Credit for TAM 531 or 532, 541, 542, 551 or equivalent as evaluated by the Associate Head for Mechanics	
A 25% or more teaching assistantship for at least one semester.	
Continuous registration is required after the preliminary exam and until thesis deposit, while on campus and during semester of final defense.	
MSE 492 Lab Safety Fundamentals	
Ph.D. exam and dissertation requirements:	
Qualifying exam	
Preliminary exam	
Final exam or dissertation defense	
Dissertation deposit	
Minimum GPA:	3.0

Learning Outcomes: Theoretical & Applied Mechanics, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Theoretical & Applied Mechanics

Illinois MechSE TAM graduates will have:

1. A thorough understanding of the fundamentals of the engineering disciplines, namely, solid mechanics, fluid mechanics, and applied mathematics (core requirements). [MS/PhD]

2. A broad understanding of the various foundations of the engineering disciplines, including computational mechanics, mechanics of materials, biomechanics, dynamics, and nanomechanics (in the PhD program, breadth requirements). [MS/PhD]
3. Ability to identify relevant research subjects, outline strategies of inquiry, and demonstrate potential to bring the relevant research to completion. [MS/PhD]
4. Ability to communicate research results to scientific audience in conferences. [MS/PhD]
5. Ability to document research outcomes comprehensively for publication. [MS/PhD]

Translation & Interpreting, MA

for the Master of Arts in Translation & Interpreting, On Campus or Online

Program Website: http://www.translation.illinois.edu/
Program Director: Joyce Tolliver
Program Address: 4080 Foreign Languages Building
707 South Mathews Avenue
Urbana, IL 61801
Overview of Graduate College Admissions & Requirements:
Graduate Admissions (https://grad.illinois.edu/admissions/apply/)

The Program in Translation and Interpreting Studies in the School of Literatures, Cultures and Linguistics offers a graduate program leading to the Master of Arts in Translation and Interpreting. Candidates for the master's degree may specialize in Translation for the Professions, Literary and Applied Literary Translation, or Conference and Community Interpreting. Campus-based and online programs are available.

Campus-Based Program

In order to maintain full-time status, students in the campus-based program must take a minimum of 12 credit hours per semester (3 courses); 2 of which should be 400- or 500-level courses offered by or cross-listed with the Program in Translation and Interpreting Studies.

Online Program

In order to maintain full-time status, students working online will take at least eight credit hours per semester (2 courses), consisting of 400- or 500-level courses offered by or cross-listed with the Program in Translation and Interpreting Studies. The degree requirements are the same as for the campus-based program.

for the Master of Arts in Translation & Interpreting, On Campus or Online

Campus-Based Program

Students on campus must take a minimum of 12 credit hours per semester (3 courses); 2 of which should be Translation Studies required courses, to maintain full-time status. The required courses must be taken in the order in which they are offered to complete degree requirements. Campus based courses follow the 16-week calendar. All students must follow a four-semester (Fall and Spring) schedule to complete this program. It is not possible to accelerate the program. Students who request a leave of absence from the program must apply to the department for re-entry.

Online Program

Students working online will take two 4-credit hour courses per semester that will be offered sequentially, for eight weeks each. The courses will be asynchronous. Interaction with the instructor and other students will be required and facilitated through the state-of-the-art course delivery platform. Online students are required to keep pace with the course schedule. The requirements are the same as for the campus based program.

For additional details and requirements refer to the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

This degree program can be completed either on campus or online; the requirements are listed below:

Code	Title	Hours
Core requirements		
TRST 500	Translation and Interpretation: Reflective Practice	4
TRST 410	Translation and Interpreting Theory & Practice	4
TRST 407	Terminology	4
Specialization: Students must complete 8 hours in one specialization:		8
Translation for the Professions (TRST 405, TRST 406)		
Literary and Applied Literary Translation (TRST 501, TRST 502)		
Conference and Community Interpreting (TRST 541, TRST 542)		
See Center for Translation Studies webpage for a list of appropriate courses for each specialization.		
Elective courses: See Center for Translation Studies webpage for a list of appropriate courses.		8
TRST 540	Capstone	4
Total Hours		32

Other Requirements

Requirement	Description
Other rquirements may overlap	
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	2.75

Learning Outcomes: Translation & Interpretation, MA

Learning Outcomes for the Master of Art in Translation & Interpretation, On-Campus or Online

1. Understanding of theories of and approaches to a variety of translation and interpreting fields
2. Awareness of cultural, ethical, and epistemological aspects of translation and interpreting practices
3. Understanding of and appreciation for language use as a cultural practice
4. Command of technical tools regularly used in translation or interpreting

5. Demonstrated skill in creation, management, and production of an individual project in a specialized subfield (interpreting, literary translation, technical and professional translation)

Urban Planning, MUP

for the degree of Master of Urban Planning in Urban Planning

department head: Rolf Pendall
director of the MUP program: Bumsoo Lee
MUP admissions director: Andrew Greenlee
director of the PhD program: Faranak Miraftab
overview of admissions & requirements: https://urban.illinois.edu/programs-applying/master-urban-planning/how-to-apply-mup/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: Urban + Regional Planning (https://urban.illinois.edu/)
program website: https://urban.illinois.edu/programs-applying/master-urban-planning/
department faculty: https://urban.illinois.edu/people/meet-our-faculty/
college website: College of Fine & Applied Arts (https://faa.illinois.edu/)
department office: 111 Temple Buell Hall, 611 Taft Drive, Champaign, IL 61820
phone: (217) 333-3890
email: urbplan@illinois.edu

The professionally accredited M.U.P. program prepares students for careers in planning practice. Such careers involve public service at all levels of government, in private consulting practice, in the nonprofit sector, and in a wide variety of organizations in need of planning services. The program also prepares students for advanced work leading to the Ph.D. degree and a career in teaching and research.

The M.U.P. curriculum consists of a focused set of core courses required of all students, concentration/elective courses, applied workshops, a recommended internship (reduces the hours needed to graduate by 4), and a capstone requirement. The program is purposely flexible so that students may design a program that builds their expertise in a concentration area of practice such as land use and environmental planning, transportation planning, community development for social justice, housing, sustainable design and development, local and regional economic development, and geographic information systems and analysis. The department also has an active international program designed to expose students to planning practices and challenges in Europe, Africa, Latin America, and Asia.

If a student has an undergraduate professional degree in urban planning, up to 16 hours may be waived by petition, and the student must take at least 30 hours of urban and regional planning courses at Illinois.

Please consult the department's website (https://urban.illinois.edu/programs-applying/master-urban-planning/) for additional information about the M.U.P. requirements.

Graduate Degree Programs in Urban Planning

Sustainable Urban Management, MS (p. 1032)
Urban Planning, MUP (p. 1060)
Regional Planning, PhD (p. 987)
joint programs:
- Urban Planning, MUP & (p. 1151) Architecture, MARCH (p. 1151)
- Urban Planning, MUP & Law, JD (p. 1168)
- Urban Planning, MUP & Landscape Architecture, MLA (p. 1157)
- Urban Planning, MUP & Public Health, MPH (p. 1164)
- Urban Planning, MUP & any Illinois master's degree in related field (p. 1168)

The Department of Urban and Regional Planning offers graduate programs leading to the degrees of Master of Urban Planning and Doctor of Philosophy in Regional Planning as well as Master of Science in Sustainable Urban Management. Students can also apply to obtain a joint degree with another graduate degree simultaneously. The most popular joint degrees are with Architecture, Landscape Architecture, Law and Agricultural and Applied Economics. Joint degrees with any related field are possible. In addition, a small number of the department's Bachelor of Arts in Urban Studies and Planning (B.A.U.S.P.) students participate in the highly selective 4+1 program (http://catalog.illinois.edu/undergraduate/faa/urban-studies-planning-ba-mup/) to complete the B.A.U.S.P. and M.U.P. in five years.

Admission

We welcome applications from people from a wide variety of backgrounds who have demonstrated potential for extraordinary professional achievement. Students seeking a graduate degree in planning come from a diverse range of academic backgrounds. The most frequent are sociology, economics, political science, geography, environmental sciences, architecture, engineering, public administration, urban planning, and public policy, but the natural sciences, humanities, and other fields also provide excellent foundations for graduate study in planning. Prospective students must have a grade point average (GPA) of at least 3.0 computed from the last 60 hours of undergraduate work and any subsequent graduate study, but the average GPA of admitted students is considerably higher. International applicants must meet additional minimum requirements (http://www.grad.illinois.edu/admissions/countries/) based on their country of origin, including the Test of English as a Foreign Language (TOEFL).

We place particular emphasis on each applicant's statement of purpose. Applicants should use the statement to convey information about their backgrounds, professional and personal experience, and intellectual perspectives, in the context of articulating why a Master's in Urban Planning or Ph.D. in Regional Planning from the University of Illinois will help them achieve their professional goals. We seek an applicant pool that represents a mix of racial and ethnic populations, a range of social and economic backgrounds, different philosophies and perspectives, and a variety of life experiences. We are especially interested in applicants with professional experience, though that experience need not be in planning or closely related fields.

Applicants to the Ph.D. program are admitted when they meet the standards of the Department and have a faculty member prepared to serve as their mentor and, if necessary, primary source of financial support. Students interested in pursuing a Ph.D. in Regional Planning should communicate with the Director of the Ph.D. Program and faculty

most closely aligned with their interests, in addition to completing the formal application process.

Consult the M.U.P. admissions (https://urban.illinois.edu/programs-applying/master-urban-planning/how-to-apply-mup/) and Ph.D. admissions (https://urban.illinois.edu/programs-applying/phd-regional-planning/how-to-apply-phd/) web pages for more information.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the doctoral experience in this program and is strongly encouraged for those intending to pursue an academic career.

Faculty Research Interests

The mission of the Department of Urban and Regional Planning is to teach and conduct research to improve understanding of human settlements and of planning situations. The department's faculty studies the ecological, economic, social, and institutional aspects of urban and regional development, and the theory and practice of planning processes. Planning is viewed as the achievement of outcomes based on interrelated actions over time and space, and close communication and collaboration with a wide range of disciplines and professions is inherent in the department's approach. The basis of that collaboration is a faculty whose academic training and degrees are in architecture, economics, geography, history, law, political science, regional science, and zoology, in addition to planning. Planning faculty and doctoral students pursue interdisciplinary research and make scholarly contributions to planning and fields closely allied with planning.

Facilities and Resources

The Department of Urban and Regional Planning shares Temple Hoyne Buell Hall (TBH) with the Department of Landscape Architecture and the School of Architecture. The majority of urban planning classes are held in TBH. The department has a 24-hour instructional computing laboratory. Research project and doctoral student workspace is provided in Noble Hall.

The City Planning and Landscape Architecture Reference and Resource Center is located in Funk Library (http://www.library.uiuc.edu/agx/). The planning collection is one of the finest in the world, with books and reports gathered since the collection started over eighty years ago.

Financial Aid

Students compete for departmental and Graduate College fellowships and departmental teaching and research assistantships. Selection is based on the academic achievement and qualifications of the student.

for the degree of Master of Urban Planning in Urban Planning

For additional details and requirements refer to the department's Web site *(*https://urban.illinois.edu/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Thesis Option

Code	Title	Hours
UP 501	Planning History and Theory	4
UP 503	Physical Planning	4
UP 504	Urban History and Theory	4
UP 505	Urban and Regional Analysis	4
UP 510	Plan Making	4
UP 511	Law and Planning	4
UP 590	Professional Internship (reduces the hours needed to graduate by 4)	0
Recommended concentration/electives		32
UP 591	Capstone Seminar (enrollment required for two semesters)	0
UP 599	Thesis Research (min/max applied toward degree)	8
Total Hours		64

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum Hours Required Within the Unit:	40
Minimum 500-level Hours Required Overall:	16 (12 in UP)
Minimum GPA:	3.0

Non-Thesis Option

Code	Title	Hours
UP 501	Planning History and Theory	4
UP 503	Physical Planning	4
UP 504	Urban History and Theory	4
UP 505	Urban and Regional Analysis	4
UP 510	Plan Making	4
UP 511	Law and Planning	4
UP 590	Professional Internship (reduces the hours needed to graduate by 4)	0
Recommended concentration/electives		32
UP 591	Capstone Seminar (enrollment required for two semesters)	0
UP 598	Master's Project (min/max applied toward degree)	8
Total Hours		64

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum Hours Required Within the Unit:	40
Minimum 500-level Hours Required Overall:	16 (12 in UP)
Minimum GPA:	3.0

Learning Outcomes: Urban Planning, MUP

Learning Outcomes for the degree of Master of Urban Planning in Urban Planning

To be consistent with our accreditation requirements, we are using the Knowledge, Skills, and Values identified by the Planning Accreditation Board (PAB) as desired outcomes for planning education.

A.1. General planning knowledge:

1. Purpose and Meaning of Planning:
2. Planning Theory:
3. Planning Law:
4. Human Settlements and History of Planning:
5. The Future:
6. Global Dimensions of Planning:

A.2. Planning skills:

1. ResearchWritten, Oral and Graphic Communication:
2. Quantitative and Qualitative Methods:
3. Plan Creation and Implementation: is able to use Planning Process Methods:
4. Leadership:

A.3. Values and ethics

1. Professional Ethics and Responsibility:
2. Governance and Participation:
3. Sustainability and Environmental Quality:
4. Growth and Development: Social Justice:

VMS - Comparative Biosciences, MS

for the degree of Master of Science in Veterinary Medical Science - Comparative Biosciences

dean of the college of veterinary medicine: Peter D. Constable
head of department: Uwe Rudolph
director of graduate studies: Megan Mahoney (https://vetmed.illinois.edu/biosketch/search/?search_type=userid&search=mmm1&skinId=10776)
assistant director of graduate studies: Juanmahel Davila (https://vetmed.illinois.edu/biosketch/search/?search_type=userid&search=davilo&skinId=10776)
department website: https://www.vetmed.illinois.edu/c (https://www.vetmed.illinois.edu/path/)**b**
department faculty: Comparative Biosciences Faculty (https://vetmed.illinois.edu/directory/?dept=873&type=Faculty)
overview of admissions & requirements: Comparative Biosciences Graduate Program (https://vetmed.illinois.edu/college-organization/comparative-biosciences/graduate-study-training-programs/)
college website: College of Veterinary Medicine (http://www.vetmed.illinois.edu/)
email: cbgradprogram@vetmed.illinois.edu (compbioscigradprog@vetmed.illinois.edu)
graduate office: 3519 Veterinary Medicine Basic Sciences Building, 2001 South Lincoln Avenue, Urbana, IL 61802
phone: (217) 333-2506

Graduate Degree Programs in Comparative Biosciences

VMS - Comparative Biosciences, MS (p. 1062)
VMS - Comparative Biosciences, PhD (p. 1063)
Joint Degree Programs: Veterinary Medical Scholars Program
DVM and VMS - Comparative Biosciences, PhD (p. 1169)

Admission

Applicants for graduate study in Comparative Biosciences must have a minimum grade point average of 3.0 (A = 4.0). Grade point averages will be calculated on the last 60 hours of undergraduate studies for those without the D.V.M. degree and on the entire professional curriculum for those with the D.V.M., or equivalent degree. Applicants with a graduate degree or with some graduate coursework will be evaluated on the basis of their graduate work as well as their undergraduate or professional records. Qualifications of students must be approved by the department's Graduate Studies Committee.

The Graduate Record Examination (GRE) is required and must have been taken within the last five years prior to application.

Domestic and international applicants whose native language is not English must take the Test of English as a Foreign Language (TOEFL). A score of at least 600 on the paper-based test, or 250 on the computer-based test, is required. Those applicants who gain admission on the basis of their academic credentials, but score below 600 on the TOEFL, will be admitted on limited status and required to take the English Placement Test (EPT) upon their arrival. Students are exempt from the TOEFL requirement if they have completed at least two academic years of full-time study at an institution where the language of instruction is English during the five-year period prior to the proposed date of enrollment. Students also need to take the Test of Spoken English (TSE) oral exam and score at least 50.

We are not accepting applications for the M.S./D.V.M. program at this time.

Graduate Teaching Experience

Experience in teaching is considered a vital part of the graduate program and is suggested as part of the academic work of all M.S. candidates in this program.

Faculty Research Interests

Experimental models range from stem cells to rodent models to domestic animals, and human patients. Exciting research is being conducted by CB faculty in the areas of:

- **endocrine/reproductive biology**
- **developmental and stem cell research**
- **neurobiology**
- **comparative pharmacology and toxicology**
- **biochemistry**

Training Programs, Centers and Institutes

Our faculty provide graduate instruction in stem cell research, molecular genetics, pharmacology and toxicology. They also participate in interdisciplinary training programs including the NIEHS-funded Environmental Toxicology Training Program (http://vetmed.illinois.edu/cb/nihtox/), the Interdisciplinary Environmental Toxicology Training Program (https://vetmed.illinois.edu/ietp/), the Reproductive Biology Program (https://vetmed.illinois.edu/peer/), the Neuroscience Program (http://neuroscience.illinois.edu/), the Nutritional Sciences Division (http://www.nutrsci.illinois.edu/), Beckman Institute (http://www.beckman.uiuc.edu/), and the Institute for Genomic Biology (http://www.igb.illinois.edu/).

Financial Aid

A limited number of research and teaching assistantships or fellowship positions are available.

for the degree of Master of Science in Veterinary Medical Science - Comparative Biosciences

For additional details and requirements refer to the department's graduate degree requirements (https://vetmed.illinois.edu/college-organization/comparative-biosciences/graduate-study-training-programs/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
Student must select from one of the following courses with the advice of his/her dissertation committee:		3-4
MCB 450	Introductory Biochemistry	
MCB 354	Biochem & Phys Basis of Life (credits cannot be used towards degree)	
MCB 401	Cellular Physiology	
MCB 402	Sys & Integrative Physiology	
MCB 410	Developmental Biology, Stem Cells and Regenerative Medicine	
MCB 480	Eukaryotic Cell Signaling	
MCB 501	Advanced Biochemistry	
Select one of the following:		4
PATH 524	Biostatistics	
VCM 572	Clinical Epidemiology	
CPSC 440	Applied Statistical Methods I	
or approved equivalent		
CB 590	Seminar	1
CB 591	Biosciences Seminar Series (may be repeated for up to 2 hours of credit)	1
CB 592	Special Problems (4 max applied toward degree)	4
Electives		5-11
CB 599	Thesis Research (min/max applied toward degree)	12
Total Hours		32

Other Requirements

Requirement	Description
Other requirements may overlap	Students may be required to take additional courses as recommended by Advisory Committees or Department Divisions
Minimum Hours Required Within the Unit:	8 (500 level)
Minimum 500-level Hours Required Overall:	12
Final Exam/Thesis Defense	Required
Thesis Deposit Required	
Minimum GPA:	3.00

Learning Outcomes: VMS - Comparative Biosciences, MS

Learning Outcomes for the degree of Master of Science in Veterinary Medical Science - Comparative Biosciences

Graduates of CB M.S. program will be able to:

1. Demonstrate a basic understanding of statistics, biochemistry/physiology and achieve a GPA of 3.0 or greater
2. Demonstrate in-depth knowledge in the areas of his/her thesis research based upon their written thesis and oral communications
3. Perform experiments and statistical analyses, and interpret the results in the context of the research question
4. Communicate science and present research
5. Teach students in a laboratory or classroom setting(optional)

VMS - Comparative Biosciences, PhD

for the degree of Doctor of Philosophy in Veterinary Medical Science - Comparative Biosciences

dean of the college of veterinary medicine: Peter D. Constable
head of department: Uwe Rudolph
director of graduate studies: Megan Mahoney
assistant director of graduate studies: Juanmahel Davila (https://vetmed.illinois.edu/biosketch/search/?search_type=userid&search=davilo&skinId=10776)
department website: https://www.vetmed.illinois.edu/c (https://www.vetmed.illinois.edu/path/)**b**
department faculty: Comparative Biosciences Faculty (https://vetmed.illinois.edu/directory/?dept=873&type=Faculty)
overview of admissions & requirements: Comparative Biosciences Graduate Program (https://vetmed.illinois.edu/college-organization/comparative-biosciences/graduate-study-training-programs/)
college website: College of Veterinary Medicine (http://www.vetmed.illinois.edu/)
email: cbgradprogram@vetmed.illinois.edu (compbioscigradprog@vetmed.illinois.edu)
graduate office: 3519 Veterinary Medicine Basic Sciences Building, 2001 South Lincoln Avenue, Urbana, IL 61802
phone: (217) 333-2506

Graduate Degree Programs in Comparative Biosciences

VMS - Comparative Biosciences, MS (p. 1062)
VMS - Comparative Biosciences, PhD (p. 1063)

Joint Degree Programs: Veterinary Medical Scholars Program

DVM and VMS - Comparative Biosciences, PhD (p. 1169)

Admission

Applicants for graduate study in Comparative Biosciences must have a minimum grade point average of 3.0 (A = 4.0). Grade point averages will be calculated on the last 60 hours of undergraduate studies for those without the D.V.M. degree and on the entire professional curriculum for those with the D.V.M., or equivalent degree. Applicants with a graduate degree or with some graduate coursework will be evaluated on the basis of their graduate work as well as their undergraduate or professional

records. Qualifications of students must be approved by the department's Graduate Studies Committee.

The Graduate Record Examination (GRE) is required and must have been taken within the last five years prior to application.

International applicants whose native language is not English must take the Test of English as a Foreign Language (TOEFL). A score of at least 600 on the paper-based test, or 250 on the computer-based test, is required. Those applicants who gain admission on the basis of their academic credentials, but score below 600 on the TOEFL, will be admitted on limited status and required to take the English Placement Test (EPT) upon their arrival. Students are exempt from the TOEFL requirement if they have completed at least two academic years of full-time study at an institution where the language of instruction is English during the five-year period prior to the proposed date of enrollment. Students also need to take the Test of Spoken English (TSE) oral exam and score at least 50.

Joint Degree Programs

Students accepted into the Veterinary Medical Scholars Program (https://vetmed.illinois.edu/education/doctor-veterinary-medicine-degree/research-opportunities-dvm-students/veterinary-medical-scholars-program/) can complete a D.V.M. and Ph.D. degree.

Graduate Teaching Experience

Experience in teaching is considered a vital part of the graduate program and is required as part of the academic work of all Ph.D. candidates in this program.

Faculty Research Interests

Experimental models range from stem cells to rodent models to domestic animals, and human patients. Exciting research is being conducted by CB faculty in the areas of:

- **endocrine/reproductive biology**
- **developmental and stem cell research**
- **neurobiology**
- **comparative pharmacology and toxicology**
- **biochemistry**

Training Programs, Centers and Institutes

Our faculty provide graduate instruction in stem cell research, molecular genetics, pharmacology and toxicology. They also participate in interdisciplinary training programs including the NIEHS-funded Environmental Toxicology Training Program (http://vetmed.illinois.edu/cb/nihtox/), the Interdisciplinary Environmental Toxicology Training Program (https://vetmed.illinois.edu/ietp/), the Reproductive Biology Program (https://vetmed.illinois.edu/peer/), the Neuroscience Program (http://neuroscience.illinois.edu/), the Nutritional Sciences Division (http://www.nutrsci.illinois.edu/), Beckman Institute (http://www.beckman.uiuc.edu/), and the Institute for Genomic Biology (http://www.igb.illinois.edu/).

Financial Aid

A limited number of research and teaching assistantships or fellowship positions are available.

for the degree of Doctor of Philosophy in Veterinary Medical Science - Comparative Biosciences

For additional details and requirements refer to the department's degree programs information (http://chbe.illinois.edu/graduate-program/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
CB 590	Seminar (Thesis Defense seminar 1 hour and Prospectus Exam 1 hour)	2
CB 591	Biosciences Seminar Series (May be repeated for up to 4 hours of credit)	2
CB 592	Special Problems (min/max applied toward degree. Limit of 12 credit hours total. This limit includes credits accrued during the MS degree.)	12
CB 599	Thesis Research (min/max applied toward degree)	0
Students must select ONE of the following courses with the advice of his/her dissertation committee:		3-4
MCB 354	Biochem & Phys Basis of Life	
MCB 401	Cellular Physiology	
MCB 402	Sys & Integrative Physiology	
MCB 410	Developmental Biology, Stem Cells and Regenerative Medicine	
MCB 450	Introductory Biochemistry	
MCB 480	Eukaryotic Cell Signaling	
MCB 501	Advanced Biochemistry	
Select one of the following: [1]		4
PATH 524	Biostatistics	
VCM 572	Clinical Epidemiology	
CPSC 440	Applied Statistical Methods I	
Total Hours		**64**

[1] *Or approved equivalent course.*

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Students may be required to take additional courses as recommended by Advisory Committee or Department Divisions.	
64 hours (including thesis research) earned in courses meeting on the Urbana-Champaign campus, on the Chicago campus, or in other locations approved by the Graduate College for graduate credit.	
Teaching experience is required	
Masters Degree Required for Admission to PhD?	No, but Masters-level requirements must be met (32 hours min.)
Qualifying Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the* department's degree programs information *(*http://chbe.illinois.edu/graduate-program/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: VMS - Comparative Biosciences, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Veterinary Medical Science - Comparative Biosciences

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Graduates of CB Ph.D. program will be able to:

1. Demonstrate a basic understanding of statistics, biochemistry/physiology and achieve a GPA of 3.0 or greater
2. Demonstrate in-depth knowledge in the areas of his/her thesis research based upon their written thesis and oral communications
3. Perform experiments and statistical analyses, and interpret the results in the context of the research question
4. Communicate science and present research seminars successfully
5. Teach students in a laboratory or classroom setting

VMS - Pathobiology, MS

for the degree of Master of Science in Veterinary Medical Science - Pathobiology

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dean of the college of veterinary medicine: Peter D. Constable
head of department:
director of graduate studies: Dongwan Yoo
department website: https://www.vetmed.illinois.edu/path (https://www.vetmed.illinois.edu/path/)
department faculty:
overview of college admissions & requirements:
college website: College of Veterinary Medicine (http://www.vetmed.illinois.edu/)
email: Karen Nichols klp68@illinois.edu
graduate office: 2522 Veterinary Medicine Basic Sciences Building, 2001 South Lincoln Avenue, Urbana, IL 61802
phone: (217) 333-2449

Graduate Degree Programs in Pathobiology

VMS - Pathobiology, MS (p. 1065)
Pathobiology Research Scholars
VMS - Pathobiology, PhD (p. 1066)
Pathobiology Research Scholars
Joint Degree Program: Veterinary Medical Scholars Program
DVM and VMS - Pathobiology, PhD (p. 1169)

The Department of Pathobiology offers graduate programs leading to the degree of Master of Science. Areas of specialization include epidemiology, infectious diseases, immunology, virology, bacteriology, anatomic pathology, and clinical pathology. Each specialty area has a core of required courses supplemented by other courses within the Department of Pathobiology and from other departments of the Graduate College. Adequate laboratory and animal holding space to conduct the research of the faculty and graduate students is provided in the Basic Sciences Building, Veterinary Teaching Hospitals, and the Veterinary Research Farm.

Admission

Applicants for graduate study in the Department of Pathobiology must have a minimum grade point average of 3.0 (A = 4.0). Grade point averages will be calculated on the last 60 hours of undergraduate studies for those without the D.V.M. degree and on the entire professional curriculum for those with the D.V.M., or equivalent, degree. Applicants with a graduate degree or with some graduate coursework will be evaluated on the basis of their graduate work as well as their undergraduate or professional records. Qualifications of students must be approved by the department's Graduate Admissions Committee.

The Graduate Record Examination (GRE) is required and must have been taken within the last five years prior to application. Usually, successful candidates score an average in the 80th percentile or higher on each of the three portions of the GRE to be eligible for consideration.

International applicants whose native language is not English must take the Test of English as a Foreign Language (TOEFL). A score of at least 600 on the paper-based test, or 250 on the computer-based test, is required. Those applicants who gain admission on the basis of their academic credentials, but score below 600 on the TOEFL, will be admitted on limited status and required to take the English Placement Test (EPT) upon their arrival. Students are exempt from the TOEFL requirement if they have completed at least two academic years of full-time study at an institution where the language of instruction is English during the five-year period prior to the proposed date of enrollment. Students also need to take the Test of Spoken English (TSE) oral exam and score at least 50. We are not accepting applications for the M.S./D.V.M. program at this time.

Specialization in Infectious Diseases

The Department of Pathobiology offers an area of specialization in infectious diseases. The program is flexible and provides the student with proficiency in several areas of epidemiology, immunology, parasitology, virology, bacteriology and molecular pathogenesis of infectious disease and ecology of infectious diseases. Students electing this area should have completed coursework in basic genetics, biochemistry, and microbiology. The program of study for each student in the specialization is decided individually. Interested students should direct inquiries and applications to the department.

Specialization in Anatomic, Clinical and Zoo Pathology

The Department of Pathobiology offers an area of specialization in anatomic, clinical, and zoo pathology. These programs are residency programs available to qualified graduate veterinarians. Veterinarians entering this specialization will be specifically trained in pathology so they can function as competent and innovative professionals and assume leadership roles in academia, government, and industry. Students electing this area must have completed coursework in the D.V.M. curriculum. The program of study for each student in these specializations is decided individually. Interested students should direct inquiries and applications to the department. Students completing the specialization will be qualified to take the ACVP Board examinations during the program.

Joint Degree Program

Students accepted into the Veterinary Medical Scholars Program (http://www.vetmed.illinois.edu/asa/vmsp.html) can complete a D.V.M. and Ph.D. simultaneously.

Faculty Research Interests

Expertise in the Department of Pathobiology spans epidemiology, immunology, parasitology, virology, bacteriology and comparative pathology. Through its multidisciplinary approach, the department addresses complex problems in biomedical and veterinary sciences. Research emphasizes multi-host disease systems, with the goal of improving human and animal health at the individual and population levels in a broad social and environmental context. Specific areas of research interest include:

- Molecular mechanisms of infection, host-pathogen interactions, and immunity
- Strategies for vaccine design and disease control
- Experimental pathology
- Molecular virology
- Bacteriology
- Cancer biology
- Spatial and contextual aspects of health and illness, combining human, animal, and ecosystem health
- Mathematical modeling of infectious diseases to promote disease control
- Foreign animal disease prevention, preparedness, and response

Training Programs, Centers and Institutes

Our faculty provide undergraduate and graduate instruction in molecular virology, infectious diseases, epidemiology, bacteriology, parasitology and anatomic and clinical pathology. They also participate in interdisciplinary training programs including the Emergent Behaviors of Integrated Cellular Systems (EBICS) Center, the Division of Nutritional Sciences (http://www.nutrsci.illinois.edu/) , Beckman Institute (http://www.beckman.uiuc.edu/), and the Institute for Genomic Biology (http://www.igb.illinois.edu/). Pathobiology faculty also lead the Anatomical and Clinical Pathology Residency Program (http://vetmed.illinois.edu/cb/vcpharm.html), which prepares graduate veterinarians for the certifying examination of the American College of Veterinary Pathologists (ACVP).

Graduate Teaching Experience

Experience in teaching is considered a vital part of the graduate program and is required as part of the academic work of all M.S. candidates in this program.

Financial Aid

A limited number of teaching and research assistantships or associate positions are available.

for the degree of Master of Science in Veterinary Medical Science - Pathobiology

For additional details and requirements refer to the department's graduate degree requirements and the Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Code	Title	Hours
Thesis Option		
PATH 590	Seminar	1
PATH 524	Biostatistics	4
Electives		0-27
PATH 599	Thesis Research (0 min applied toward degree)	0
Total Hours	**Thesis Option**	**32**
Non-Thesis Option		
PATH 590	Seminar	1
PATH 524	Biostatistics	4
Electives		27
Total Hours	**Non Thesis Option**	**32**

Other Requirements

Requirement	Description
Other Requirements may overlap	
Final comprehensive examination	
Minimum 500-level Hours Required Overall:	12 (8 in PATH)
Minimum GPA:	3.0

Learning Outcomes: VMS - Pathobiology, MS

Learning Outcomes for the degree of Master of Science in Veterinary Medical Science - Pathobiology

Graduates of the MS program in Pathobiology will:

1. Demonstrate comprehensive knowledge of their chosen sub-discipline that forms the foundation of scientific study in infectious diseases of humans and animals.
2. Formulate ideas and concepts and perform hypothesis-driven research beyond the current boundary of knowledge to make substantive contributions to the field.
3. Demonstrate mastery in scientific techniques and methodology and data analysis.
4. Use effective written and oral communication skills to deliver complex ideas to students in classrooms and to general public.
5. Be prepared to perform high-quality research in academia, industry, or government agencies in an ethical and professional manner.

VMS - Pathobiology, PhD

for the degree of Doctor of Philosophy in Veterinary Medical Science - Pathobiology

dean of the college of veterinary medicine: Peter D. Constable
head of department:
director of graduate studies: Dongwan Yoo
department website: https://www.vetmed.illinois.edu/path (https://www.vetmed.illinois.edu/path/)
department faculty:
overview of college admissions & requirements:
college website: College of Veterinary Medicine (http://www.vetmed.illinois.edu/)
email: Karen Nichols klp68@illinois.edu
graduate office: 2522 Veterinary Medicine Basic Sciences Building, 2001 South Lincoln Avenue, Urbana, IL 61802
phone: (217) 333-2449

Graduate Degree Programs in Pathobiology

VMS - Pathobiology, MS (p. 1065)
Pathobiology Research Scholars
VMS - Pathobiology, PhD (p. 1066)
Pathobiology Research Scholars
Joint Degree Program: Veterinary Medical Scholars Program
DVM and VMS - Pathobiology, PhD (p. 1169)

The Department of Pathobiology offers graduate programs leading to the degree of Master of Science. Areas of specialization include epidemiology, infectious diseases, immunology, virology, bacteriology, anatomic pathology, and clinical pathology. Each specialty area has a core of required courses supplemented by other courses within the Department of Pathobiology and from other departments of the Graduate College. Adequate laboratory and animal holding space to conduct the research of the faculty and graduate students is provided in the Basic Sciences Building, Veterinary Teaching Hospitals, and the Veterinary Research Farm.

Admission

Applicants for graduate study in the Department of Pathobiology must have a minimum grade point average of 3.0 (A = 4.0). Grade point averages will be calculated on the last 60 hours of undergraduate studies for those without the D.V.M. degree and on the entire professional curriculum for those with the D.V.M., or equivalent, degree. Applicants with a graduate degree or with some graduate coursework will be evaluated on the basis of their graduate work as well as their undergraduate or professional records. Qualifications of students must be approved by the department's Graduate Admissions Committee.

The Graduate Record Examination (GRE) is required and must have been taken within the last five years prior to application. Usually, successful candidates score an average in the 80th percentile or higher on each of the three portions of the GRE to be eligible for consideration.

International applicants whose native language is not English must take the Test of English as a Foreign Language (TOEFL). A score of at least 600 on the paper-based test, or 250 on the computer-based test, is required. Those applicants who gain admission on the basis of their academic credentials, but score below 600 on the TOEFL, will be admitted on limited status and required to take the English Placement Test (EPT) upon their arrival. Students are exempt from the TOEFL requirement if they have completed at least two academic years of full-time study at an institution where the language of instruction is English during the five-year period prior to the proposed date of enrollment. Students also need to take the Test of Spoken English (TSE) oral exam and score at least 50. We are not accepting applications for the M.S./D.V.M. program at this time.

Specialization in Infectious Diseases

The Department of Pathobiology offers an area of specialization in infectious diseases. The program is flexible and provides the student with proficiency in several areas of epidemiology, immunology, parasitology, virology, bacteriology and molecular pathogenesis of infectious disease and ecology of infectious diseases. Students electing this area should have completed coursework in basic genetics, biochemistry, and microbiology. The program of study for each student in the specialization is decided individually. Interested students should direct inquiries and applications to the department.

Specialization in Anatomic, Clinical and Zoo Pathology

The Department of Pathobiology offers an area of specialization in anatomic, clinical, and zoo pathology. These programs are residency programs available to qualified graduate veterinarians. Veterinarians entering this specialization will be specifically trained in pathology so they can function as competent and innovative professionals and assume leadership roles in academia, government, and industry. Students electing this area must have completed coursework in the D.V.M. curriculum. The program of study for each student in these specializations is decided individually. Interested students should direct inquiries and applications to the department. Students completing the specialization will be qualified to take the ACVP Board examinations during the program.

Joint Degree Program

Students accepted into the Veterinary Medical Scholars Program (http://www.vetmed.illinois.edu/asa/vmsp.html) can complete a D.V.M. and Ph.D. simultaneously.

Faculty Research Interests

Expertise in the Department of Pathobiology spans epidemiology, immunology, parasitology, virology, bacteriology and comparative pathology. Through its multidisciplinary approach, the department addresses complex problems in biomedical and veterinary sciences. Research emphasizes multi-host disease systems, with the goal of improving human and animal health at the individual and population levels in a broad social and environmental context. Specific areas of research interest include:

- Molecular mechanisms of infection, host-pathogen interactions, and immunity
- Strategies for vaccine design and disease control
- Experimental pathology
- Molecular virology
- Bacteriology
- Cancer biology
- Spatial and contextual aspects of health and illness, combining human, animal, and ecosystem health
- Mathematical modeling of infectious diseases to promote disease control
- Foreign animal disease prevention, preparedness, and response

Training Programs, Centers and Institutes

Our faculty provide undergraduate and graduate instruction in molecular virology, infectious diseases, epidemiology, bacteriology, parasitology and anatomic and clinical pathology. They also participate in interdisciplinary training programs including the Emergent Behaviors of Integrated Cellular Systems (EBICS) Center, the Division of Nutritional Sciences (http://www.nutrsci.illinois.edu/) , Beckman Institute (http://www.beckman.uiuc.edu/), and the Institute for Genomic Biology (http://www.igb.illinois.edu/). Pathobiology faculty also lead the Anatomical and Clinical Pathology Residency Program (http://vetmed.illinois.edu/cb/vcpharm.html), which prepares graduate veterinarians for the certifying examination of the American College of Veterinary Pathologists (ACVP).

Graduate Teaching Experience

Experience in teaching is considered a vital part of the graduate program and is required as part of the academic work of all M.S. candidates in this program.

Financial Aid

A limited number of teaching and research assistantships or associate positions are available.

for the degree of Doctor of Philosophy in Veterinary Medical Science - Pathobiology

For additional details and requirements, refer to the department's graduate degree requirements and the Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Code	Title	Hours
PATH 524	Biostatistics	4
PATH 590	Seminar	2
PATH 599	Thesis Research (0 min. applied toward degree)	0
Elective hours outside of PATH and within the Graduate College		12
Total Hours		**64**

Other requirements [1]

Requirement	Description
Other requirements may overlap	
Teaching experience is required	
Communicative skills requirements	
Masters degree required for admission to Ph.D.?	No, but Masters-level requirements must be met (32 hours min.)
Qualifying Exam required	No
Preliminary Exam required	Yes
Final Exam/Dissertation Defense required	Yes
Dissertation deposit required	Yes
Minimum GPA:	3.0

[1] *For additional details and requirements, refer to the department's graduate degree requirements and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: VMS - Pathobiology, PhD

Learning Outcomes for the degree of Doctor of Philosophy in Veterinary Medical Science - Pathobiology

Graduates of the PhD program in Pathobiology will:

1. Demonstrate comprehensive knowledge of their chosen sub-discipline that forms the foundation of scientific study in infectious diseases of humans and animals.
2. Formulate ideas and concepts and perform hypothesis-driven research beyond the current boundary of knowledge to make substantive contributions to the field.
3. Demonstrate mastery in scientific techniques and methodology and data analysis.
4. Use effective written and oral communication skills to deliver complex ideas to students in classrooms and to general public.
5. Be prepared to perform high-quality research in academia, industry, or government agencies in an ethical and professional manner.

VMS - Veterinary Clinical Medicine, MS

for the degree of Master of Science in Veterinary Medical Science - Veterinary Clinical Medicine

dean of the college: Peter D. Constable
head of department: Dennis D. French
director of graduate studies: Timothy M. Fan
overview of admissions & requirements:
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: College of Veterinary Medicine (http://www.vetmed.illinois.edu/)
department website: https://vetmed.illinois.edu/college-organization/veterinary-clinical-medicine/
college faculty:
college office: 242 Small Animal Clinic, 1008 West Hazelwood Drive, Urbana, IL 61802
phone: 217-333-5310
email:

The Master of Science in VMS-Veterinary Clinical Medicine is not currently accepting applications.

Graduate Degree Programs in Veterinary Clinical Medicine

VMS-Veterinary Clinical Medicine, MS (p. 1068)
Veterinary Clinical Medicine Research Scholars
VMS-Veterinary Clinical Medicine, PhD (p. 1062)
Veterinary Clinical Medicine Research Scholars

The Department of Veterinary Clinical Medicine offers a graduate program leading to the degree of Master of Science. The primary goal of graduate programs in veterinary clinical medicine is to prepare students for careers involving research and/or teaching in a specialty area. Graduate work in veterinary clinical medicine may be pursued in several areas, including:

- **anesthesiology**
- **equine medicine and surgery**
- **equine theriogeneology**
- **farm animal reproduction (theriogenology)**
- **medicine**
- **surgery**
- **imaging/radiation therapy**
- **small animal medicine (emergency and critical care, internal medicine)**
- **small animal surgery**
- **specialty medicine (cardiology, dentistry, dermatology, oncology, ophthalmology)**
- **zoological medicine**

The department, with the teaching hospital, has facilities and equipment for studying the health and diseases of animals.

After completing graduate work, the student will be able to conduct research both independently and as a team member. Adequate training in planning research projects and writing research proposals will give the student the ability to function with teams of scientists from various areas of the biomedical field. Experience in clinical teaching and literature study will form the basis for the student's development of teaching programs within his or her discipline.

A residency program, designed to train a veterinarian for specialty clinical practice, can be combined with the graduate program. While a graduate program can be accomplished in a shorter time period, the duration of combined programs is usually three years, reflecting the time required to satisfy the objective of each program. Details of the residency program can be obtained from the Program Secretary of the Department of Veterinary Clinical Medicine.

Admission

Admission requirements include a doctor of veterinary medicine (D.V.M.) degree or equivalent. By petition, non-D.V.M.s may be admitted. Applicants for graduate study in veterinary clinical medicine must have a minimum grade point average of 3.0 (A = 4.0). Admission averages are computed from the entire professional curriculum or from the last 60 hours of undergraduate studies for those without the D.V.M. degree. Applicants with a grade point average between 2.5 and 3.0 may be considered for admission on limited status on the basis of individual merit. Applicants who have a prior graduate degree or who have completed some graduate course work will be evaluated on the basis of their graduate work as well as their under-graduate or professional records. Acceptance of students must be approved by the department's Graduate Committee.

International applicants must submit evidence of satisfactory performance on TOEFL or other tests designed to test proficiency in English. International students must also submit evidence of financial support.

We are not accepting applications for the M.S./D.V.M. program at this time.

Graduate Teaching Experience

Experience in teaching is considered a vital part of the graduate program and is required as part of the academic work of all M.S. candidates in this program.

Financial Aid

A limited number of research associate positions are available.

for the degree of Master of Science in Veterinary Medical Science - Veterinary Clinical Medicine

The requirements for this degree include completion of a thesis that conforms to the requirements of the Department of Veterinary Clinical Medicine. The non-thesis option requires departmental approval.

The candidate must complete all requirements of the department and the Graduate College and pass the stipulated examinations. The final M.S. examination consists of a presentation of the thesis in the form of a departmental seminar (VCM 590). The seminar is followed by an oral examination administered by the candidate's committee and the department head. The student must demonstrate the ability to design and conduct independent research in order to be granted the M.S. degree.

For additional details and requirements refer to the department's graduate degree requirements and the Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

The requirements for this degree include completion of a thesis that conforms to the requirements of the Department of Veterinary Clinical Medicine. The non-thesis option requires departmental approval.

The candidate must complete all requirements of the department and the Graduate College and pass the stipulated examinations. The final M.S. examination consists of a presentation of the thesis in the form of a departmental seminar (VCM 590). The seminar is followed by an oral examination administered by the candidate's committee and the department head. The student must demonstrate the ability to design and conduct independent research in order to be granted the M.S. degree.

Thesis Option

Code	Title	Hours
One statistics course		
VCM 590	Seminar	1
Graduate electives at the 400 or 500 level in consultation with your advisor		8
VCM 592	Special Problems (optional, max 12)	12
VCM 593	Adv Topics Vet Clin Med (optional, max 8)	8
VCM 599	Thesis Research (min/max applied toward degree)	0-12
Total Hours		32

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum 500-Level Hours Required Within the Unit:	8
Minimum 500-level Hours Required Overall:	12 (not including 599 or 590)
Teaching experience is required	
Oral exam	
Minimum Cumulative GPA in VCM M.S. program:	3.0
A thesis submitted to the Graduate College	

[1] *For additional details and requirements refer to the department's graduate degree requirements and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Manuscript Based (Non-thesis) Option

Code	Title	Hours
One statistics course		
VCM 590	Seminar	1
Graduate electives at the 400 or 500 level in consultation with your advisor		8
VCM 592	Special Problems (optional, max 12)	12
VCM 593	Adv Topics Vet Clin Med (optional, max 8)	8
VCM 598	Manuscript Research (min/max applied toward degree)	12
Total Hours		32

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum 500-Level Hours Required Within the Unit:	8
Minimum 500-level Hours Required Overall:	12 (not including 598 or 590)
Manuscript submitted and accepted for publication	
Teaching experience is required	
Oral exam	
Minimum Cumulative GPA in VCM M.S. program:	3.0

[1] *For additional details and requirements refer to the department's graduate degree requirements and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Veterinary Clinical Medicine, MS

Learning Outcomes for the degree of Master of Science in Veterinary Medical Science - Veterinary Clinical Medicine

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Graduates of the MS program in Veterinary Clinical Medicine will:

1. Be life-long learners in careers involving specialty clinical practice, teaching, industry, government, or research related to the field of veterinary medicine
2. Understand the pathologic mechanisms for common clinical disease manifestations encountered in veterinary medicine
3. Develop a foundational molecular knowledge base pertaining to veterinary clinical diseases
4. Cultivate an appreciation for scientific literature evaluation
5. Gain oratory skills required for scientific audience public speaking

GRADUATE CONCENTRATIONS

- #
- A (p. 1071)
- B (p. 1071)
- C (p. 1071)
- D (p. 1071)
- E (p. 1071)
- F (p. 1072)
- G (p. 1072)
- H (p. 1072)
- I (p. 1072)
- J (p. 1072)
- K
- L (p. 1072)
- M (p. 1072)
- N
- O
- P (p. 1072)
- Q
- R (p. 1072)
- S (p. 1072)
- T (p. 1073)
- U (p. 1073)
- V (p. 1073)
- W (p. 1073)
- X
- Y
- Z

A graduate concentration constitutes a coherent program of study requiring additional breadth or considerable depth of knowledge. A concentration may refer to a subfield within a discipline, or to an interdepartmental and/or interdisciplinary area of knowledge. Concentrations appear on academic transcripts.

Some concentrations (major-based) are only open to a student majoring in the offering department. Other concentrations (floating) are open to students in a broad range of majors. Both types are listed here, with the eligible programs listed below each concentration.

A

Accountancy (p. 1073)
- Business Administration, MBA (p. 646)|Business Administration, MS (p. 646)|Finance, MS (p. 763)|Technology Management, MS (p. 1048)

Accountancy Analytics (p. 546) **(online)**
- Accountancy, MS (p. 544)

Acting (p. 1052)
- Theatre, MFA (p. 1050)

Actuarial Science and Risk Analytics (p. 868)
- Mathematics, PhD (p. 867)

Advanced Analytics (p. 1074)
- Financial Engineering, MS (p. 765) | Industrial & Enterprise Engineering, MS (p. 814)

Advanced Clinical Practice (p. 1004)
- Social Work, MSW (p. 1003)

Aerospace Systems Engineering (p. 745) **(on campus and online)**
- Engineering, MEng (p. 745)

African American Studies (p. 1075)
- African Studies, MA (p. 556)|Education Policy, Organization and Leadership, MA (p. 720)|Education Policy, Organization and Leadership, PhD (p. 723)|Educational Psychology, EdM (p. 725)|Educational Psychology, MA (p. 728)|Educational Psychology, MS (p. 731)|Educational Psychology, PhD (p. 734)|History, MA (p. 802)|History, PhD (p. 803)|Political Science, MA (p. 968)|Political Science, PhD (p. 969)|Sociology, MA (p. 1009)|Sociology, PhD (p. 1009)

Analytics (p. 1028)
- Statistics, MS (p. 1027)

Animal Sciences (p. 625)
- Bioinformatics, MS (http://catalog.illinois.edu/graduate/provost/ms_bioinfo/)

Applied Statistics (p. 1029)
- Statistics, MS (p. 1027)

Astrochemistry (p. 1076)
- Astronomy, PhD (p. 606)|Chemistry, PhD (p. 659)

Autonomy & Robotics (p. 747)
- Engineering, MEng (p. 745)

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B

Bilingual-Bicultural Education (p. 1076)
- Curriculum and Instruction, CAS (p. 689)|Curriculum and Instruction, EdD (p. 691)|Curriculum and Instruction, EdM (p. 693)|Curriculum and Instruction, MA (p. 695)|Curriculum and Instruction, MS (p. 697)|Early Childhood Education, EdM (p. 703)|Education Policy, Organization & Leadership, EdD (p. 722)|Education Policy, Organization & Leadership, EdM (p. 718)|Education Policy, Organization & Leadership, MA (p. 720)|Educational Psychology, EdM (p. 725)|Educational Psychology, MA (p. 728)|Educational Psychology, MS (p. 731)|Elementary Education, EdM (p. 742)|Secondary Education, EdM (p. 994)|Special Education, EdM (p. 1018)|Special Education, MS (p. 1020)

Bioengineering (p. 626)
- Bioinformatics, MS (p. 626)

Bioinstrumentation (p. 617)
- Bioengineering, MEng (p. 616)

Biomechanics (p. 1085)
- Bioengineering, MS (p. 621)|Bioengineering, PhD (p. 623)|Bioinformatics: Bioengineering, MS (p. 626)|Electrical

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F

Finance (p. 1096)
Accountancy, MAS (p. 542) | Accountancy, MS (p. 544) **(on-campus)** | Business Administration, MS (p. 646) | Management, MS (p. 858) | Technology Management, MS (p. 1048)
Financial Reporting & Assurance (p. 543)
Accountancy, MAS (p. 542)
Food Science (p. 768)
Food Science & Human Nutrition, MS (p. 766)
Food Science & Human Nutrition, PhD (p. 775)

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G

General Bioengineering (p. 620)
Bioengineering, MENG (p. 616)
Geographic Information Science (p. 789)
Geography, MS with Professional Science Master's (p. 789)
Global Challenges in Business (p. 1097)
Accountancy, MS (online) (p. 544) | Business Administration, MBA (iMBA) (p. 642) | Management, MS (p. 858)
Global Studies in Education (p. 1098)
Education Policy, Organization & Leadership, CAS (p. 716)|Education Policy, Organization & Leadership, EdD (p. 722)|Education Policy, Organization & Leadership, EdM (p. 718)|Education Policy, Organization & Leadership, MA (p. 720)|Education Policy, Organization & Leadership, PhD (p. 723)
Graphic Design (p. 588)
Art and Design, MFA (p. 585)
Greek (p. 667)
Classics, MA (p. 666)

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H

Health & Wellbeing (http://catalog.illinois.edu/graduate/faa/architecture-march/health-wellbeing/)
Architecture, MARCH (p. 579)
Higher Education (p. 1098)
Education Policy, Organization & Leadership, CAS (p. 716) | Education Policy, Organization & Leadership, EdD (p. 722) | Education Policy, Organization & Leadership, EdM (p. 718) | Education Policy, Organization & Leadership, MA (p. 720) | Education Policy, Organization & Leadership, PhD (p. 723)
History of Education (p. 1099)
Education Policy, Organization & Leadership, CAS (p. 716) | Education Policy, Organization & Leadership, EdD (p. 722) | Education Policy, Organization & Leadership, EdM (p. 718) | Education Policy, Organization & Leadership, MA (p. 720) | Education Policy, Organization & Leadership, PhD (p. 723)
Human Nutrition (p. 770)
Food Science & Human Nutrition, MS (p. 770) | Food Science & Human Nutrition, PhD (p. 779)
Human Resource Development (p. 1099)
Education Policy, Organization & Leadership, CAS (p. 716) | Education Policy, Organization & Leadership, EdD (p. 722) | Education Policy, Organization & Leadership, EdM (p. 718) | Education Policy, Organization & Leadership, MA (p. 720) | Education Policy, Organization & Leadership, PhD (p. 723)

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M

Mathematics (p. 997)
Secondary Education, EdM (p. 994)
Medieval Studies (p. 1101)
Architecture, MARCH (p. 579) | Architecture, PhD (p. 583) | Art History, MA (p. 601) | Art History, PhD (p. 602) | Classical Philology, PhD (p. 664) | Classics, MA (p. 666) | Communication, MA (p. 670) | Communication, PhD (p. 671) | Comparative Literature, MA (p. 676) | Comparative Literature, PhD (p. 677) | East Asian Languages & Cultures, PhD (p. 707) | English, MA (p. 751) | English, PhD (p. 753) | French, MA (p. 781) | French, PhD (p. 783) | German, MA (p. 794) | German, PhD (p. 796) | History, MA (p. 802) | History, PhD (p. 803) | Italian, MA (p. 824) | Italian, PhD (p. 826) | Landscape Architecture, MLA (p. 832) | Landscape Architecture, PhD (p. 833)|Musicology, PhD (p. 941)|Philosophy, MA (p. 957)|Philosophy, PhD (p. 959) | Portuguese, MA (p. 972) | Portuguese, PhD (p. 973) | Spanish, MA (p. 1012) | Spanish, PhD (p. 1016)
Metals (p. 591)
Art & Design, MFA (p. 585)
Music Composition (p. 906)
Music, DMA (p. 893)
Music Composition (p. 926)
Music, MMUS (p. 914)
Music Theory (p. 928)
Music, MMUS (p. 914)
Musicology (p. 931)
Music, MMUS (p. 914)

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P

Painting (p. 592)
Art & Design, MFA (p. 585)
Performance & Literature (p. 909)
Music, DMA (p. 893)
Performance & Literature (p. 933)
Music, MMUS (p. 914)
Pharmaceutical Engineering (p. 1103)
Bioengineering, MEng (p. 616)
Philosophy of Education (p. 1104)
Education Policy, Organization & Leadership, CAS (p. 716) | Education Policy, Organization & Leadership, EdD (p. 722) | Education Policy, Organization & Leadership, EdM (p. 718) | Education Policy, Organization & Leadership, MA (p. 720) | Education Policy, Organization & Leadership, PhD (p. 723)
Photography (p. 593)
Art & Design, MFA (p. 585)
Piano Pedagogy (p. 936)
Music, MMUS (p. 914)
Plasma Engineering (p. 748) **(on campus and online)**
Engineering, MENG (p. 745)
Policy Economics (p. 714)
Economics, MS (p. 713)
Printmaking (p. 594)
Art & Design, MFA (p. 585)
Professional Science Master's (p. 1104)
Agricultural Production, MS (p. 567) | Bioprocessing & Bioenergy, MS (p. 641) | Food Science & Human Nutrition, MS (p. 766) | Geography: Geographic Information Science, MS

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T

Taxation (p. 1110)
Accountancy, MAS (p. 542) | Accountancy, MS (p. 544)
Technology Management (p. 859)
Management, MS (p. 858)

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U

US Legal Practice Skills (p. 848)
Master of Law, LLM (p. 839)
Urbanism (http://catalog.illinois.edu/graduate/faa/architecture-march/urbanism/)
Architecture, MARCH (p. 579)

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V

Vocal Coaching & Accompanying (p. 911)
Music, DMA (p. 893)
Vocal Coaching & Accompanying (p. 938)
Music, MMUS (p. 914)

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W

Writing Studies (p. 1111)
Communication, PhD (p. 671)|Curriculum & Instruction, PhD (p. 699)|Education Policy, Organization & Leadership, EdD (p. 722)|Education Policy, Organization & Leadership, PhD (p. 723)|English, PhD (p. 753)|Information Sciences, PhD (p. 821)

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Accountancy Graduate Concentration

for the Graduate Concentration in Accountancy

interim chair of department: Cele Otnes
director of graduate studies: Deepak Somaya
director of admissions committee: Rakesh Bhatt
email: ba@business.illinois.edu
department website: https://giesbusiness.illinois.edu/msba (https://giesbusiness.illinois.edu/msba/)
department faculty: https://business.illinois.edu/people/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://giesbusiness.illinois.edu/
department office: 360 Wohlers Hall, 1206 South Sixth, Champaign, IL 61820
phone: (217) 333-0857

The Accountancy concentration is available for:

- Business Administration, MBA (p. 646)
- Business Administration, MS (p. 858)
- Finance, MS (p. 763)
- Technology Management, MS (p. 1048)

Graduate Degree Programs in Accountancy

Graduate Majors:
Accountancy, MAS (p. 542)
with optional concentrations: Business & Public Policy (p. 1087), Corporate Governance & International Business (p. 1090), Data Analytics in Accountancy (p. 1091), Finance (p. 763), Information Technology & Control (p. 1100), Real Estate (p. 1105), Supply Chain Management (p. 1109), Taxation (p. 1149)
Accountancy, MS (p. 544) **(on campus & online)**
with optional on campus concentrations: Business & Public Policy (p. 1087), Corporate Governance & International Business (p. 1090), Data Analytics in Accountancy (p. 1091), Information Technology & Control (p. 1100), Supply Chain Management (p. 1109)
Accountancy, PhD (p. 547)
Graduate Minors:
Accountancy (p. 1136)
Graduate Concentrations:
Accountancy (p. 1073)
Data Analytics in Accountancy (p. 1091)

Admission

Applicants will complete a Graduate Concentration in Accountancy application, signed by their graduate advisor and/or graduate program director. The Director of the MSA program will monitor the admission process.

Admission is limited and acceptance is on a competitive basis.

Faculty Research Interests

Faculty research interests are in the areas of marketing, organizational behavior, organization theory, decision sciences, information systems, strategic management, risk analysis, judgment under uncertainty, international business, production and operations management, accounting, economics, entrepreneurship, and finance. The Gies College of Business houses computer facilities, a behavioral science laboratory, and a separate library. The college maintains contacts with industry and government through its Survey Research Laboratory, Illinois Business Consulting, the Academy for Entrepreneurial Leadership and several professional and scholarly journals edited by its faculty.

This concentration requires twelve graduate hours of coursework. Admission to the concentration requires an application to the Department and admission to one of the following graduate programs:

- Finance, MS (MSFA)
- Technology Management, MS (MSTM)
- Business Administration, MBA (full-time)

- Business Administration, MBA (part-time)
- Business Administration: International Management, MS (MSBA)

Admission is limited and acceptance is on a competitive basis.

Code	Title	Hours
Choose three from this list:		
ACCY 501	Accounting Analysis I	4
ACCY 502	Accounting Analysis II	4
ACCY 503	Managerial Accounting	4
or ACCY 517	Financial Statement Analysis and Valuation	
Or, substitute graduate accountancy courses approved by an Accountancy MSA program advisor.		
Total Hours		12

Other Requirements

Requirement	Description
In addition to the concentration requirements, students must also complete the requirements of their major degree.	

for the Graduate Concentration in Accountancy

Code	Title	Hours
Choose three from this list:		
ACCY 501	Accounting Analysis I	4
ACCY 502	Accounting Analysis II	4
ACCY 503	Managerial Accounting	4
or ACCY 517	Financial Statement Analysis and Valuation	
Or, substitute graduate accountancy courses approved by an Accountancy MSA program advisor.		
Total Hours		12

Other Requirements

Requirement	Description
In addition to the concentration requirements, students must also complete the requirements of their major degree.	

Advanced Analytics in Industrial & Enterprise Systems Engineering Concentration

for the concentration of Advanced Analytics in Industrial & Enterprise Systems Engineering (on campus & online)

department head: Jeff Shamma (jshamma@illinois.edu)
associate head of graduate studies: Ramavarapu S Sreenivas (rsree@illinois.edu)
overview of admissions & requirements: https://ise.illinois.edu/graduate/admissions/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://ise.illinois.edu/
program website: https://ise.illinois.edu/graduate/degrees-and-programs/advanced-analytics-concentration.html
department faculty: https://ise.illinois.edu/directory/faculty.html
college website: https://grainger.illinois.edu/
contact: Lauren Redman (lredman@illinois.edu)
address: 117 Transportation Building, 104 S Mathews Ave, Urbana, IL 61801
phone: (217) 333-2730
email: ise-grad@illinois.edu

The Advanced Analytics in Industrial & Enterprise Systems Engineering Concentration prepares students to relate the application of engineering approaches and methods to the analysis and management of engineering and business processes which are data-oriented. Students will be able to provide companies and organizations with the ability to convert the massive amounts of data received into useful information that can help shape the decisions companies and organizations make.

Students must be enrolled in the Industrial Engineering MS (p. 814) (thesis or non-thesis) or Financial Engineering MS (p. 765) degree programs. After the first enrolled semester the student notifies the ISE Graduate Programs Office of their intention to enroll in the concentration and file a petition to add the Advanced Analytics Concentration with the Graduate College.

Graduate Programs in Industrial & Enterprise Systems Engineering

degrees:

Industrial Engineering, MS (p. 814)
optional concentrations:
Advanced Analytics in Industrial & Enterprise Systems Engineering (p. 1074) | Computational Science & Engineering (p. 1089)
Industrial Engineering, PhD (p. 816)
optional concentrations:
Computational Science & Engineering (p. 1089)
Systems & Entrepreneurial Engineering, MS (p. 1034)
optional concentrations:
Computational Science & Engineering (p. 1089)
Systems & Entrepreneurial Engineering, PhD (p. 1035)
Financial Engineering, MS (p. 765) **(sponsored jointly with Department of Finance)**
optional concentrations:
Advanced Analytics in Industrial & Enterprise Systems Engineering (p. 1074) | Data Analytics in Finance (p. 1092)

The Department of Industrial and Enterprise Systems Engineering (ISE) offers graduate programs leading to degrees of Master of Science and Doctor of Philosophy in Industrial Engineering (IE) and Systems and Entrepreneurial Engineering (SEE), as well as (jointly with the Department of Finance) Master of Science in Financial Engineering. The ISE programs

offers an approach to industrial engineering and systems engineering, engineering design, and entrepreneurial engineering that crosses disciplinary lines. The IE program is based in advanced studies that focus on operations research, optimization, supply chain management, financial engineering, quality and reliability engineering and production management, with the aim to advance modeling, simulation, analysis and decision making for complex engineering and economic systems. The SEE program is founded on the premise of dual competency in both traditional engineering and systems integration. The SEE program offers flexibility by permitting the student to select from a menu of advanced courses and take a wide range of electives to meet individual career goals. Graduates of these programs are prepared to enter academic and professional engineering positions in universities, industry, government, and private practice.

Opportunity also exists for specializing in energy and sustainability engineering via the

Energy and Sustainability Engineering (EaSE) Graduate Certificate Option (http://ease.illinois.edu/)

for the concentration of Advanced Analytics in Industrial & Enterprise Systems Engineering (on campus & online)

The Advanced Analytics in Industrial & Enterprise Engineering Concentration is available for:

Industrial Engineering MS (p. 814)
Financial Engineering, MS (p. 765)

Code	Title	Hours
Advanced Analytics Core:		**8**
IE 522	Statistical Methods in Finance	
IE 525	Stochastic Calculus & Numerical Models in Finance	
IE 528	Computing for Data Analytics	
IE 529	Stats of Big Data & Clustering	
IE 530	Optimiztion for Data Analytics	
IE 531	Algorithms for Data Analytics	
IE 532	Analysis of Network Data	
IE 533	Big Graphs and Social Networks	
Advanced Analytics Secondary: [1]		**4**
IE 400	Design & Anlys of Experiments	
IE 410	Advanced Topics in Stochastic Processes & Applications	
IE 411	Optimization of Large Systems	
IE 510	Applied Nonlinear Programming	
IE 511	Integer Programming	
IE 521	Convex Optimization	
IE 523	Financial Computing	
IE 534	Deep Learning	
Total Hours [2, 3]		**12**

[1] Complete 4 hours from the Advanced Analytics Secondary Course List or choose an additional 4 hours from the Advanced Analytics Core Course List.

[2] Students to earn a B or better in each concentration course.

[3] These 12 hours may be used toward the major degree requirements.

African American Studies Concentration

for the Graduate Concentration in African American Studies

department head: Ronald Bailey
overview of admissions & requirements: http://www.afro.illinois.edu/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department website: http://www.afro.illinois.edu/
department faculty:
department office: 1201 West Nevada, Urbana, IL 61801
phone: (217) 333-7781
fax: (217) 244-4809
email: aasrp@illinois.edu

Those wishing to apply for the concentration must submit three letters of recommendation, as well as a brief personal essay describing their background and career plans and explaining how a concentration in African American Studies enhances their primary program of study. Students must be accepted into the concentration. Students also would be expected to have a faculty member affiliated with the department on their doctoral committee. For admission to the concentration or for more information, please contact DAAS. A student's intent to pursue a graduate concentration must be approved by the student's adviser and graduate program director.

Graduate Programs in African American Studies

African American Studies Concentration (p. 1075)
participating programs:
African Studies, MA (p. 556)|Educational Policy, Organization and Leadership, MA (p. 720)|Educational Policy, Organization and Leadership, PhD (p. 723)|Educational Psychology, EdM (p. 725) **(not online)**|Educational Psychology, MA (p. 728) **(not online)**|Educational Psychology, MS (p. 731) **(not online)**|Educational Psychology, PhD (p. 734) **(not online)**|History, MA (p. 802)|History, PhD (p. 803)|Political Science, MA (p. 968)|Political Science, PhD (p. 969)|Sociology, MA (p. 1009)|Sociology, PhD (p. 1009)
African American Studies Graduate Minor (p. 1122)

Code	Title	Hours
AFRO 500	Core Probs African-Am Studies	4
AFRO 597	Problems in African-Am Studies	4
AFRO 598	Res Sem in African-Am Studies	4
Elective hours from approved departmental list		12
Total Hours		24

Astrochemistry Concentration

for the Astrochemistry Graduate Concentration

program coordinator:
overview of admissions & requirements: Astronomy Graduate Admissions (http://www.astro.illinois.edu/academics/graduate/)
overview of admissions & requirements: Chemistry Graduate Admissions (https://chemistry.illinois.edu/admissions/graduate-admissions/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
program website:
department faculty:
department office:
phone:
email:

Not accepting applications at this time.

The Astrochemistry graduate concentration (https://chemistry.illinois.edu/admissions/graduate/astrochemistry-graduate-concentration-not-currently-offered/) is intended for Ph.D. students in Chemistry or Astronomy who wish to gain the necessary background to perform original research in the emerging interdisciplinary field of astrochemistry. It is an addition to the Chemistry and Astronomy Ph.D. programs at Illinois and offers transcript recognition that will ensure that students are recognized as qualified by scientists in both traditional fields (chemistry and astronomy).

Astrochemistry Graduate Concentration

Astrochemistry (p. 1076)
participating programs: Astronomy, PhD (p. 606) | Chemistry, PhD (p. 659)

Astrochemistry is an interdisciplinary area of knowledge at the intersection between chemistry and astronomy. As a few examples, topics of active research in this area include identifying organic molecules in interstellar space, building models of the chemical reactions that occur in interstellar space, laboratory measurements of astronomically important molecules, searching for Earthlike planets using molecular signatures, and understanding the contributions of interstellar molecules to the chemical origin of life. In order to succeed in this field, students require training in both of the traditional disciplines of chemistry and astronomy.

Admission

As the Astrochemistry graduate concentration (https://chemistry.illinois.edu/admissions/graduate/astrochemistry-graduate-concentration-not-currently-offered/) is a part of the Chemistry and Astronomy Ph.D. programs, students should submit applications directly to either the Department of Chemistry or the Department of Astronomy.

Faculty Research Interests

A variety of faculty members in the departments of Chemistry, Astronomy, and Physics have research interests related to astrochemistry. A partial listing of research groups is available on the Astrochemistry concentration website (https://chemistry.illinois.edu/admissions/graduate/astrochemistry-graduate-concentration-not-currently-offered/).

Facilities and Resources

Facilities that can be utilized by astrochemistry students in their thesis research include a wide variety of laboratory spectroscopy equipment in Chemistry, the Combined Array for Research in Millimeter-wave Astronomy, computing facilities in both Chemistry and Astronomy, and other national and international observational astronomy facilities.

Financial Aid

Financial aid in the form of teaching assistantships and/or research assistantships is generally provided for admitted students by the Departments of Chemistry and Astronomy.

for the Astrochemistry Graduate Concentration

The requirements for the Astrochemistry graduate concentration (http://astrochemistry.illinois.edu/concentration.php) are supplemental to the degree requirements of the Ph.D. in either Chemistry or Astronomy, and are summarized in the table below. For this concentration, at least 24 hours of graduate level coursework (at the 400- and 500- level) are required, of which at least 12 must be in chemistry courses and at least 12 in astronomy courses. A list of recommended courses is given on the Astrochemistry concentration website (http://astrochemistry.illinois.edu/concentration.php), but students may substitute other courses with consent of the Astrochemistry concentration steering committee.

All students in the concentration are required to take CHEM/ASTR 450, Astrochemistry, which may count toward either the astronomy or chemistry requirements. Students concentrating in astrochemistry should have at least one member from each department on their thesis committee.

Code	Title	Hours
Graduate level Chemistry courses		12
Graduate level Astronomy courses		12
ASTR/CHEM 450	Astrochemistry (required, but may be taken to satisfy required Chemistry or Astronomy courses above)	4
Total Hours		24

Other Requirements

Requirement	Description
Other requirements may overlap	
At least one member of each department must serve on the PhD thesis committee.	
Thesis research must be related to astrochemistry.	

Bilingual-Bicultural Education Concentration

for the Graduate Concentration in Bilingual-Bicultural Education (on campus & online)

head of the department: Sarah McCarthey
director of graduate studies: Gloriana Gonzalez
graduate admissions information: Mitzi Koeberlein
overview of admissions & requirements: College of Education (https://education.illinois.edu/programs/grad/how-to-apply/?url=/programs/grad)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: http://education.illinois.edu/ci (http://education.illinois.edu/ci/)
program website: College of Education Programs (https://education.illinois.edu/faceted-search/programs/)
department faculty: Curriculum & Instruction Faculty (https://education.illinois.edu/faculty-finder/ci/)
college website: http://education.illinois.edu/
department office: 142 Education Building, 1310 South Sixth Street, Champaign, IL 61820
phone: (217) 244-3542
email: gradservices@education.illinois.edu

This concentration is available for:

Curriculum and Instruction, EdD (p. 691)|Curriculum and Instruction, EdM (p. 693)|Curriculum and Instruction, MA (p. 695)|Curriculum and Instruction, MS (p. 697)|Curriculum and Instruction, CAS (p. 689)

Early Childhood Education, EdM (p. 703)|

Educational Policy, Organization & Leadership, EdD (p. 722)|Educational Policy, Organization & Leadership, EdM (p. 718)|Educational Policy, Organization & Leadership, MA (p. 720)|

Educational Psychology, EdM (p. 725)|Educational Psychology, MA (p. 728)|Educational Psychology, MS (p. 731)|

Elementary Education, EdM (p. 742)|

Secondary Education, EdM (p. 994)|

Special Education, EdM (p. 1018)|Special Education, MS (p. 1020)|

PhD students seeking a concentration should select the SLATE concentration offered by Linguistics instead.

Students may add the concentration to the Curriculum and Instruction online EdM program at the time of admission or petition to add the concentration during their degree program in the majors listed above.

for the Graduate Concentration in Bilingual-Bicultural Education (on campus & online)

Students in the C & I EDM without licensure program will have a 32 hour program including electives and foundations courses. All other Curriculum and Instruction programs allow this concentration to count toward the program hours.

Students pursuing this concentration in Educational Psychology or Special Education will be required to complete the required coursework (20 hours) in excess of their program of study.

Educational Policy, Organization and Leadership students will complete the required coursework (20 hours) in excess of their program of study unless they are in the Learning Design and Leadership concentration. CI 433 and CI 517 may be counted towards both the concentration and the degree.

Code	Title	Hours
CI 433	Foundations of Bilingual Education	4
CI 477	Bilingual/ESL Methods & Materials	4
CI 446	Culture in the Classroom	4
CI 507	Problems & Trends in Special Fields	4
CI 517	Bilingual and English as a Second Language Assessment	4
Total Hours		20

Students seeking a Bilingual or ESL endorsement from ISBE have additional requirements: https://cte-s.education.illinois.edu/dotnet/webpages/webpage.aspx/webpage?page_level=4.1.4 (https://cte-s.education.illinois.edu/dotnet/webpages/webpage.aspx/webpage/?page_level=4.1.4)

Students may substitute EIL 486, LING 489, EIL 460, or EIL 411 for C & I courses in the appropriate content areas with permission from the C & I Department.

Bioinformatics: Animal Sciences, MS

for the Master of Science Major in Bioinformatics, Animal Sciences Concentration

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department head: Rodney Johnson
graduate program coordinator: Sandra Rodriguez-Zas
department website: https://ansc.illinois.edu
department faculty: https://ansc.illinois.edu/directory/faculty/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://aces.illinois.edu/
department office: 110 Animal Sciences Laboratory, 1207 West Gregory Drive, Urbana, IL 61801
phone: (217) 333-3131
email: ansci-gradprog@illinois.edu

Graduate Degree Programs in Animal Sciences

Graduate Majors:
Animal Sciences, MANSC (p. 568)
Animal Sciences, MS (p. 569)
Animal Sciences, PhD (p. 570)
Graduate Concentrations:
Bioinformatics: Animal Sciences, MS (p. 625)

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for the Master of Science Major in Bioinformatics, Animal Sciences Concentration

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For additional details and requirements refer to the department's Graduate Handbook (http://ansci.illinois.edu/grads/degree-requirements/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Thesis Option

Code	Title	Hours
Biology (choose one)		4
ANSC 441	Human Genetics	
ANSC 444	Applied Animal Genetics	
ANSC 446	Population Genetics	
BIOP 401	Introduction to Biophysics	
BIOP 550	Biomolecular Physics	
CPSC 452	Advanced Plant Genetics	
CPSC 466	Genomics for Plant Improvement	
CPSC 563	Chromosomes	
CPSC 566	Plant Gene Regulation	
MCB 400	Cancer Cell Biology	
MCB 450	Introductory Biochemistry	
MCB 501	Advanced Biochemistry	
MCB 502	Advanced Molecular and Cell Biology	
Fundamental Bioinformatics (choose one)		4
ANSC 542	Applied Bioinformatics	
ANSC 545	Statistical Genomics	
CHBE 571	Bioinformatics	
CPSC 567	Bioinformatics & Systems Biol	
CS 466	Introduction to Bioinformatics	
IB 467	Principles of Systematics	
MCB 432	Computing in Molecular Biology	
Computer Science and Informatics (choose one)		4
CS 411	Database Systems	
CS 466	Introduction to Bioinformatics	
CS 473	Algorithms	
CPSC 565	Perl & UNIX for Bioinformatics	
IS 455	Database Design and Prototyping	
IS 507	Data, Statistical Models and Information	
STAT 428	Statistical Computing	
STAT 440	Statistical Data Management	
STAT 448	Advanced Data Analysis	
STAT 480	Data Science Foundations	
STAT 525	Computational Statistics	
Graduate seminar (ANSC 590) enrollment is required every semester (max 2 hours can be applied to the degree)		2
ANSC 599	Thesis Research (min/max applied toward degree)	8
Electives		14
Total Hours		36

Other Requirements

Requirement
Other Requirements and conditions may overlap
A concentration is required.
Minimum Hours Overall Required Within the Unit: 8
Minimum 500-level Hours Required Overall: 12
A comprehensive oral examination concerning the thesis and other areas of Bioinformatics and Animal Sciences is required.
Thesis Deposit Required: Yes
Minimum GPA: 3.0

Learning Outcomes: Animal Sciences Concentration

Learning Outcomes for the Master of Science Major in Bioinformatics, Animal Sciences Concentration

1. Graduate-level understanding of essential concepts and approaches in the area of bioinformatics with application to animal sciences. The essential bioinformatics concepts will enable the graduate to secure a mid-management position in industry or federal agencies or pursue Ph.D. studies and to advance throughout the professional ranks.
2. Capacity to execute supervised thesis research including: a) understanding of the scientific method, research objectives, materials and methods, advanced data analysis, and appreciation of the findings; and b) leadership on the implementation of essential research activities.
3. Ability to effectively communicate essential bioinformatics and animal sciences knowledge and thesis research findings in oral and written formats.
4. Aptitude to advocate for interdisciplinary research and education efforts to advance food security, food safety, animals and human health and wellbeing or environmental stewardship.

Bioinformatics: Bioengineering, MS

for the Master of Science in Bioinformatics, Bioengineering Concentration

This program is not currently accepting applications.

Other Graduate Programs in Bioengineering

degrees:

Bioengineering, MEng (p. 616)
concentrations:
Bioinstrumentation (p. 617)|Computational Genomics (p. 618)|General Bioengineering (p. 620)
Bioengineering, MS (p. 621)
optional concentrations:
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)
Bioengineering, PhD (p. 623)
optional concentrations:
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)|Computational Science & Engineering (p. 1089)

concentrations:

Biomechanics (p. 1085)
available for:
Electrical & Computer Engineering, MS (p. 738)|Electrical & Computer Engineering, PhD| (p. 740)Materials Engineering, MEng|Materials Science & Engineering, MS (p. 861)|Materials Science & Engineering, PhD (p. 863)|Mechanical Engineering, MS (p. 870)|Mechanical Engineering, MEng (p. 869)|Mechanical Engineering, PhD (p. 872)|Theoretical & Applied Mechanics, MS (p. 1054)|Theoretical & Applied Mechanics, PhD (p. 1057)
Cancer Nanotechnology (p. 1088)
available for:
Electrical & Computer Engineering, MS (p. 738)|Electrical & Computer Engineering, PhD| (p. 740)Materials Engineering, MEng|Materials Science & Engineering, MS (p. 861)|Materials Science & Engineering, PhD (p. 863)|Mechanical Engineering, MS (p. 870)|Mechanical Engineering, MEng (p. 869)|Mechanical Engineering, PhD (p. 872)|Theoretical & Applied Mechanics, MS (p. 1054)|Theoretical & Applied Mechanics, PhD (p. 1057)

for the Master of Science in Bioinformatics, Bioengineering Concentration

For additional details and requirements for all degrees, please refer to the department's Graduate Studies Web site (https://bioengineering.illinois.edu/academics/graduate/) and the Graduate College Handbook (http://grad.illinois.edu/gradhandbook/).

Thesis Option [1]

Code	Title	Hours
BIOE 599	Thesis Research (min applied toward degree)	4
BIOE 504	Analytical Methods in Bioeng	4
or BIOE 505	Computational Bioengineering	
Computer Science and Informatics (choose one)		4
CS 411	Database Systems	
CS 466	Introduction to Bioinformatics	
CS 473	Algorithms	
CPSC 565	Perl & UNIX for Bioinformatics	
IS 455	Database Design and Prototyping	
IS 542	Research and Inquiry for Youth	
STAT 428	Statistical Computing	
STAT 440	Statistical Data Management	
STAT 448	Advanced Data Analysis	
STAT 480	Data Science Foundations	
STAT 525	Computational Statistics	
Fundamental Bioinformatics (choose one)		4
ANSC 542	Applied Bioinformatics	
ANSC 545	Statistical Genomics	
CHBE 571	Bioinformatics	
CPSC 567	Bioinformatics & Systems Biol	
CS 466	Introduction to Bioinformatics	
IB 467	Principles of Systematics	
MCB 432	Computing in Molecular Biology	
Biology (choose one)		4
ANSC 441	Human Genetics	
ANSC 444	Applied Animal Genetics	
ANSC 446	Population Genetics	
BIOP 401	Introduction to Biophysics	
BIOP 550	Biomolecular Physics	
CPSC 452	Advanced Plant Genetics	
CPSC 466	Genomics for Plant Improvement	
CPSC 563	Chromosomes	
CPSC 564		
CPSC 566	Plant Gene Regulation	
MCB 400	Cancer Cell Biology	
MCB 450	Introductory Biochemistry	
MCB 501	Advanced Biochemistry	
MCB 502	Advanced Molecular and Cell Biology	
One course in systems biology from departmental list (http://bioengineering.illinois.edu/graduate-programs/prospective-graduate-students/bioengineering-courses-illinois/#electives)		3
Elective Courses (http://bioengineering.illinois.edu/graduate-programs/prospective-graduate-students/bioengineering-courses-illinois/#electives)		9
Total Hours		32

Non-Thesis Option [1]

Code	Title	Hours
BIOE 504	Analytical Methods in Bioeng	4
or BIOE 505	Computational Bioengineering	
Computer Science and Informatics (choose one)		4
CS 411	Database Systems	
CS 466	Introduction to Bioinformatics	
CS 473	Algorithms	
CPSC 565	Perl & UNIX for Bioinformatics	
IS 455	Database Design and Prototyping	
IS 542	Research and Inquiry for Youth	
STAT 428	Statistical Computing	
STAT 440	Statistical Data Management	
STAT 448	Advanced Data Analysis	
STAT 480	Data Science Foundations	
STAT 525	Computational Statistics	
Fundamental Bioinformatics (choose one)		4
ANSC 542	Applied Bioinformatics	
ANSC 545	Statistical Genomics	
CHBE 571	Bioinformatics	
CPSC 567	Bioinformatics & Systems Biol	
CS 466	Introduction to Bioinformatics	
IB 467	Principles of Systematics	
MCB 432	Computing in Molecular Biology	
Biology (choose one)		4
ANSC 441	Human Genetics	
ANSC 444	Applied Animal Genetics	
ANSC 446	Population Genetics	
BIOP 401	Introduction to Biophysics	
BIOP 550	Biomolecular Physics	
CPSC 452	Advanced Plant Genetics	
CPSC 466	Genomics for Plant Improvement	

CPSC 563	Chromosomes	
CPSC 564		
CPSC 566	Plant Gene Regulation	
MCB 400	Cancer Cell Biology	
MCB 450	Introductory Biochemistry	
MCB 501	Advanced Biochemistry	
MCB 502	Advanced Molecular and Cell Biology	
One course in systems biology from departmental list (http://bioengineering.illinois.edu/graduate-programs/prospective-graduate-students/bioengineering-courses-illinois/#electives)		3
Elective Courses (http://bioengineering.illinois.edu/graduate-programs/prospective-graduate-students/bioengineering-courses-illinois/#electives)		17
Total Hours		36

[1]Other Requirements

Requirement	Description
Other Requirements and Conditions may overlap	
A concentration is required.	
A minimum of 12 500-level credit hours overall applied toward the degree, with 8 hours being Bioengineering courses; a maximum of 2 hours of seminar courses can be counted to towards these 12 hours.	
The non-thesis option is only available with permission of the advisor. Requirements include an additional 8 hours of elective courses which, with the approval of an advisor, may include supervised research experiences including internships and projects.	
Minimum GPA:	3.0

Bioinformatics: Chemical & Biomolecular Engineering, MS

for the Master of Science in Bioinformatics, Chemical & Biomolecular Engineering Concentration

This program is not currently accepting applications.

Other Graduate Programs in Chemical & Biomolecular Engineering

degrees:

Chemical Engineering, MS (p. 653)
Chemical Engineering, PhD (p. 654)
optional concentrations:
Computational Science and Engineering (p. 1089)

The Department of Chemical & Biomolecular Engineering offers graduate programs leading to degrees of Master of Science and Doctor of Philosophy in Chemical Engineering, as well as a Chemical & Biomolecular Engineering Concentration under the MS in Bioinformatics.

for the Master of Science in Bioinformatics, Chemical & Biomolecular Engineering Concentration

For additional details and requirements for all degrees, please refer to the department's Graduate Studies Web site (https://chbe.illinois.edu/graduate-program/) and the Graduate College Handbook (http://grad.illinois.edu/gradhandbook/).

Thesis Option

Code	Title	Hours
Computer Science and Informatics (choose one)		4
CS 411	Database Systems	
CS 466	Introduction to Bioinformatics	
CS 473	Algorithms	
CPSC 565	Perl & UNIX for Bioinformatics	
IS 455	Database Design and Prototyping	
IS 542	Research and Inquiry for Youth	
STAT 428	Statistical Computing	
STAT 440	Statistical Data Management	
STAT 448	Advanced Data Analysis	
STAT 480	Data Science Foundations	
STAT 525	Computational Statistics	
Fundamental Bioinformatics (choose one)		4
ANSC 542	Applied Bioinformatics	
ANSC 545	Statistical Genomics	
CHBE 571	Bioinformatics	
CPSC 567	Bioinformatics & Systems Biol	
CS 466	Introduction to Bioinformatics	
IB 467	Principles of Systematics	
MCB 432	Computing in Molecular Biology	
Biology (choose one)		4
ANSC 441	Human Genetics	
ANSC 444	Applied Animal Genetics	
ANSC 446	Population Genetics	
BIOP 401	Introduction to Biophysics	
BIOP 550	Biomolecular Physics	
CPSC 452	Advanced Plant Genetics	
CPSC 466	Genomics for Plant Improvement	
CPSC 563	Chromosomes	
CPSC 564		
CPSC 566	Plant Gene Regulation	
MCB 400	Cancer Cell Biology	
MCB 450	Introductory Biochemistry	
MCB 501	Advanced Biochemistry	
MCB 502	Advanced Molecular and Cell Biology	
CHBE 572 & CHBE 580	Metabolic Systems Engineering and Lab Techs in Bioinformatics	6

CHBE 599	Thesis Research (min/max applied toward degree)	4
Total Hours		**32**

Other Requirements

Requirement	Description
Other requirements may overlap	
A concentration is required.	
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	2.75

Non-Thesis Option

Code	Title	Hours
Computer Science and Informatics (choose one)		4
CS 411	Database Systems	
CS 466	Introduction to Bioinformatics	
CS 473	Algorithms	
CPSC 565	Perl & UNIX for Bioinformatics	
IS 455	Database Design and Prototyping	
IS 542	Research and Inquiry for Youth	
STAT 428	Statistical Computing	
STAT 440	Statistical Data Management	
STAT 448	Advanced Data Analysis	
STAT 480	Data Science Foundations	
STAT 525	Computational Statistics	
Fundamental Bioinformatics (choose one)		4
ANSC 542	Applied Bioinformatics	
ANSC 545	Statistical Genomics	
CHBE 571	Bioinformatics	
CPSC 567	Bioinformatics & Systems Biol	
CS 466	Introduction to Bioinformatics	
IB 467	Principles of Systematics	
MCB 432	Computing in Molecular Biology	
Biology (choose one)		4
ANSC 441	Human Genetics	
ANSC 444	Applied Animal Genetics	
ANSC 446	Population Genetics	
BIOP 401	Introduction to Biophysics	
BIOP 550	Biomolecular Physics	
CPSC 452	Advanced Plant Genetics	
CPSC 466	Genomics for Plant Improvement	
CPSC 563	Chromosomes	
CPSC 564		
CPSC 566	Plant Gene Regulation	
MCB 400	Cancer Cell Biology	
MCB 450	Introductory Biochemistry	
MCB 501	Advanced Biochemistry	
MCB 502	Advanced Molecular and Cell Biology	
CHBE 572 & CHBE 580	Metabolic Systems Engineering and Lab Techs in Bioinformatics	6
Total Hours		**36**

Other Requirements

Requirement	Description
Other requirements may overlap	
A concentration is required.	
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	2.75

Bioinformatics: Computer Science, MS

for the degree of Master of Science in Bioinformatics, Computer Science Concentration

department head: Nancy Amato (namato@illinois.edu)
director of graduate studies: Robin Kravets (rhk@illinois.edu)
overview of admissions & requirements: https://cs.illinois.edu/admissions/graduate/applications-process-requirements (https://cs.illinois.edu/admissions/graduate/applications-process-requirements/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://cs.illinois.edu/
program websites: https://cs.illinois.edu/academics/graduate/ms-bioinformatics-program (https://cs.illinois.edu/academics/graduate/ms-bioinformatics-program/) **and** https://www.informatics.illinois.edu/bioinformatics-masters/
informatics faculty affiliates: https://www.informatics.illinois.edu/faculty-affiliates/
college website: https://grainger.illinois.edu/
computer science contact: Viveka P Kudaligama (kudaliga@illinois.edu)
address: 1210 Siebel Center, 201 N Goodwin, Urbana, IL 61801
phone: (217) 333-4428
email: academic@cs.illinois.edu
informatics contact: Karin Readel (kereadel@illinois.edu)
phone: (217)-244-1220

The Department of Computer Science is one of the longest established computer science departments in the world and is consistently ranked as a top-5 graduate program.

The MS in Bioinformatics, Computer Science Concentration is an interdisciplinary degree that can be counted toward the PhD in Computer Science.

Admission Requirements

Applicants must hold a bachelor's degree equivalent to that granted by the University of Illinois at Urbana-Champaign. The recommended background for students entering a Computer Science graduate degree program is a bachelor's degree in computer science or computer engineering. The Graduate Record Examination (GRE) (http://www.ets.org/) general aptitude tests (Verbal, Quantitative, and Analytical) are no longer required. However, in some cases, GRE general scores may provide helpful supporting information.

Applicants to the Computer Science Concentration of the MS in Bioinformatics program must have a minimum grade point average (GPA)

of 3.20 (A = 4.00) in their undergraduate studies (international GPAs are systematically converted) to be considered. The department reserves the right to admit applicants with lower GPAs under rare and exceptional circumstances. If an applicant also holds a graduate degree, the minimum GPA for that degree must be 3.00. Full details of the programs offered by Computer Science, admissibility, application procedures, and deadlines can be found at the department's Prospective Graduate Student Information Web site (http://cs.illinois.edu/admissions/graduate/).

All applicants whose native language is not English are required to submit TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) scores as evidence of English proficiency. Minimum admission requirements (https://grad.illinois.edu/admissions/instructions/04c/) are set by the Graduate College.

Financial Aid

Research assistantships and teaching assistantships (all of which include tuition and partial fee waivers) are awarded on a competitive basis. All applicants, regardless of US citizenship, whose native language is not English and who wish to be considered for teaching assistantships (one of the most common forms of financial aid for new graduate students in the department) must demonstrate spoken English language proficiency (http://grad.illinois.edu/admissions/taengprof.htm) by achieving a minimum score of 24 on the speaking subsection of the TOEFL iBT or 8 on the speaking subsection of the IELTS (academic exam). Students who are unable to take the iBT or IELTS are required to receive a minimum score of 5 on the EPI test (http://cte.illinois.edu/testing/oral_eng/epi_overview.html), offered on campus. All new teaching assistants are required to participate in the Graduate Academy for College Teaching (https://citl.illinois.edu/citl-101/teaching-learning/grad-academy-for-college-teaching/) conducted prior to the start of the semester.

Other Graduate Programs in the Department of Computer Science

degrees:

Computer Science, MCS (p. 679)
optional concentrations:
Computational Science and Engineering (p. 1089)
Computer Science, MS (p. 681)
optional concentrations:
Computational Science and Engineering (p. 1089)
Computer Science, PhD (p. 682)
optional concentrations:
Computational Science and Engineering (p. 1089)
joint programs:
Computer Science, MCS & Architecture, MArch (p. 1151)
Computer Science, MCS & Law, JD (p. 1151)

The Department of Computer Science (CS) offers other graduate programs leading to the degrees of Master of Science and Doctor of Philosophy in Computer Science and a Master of Computer Science (MCS). The MCS program is also available online for students who are working full-time and unable to come to campus.

for the degree of Master of Science in Bioinformatics, Computer Science Concentration

The Computer Science concentration for the MS in Bioinformatics is an interdisciplinary degree that can be counted toward the Computer Science PhD.

For additional details and requirements refer to the department's Graduate Degree Requirements (http://cs.illinois.edu/academics/graduate/ms-bioinformatics-program/) and the Graduate College Handbook (http://grad.illinois.edu/gradhandbook/).

Code	Title	Hours
CS 411	Database Systems	4
CS 473	Algorithms	4
STAT 410	Statistics and Probability II	4
Fundamental Bioinformatics (choose one)		4
ANSC 542	Applied Bioinformatics	
ANSC 545	Statistical Genomics	
CHBE 571	Bioinformatics	
CPSC 567	Bioinformatics & Systems Biol	
CS 466	Introduction to Bioinformatics	
IB 467	Principles of Systematics	
MCB 432	Computing in Molecular Biology	
Biology (choose one)		4
ANSC 441	Human Genetics	
ANSC 444	Applied Animal Genetics	
ANSC 446	Population Genetics	
BIOP 401	Introduction to Biophysics	
BIOP 550	Biomolecular Physics	
CPSC 452	Advanced Plant Genetics	
CPSC 466	Genomics for Plant Improvement	
CPSC 563	Chromosomes	
CPSC 564		
CPSC 566	Plant Gene Regulation	
MCB 400	Cancer Cell Biology	
MCB 450	Introductory Biochemistry	
MCB 501	Advanced Biochemistry	
MCB 502	Advanced Molecular and Cell Biology	
CS electives, chosen from a departmental list of CS electives. (http://cs.illinois.edu/academics/graduate/ms-bioinformatics-program/)		12
One additional 4-credit hour graduate course (may be from the bioinformatics or biological science categories above)		4
Total Hours		**36**

Other Requirements

Code	Title	Hours
Other Requirements and Conditions may overlap		
A minimum of 12 500-level credit hours overall.		
The minimum program GPA is 3.0		
All degree requirements must be completed within five consecutive semesters (only fall and spring semesters are counted).		

Bioinformatics: Crop Sciences, MS

for the Master of Science in Bioinformatics, Crop Sciences Concentration

head of department: Adam Davis
advisor: Nathan Schroeder
department website: https://cropsciences.illinois.edu/
email: cptomlin@illinois.edu
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://aces.illinois.edu/
department office: AW-101 Turner Hall, 1102 South Goodwin Avenue, Urbana, IL 61801
phone:(217) 244-0396

Graduate Degree Programs in Crop Sciences

Crop Sciences, MS (p. 686) **(on campus & online)**
Bioinformatics: Crop Sciences, MS (p. 631)
Plant Biotechnology, MS - Professional Science Master's (p. 967)
Crop Sciences, PhD (p. 687)

The genomic and proteomic projects are generating large amounts of complex biological data that require effective storage, retrieval, analysis and interpretation. The bioinformatics degree program provides students with the skills necessary to augment the understanding and use of agricultural, biological and medical information and resources through the application of molecular, chemical, physical, computational, statistical, mathematical and informatic techniques. Students interested in this program may come with undergraduate training in one of the following areas:

1. biological and agricultural sciences,
2. statistical, mathematical and computer sciences,
3. informatics and engineering sciences.

Graduates from the bioinformatics program will be able to integrate basic and applied concepts in the three areas and apply them to biotechnology and medical research. For additional information, please see our website at https://cropsciences.illinois.edu/graduate/.

Admission

Applicants are considered for admission to the Master of Science program if they have a bachelor's or equivalent degree comparable to that granted by the University of Illinois. Strong letters of reference, evident motivation to undertake graduate study, and good preparation in basic science courses enhance an applicant's credentials. For some programs, greater emphasis is given to previous training in plant sciences, chemistry, or mathematics. A grade point average equivalent to at least a B in the last 60 semester hours of undergraduate course work plus any graduate level work completed is required. All applicants whose native language is not English are required to submit the results of the TOEFL or IELTS as evidence of English proficiency. Official scores are required to be submitted directly from TOEFL/ETS or IELTS to the University. Additional information for international applicants can be found at: https://grad.illinois.edu/admissions/apply/begin/international (https://grad.illinois.edu/admissions/apply/begin/international/). Please see our web page for additional information: https://cropsciences.illinois.edu/graduate/admissions/.

Graduate Teaching Experience

Experience in teaching is considered an important part of the graduate experience in this program.

Faculty Research Interests

Please refer to the following webpage for a detailed listing of our faculty and their areas of interest https://cropsciences.illinois.edu/people/faculty/.

Financial Aid

Fellowships and assistantships are available to outstanding students on a competitive basis. Awards for financial assistance are based principally on a candidate's academic record, statement of plans, and letters of reference.

for the Master of Science in Bioinformatics, Crop Sciences Concentration

The Crop Sciences concentration within the M.S. degree in Bioinformatics can be earned with a thesis option or a non-thesis option, which requires optional supervised research experiences.

For additional details and requirements refer to the department's graduate handbook (http://cropsci.illinois.edu/sites/cropsci.illinois.edu/files/pdf/Grad_Student_Handbook_2013.pdf) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Thesis Option

Code	Title	Hours
Biology (choose one)		4
ANSC 441	Human Genetics	
ANSC 444	Applied Animal Genetics	
ANSC 446	Population Genetics	
BIOP 401	Introduction to Biophysics	
BIOP 550	Biomolecular Physics	
CPSC 452	Advanced Plant Genetics	
CPSC 466	Genomics for Plant Improvement	
CPSC 554	Quantitative Genetics and Genomics	
CPSC 563	Chromosomes	
CPSC 566	Plant Gene Regulation	
MCB 400	Cancer Cell Biology	
MCB 450	Introductory Biochemistry	
MCB 501	Advanced Biochemistry	
MCB 502	Advanced Molecular and Cell Biology	
Fundamental Bioinformatics (choose one)		4
ANSC 542	Applied Bioinformatics	
ANSC 545	Statistical Genomics	
CHBE 571	Bioinformatics	
CPSC 567	Bioinformatics & Systems Biol	
CS 466	Introduction to Bioinformatics	
IB 467	Principles of Systematics	
MCB 432	Computing in Molecular Biology	
Computer Science and Informatics (choose one)		4
CS 411	Database Systems	
CS 466	Introduction to Bioinformatics	
CS 473	Algorithms	

CPSC 565	Perl & UNIX for Bioinformatics	
IS 455	Database Design and Prototyping	
IS 507	Data, Statistical Models and Information	
STAT 428	Statistical Computing	
STAT 440	Statistical Data Management	
STAT 448	Advanced Data Analysis	
STAT 480	Data Science Foundations	
STAT 525	Computational Statistics	
Seminar (1 per semester)		
Electives		16
CPSC 599	Thesis Research	4
or PLPA 599		
Total Hours		**32**

Other Requirements

Code	Title	Hours
Other requirements and conditions may overlap		
A concentration is required		
Minimum Hours Required Within the Unit:		5
Minimum 500-level Hours Required overall:		12
Minimum GPA:		3.0

Non-Thesis Option

Code	Title	Hours
Biology (choose one)		4
ANSC 441	Human Genetics	
ANSC 444	Applied Animal Genetics	
ANSC 446	Population Genetics	
BIOP 401	Introduction to Biophysics	
BIOP 550	Biomolecular Physics	
CPSC 452	Advanced Plant Genetics	
CPSC 466	Genomics for Plant Improvement	
CPSC 554	Quantitative Genetics and Genomics	
CPSC 563	Chromosomes	
CPSC 566	Plant Gene Regulation	
MCB 400	Cancer Cell Biology	
MCB 450	Introductory Biochemistry	
MCB 501	Advanced Biochemistry	
MCB 502	Advanced Molecular and Cell Biology	
Fundamental Bioinformatics (choose one)		4
ANSC 542	Applied Bioinformatics	
ANSC 545	Statistical Genomics	
CHBE 571	Bioinformatics	
CPSC 567	Bioinformatics & Systems Biol	
CS 466	Introduction to Bioinformatics	
IB 467	Principles of Systematics	
MCB 432	Computing in Molecular Biology	
Computer Science and Informatics (choose one)		4
CS 411	Database Systems	
CS 466	Introduction to Bioinformatics	
CS 473	Algorithms	
CPSC 565	Perl & UNIX for Bioinformatics	
IS 455	Database Design and Prototyping	
IS 507	Data, Statistical Models and Information	
STAT 428	Statistical Computing	
STAT 440	Statistical Data Management	
STAT 448	Advanced Data Analysis	
STAT 480	Data Science Foundations	
STAT 525	Computational Statistics	
Seminar (1 per semester)		
Electives		24
Total Hours		**36**

Other Requirements

Code	Title	Hours
Other requirements and conditions may overlap		
A concentration is required		
Minimum Hours Required Within the Unit:		5
Minimum 500-level Hours Required overall:		12
Minimum GPA:		3.0

Learning Outcomes: Bioinformatics: Crop Sciences, MS

Learning Outcomes for the Master of Science in Bioinformatics, Crop Sciences Concentration

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Thesis

1. Students will be able to read, understand, knowledgeably discuss and summarize in writing the primary scientific literature of their particular disciplinary research area (bioinformatics and statistics, crop genetic improvement, crop production, plant protection, sustainable food systems, and water quality and environmental systems).
2. Students will assume responsibility and ownership in research project development and execution.
3. Students will acquire professional scientific writing and communication skills.
4. Students will develop the capacity to communicate and collaborate across interdisciplinary boundaries.
5. Students will develop the interpersonal skills to be competitive for career opportunities in plant sciences and agriculture.

Non-Thesis

1. Students will be able to read, understand, knowledgeably discuss and summarize in writing the primary scientific literature of their particular disciplinary research area (bioinformatics and statistics, crop genetic improvement, crop production, plant protection, sustainable food systems, and water quality and environmental systems).
2. Students will acquire professional scientific writing and communication skills.
3. Students will develop the capacity to communicate and collaborate across interdisciplinary boundaries.
4. Students will develop the interpersonal skills to be competitive for career opportunities in plant sciences and agriculture.

Biomechanics Graduate Concentration

For the graduate concentration in Biomechanics

department head: Mark Anastasio (mfi@illinois.edu)
director of graduate studies: Gregory Underhill (bodony@illinois.edu)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://bioengineering.illinois.edu/
program website: https://bioengineering.illinois.edu/academics/graduate/phd/concentrations.html
department faculty: https://bioengineering.illinois.edu/directory/
college website: https://grainger.illinois.edu/
contact: Krista Smith (kristasm@illinois.edu)
address: 1240 Everitt Laboratory, 1406 W Green St, Urbana, IL 61801
phone: (217) 333-1867
email: bioe-gradprograms@illinois.edu (bioengineering@illinois.edu)

The Biomechanics Concentration prepares students for collaborative research across the disciplines of engineering, biology, and the sciences. Students must be enrolled in a graduate degree program:

Bioengineering, MS (p. 621)|Bioengineering, PhD (p. 623)|Bioinformatics: Bioengineering, MS (p. 626)| Electrical & Computer Engineering, MS (p. 738)|Electrical & Computer Engineering, PhD (p. 740)|Materials Engineering, MEng (p. 860)|Materials Science & Engineering, MS (p. 861)|Materials Science & Engineering, PhD (p. 863)| Mechanical Engineering, MS (p. 870)|Mechanical Engineering, MEng (p. 869)|Mechanical Engineering, PhD (p. 872)|Theoretical & Applied Mechanics, MS (p. 1054)|Theoretical & Applied Mechanics, PhD (p. 1057)

Other Graduate Programs in the Department of Bioengineering

degrees:

Bioengineering, MEng (p. 616)
concentrations:
Bioinstrumentation (p. 617)|Computational Genomics (p. 618)|General Bioengineering (p. 620)
Bioengineering, MS (p. 621)
optional concentrations:
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)
Bioengineering, PhD (p. 623)
optional concentrations:
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)|Computational Science and Engineering (p. 1089)

concentrations:

Cancer Nanotechnology (p. 1088)
available for:
Bioengineering, MS (p. 621)|Bioengineering, PhD (p. 623)|Bioinformatics: Bioengineering, MS (p. 626)|Electrical & Computer Engineering, MS (p. 738)|Electrical & Computer Engineering, PhD (p. 740)|Materials Engineering, MEng (p. 860)|Materials Science & Engineering, MS (p. 861)|Materials Science & Engineering, PhD (p. 863)|Mechanical Engineering, MS (p. 870)|Mechanical Engineering, MEng (p. 869)|Mechanical Engineering, PhD (p. 872)|Theoretical & Applied Mechanics, MS (p. 1054)|Theoretical & Applied Mechanics, PhD (p. 1057)

The Department of Bioengineering offers studies leading to the Master of Engineering in Bioengineering (MEng), the Master of Science in Bioengineering (MS), and the Doctor of Philosophy (PhD) in Bioengineering. The Bioengineering Graduate Program provides students with educational and research experiences that integrate the sciences of biology and medicine with the practices and principles of engineering. For the MS and PhD programs, areas of focus include Bio-imaging, Cell & Tissue Engineering, Micro and Molecular Technologies, and Computational Biology.

Opportunity also exists for specializing in energy and sustainability engineering via the

Energy and Sustainability Engineering (EaSE) Graduate Certificate Option (http://ease.illinois.edu/)

For the Biomechanics Graduate Concentration

The Biomechanics Concentration requires students to earn a B or better in each concentration course and complete at least 12 hours. Fulfillment of these requirements will be monitored jointly by the graduate coordinators in Bioengineering and in Mechanical Science and Engineering.

Code	Title	Hours
Current course options include:		
ABE 446	Biological Nanoengineering	
BIOE 482	Musculoskel Tissue Mechanics	
ME 483	Mechanobiology	
MSE 474	Biomaterials and Nanomedicine	
PHYS 550	Biomolecular Physics	
TAM 461	Cellular Biomechanics	
Alternate courses may be applicable to the Biomechanics Concentration pending joint approval by the Bioengineering and Mechanical Science and Engineering Graduate Programs.		
Total hours required for the concentration:		**12**

Requirement	Description
Courses taken toward this concentration will count toward the student's graduate degree.	
Students must notify their department of their plan to pursue this concentration.	

When choosing courses, students must work directly with their department to ensure that all degree requirements will be met.

Note that students who intend to complete both a Biomechanics Concentration and a Cancer Nanotechnology Concentration may only overlap one course between the two concentrations.

Business Data Analytics Graduate Concentration

for the Graduate Concentration in Business Data Analytics

department head: Cele Otnes
director of graduate studies: Jeffrey Loewenstein (MS) and Olga Khessina (PhD)
email: ba@business.illinois.edu
department website: https://giesbusiness.illinois.edu/msba (https://giesbusiness.illinois.edu/msba/)
department faculty: https://business.illinois.edu/people/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://giesbusiness.illinois.edu/
department office: 350 Wohlers Hall, 1206 S. Sixth Street, Champaign, IL 61820
phone: (217) 333-4240

The concentration in Business Data Analytics is designed to develop managers who understand how to leverage data to innovate and make decisions.

The concentration is open to students enrolled in:

Business Administration, MBA (p. 646)
Business Administration, MS (p. 646)
Management, MS (p. 858)
Technology Management, MS (p. 1048)

Graduate Degree Programs in Business Administration

Majors:

- Business Administration, MBA (p. 642) **(online-iMBA)**
- Business Administration, MS (p. 646)
  - **with optional concentrations:** Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Corporate Governance & International Business (p. 1090), Finance (p. 1096), Supply Chain Management (p. 1109)
- Business Analytics, MS (p. 649)
- Management, MS (p. 858)
  - **with optional concentrations:** Business Data Analytics (p. 1086), Finance, (p. 1096) Corporate Governance & International Business (p. 1090)
- Technology Management, MS (p. 1048)
  - **with optional concentrations:** Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Finance (p. 1096), Information Technology & Control (p. 1100), Supply Chain Management (p. 1109)
- Business Administration, PhD (p. 647)

Minors:

- Information Technology & Control (p. 1136)
- Corporate Governance & International Business (p. 1130)
- Supply Chain Management (p. 1144)

Concentrations:

- Business Data Analytics (p. 1086)
- Corporate Governance & International Business (p. 1090)
- Information Technology & Control (p. 1100)
- Supply Chain Management (p. 1109)

Certificates:

- Digital Marketing, CERT (p. 1115)
- Entrepreneurship & Strategic Innovation, CERT (p. 1116)
- Financial Management, CERT (p. 1117)
- Global Challenges in Business, CERT (p. 1118)
- Managerial Economics & Business Analysis, CERT (p. 1119)
- Strategic Leadership Management, CERT (p. 1120)
- Value Chain Management, CERT (p. 1121)

Joint Degree Program:

- Accountancy, MS (iMSA) & Business Administration, MBA (iMBA) (http://catalog.illinois.edu/graduate/bus/joint-degree/accountancy-ms-business-mba-online/)

Admission

Admission to the concentration requires a Graduate Student Request Form submitted to the Department and Graduate College and enrollment in a Gies College of Business graduate program or other graduate approved for the concentration. Admission is limited, and acceptance is considered based on a student's academic standing and space availability.

for the Graduate Concentration in Business Data Analytics

This concentration requires twelve graduate hours of Business Data Analytics coursework. Successful completion of the concentration assumes certain knowledge of business and prior coursework.

Admission to the concentration requires a Graduate Student Request Form submitted to the Department and Graduate College and enrollment in a Gies College of Business graduate program or other graduate approved for the concentration. Admission is limited, and acceptance is considered based on a student's academic standing and space availability.

Code	Title	Hours
BADM 554	Enterprise Database Management	4
FIN 510	Big Data Analytics in Finance for Predictive and Causal Analysis	4
BDI 513	Data Storytelling	4

Other Requirements

Requirement	Description
Minimum 500-level Hours Required Overall	4
Minimum GPA	2.75

Business & Public Policy Graduate Concentration

for the Graduate Concentration in Business & Public Policy (on campus)

chair of department: Louis Chan
director of graduate studies: Martin Widdicks (MSF); Heitor Almeida (PhD)
director of admissions committee: Rakesh Bhatt
email: grad@business.illinois.edu
department website: https://giesbusiness.illinois.edu/msf (https://giesbusiness.illinois.edu/msf/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://giesbusiness.illinois.edu/
department office: 330 Wohlers Hall, 1206 S. Sixth Street, Champaign, IL 61820
phone: (217) 244-2239

This concentration is available for on campus students.

Graduate Degree Programs in Finance

Majors

- Finance, MS (p. 763)
  - **optional concentrations for the Finance, MS:** Accountancy (p. 1073), Business & Public Policy (p. 1087), Corporate Governance & International Business (p. 1090), Data Analytics in Finance (p. 1092), Information Technology & Control (p. 1100)
- Financial Engineering, MS (p. 765) (**administered by** Finance and Industrial & Enterprise Systems Engineering (https://msfe.illinois.edu/))
  - **optional concentration for the Financial Engineering, MS:** Data Analytics in Finance (p. 1092)
- Finance, PhD (p. 764)

Minors

- Finance (p. 1133)

Concentrations

- Data Analytics in Finance (p. 1092)
- Finance (p. 1096)
- Business & Public Policy (p. 1087)
- Real Estate (p. 1105)

Today's business leaders must make strategic decisions in an extremely complex world. In addition to navigating the rapidly changing market forces in their industry, companies operate in an environment that is strongly influenced by regulatory and public policy considerations. Furthermore, our public sector leaders must also understand how market forces can help or hinder alternative solutions to society's most pressing problems. The business and public policy graduate concentration is designed to provide graduate business students a framework for evaluating the impact of public policy on firms and the markets in which they operate.

The concentration is open to these majors in the College of Business but required of none:

Accountancy, MAS (p. 542)
Accountancy, MS (p. 544)
Business Administration, MS (p. 646)
Finance, MS (p. 763)
Technology Management, MS (p. 1048)

Admission

Candidates will apply to the Department of Finance for admission into the concentration. Students wishing to be admitted to the concentration should consult with their program advisor before applying.

for the Graduate Concentration in Business & Public Policy

Code	Title	Hours
Complete 12 hours from the following list:		12
FIN 536	Government Insurance Programs	
FIN 571	Retirement Policy	
FIN 572	Health Care Policy	
FIN 573	Competition Policy	
FIN 574	Individual Tax Policy	
FIN 575	Business Tax Policy	
FIN 576	Domestic Environmental Policy	
FIN 577	International Environmental Policy	

FIN 578	Govt Market Economy	
Total Hours		12

Other Requirements

Requirement	Description
In addition to the concentration requirements, students must also complete the requirements of their major degree.	

Cancer Nanotechnology Graduate Concentration

for the graduate concentration in Cancer Nanotechnology

department head: Mark Anastasio (mfi@illinois.edu)
director of graduate studies: Gregory Underhill (bodony@illinois.edu)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://bioengineering.illinois.edu/
program website: https://bioengineering.illinois.edu/academics/graduate/phd/concentrations.html
department faculty: https://bioengineering.illinois.edu/directory/
college website: https://grainger.illinois.edu/
contact: Krista Smith (kristasm@illinois.edu)
address: 1240 Everitt Laboratory, 1406 W Green St, Urbana, IL 61801
phone: (217) 333-1867
email: bioe-gradprograms@illinois.edu (bioengineering@illinois.edu)

The Cancer Nanotechnology Concentration prepares students for collaborative research across the disciplines of engineering, biology, and the sciences. Students must be enrolled in a graduate degree program:

Bioengineering, MS (p. 621)|Bioengineering, PhD (p. 623)|Bioinformatics: Bioengineering, MS (p. 626)|Electrical & Computer Engineering, MS (p. 738)|Electrical & Computer Engineering, PhD (p. 740)|Materials Engineering, MEng (p. 860)|Materials Science & Engineering, MS (p. 861)|Materials Science & Engineering, PhD (p. 863)|Mechanical Engineering, MS (p. 870)|Mechanical Engineering, MEng (p. 869)|Mechanical Engineering, PhD (p. 872)|Theoretical & Applied Mechanics, MS (p. 1054)|Theoretical & Applied Mechanics, PhD (p. 1057)

Other Graduate Programs in the Department of Bioengineering

degrees:

Bioengineering, MEng (p. 616)
concentrations:
Bioinstrumentation (p. 617)|Computational Genomics (p. 618)|General Bioengineering (p. 620)
Bioengineering, MS (p. 621)
optional concentrations:
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)
Bioengineering, PhD (p. 623)
optional concentrations:
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)|Computational Science and Engineering (p. 1089)

concentrations:

Biomechanics (p. 1085)
available for:
Bioengineering, MS (p. 621)|Bioengineering, PhD (p. 623)|Bioinformatics: Bioengineering, MS (p. 626)| Electrical & Computer Engineering, MS (p. 738)|Electrical & Computer Engineering, PhD (p. 740)|Materials Engineering, MEng (p. 860)|Materials Science & Engineering, MS (p. 861)|Materials Science & Engineering, PhD (p. 863)| Mechanical Engineering, MS (p. 870)|Mechanical Engineering, MEng (p. 869)|Mechanical Engineering, PhD (p. 872)|Theoretical & Applied Mechanics, MS (p. 1054)|Theoretical & Applied Mechanics, PhD (p. 1057)

The Department of Bioengineering offers studies leading to the Master of Engineering in Bioengineering (MEng), the Master of Science in Bioengineering (MS), and the Doctor of Philosophy (PhD) in Bioengineering. The Bioengineering Graduate Program provides students with educational and research experiences that integrate the sciences of biology and medicine with the practices and principles of engineering. For the MS and PhD programs, areas of focus include Bio-imaging, Cell & Tissue Engineering, Micro and Molecular Technologies, and Computational Biology.

Opportunity also exists for specializing in energy and sustainability engineering via the

Energy and Sustainability Engineering (EaSE) Graduate Certificate Option (http://ease.illinois.edu/)

The Cancer Nanotechnology Concentration requires students to earn a B or better in each concentration course. Students must complete 12 credit hours, including at least one core Cancer course and one core Nanotechnology course. Participants may take a second core Cancer course and/or a second core Nanotechnology course as an elective. Fulfillment of these requirements will be monitored by the graduate coordinator in Bioengineering.

Code	Title	Hours
Core Cancer Classes		
BIOE 498	Special Topics (Section RB, Cancer Science and Technology)	
MCB 400	Cancer Cell Biology	
Core Nanotechnology Classes		
ABE 446	Biological Nanoengineering	
BIOE 416	Biosensors	
ECE/ME 485	MEMS Devices & Systems	

Elective Courses		
FSHN 480	Basic Toxicology	
ME 483	Mechanobiology	
ME 487	MEMS-NEMS Theory & Fabrication	
ME 586	Mechanics of MEMS	
Total hours required for the concentration:		**12**

Requirement	Description
Courses taken toward this concentration will count toward the student's graduate degree.	
Students must notify their department of their plan to pursue this concentration.	
When choosing courses, students must work directly with their department to ensure that all degree requirements will be met.	
Note that students who intend to complete both a Biomechanics Concentration and a Cancer Nanotechnology Concentration may only overlap one course between the two concentrations.	

Computational Science & Engineering Concentration

for the graduate concentration in Computational Science & Engineering

program director: Luke Olson (lukeo@illinois.edu)
overview of admissions & requirements: https://cse.illinois.edu/cse-educational-programs/graduate-concentration/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
program website: https://cse.illinois.edu
program website: https://cse.illinois.edu/cse-educational-programs/graduate-concentration/
program faculty: https://cse.illinois.edu/about-us/faculty-affiliates/
college website: https://grainger.illinois.edu/
contact: Bryan Wang (bpcwang@illinois.edu)
department office: 1205 W Clark St, Suite 2102, Urbana, IL 61801
phone: (217) 300-5696
email: cse@cse.illinois.edu

The heart of Computational Science and Engineering (CSE) is to develop innovative ways of solving engineering and scientific problems using computation as a tool. This new form of science compresses the development process in engineering and engenders knowledge discovery with a new paradigm in many areas because it enables “virtual experiments” and helps focus physical experiments to reduce or eliminate trial-end-error laboratory-based approaches. Further, it teaches students to solve complex problems with prevailing computer technology.

The CSE graduate concentration is designed to provide graduate students at both the Masters and PhD levels with a solid base in problem-solving using computation as a major tool for modeling complicated problems in science and engineering. This concentration is not part of the MEng in Engineering degree program.

This concentration requires students to complete 16 graduate credit hours. Courses taken toward this concentration will count towards the student’s graduate degree for students enrolled in:

Actuarial Science, MS (p. 548)
Aerospace Engineering, MS (p. 550)|Aerospace Engineering, PhD (p. 553)
Agricultural & Biological Engineering, MS (p. 562)|Agricultural & Biological Engineering, PhD (p. 564)
Applied Mathematics, MS (p. 575)|Applied Mathematics: Actuarial Science, MS (http://catalog.illinois.edu/graduate/las/applied-mathematics-ms/actuarial-science/)
Astronomy, PhD (p. 606)
Atmospheric Sciences, MS (p. 608)|Atmospheric Sciences, PhD (p. 610)
Bioengineering, PhD (p. 623)
Biology: Ecology, Ethology, and Evolution, MS (p. 633)|Biology: Ecology, Ethology, and Evolution, PhD (p. 635)
Biophysics & Quantitative Biology, PhD (p. 640)
Chemical Engineering, PhD (p. 654)
Chemistry, PhD (p. 659)
Civil Engineering, MS (p. 660)|Civil Engineering, PhD (p. 662)
Computer Science, MCS (p. 679)|Computer Science, MS (p. 681)|Computer Science, PhD (p. 682)
Electrical & Computer Engineering, MS (p. 738)|Electrical & Computer Engineering, PhD (p. 740)
Environmental Engineering in Civil Engineering, MS (p. 757)|Environmental Engineering in Civil Engineering, PhD (p. 759)
Entomology, MS (p. 755)|Entomology, PhD (p. 756)
Financial Engineering, MS (p. 765)
Geography, MS (p. 787)|Geography, PhD (p. 790)
Industrial Engineering, MS (p. 814)
Materials Science & Engineering, MS (p. 861)|Materials Science & Engineering, PhD (p. 863)
Mathematics, MS (p. 866)|Mathematics, PhD (p. 867)
Mechanical Engineering, MS (p. 870)|Mechanical Engineering, PhD (p. 872)
Nuclear, Plasma, & Radiological Engineering, MS (p. 949)|Nuclear, Plasma, & Radiological Engineering, PhD (p. 951)
Physics, PhD (p. 961)
Plant Biology, MS (p. 963)|Plant Biology, PhD (p. 965)
Statistics, PhD (p. 1029)
Systems & Entrepreneurial Engineering, MS (p. 1034)
Teaching of Mathematics MS (p. 1043)
Theoretical & Applied Mechanics, MS (p. 1054)|Theoretical & Applied Mechanics, PhD (p. 1057)

Admission

Students wishing to enroll in the Computational Science & Engineering Concentration should follow the enrollment procedure on the program's Web site (https://cse.illinois.edu/cse-educational-programs/graduate-concentration/).

for the graduate concentration in Computational Science & Engineering

For more information regarding the CSE Graduate Concentration, visit the Computational Science and Engineering website (http://cse.illinois.edu/), or contact the CSE Office at 217-333-3247 or cse@cse.illinois.edu.

Code	Title	Hours
Core Course Work: Complete two courses (4 hours each) from the list below.		8
CSE 401	Numerical Analysis	
CSE 402	Parallel Progrmg: Sci & Engrg	
CSE 408	Applied Parallel Programming	
CSE 510	Numerical Methods for PDEs	
CSE 527	Scientific Visualization	
Computing Elective		8
Complete two courses (4 hours each) from the approved list. The application coursework must be distinct from the core courses (no double-counting is allowed).		
Total Hours		**16**
Additional Requirement		
M.S. and Ph.D. Thesis Requirement: The graduate thesis must have a significant computational component, and the thesis committee must include at least one CSE-affiliated faculty.		
M.S., Non-thesis Requirement: Must complete a 4- hour independent study/Capstone Project course, where the project is supervised by a CSE-affiliated faculty. The independent study project must comprise sufficient computational work, to be designed in consultation with the faculty supervisor overseeing the independent study.		

Corporate Governance & International Business Graduate Concentration

for the Graduate Concentration in Corporate Governance and International Business

interim chair of department: Cele Otnes
director of graduate studies: Deepak Somaya
director of admissions committee: Rakesh Bhatt
email: ba@business.illinois.edu
department website: https://giesbusiness.illinois.edu/msba (https://giesbusiness.illinois.edu/msba/)
department faculty: https://business.illinois.edu/people/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://giesbusiness.illinois.edu/
department office: 350 Wohlers Hall, 1206 S. Sixth Street, Champaign, IL 61820
phone: (217) 333-4240

This concentration is available for on campus students in these programs:

Accountancy, MAS (p. 542)
Accountancy, MS (p. 544)
Business Administration, MBA (p. 646)
Business Administration, MS (p. 646)
Finance, MS (p. 763)
Management, MS (p. 858)

The concentration in Corporate Governance and International Business is designed to develop leaders in various business fields who understand international business and corporate governance issues within the global economy. It specifically covers topics such as (1) how to create value for multinational partners, employees with diverse cultural backgrounds, and shareholders by designing better organizations and corporate governance structures; and (2) how managerial practices differ in various national/cultural contexts and why managers must be able to understand the strategic, financial, and economic implications of these differences in managing multinational corporations. The concentration will provide a strong foundation in the International Business and Governance area and can be tailored to fit the specific career needs of students.

Graduate Degree Programs in Business Administration

Majors:

Business Administration, MBA (p. 642) **(online-iMBA)**
Business Administration, MS (p. 646)
with optional concentrations: Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Corporate Governance & International Business (p. 1090), Finance (p. 1096), Supply Chain Management (p. 1109)
Business Analytics, MS (p. 649)
Management, MS (p. 858)
with optional concentrations: Business Data Analytics (p. 1086), Finance, (p. 1096) Corporate Governance & International Business (p. 1090)
Technology Management, MS (p. 1048)
with optional concentrations: Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Finance (p. 1096), Information Technology & Control (p. 1100), Supply Chain Management (p. 1109)
Business Administration, PhD (p. 647)

Minors:

Information Technology & Control (p. 1136)
Corporate Governance & International Business (p. 1130)
Supply Chain Management (p. 1144)

Concentrations:

Business Data Analytics (p. 1086)
Corporate Governance & International Business (p. 1090)
Information Technology & Control (p. 1100)
Supply Chain Management (p. 1109)

Certificates:

Digital Marketing, CERT (p. 1115)
Entrepreneurship & Strategic Innovation, CERT (p. 1116)
Financial Management, CERT (p. 1117)
Global Challenges in Business, CERT (p. 1118)
Managerial Economics & Business Analysis, CERT (p. 1119)
Strategic Leadership Management, CERT (p. 1120)
Value Chain Management, CERT (p. 1121)

Joint Degree Program:

Accountancy, MS (iMSA) & Business Administration, MBA (iMBA) (http://catalog.illinois.edu/graduate/bus/joint-degree/accountancy-ms-business-mba-online/)

Admission

Admission to the concentration requires a Graduate Student Request Form submitted to the Department and Graduate College and admission to one of the approved programs. Admission is limited, and acceptance is on a competitive basis.

for the Graduate Concentration in Corporate Governance and International Business

This concentration requires submission of twelve graduate hours of Corporate Governance and International Business related coursework.

Successful completion of the concentration assumes certain knowledge of business and prior coursework.

Course substitutions may be approved by the Department after consultation with the IB & Business Law Area faculty.

In addition to the concentration requirements, students must also complete the requirements of their major degree.

Code	Title	Hours
Select three of the following:		12
BADM 532	Sustainable Product Design & Enterprise Plan Development - I: Bottom-Up Immersion & Design	
BADM 582	Multinational Management	
BADM 583	Current Topics in Intl Bus	
BADM 584	Global Marketing	
BADM 586	Intl Comparative Management	
BADM 590	Seminar in Business Admin (US Corporate Governance)	
BADM 590	Seminar in Business Admin (Technology and Globalization)	
BADM 590	Seminar in Business Admin (Global Strategy)	
Total Hours		**12**

Data Analytics in Accountancy Graduate Concentration

for the Data Analytics in Accountancy Graduate Concentration (on campus & online)

chair of department: Theo Sougiannis
director of graduate studies: Nerissa Brown
associate director of graduate studies: Ashley Lamb
department website: https://giesbusiness.illinois.edu/accountancy (https://giesbusiness.illinois.edu/accountancy/)
program website: https://giesbusiness.illinois.edu/accountancy/programs/msa/
college website: https://giesbusiness.illinois.edu/ (https://business.illinois.edu/)
overview of graduate college admissions & requirements: Graduate Admissions (https://grad.illinois.edu/admissions/apply/)
overview of college admissions & requirements: Gies Catalog (http://catalog.illinois.edu/schools/gies-business/academic-units/)
department office: 360 Wohlers Hall, 1206 South Sixth, Champaign, IL 61820
phone: (217) 333-0857
email: accy@illinois.edu

The Data Analytics in Accountancy Concentration is available for the

Accountancy, MAS (p. 542)
Accountancy, MS (p. 544) **(on campus & online)**

The Data Analytics in Accountancy Concentration is designed to develop leaders who understand (1) how to apply data analytics in a variety of accounting and business contexts, (2) critically solve business problems using data-intensive business and accounting information, and (3)

synthesize and effectively communicate data-intensive information, findings, and conclusions to other environment-constituents, including supervisors, peers, and subordinates, clients, and regulatory agencies. This concentration will not only provide a strong foundational knowledge of data analytics, but also provide students multiple opportunities to apply this knowledge via experiential learning opportunities.

Graduate Degree Programs in Accountancy

Accountancy, MAS (p. 542)
with optional concentrations:
Business & Public Policy (p. 1087) | Corporate Governance & International Business (p. 1090) | Data Analytics in Accountancy (p. 1091) | Finance (http://catalog.illinois.edu/graduate/bus/concentration/finance/finance/) | Financial Reporting & Assurance (p. 543) | Information Technology & Control (p. 1100) | Real Estate (p. 1105) | Supply Chain Management (p. 1109) | Taxation (p. 1110)
Accountancy, MS (p. 544) **(on campus & online)**
on campus concentrations:
Business & Public Policy (p. 1087) | Corporate Governance & International Business (p. 1090) | Data Analytics in Accountancy (p. 1091) | Finance (p. 1096) | Information Technology & Control (p. 1100) | Supply Chain Management (p. 1109) | Taxation (p. 1110)
online concentrations:
Accountancy Analytics (p. 546)
Accountancy, PhD (p. 547)
Minor:
Accountancy (p. 1122)

for the Data Analytics in Accountancy Graduate Concentration (on campus & online)

The Data Analytics in Accountancy Concentration is available for the

Accountancy, MAS (p. 542)
Accountancy, MS (p. 544) **(on campus)**

Code	Title	Hours
ACCY 570	Data Analytics Foundations for Accountancy	4
ACCY 575	Data Analytics Applications in Accountancy	4
Choose one (1) from:		**4**
ACCY 571	Statistical Analyses for Accountancy	
ACCY 512	Data Analytics for Management Accounting	
ACCY 574	Risk Management and Innovation	
ACCY 592	Introduction to Accounting Research	
or both:		
ACCY 550	Multistate Taxation	
ACCY 554	International Taxation	
Total Hours		12

Requirement	Description
Course substitutions may be approved by the Department of Accoutancy.	
Other requirements may overlap.	

Data Analytics in Finance Graduate Concentration

For the Data Analytics in Finance Concentration

chair of department: Louis Chan
director of graduate studies: Martin Widdicks (MSF); George Pennacchi (PhD)
email: grad@business.illinois.edu
department website: https://giesbusiness.illinois.edu/msf (https://giesbusiness.illinois.edu/msf/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://giesbusiness.illinois.edu/
department office: 340 Wohlers Hall, 1206 S. Sixth Street, Champaign, IL 61820
phone: (217) 244-2239

The Data Analytics in Finance Concentration is open to students enrolled in:

Finance, MS (p. 763)
Financial Engineering, MS (p. 765)

The Data Analytics in Finance Concentration is designed to develop graduates who understand:

- how to apply data analytics in a variety of financial contexts including investment and policy decisions;
- critically solve business problems using data-intensive economic and financial information; and,
- synthesize and effectively communicate data-intensive information, findings, and conclusions to others, including supervisors, peers, and clients.

This concentration will not only provide a strong technical knowledge of data analytics topics, but also provide students multiple opportunities to apply this knowledge via experiential learning opportunities.

Graduate Degree Programs in Finance

Majors

Finance, MS (p. 763)

optional concentrations for the Finance, MS: Accountancy (p. 1073), Business & Public Policy (p. 1087), Corporate Governance & International Business (p. 1090), Data Analytics in Finance (p. 1092), Information Technology & Control (p. 1100)

Financial Engineering, MS (p. 765) (**administered by** Finance and Industrial & Enterprise Systems Engineering (https://msfe.illinois.edu/))

optional concentration for the Financial Engineering, MS: Data Analytics in Finance (p. 1092)

Finance, PhD (p. 764)

Minors

Finance (p. 1133)

Concentrations

Data Analytics in Finance (p. 1092)
Finance (p. 1096)
Business & Public Policy (p. 1087)
Real Estate (p. 1105)

Admission

Candidates will apply to the Department of Finance for admission into the concentration. Students wishing to be admitted to the concentration should consult with their program advisor before applying.

For the Data Analytics in Finance Concentration

Code	Title	Hours
FIN 510	Big Data Analytics in Finance for Predictive and Causal Analysis	4
Choose any two of the following:		
FIN 552	Applied Financial Econometrics	4
FIN 553	Machine Learning in Finance	4
FIN 555	Financial Innovation	4
FIN 567	Financial Risk Management	4
FIN 580	Special Topics in Finance	4
Total Hours		**12**

Digital Learning Concentration

for the Graduate Concentration in Digital Learning (on campus & online)

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head of the department: Sarah McCarthey
director of graduate studies: Gloriana Gonzalez
graduate admissions information: Mitzi Koeberlein
overview of admissions & requirements: College of Education (https://education.illinois.edu/programs/grad/how-to-apply/?url=/programs/grad)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: http://education.illinois.edu/ci (http://education.illinois.edu/ci/)
program website: College of Education Programs (https://education.illinois.edu/faceted-search/programs/)
department faculty: Curriculum & Instruction Faculty (https://education.illinois.edu/faculty-finder/ci/)
college website: http://education.illinois.edu/
department office: 142 Education Building, 1310 South Sixth Street, Champaign, IL 61820
phone: (217) 244-3542
email: gradservices@education.illinois.edu

This concentration is available for:

Curriculum and Instruction, EdD (p. 691)|Curriculum and Instruction, EdM (p. 693)|Curriculum and Instruction, MA (p. 695)|Curriculum and Instruction, MS (p. 697)|Curriculum and Instruction, PhD (p. 699)|

Early Childhood Education, EdM (p. 703)|

Educational Policy, Organization & Leadership, EdD (p. 722)|Educational Policy, Organization & Leadership, EdM (p. 718)|Educational Policy, Organization & Leadership, MA (p. 720)|Educational Policy, Organization & Leadership, PhD (p. 723)|

Educational Psychology, EdM (p. 725)|Educational Psychology, MA (p. 728)|Educational Psychology, MS (p. 731)|Educational Psychology, PhD (p. 734)|

Elementary Education, EdM (p. 742)|

Secondary Education, EdM (p. 994)|

Special Education, EdM (p. 1018)|Special Education, MS (p. 1020)|

Students may add the concentration to the Curriculum and Instruction online EdM program at the time of admission or petition to add the concentration during their degree program in the majors listed above.

for the Graduate Concentration in Digital Learning (on campus & online)

Hours for this concentration will count towards the degree programs in Curriculum and Instruction. Students pursuing this concentration in programs outside of Curriculum and Instruction will be required to complete the required coursework in excess of their program of study.

Code	Title	Hours
Select 3 courses from the following:		12
CI 482	Social Learning and Multimedia	
CI 499	Issues and Development in Education (Section: Technology Applications for Teachers)	

CI 438	Computer Programming and the Classroom
CI 555	Advanced Educational Technologies for Engagement and Interactive Learning
CI 499	Issues and Development in Education (Section: Critiques of Educational Technology)
Total Hours	12

Digital Marketing Concentration

for the Graduate Concentration in Digital Marketing (online)

associate dean: W. Brooke Elliott
email: g (ba@business.illinois.edu)**iesonline@illinois.edu**
department website: https://giesbusiness.illinois.edu/graduate-hub/online (https://giesbusiness.illinois.edu/graduate-hub/online/)
department faculty: https://business.illinois.edu/people/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://giesbusiness.illinois.edu/
department office: 2302 Fox Drive, Suite D, Champaign, IL 61820
phone: (217) 300-2481

This concentration is available for these programs:

Accountancy, MS (online) (p. 544)
Business Administration, MBA (iMBA) (p. 642)
Management, MS (online) (p. 858)

The Digital Marketing Concentration is designed to develop leaders who (1) understand the foundations of the new digital marketing landscape and the application of marketing tools and strategies in the digital environment, (2) employ marketing analytics to visualize and use data, and (3) understand how digital channels are used in marketing. This concentration will not only provide a strong foundational knowledge of digital marketing, but also provide students multiple opportunities to apply this knowledge via experiential learning opportunities.

Exceptions to the required courses will not be permitted.

Admission

Admission to the concentration requires submitting a Curriculum Change Form to the Department and Graduate College and admission to one of the approved programs. Admission is limited, and acceptance is on a competitive basis.

for the Graduate Concentration in Digital Marketing (online)

Code	Title	Hours
MBA 541	Marketing in a Digital World	2
MBA 542	Digital Marketing Analytics	4
MBA 543	Digital Media & Marketing	4
MBA 544	Marketing in an Analog World	2
Total Hours		**12**

Diversity & Equity in Education Concentration

for the Diversity & Equity in Education Concentration

head of the department: Yoon Pak
directors of graduate studies: Wen-Hao Huang, Mary Allison Witt
graduate admissions information: Linda Stimson (on campus) and Jena Pfoff (online/off-campus)
overview of admissions & requirements: College of Education (https://education.illinois.edu/programs/grad/how-to-apply/?url=/programs/grad)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://education.illinois.edu/epol (https://education.illinois.edu/epol/)
program website: College of Education Programs (https://education.illinois.edu/faceted-search/programs/)
department faculty: Education Policy, Organization & Leadership Faculty (https://education.illinois.edu/faculty-finder/epol/)
college website: http://education.illinois.edu/
department office: 142 Education Building, 1310 South Sixth Street, Champaign, IL 61820
phone: (217) 244-3542
email: gradservices@education.illinois.edu

This concentration is available for:

Education Policy, Organization and Leadership, EdM (p. 718) **(on campus & online)**
Education Policy, Organization and Leadership, MA (p. 720)
Education Policy, Organization and Leadership, CAS (p. 716) **(on campus)**
Education Policy, Organization and Leadership, EdD (p. 722) **(on campus & online)**
Education Policy, Organization and Leadership, PhD (p. 723)

for the Diversity & Equity in Education Concentration

The graduate credit needed for this concentration fulfills general coursework requirements for:

Education Policy, Organization and Leadership, EdM (p. 718) **(on campus & online)**
Education Policy, Organization and Leadership, MA (p. 720)
Education Policy, Organization and Leadership, CAS (p. 716) **(on campus)**
Education Policy, Organization and Leadership, EdD (p. 722) **(on campus & online)**
Education Policy, Organization and Leadership, PhD (p. 723)

This degree program can be completed either on campus or online; the requirements are listed below:

Code	Title	Hours
Select eight hours from the following courses:		**8**
EOL 568	Diversity, Leadership & Policy	
EPS 536	Race, Gender and Sexuality Issues	
SPED 514	Equity Issues in Special Education	
Select four hours from the following courses:		**4**

EPS 405	Historical and Social Barriers
EPS 415	Technology and Educational Reform
EPS 529	Education and Human Rights
EPS 530	Education and Globalization
EPS 533	Global Youth and Citizenship
EPS 580	Researching Global Education
HRD 530	Organization Development
Total Hours	12

Educational Administration & Leadership Concentration

for the Educational Administration & Leadership Concentration

head of the department: Yoon Pak
directors of graduate studies: Wen-Hao Huang, Mary Allison Witt
graduate admissions information: Linda Stimson (on campus) and Jena Pfoff (online/off-campus)
overview of admissions & requirements: College of Education (https://education.illinois.edu/programs/grad/how-to-apply/?url=/programs/grad)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://education.illinois.edu/epol (https://education.illinois.edu/epol/)
program website: College of Education Programs (https://education.illinois.edu/faceted-search/programs/)
department faculty: Education Policy, Organization & Leadership Faculty (https://education.illinois.edu/faculty-finder/epol/)
college website: http://education.illinois.edu/
department office: 142 Education Building, 1310 South Sixth Street, Champaign, IL 61820
phone: (217) 244-3542
email: gradservices@education.illinois.edu

This concentration is available for:

Education Policy, Organization and Leadership, EdM (p. 718) **(on campus, off-campus & online)**
Education Policy, Organization and Leadership, MA (p. 720)
Education Policy, Organization and Leadership, CAS (p. 716) **(on campus and off-campus)**
Education Policy, Organization and Leadership, EdD (p. 722) **(on campus, off-campus & online)**
Education Policy, Organization and Leadership, PhD (p. 723)

for the Educational Administration & Leadership Concentration

The graduate credit needed for this concentration fulfills general coursework requirements for:

Education Policy, Organization and Leadership, EdM (p. 718) **(on campus, off-campus & online)**
Education Policy, Organization and Leadership, MA (p. 720)
Education Policy, Organization and Leadership, CAS (p. 716) **(on campus and off-campus)**
Education Policy, Organization and Leadership, EdD (p. 722) **(on campus, off-campus & online)**
Education Policy, Organization and Leadership, PhD (p. 723)

Code	Title	Hours
Select 24 hours from the following courses:		**24**
EOL 540	Introduction to Educational Leadership	
EOL 541	Supervision of Learning Environments	
EOL 542	Leading Learning-Centered Schools	
EOL 543	Leading School Improvement	
EOL 544	Leading Improvement and Innovation	
EOL 546	Public School Finance	
EOL 547	Education Law	
EOL 548		
EOL 549	Organizational Theory for Educational Leaders	
EOL 550	Educational Leadership and Professional Development	
EOL 560	Clinical Experience Administration	
EOL 561	Educational Politics and Policies	
EOL 562	Law and School District Leader	
EOL 563	The School Superintendency	
EOL 564	District Change for Equity and Social Justice	
EOL 565	Human Resource Management at the School District Level	
EOL 566	School District Financial Management	
EOL 567	Program Planning & Evaluation	
EOL 568	Diversity, Leadership & Policy	
EOL 588	Capstone Experience I & II	
EPOL 595	Independent Study	
EPOL 599	Thesis Research	
Total Hours		24

Learning Outcomes: Education Administration & Leadership

Learning Outcomes for the Educational Administration & Leadership Concentration

CAS

1. The student demonstrates knowledge in relevant significant domains in educational leadership and higher education, including areas such as historical, political, social, legal, and economic contexts in which educational systems operate.
2. The student demonstrates proficiency in incorporating an understanding of issues relating to social justice, democracy, and equity into professional practice.
3. The student demonstrates proficiency in critical and analytical thinking.

4. The student demonstrates proficiency in oral communication skills.
5. The student demonstrates proficiency in written communication skills.

EdM

1. The student demonstrates knowledge in relevant significant domains in educational leadership and higher education, including areas such as historical, political, social, legal, and economic contexts in which educational systems operate.
2. The student demonstrates proficiency in incorporating an understanding of issues relating to social justice, democracy, and equity into professional practice.
3. The student demonstrates proficiency in critical and analytical thinking.
4. The student demonstrates proficiency in oral communication skills.
5. The student demonstrates proficiency in written communication skills.

EdD

1. The student demonstrates knowledge in relevant significant domains in educational leadership and higher education, including areas such as historical, political, social, legal, and economic contexts in which educational systems operate.
2. The student demonstrates proficiency in incorporating an understanding of issues relating to social justice, democracy, and equity into professional practice.
3. The student demonstrates proficiency in critical and analytical thinking.
4. The student demonstrates proficiency in oral communication skills.
5. The student demonstrates proficiency in written communication skills.
6. The student demonstrates an ability to use scholarly research to improve professional practice.

PhD

1. The student demonstrates knowledge in relevant significant domains in educational leadership and higher education, including areas such as historical, political, social, legal, and economic contexts in which educational systems operate.
2. The student demonstrates proficiency in incorporating an understanding of issues relating to social justice, democracy, and equity into professional practice.
3. The student demonstrates proficiency in critical and analytical thinking.
4. The student demonstrates proficiency in oral communication skills.
5. The student demonstrates proficiency in written communication skills.
6. The student demonstrates an ability to use scholarly research to improve professional practice.

Entrepreneurship & Strategic Innovation Concentration

for the Graduate Concentration in Entrepreneurship and Strategic Innovation (online)

associate dean: W. Brooke Elliott
email: g (ba@business.illinois.edu)**iesonline@illinois.edu**
department website: https://giesbusiness.illinois.edu/graduate-hub/online (https://giesbusiness.illinois.edu/graduate-hub/online/)
department faculty: https://business.illinois.edu/people/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://giesbusiness.illinois.edu/
department office: 2302 Fox Drive, Suite D, Champaign, IL 61820
phone: (217) 300-2481

This concentration is available for these programs:
Accountancy, MS (online) (p. 544)
Business Administration, MBA (iMBA) (p. 642)
Management, MS (online) (p. 858)

The Entrepreneurship and Strategic Innovation Concentration is designed to develop leaders who (1) recognize an entrepreneurial mindset, (2) understand how to manage and innovate in uncertainty (3) understand when, why, and how to think creatively, and (4) assess the feasibility of a new venture and the diversity of challenges involved. This concentration will not only provide a strong foundational knowledge of creativity and entrepreneurship, but also provide students multiple opportunities to apply this knowledge via experiential learning opportunities.

Exceptions to the required courses will not be permitted.

Admission

Admission to the concentration requires submitting a Curriculum Change Form to the Department and Graduate College and admission to one of the approved programs. Admission is limited, and acceptance is on a competitive basis.

for the Graduate Concentration in Entrepreneurship and Strategic Innovation (online)

Code	Title	Hours
MBA 551	Strategic Innovation	4
MBA 552	Fostering Creative Thinking	4
MBA 553	Entrepreneurship: From Startup to Growth	4
Total Hours		**12**

Finance Graduate Concentration

for the Finance Concentration

chair of department: Louis Chan
director of graduate studies: Martin Widdicks (MSF); George Pennacchi (PhD)
email: grad@business.illinois.edu
department website: https://giesbusiness.illinois.edu/msf (https://giesbusiness.illinois.edu/msf/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://giesbusiness.illinois.edu/
department office: 340 Wohlers Hall, 1206 S. Sixth Street, Champaign, IL 61820
phone: (217) 244-2239

The Finance Concentration is available for:

Accountancy, MAS (p. 542)
Accountancy, MS (p. 544) **(on campus only)**
Business Administration, MS (p. 646)
Management, MS (p. 858) **(on campus only)**
Technology Management, MS (p. 1048)

Graduate Degree Programs in Finance

Majors

Finance, MS (p. 763)
optional concentrations for the Finance, MS: Accountancy (p. 1073), Business & Public Policy (p. 1087), Corporate Governance & International Business (p. 1090), Data Analytics in Finance (p. 1092), Information Technology & Control (p. 1100)
Financial Engineering, MS (p. 765) **(administered by** Finance and Industrial & Enterprise Systems Engineering (https://msfe.illinois.edu/))
optional concentration for the Financial Engineering, MS: Data Analytics in Finance (p. 1092)
Finance, PhD (p. 764)

Minors

Finance (p. 1133)

Concentrations

Data Analytics in Finance (p. 1092)
Finance (p. 1096)
Business & Public Policy (p. 1087)
Real Estate (p. 1105)

Admission

Students in the MAS or MSA programs who are interested in the concentration should consult with their program advisor to determine if the concentration is appropriate. Students may also email finance@illinois.edu for more information.

for the degree of Master of Accounting Science in Accountancy, Finance Concentration

The Finance Concentration is available for:

Accountancy, MAS (p. 542)
Accountancy, MS (p. 544) **(on campus only)**
Business Administration, MS (p. 646)
Management, MS (p. 858) **(on campus only)**
Technology Management, MS (p. 1048)

Finance Concentration Requirements

Code	Title	Hours
FIN 511	Investments	4
FIN 512	Financial Derivatives [1]	4
FIN 521	Advanced Corporate Finance	4
Total Hours		12

Other Requirements

Requirement	Description
In addition to the concentration requirements, students must also complete the requirements of their programs of study.	

[1] *Alternative Finance course offerings may be substituted if approved by a program advisor.*

Global Challenges in Business Concentration

for the Graduate Concentration in Global Challenges in Business (online)

associate dean: W. Brooke Elliott
email: g (ba@business.illinois.edu)**iesonline@illinois.edu**
department website: https://giesbusiness.illinois.edu/graduate-hub/online (https://giesbusiness.illinois.edu/graduate-hub/online/)
department faculty: https://business.illinois.edu/people/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://giesbusiness.illinois.edu/
department office: 2302 Fox Drive, Suite D, Champaign, IL 61820
phone: (217) 300-2481

This concentration is available for these programs:

Accountancy, MS (online) (p. 544)
Business Administration, MBA (iMBA) (p. 642)
Management, MS (online) (p. 858)

The Global Challenges in Business Concentration is designed to develop leaders who (1) understand how businesses function in the global marketplace, (2) consider ethical decisions to run a responsible business in the global marketplace, (3) understand the role of business in addressing global challenges such as poverty and the environment, (4) understand how business can pursue opportunities and confront challenges in the complex global marketplace. This concentration will not only provide a strong foundational knowledge of global business challenges, but also provide students multiple opportunities to apply this knowledge via experiential learning opportunities.

Exceptions to the required courses will not be permitted.

Admission

Admission to the concentration requires submitting a Curriculum Change Form to the Department and Graduate College and admission to one of the approved programs. Admission is limited, and acceptance is on a competitive basis.

for the Graduate Concentration in Global Challenges in Business (online)

Code	Title	Hours
MBA 546	Global Business Horizons	4
MBA 547	Global Impact: Cultural Psychology & Business Ethics	4
MBA 548	Global Strategy	4
Total Hours		**12**

Global Studies in Education Concentration

for the Global Studies in Education Concentration

head of the department: Yoon Pak
directors of graduate studies: Wen-Hao Huang, Mary Allison Witt
graduate admissions information: Linda Stimson (on campus) and Jena Pfoff (online/off-campus)
overview of admissions & requirements: College of Education (https://education.illinois.edu/programs/grad/how-to-apply/?url=/programs/grad)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://education.illinois.edu/epol (https://education.illinois.edu/epol/)
program website: College of Education Programs (https://education.illinois.edu/faceted-search/programs/)
department faculty: Education Policy, Organization & Leadership Faculty (https://education.illinois.edu/faculty-finder/epol/)
college website: http://education.illinois.edu/
department office: 142 Education Building, 1310 South Sixth Street, Champaign, IL 61820
phone: (217) 244-3542
email: gradservices@education.illinois.edu

This concentration is available for:

Education Policy, Organization and Leadership, EdM (p. 718) **(on campus & online)**
Education Policy, Organization and Leadership, MA (p. 720)
Education Policy, Organization and Leadership, CAS (p. 716) **(on campus)**
Education Policy, Organization and Leadership, EdD (p. 722) **(on campus & online)**
Education Policy, Organization and Leadership, PhD (p. 723)

for the Global Studies in Education Concentration

The graduate credit needed for this concentration fulfills general coursework requirements for:

Education Policy, Organization and Leadership, EdM (p. 718) **(on campus & online)**
Education Policy, Organization and Leadership, MA (p. 720)
Education Policy, Organization and Leadership, CAS (p. 716) **(on campus)**
Education Policy, Organization and Leadership, EdD (p. 722) **(on campus & online)**
Education Policy, Organization and Leadership, PhD (p. 723)

Code	Title	Hours
EPS 530	Education and Globalization	4
EPS 533	Global Youth and Citizenship	4
EPS 537	Globalizing Educational Policy	4
Total Hours		12

Higher Education Concentration

for the Higher Education Concentration

head of the department: Yoon Pak
directors of graduate studies: Wen-Hao Huang, Mary Allison Witt
graduate admissions information: Linda Stimson (on campus) and Jena Pfoff (online/off-campus)
overview of admissions & requirements: College of Education (https://education.illinois.edu/programs/grad/how-to-apply/?url=/programs/grad)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://education.illinois.edu/epol (https://education.illinois.edu/epol/)
program website: College of Education Programs (https://education.illinois.edu/faceted-search/programs/)
department faculty: Education Policy, Organization & Leadership Faculty (https://education.illinois.edu/faculty-finder/epol/)
college website: http://education.illinois.edu/
department office: 142 Education Building, 1310 South Sixth Street, Champaign, IL 61820
phone: (217) 244-3542
email: gradservices@education.illinois.edu

This concentration is available for:

Education Policy, Organization and Leadership, EdM (p. 718) **(on campus)**
Education Policy, Organization and Leadership, MA (p. 720)
Education Policy, Organization and Leadership, CAS (p. 716) **(on campus)**
Education Policy, Organization and Leadership, EdD (p. 722) **(on campus)**
Education Policy, Organization and Leadership, PhD (p. 723)

for the Higher Education Concentration

The graduate credit needed for this concentration fulfills general coursework requirements for:

Education Policy, Organization and Leadership, EdM (p. 718) **(on campus)**
Education Policy, Organization and Leadership, MA (p. 720)
Education Policy, Organization and Leadership, CAS (p. 716) **(on campus)**
Education Policy, Organization and Leadership, EdD (p. 722) **(on campus)**
Education Policy, Organization and Leadership, PhD (p. 723)

Code	Title	Hours
Select 24 hours from the following courses:		**24**
EOL 570	Organization of Higher Education	
EOL 571	Foundation of Higher Education	
EOL 572	The College Student	
EOL 573	The Community College	
EOL 580	Critical Issues in Higher Education	
EOL 583	Student Affairs Administration	
EOL 585	College Teaching	
EOL 589	Internship in Education Policy, Organization and Leadership	
EPOL 595	Independent Study	
Total Hours		24

History of Education Concentration

for the History of Education Concentration

head of the department: Yoon Pak
directors of graduate studies: Wen-Hao Huang, Mary Allison Witt
graduate admissions information: Linda Stimson (on campus) and Jena Pfoff (online/off-campus)
overview of admissions & requirements: College of Education (https://education.illinois.edu/programs/grad/how-to-apply/?url=/programs/grad)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://education.illinois.edu/epol (https://education.illinois.edu/epol/)
program website: College of Education Programs (https://education.illinois.edu/faceted-search/programs/)
department faculty: Education Policy, Organization & Leadership Faculty (https://education.illinois.edu/faculty-finder/epol/)
college website: http://education.illinois.edu/
department office: 142 Education Building, 1310 South Sixth Street, Champaign, IL 61820
phone: (217) 244-3542
email: gradservices@education.illinois.edu

This concentration is available for:

Education Policy, Organization and Leadership, EdM (p. 718) **(on campus)**
Education Policy, Organization and Leadership, MA (p. 720)
Education Policy, Organization and Leadership, CAS (p. 716) **(on campus)**
Education Policy, Organization and Leadership, EdD (p. 722) **(on campus)**
Education Policy, Organization and Leadership, PhD (p. 723)

for the History of Education Concentration

The graduate credit needed for this concentration fulfills general coursework requirements for:

Education Policy, Organization and Leadership, EdM (p. 718) **(on campus)**
Education Policy, Organization and Leadership, MA (p. 720)
Education Policy, Organization and Leadership, CAS (p. 716) **(on campus)**
Education Policy, Organization and Leadership, EdD (p. 722) **(on campus)**
Education Policy, Organization and Leadership, PhD (p. 723)

Code	Title	Hours
EPS 400	History of American Education	2 to 4
or EPS 405	Historical and Social Barriers	
EPS 423	Politics of Education	3 or 4
Select four hours from the following courses:		**4**
EPS 402	Asian American Education	
EPS 481	History of American Indian Education	
EPS 500		
EPS 501	History of U.S. Educational Thought	
EPS 502	Education in the 20th Century	
EPS 503	Seminar in the History of Education	
EPS 508	Uses and Abuses of Educational Research	
Total Hours		12

Human Resource Development Concentration

for the Human Resource Development Concentration

head of the department: Yoon Pak
directors of graduate studies: Wen-Hao Huang, Mary Allison Witt
graduate admissions information: Linda Stimson (on campus) and Jena Pfoff (online/off-campus)
overview of admissions & requirements: College of Education (https://education.illinois.edu/programs/grad/how-to-apply/?url=/programs/grad)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://education.illinois.edu/epol (https://education.illinois.edu/epol/)
program website: College of Education Programs (https://education.illinois.edu/faceted-search/programs/)
department faculty: Education Policy, Organization & Leadership Faculty (https://education.illinois.edu/faculty-finder/epol/)
college website: http://education.illinois.edu/
department office: 142 Education Building, 1310 South Sixth Street, Champaign, IL 61820
phone: (217) 244-3542
email: gradservices@education.illinois.edu

This concentration is available for:

Education Policy, Organization and Leadership, EdM (p. 718) **(on campus & online)**
Education Policy, Organization and Leadership, MA (p. 720)
Education Policy, Organization and Leadership, CAS (p. 716) **(on campus)**
Education Policy, Organization and Leadership, EdD (p. 722) **(on campus & online)**
Education Policy, Organization and Leadership, PhD (p. 723)

for the Human Resource Development Concentration

The graduate credit needed for this concentration fulfills general coursework requirements for:

Education Policy, Organization and Leadership, EdM (p. 718) **(on campus & online)**
Education Policy, Organization and Leadership, MA (p. 720)
Education Policy, Organization and Leadership, CAS (p. 716) **(on campus)**
Education Policy, Organization and Leadership, EdD (p. 722) **(on campus & online)**
Education Policy, Organization and Leadership, PhD (p. 723)

Code	Title	Hours
HRD 400	Principles of Human Resource Education	3 or 4
or HRD 440	Work Analysis	
HRD 411	Instructional and Training System Design	3 or 4
or HRD 472	Learning Technologies	
HRD 530	Organization Development	4
or HRD 540	Learning on the Job	
Total Hours		12

Information Technology & Control Graduate Concentration

for the Graduate Concentration in Information Technology and Control (on campus)

interim chair of department: Cele Otnes
director of graduate studies: Deepak Somaya
director of admissions committee: Rakesh Bhatt
email: ba@business.illinois.edu
department website: https://giesbusiness.illinois.edu/msba (https://giesbusiness.illinois.edu/msba/)
department faculty: https://business.illinois.edu/people/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://giesbusiness.illinois.edu/
department office: 350 Wohlers Hall, 1206 S. Sixth Street, Champaign, IL 61820
phone: (217) 333-4240

This concentration is available for these programs:
Accountancy, MAS (p. 542)
Accountancy, MS (p. 544) **(on campus)**
Business Administration, MBA (p. 646) **(Full and Part-time)**
Finance, MS (p. 763)
Technology Management, MS (p. 1048)

Graduate Degree Programs in Business Administration

Majors:
Business Administration, MBA (p. 642) **(online-iMBA)**
Business Administration, MS (p. 646)
with optional concentrations: Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Corporate Governance & International Business (p. 1090), Finance (p. 1096), Supply Chain Management (p. 1109)
Business Analytics, MS (p. 649)
Management, MS (p. 858)
with optional concentrations: Business Data Analytics (p. 1086), Finance, (p. 1096) Corporate Governance & International Business (p. 1090)
Technology Management, MS (p. 1048)
with optional concentrations: Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Finance (p. 1096), Information Technology & Control (p. 1100), Supply Chain Management (p. 1109)
Business Administration, PhD (p. 647)

Minors:
Information Technology & Control (p. 1136)
Corporate Governance & International Business (p. 1130)
Supply Chain Management (p. 1144)

Concentrations:
Business Data Analytics (p. 1086)
Corporate Governance & International Business (p. 1090)
Information Technology & Control (p. 1100)
Supply Chain Management (p. 1109)

Certificates:
Digital Marketing, CERT (p. 1115)
Entrepreneurship & Strategic Innovation, CERT (p. 1116)
Financial Management, CERT (p. 1117)
Global Challenges in Business, CERT (p. 1118)
Managerial Economics & Business Analysis, CERT (p. 1119)
Strategic Leadership Management, CERT (p. 1120)
Value Chain Management, CERT (p. 1121)

Joint Degree Program:
Accountancy, MS (iMSA) & Business Administration, MBA (iMBA) (http://catalog.illinois.edu/graduate/bus/joint-degree/accountancy-ms-business-mba-online/)

Admission

Admission to the concentration requires a Graduate Student Request Form submitted to the Department and Graduate College and admission to one of the approved programs. Admission is limited, and acceptance is on a competitive basis.

for the Graduate Concentration in Information Technology and Control

This concentration requires submission of twelve graduate hours of Information Technology and Control related coursework. Successful completion of the concentration assumes certain knowledge of business and prior coursework.

In addition to the concentration requirements, students must also complete the requirements of their major degree.

Course substitutions may be approved by the Department after consultation with the IT Area faculty.

Code	Title	Hours
BADM 554	Enterprise Database Management	
BADM 555	Info Sys Development and Mgt	
Select from the following:		
BADM 557	Business Intelligence	
BADM 559	Enterprise IT Governance	
BADM 562	Social Media Strategy	
Total Hours		**12**

Learning Design & Leadership Concentration

for the Learning Design & Leadership Concentration

head of the department: Yoon Pak
directors of graduate studies: Wen-Hao Huang, Mary Allison Witt
graduate admissions information: Linda Stimson (on campus) and Jena Pfoff (online/off-campus)
overview of admissions & requirements: College of Education (https://education.illinois.edu/programs/grad/how-to-apply/?url=/programs/grad)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://education.illinois.edu/epol (https://education.illinois.edu/epol/)
program website: College of Education Programs (https://education.illinois.edu/faceted-search/programs/)
department faculty: Education Policy, Organization & Leadership Faculty (https://education.illinois.edu/faculty-finder/epol/)
college website: http://education.illinois.edu/
department office: 142 Education Building, 1310 South Sixth Street, Champaign, IL 61820
phone: (217) 244-3542
email: gradservices@education.illinois.edu

This concentration is available for:

Education Policy, Organization and Leadership, EdM (p. 718) **(on campus & online)**
Education Policy, Organization and Leadership, MA (p. 720)
Education Policy, Organization and Leadership, CAS (p. 716) **(on campus)**
Education Policy, Organization and Leadership, EdD (p. 722) **(on campus & online)**
Education Policy, Organization and Leadership, PhD (p. 723)

for the Learning Design & Leadership Concentration

The graduate credit needed for this concentration fulfills general coursework requirements for:

Education Policy, Organization and Leadership, EdM (p. 718) **(on campus & online)**
Education Policy, Organization and Leadership, MA (p. 720)
Education Policy, Organization and Leadership, CAS (p. 716) **(on campus)**
Education Policy, Organization and Leadership, EdD (p. 722) **(on campus & online)**
Education Policy, Organization and Leadership, PhD (p. 723)

Code	Title	Hours
EPS 431	New Learning	3 or 4
HRD 472	Learning Technologies	3 or 4
HRD 585	Program Evaluation	4
or EPSY 474	Evaluating Learning Technology	
Total Hours		12

Medieval Studies Concentration

for the Graduate Concentration in Medieval Studies

center director & director of graduate studies: Renée R. Trilling
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
program website: http://medieval.illinois.edu (http://www.medieval.illinois.edu/)
program faculty information: http://www.medieval.illinois.edu/people/faculty/
center office: 4080 Foreign Languages Building, 707 S. Mathews Avenue, Urbana, IL 61801
phone: (217) 265-6254
fax: (217) 244-8430
email: medievalstudies@illinois.edu

The Program in Medieval Studies offers a graduate concentration in Medieval Studies. Students who are admitted to graduate programs in departments with medieval studies faculty may apply to the concentration by meeting to express interest and to discuss the concentration with the Director of the Program in Medieval Studies. The program offers a flexible curriculum requiring a minimum of 24 hours of graduate-level coursework including advanced training both in the various disciplines of medieval studies and in foundational languages and technical skills appropriate to the field. For complete information about the program and its offerings, see the program's web site: http://medieval.illinois.edu (http://www.medieval.illinois.edu/).

Medieval Studies Concentration

participating programs:

Architecture, MARCH (p. 579)|Architecture, PhD (p. 583)
Art History, MA (p. 601)|Art History, PhD (p. 602)
Classical Philology, PhD (p. 664)
Classics, MA (p. 666)
Communication, MA (p. 670)|Communication, PhD (p. 671)
Comparative Literature, MA (p. 676)|Comparative Literature, PhD (p. 677)
East Asian Languages & Cultures, PhD (p. 707)
English, MA (p. 751)|English, PhD (p. 753)
French, MA (p. 781)|French, PhD (p. 783)
German, MA (p. 794)|German, PhD (p. 796)
History, MA (p. 802)|History, PhD (p. 803)
Italian, MA (p. 824)|Italian, PhD (p. 826)
Landscape Architecture, MLA (p. 832)|Landscape Architecture, PhD (p. 833)
Musicology, PhD (p. 941)
Philosophy, MA (p. 957)|Philosophy, PhD (p. 959)
Portuguese, MA (p. 972)|Portuguese, PhD (p. 973)
Spanish, MA (p. 1012)|Spanish, PhD (p. 1016)

Admission

Students who are admitted to graduate programs in departments with medieval studies faculty are eligible to enroll in the graduate concentration in Medieval Studies after meeting to express interest and to discuss the concentration with the Director of the Program in Medieval Studies.

Faculty Research Interests

The research interests of our faculty often overlap disciplinary boundaries. Thus faculty in English and History share interest in medieval drama, performance practices, and the emergence of regional and national identities. Faculty in English, History, and Art History work on the development of historical consciousness and the representation of history in illuminated manuscripts. Faculty in Italian, History, English and French share an interest in gender studies: the history of women and gender; gender and nationalism; the development of gendered subjectivities; conduct literature and mirrors for princes. Another focus is manuscript studies (Art History, Classics, French, English, History, Library Science): history of the book; illuminated manuscripts of the 13th-15th centuries; late medieval manuscript culture; and reading practices. The program has a strength in Late Antiquity and Early Medieval, which draws together faculty in History, Classics, Religious Studies, Speech Communication; themes of particular interest are the society, culture and religion of this period; the social and cultural history of the Roman and Byzantine empires; Byzantine rhetoric; the impact of Barbarian settlements on Medieval Europe; and the survival of the Classical tradition. There is also a growing interest in Mediterranean studies shared by faculty in the History of Architecture, History, Italian, and Classics): art and built environment of the Islamic Mediterranean; the Italian baptistery; and medieval civic squares. Illinois has the strongest program in medieval English in the Big Ten, with particular strengths in Old English; Old and Middle Irish; the theory, practice and teaching of rhetoric; the oral tradition. In addition, our faculty edit the following major journals: Early Medieval Europe, Illinois Classical Studies, and the Journal of English and Germanic Philology. For more information, visit our faculty listings: http://www.medieval.illinois.edu/people/faculty/.

Centers, Programs, and Institutes

Each Spring we offer an interdisciplinary graduate seminar (one of the requirements of the Certificate) on a topic of broad interest. These seminars are led by one faculty medievalist but are collaborative, drawing on the expertise of faculty in the Program and also visiting scholars from around the world.

Facilities and Resources

The Program is affiliated with the Worldwide Universities Network (www.wun.ac.uk (http://www.wun.ac.uk/)), which connects us to Medieval Studies programs at six UK universities (Bristol, Leeds, Manchester, Southampton, Sheffield, York), three on the continent (Bergen, Oslo, Utrecht), and three American universities (Wisconsin-Madison, Penn State, UC-San Diego). The Program has established partnerships with the Università degli Studi di Milano (Italy) and with Stockholm University (Sweden).
The library at the University of Illinois contains world class research collections in Medieval Studies. It is the largest academic library at a public university with more than 10 million volumes.

Financial Aid

The Program awards fellowships to help affiliated units recruit top ranked applicants. In addition, financial aid in the form of fellowships and teaching assistantships are available through the individual units cooperating in the Program in Medieval Studies.

for the Graduate Concentration in Medieval Studies

For additional details and requirements refer to the department's graduate concentration program *(*http://www.medieval.illinois.edu/education/grad/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Code	Title	Hours
Two graduate courses at the 400- or 500-level in Medieval Studies selected by the student and approved by the Advisory Board of Medieval Studies		6-8
MDVL 500	Seminar in Medieval Studies	4
Reading knowledge of a major international medieval language essential to the student's field of specialization, as determined by the student in consultation with a faculty supervisor and with the approval of the Director, as demonstrated by completion of a college-level course with a grade of B or better. Note: Students who fulfill this requirement by taking courses at the 200- or 300-level may be required to take additional coursework at the 400- and 500-level to meet the requirement of 24 hours of graduate-level coursework.		3-4
Reading knowledge of another medieval language with a minimum grade of B, or completion of a one-semester introductory course in a medieval language (such as FR 531 or ENGL 507) with a minimum grade of B, or an equivalent approved by the Medieval Studies Advisory Committee.		4
Thesis Hours Required (min/max applied toward degree)		6-8
Total Hours		24

Other Requirements

Requirement	Description
Other requirements may overlap	
A dissertation or thesis in the area of Medieval Studies.	
A member of one of the cooperating departments external to the student's home department will be a member of the student's dissertation or thesis committee.	
In addition to the graduate concentration requirements, students must also complete the requirements of their major degree.	

Bioengineering: Pharmaceutical Engineering, MEng

for the Master of Engineering in Engineering, Pharmaceutical Engineering Concentration (on campus & online)

department head: Mark Anastasio (mfi@illinois.edu)
director of graduate studies: Gregory Underhill (gunderhi@illinois.edu)
director of MEng program: Wawrzyniec Dobrucki (dobrucki@illinois.edu)
overview of admissions & requirements: https://bioemeng.illinois.edu/admissions/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://bioengineering.illinois.edu
program website: https://bioemeng.illinois.edu
college website: https://grainger.illinois.edu/
contact: Liezl Bowman (liezlb@illinois.edu)
address: 1240 Everitt Laboratory, 1406 W Green St, Urbana, IL 61801
phone: (217) 300-8066
email: bioe-meng@illinois.edu

The MEng in Bioengineering is a professionally-oriented degree designed to bridge the skills gap by developing students with advanced technical know-how, a better understanding of the medical healthcare industry and more business acumen through coursework and project work, which provides students exposure to real world industry issues. Other concentrations under the MEng in Bioengineering major include General Bioengineering (p. 620), Computational Genomics (p. 618), Entrepreneurship & Innovation (http://catalog.illinois.edu/graduate/engineering/concentration/entrepreneurship-innovation/) and Pharmaceutical Engineering (p. 1103).

Admission Requirements

Students must select one of the concentrations under the MEng in Bioengineering program to apply to and will not be able to complete multiple concentrations. Students should have an undergraduate degree in an engineering or a science related field or must have taken engineering or science related coursework. Applicants should have a minimum grade point average of 3.00 (A = 4.00) or equivalent for the last two years of undergraduate study and show evidence of strong quantitative skills and of serious interest in the life sciences through their personal statement. Students with less than a 3.0 GPA may be considered for a limited status admission. Students in the program do not have automatic admission to the PhD program in any engineering department.

All applicants whose native language is not English are required to submit TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) scores as evidence of English proficiency. Minimum admission requirements (https://grad.illinois.edu/admissions/instructions/04c/) are set by the Graduate College. Students applying to the online program must satisfy the full status admissions requirement.

All applicants whose native language is not English must submit a minimum TOEFL (http://www.toefl.org/) score of 103 (iBT), 257 (CBT), or 613 (PBT); or minimum International English Language Testing System (IELTS) (http://www.ielts.org/) academic exam scores of 7.0 overall and 6.0 in all subsections for full admission into the program. Applicants may be exempt from the TOEFL if certain criteria (http://grad.illinois.edu/admissions/instructions/04c/)are met. Applicants with lesser scores may still apply. Limited status (http://grad.illinois.edu/admissions/instructions/04c/) is granted for lesser scores and requires enrollment in English as a Second Language (ESL) courses (http://linguistics.illinois.edu/students/esl/guidelines/) based on an ESL Placement Test (EPT) taken upon arrival to campus.

Financial Aid

For tuition information and external funding resources, please visit the program's tuition and fees Web site (https://bioemeng.illinois.edu/tuition-fees/). Students in the MEng in Bioengineering program are not eligible for Board of Trustees (BOT) tuition-waiver generating assistantships at the University of Illinois.

Department Research

Bioengineering faculty perform research in the areas of Bio-Imaging at Multi-Scale; Molecular, Cellular and Tissue Engineering; Bio-Micro and Nanotechnology; Computational and Systems Bioengineering; and Synthetic Bioengineering. MEng students are able to do independent study research projects with Bioengineering faculty and affiliate faculty (https://bioengineering.illinois.edu/directory/) for class credit.

Other Graduate Programs in the Department of Bioengineering

degrees:

Bioengineering, MS (p. 621)
optional concentrations:
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)
Bioengineering, PhD (p. 623)
optional concentrations:
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)|Computational Science and Engineering (p. 1089)

The Department of Bioengineering offers studies leading to the Master of Engineering in Bioengineering (MEng), the Master of Science in Bioengineering (MS), and the Doctor of Philosophy (PhD) in Bioengineering. The Bioengineering Graduate Program provides students with educational and research experiences that integrate the

sciences of biology and medicine with the practices and principles of engineering. For the MS and PhD programs, areas of focus include Bio-imaging, Cell & Tissue Engineering, Micro and Molecular Technologies, and Computational Biology.

for the Master of Engineering in Engineering, Pharmaceutical Engineering Concentration (on campus & online)

Code	Title	Hours
Core Coursework		
Complete the required courses in each of the following areas below.		
Technical courses from approved list.		10
Business courses from approved list.		8
Elective Courses chosen in consultation with advisor.		8
Professional Development courses from approved list.		6
Total Credit Hours		**32**
Other Requirements and Conditions (may overlap):		
A minimum of 20 credit hours must be taken from the University of Illinois at Urbana-Champaign campus.		
A minimum of 12 500-level credit hours overall.		
At most, 12 credit hours of previous University of Illinois Urbana-Champaign graduate-level coursework not applied to any other degree may be transferred and applied to the major pending department and Graduate College approval.		
Minimum GPA:		3.0

Philosophy of Education Concentration

for the Philosophy of Education Concentration

head of the department: Yoon Pak
directors of graduate studies: Wen-Hao Huang, Mary Allison Witt
graduate admissions information: Linda Stimson (on campus) and Jena Pfoff (online/off-campus)
overview of admissions & requirements: College of Education (https://education.illinois.edu/programs/grad/how-to-apply/?url=/programs/grad)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://education.illinois.edu/epol (https://education.illinois.edu/epol/)
program website: College of Education Programs (https://education.illinois.edu/faceted-search/programs/)
department faculty: Education Policy, Organization & Leadership Faculty (https://education.illinois.edu/faculty-finder/epol/)
college website: http://education.illinois.edu/
department office: 142 Education Building, 1310 South Sixth Street, Champaign, IL 61820
phone: (217) 244-3542
email: gradservices@education.illinois.edu

This concentration is available for:

Education Policy, Organization and Leadership, EdM (p. 718) **(on campus)**
Education Policy, Organization and Leadership, MA (p. 720)
Education Policy, Organization and Leadership, CAS (p. 716) **(on campus)**
Education Policy, Organization and Leadership, EdD (p. 722) **(on campus)**
Education Policy, Organization and Leadership, PhD (p. 723)

for the Philosophy of Education Concentration

The graduate credit needed for this concentration fulfills general coursework requirements for:

Education Policy, Organization and Leadership, EdM (p. 718) **(on campus)**
Education Policy, Organization and Leadership, MA (p. 720)
Education Policy, Organization and Leadership, CAS (p. 716) **(on campus)**
Education Policy, Organization and Leadership, EdD (p. 722) **(on campus)**
Education Policy, Organization and Leadership, PhD (p. 723)

Code	Title	Hours
Select 12 hours from the following courses:		**12**
EPS 410	Professional Ethics in Education	
EPS 411	School and Society	
EPS 412	Critical Thinking in Education	
EPS 413	Aesthetic Education	
EPS 415	Technology and Educational Reform	
EPS 510	Traditions in Philosophy of Education	
EPS 511	Contemporary Philosophy of Education	
EPS 515	Philosophy and Educational Research	
EPS 516	Social Theories and Education	
EPS 517	Case Studies Professional Ethics and Education	
EPS 520	Foundations of Aesthetic Education	
EPS 522	Ethical Dimensions in Educational Leadership	
EPS 529	Education and Human Rights	
Total Hours		12

Professional Science Master's

for the Graduate Concentration in Professional Science Master's

director: Natalie Bosecker
director of graduate programs: Ramona Faith Oswald
program website: https://hdfs.illinois.edu
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
program office: 204 Coble Hall, 801 South Wright Street, Champaign, Illinois 61820
phone: (217) 265-5363
email: PSMdegree@illinois.edu

Graduate Degree Program

The concentration in Professional Science Master's (PSM) provides masters students with a unique learning experience by combining traditional science, technology, or mathematics disciplines with an integrated professional curriculum focusing on core business knowledge and skills. Traditional depth in the disciplinary field coupled with business-related workplace skills and internship experience prepares graduates for careers in business, government, and not-for-profits. Programs are full-time, non-thesis, cohort-based and are designed to be completed in 16 months.

The Professional Science Master's concentration is available in:

Agricultural Production, MS (p. 567)
Bioprocessing & Bioenergy, MS (p. 641)
Food Science & Human Nutrition, MS (p. 766)
Geography: Geographic Information Science, MS (p. 789)
Plant Biotechnology, MS (p. 967)
Technical Systems Management, MS (p. 1047)

Admission

Candidates for admission to the concentration and associated Illinois M.S. degree must have a bachelor's degree from an accredited institution equivalent to those from the University of Illinois at Urbana-Champaign. Minimum requirements include a grade point average of 3.0 or higher (A = 4.0) for the last 60 hours of undergraduate work and for any graduate study. Graduate Record Examination (GRE) scores are required of all applicants. Test of English as a Foreign Language (TOEFL) scores vary by program. Admission to one of the eligible degree programs listed above is required, and their admission requirements vary by program and may be more rigorous than the minimums presented here. Transfer credit may not be applied to this program due to the cohort nature of this program.

Financial Aid

Financial assistance in the form of full or partial waiver of tuition and fees – is rarely available to Illinois PSM students (except for statutory waivers). Departments providing assistance that includes waivers must pay Illinois PSM tuition and fees on students' behalf. Illinois PSM students may be eligible for student loans.

for the Graduate Concentration in Professional Science Master's

Specific requirements vary by major degree program, but all programs require a minimum total of 42 graduate hours of work in three areas: a scientific discipline (may include related interdisciplinary fields), business, and an internship.

Code	Title	Hours
Business courses prescribed by the Illinois PSM program		**10**
PSM 501	PSM Industry Seminar I	0
PSM 502	PSM Industry Seminar II	0
PSM 503	PSM Industry Seminar III	0
PSM 555	PSM Internship	0

Real Estate Graduate Concentration

for the Graduate Concentration in Real Estate

chair of department: Louis Chan
director of graduate studies: Martin Widdicks (MSF); George Pennacchi (PhD)
email: grad@business.illinois.edu
department website: https://giesbusiness.illinois.edu/msf (https://giesbusiness.illinois.edu/msf/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://giesbusiness.illinois.edu/
department office: 340 Wohlers Hall, 1206 S. Sixth Street, Champaign, IL 61820
phone: (217) 244-2239

The concentration is open to these majors in the College of Business but required of none:

Accountancy, MAS (p. 542)
Business Administration, MBA (p. 646)

Graduate Degree Programs in Finance

Majors

Finance, MS (p. 763)
optional concentrations for the Finance, MS: Accountancy (p. 1073), Business & Public Policy (p. 1087), Corporate Governance & International Business (p. 1090), Data Analytics in Finance (p. 1092), Information Technology & Control (p. 1100)
Financial Engineering, MS (p. 765) (**administered by** Finance and Industrial & Enterprise Systems Engineering (https://msfe.illinois.edu/))
optional concentration for the Financial Engineering, MS: Data Analytics in Finance (p. 1092)
Finance, PhD (p. 764)

Minors

Finance (p. 1133)

Concentrations

Data Analytics in Finance (p. 1092)
Finance (p. 1096)
Business & Public Policy (p. 1087)
Real Estate (p. 1105)

Admission

Admission to the concentration requires approval by the Department of Finance.

for the Graduate Concentration in Real Estate

Code	Title	Hours
FIN 541	Real Estate Fundamentals	4
Select two of the following courses:		8
FIN 443	Legal Issues in Real Estate	
FIN 447	Real Estate Development	
FIN 544	Urban Real Estate Valuation	
FIN 545	Real Estate Investment [1]	
FIN 546	Real Estate Financial Markets [1]	
Total Hours		12

[1] At least one of the courses selected must be FIN 545 or FIN 546.

Romance Linguistics Concentration

for the Romance Linguistics Concentration

director of program: Professor José Ignacio Hualde
email: jihualde@illinois.edu
department website: http://www.spanport.illinois.edu
department faculty:
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department office: 4080 Foreign Languages Building, 707 South Mathews, Urbana, IL 61801
phone: (217) 333-3390
fax: (217) 244-8430

The concentration in Romance Linguistic requires a minimum of 24 hours of graduate-level coursework and it is open to PhD students in the participating Departments.

Graduate Degree Programs in Romance Linguistics

Graduate Concentration:

Romance Linguistics (p. 1106)

participating programs:

French, PhD (p. 783)|Italian, PhD (p. 826)|Linguistics, PhD (p. 855)|Portuguese, PhD (p. 973)|Spanish, PhD (p. 1016)

Admission

Ph.D. students in any of the participating Departments within the School of Literatures, Cultures and Linguistics are admitted into the program with the consent of their advisor and the director of the program.

for the Romance Linguistics Concentration

For additional details and requirements refer to the department's graduate concentration program (http://www.medieval.illinois.edu/education/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
RMLG 435	Introduction to Romance Linguistics	4
RMLG 559	Sem Romance Ling (3 courses on different topics)	12
Two 400- or 500-level courses in the linguistics of other Romance languages and/or in general linguistics, as approved by the student's advisor		8
Language Requirement:		
Reading knowledge or completion of two semester language courses with a minimum grade of B in two Romance languages other than the student's major language, or an equivalent approved by the Romance Linguistics Advisory Committee. (Language courses taken to satisfy this requirement do not count towards the total number of hours.)		
Total Hours		24

Other Requirements

Requirement	Description
Other requirements may overlap	
A dissertation or thesis in the area of Romance Linguistics. It must include significant research on at least 2 Romance languages. Whether this requirement is satisfied is determined by the Romance Linguistics Advisory Committee. We expect that a member of one of the cooperating departments external to the student's home department will normally be a member of the student's dissertation committee.	
In addition to the graduate concentration requirements, students must also complete the requirements of their major degree. All hours taken to complete the Concentration in Romance Linguistics count toward the Ph.D.s in Linguistics, Spanish, Italian or Portuguese. Sixteen of the proposed twenty-four concentration hours will count towards coursework for the Ph.D. in French.	

Second Language Acquisition & Teacher Education Concentration

for the Graduate Concentration in Second Language Acquisition & Teacher Education

director: Dr. Kiel Christianson
email: kiel@illinois.edu
department website: http://www.slate.illinois.edu/
department faculty: SLATE Faculty (http://www.slate.illinois.edu/people/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department office: 4080 Foreign Languages Building, 707 South Mathews, Urbana, IL 61801
phone: (217) 333-3390

Graduate Degree Programs participating in Second Language Acquisition & Teacher Education

Anthropology, PhD (p. 572)
Communication, PhD (p. 671)
Curriculum & Instruction, PhD (p. 699)
East Asian Languages and Cultures, PhD (p. 707)
Educational Psychology, PhD (p. 734)
French, PhD (p. 783)
German, PhD (p. 796)
Italian, PhD (p. 826)
Linguistics, PhD (p. 855)
Portuguese, PhD (p. 973)
Psychology, PhD (p. 980)
Spanish, PhD (p. 1016)
Speech and Hearing Science, PhD (p. 1025)

The concentration in SLATE requires a minimum of 28 hours of graduate-level coursework and is open to PhD students in the participating Departments.

Admission

PhD students in any of the participating Departments are admitted into the program with the consent of their advisor and the Director of the SLATE program. A coursework prerequisite (LING 400 - Introduction to Language Structure) is required, and either it or an equivalent course must be completed prior to admission. If a student believes s/he has completed an equivalent (or more advanced) course than the prerequisite, s/he may submit a petition to the Director of SLATE requesting that course to be substituted for LING 400. Petition forms and instructions, as well as an admission form, are located on the SLATE website, at http://slate.illinois.edu/students/forms/ (http://www.slate.illinois.edu/students/forms/).

for the Graduate Concentration in Second Language Acquisition and Teacher Education

Code	Title	Hours
Language Structure		
Select two of the following:		8
LING 501	Syntax I	
LING 502	Phonology I	
LING 541	Syntax II	
LING 542	Phonology II	
LING 550	Sociolinguistics II	
LING 551	Pragmatics	
SPAN 558	Sem Spanish Synchronic Ling (some sections) [1]	
LING/EALC 430	Intro to East Asian Ling	
FR 416	Structure of French Language	
FR 529	Studies in French Linguistics (some sections) [1]	
GMC 562	Germanic Linguistics (some sections) [1]	
GER 465	German Linguistics	
GER 520	History of the German Language	
ITAL 450	Italian Syntax & Phonology (some sections) [1]	
SLAV 480	Intro to Slavic Linguistics (some sections) [1]	
EALC 550	Seminar in EALC (some sections) [1]	
And other courses as approved by the SLATE Director and Executive Committe		
Psycholinguistics/Sociolinguistics		
Select one of the following:		4
CI 562	Linguistics and the School Curriculum	
LING 450	Sociolinguistics I	
LING 550	Sociolinguistics II	
LING 560	Seminar in Bilingualism	
PSYC 524	Dev Psycholinguistics	
PSYC 525	Psycholinguistics	
SPAN 558	Sem Spanish Synchronic Ling (some sections, e.g., "Sociolinguistica Hispanica") [1]	
FR 529	Studies in French Linguistics (some sections, e.g., "Language and Gender") [1]	
EPSY 566	Adv Psycholinguistics	
SPAN 588	Sem Second Lang Learn ((some sections)) [1]	
And other courses as approved by the SLATE Director and Executive Committee [2,3]		
Second Language Studies		
Select one of the following:		8
LING 529	Second Lang Acq & Bilingualism	
EPSY 487	Principles of Language Testing (EIL/FR/GER/ITAL/PORT/SLS/SPAN 460 Principles of Language Testing)	
EIL 587	Seminar in Second Lang Studies (some sections) [1]	
EALC 550	Seminar in EALC (some sections) [1]	
EPSY 590	Advanced Seminar in Educational Psychology (Section BE: "Discourse Analysis in Second Language Acquisition"; Section N: "Second Language Acquisition, a Developmental Perspective")	
CI 499	Issues and Development in Education (some sections, e.g., "Foundations of Bilingual/Multilingual Education") [1]	
CI 590	Seminar for Advanced Study of Education (some sections, e.g., "Second Language Reading and Writing") [1]	
SPAN 588	Sem Second Lang Learn (EALC/FR/GER/ITAL/LING/PORT/SLS 588 -- some sections) [1]	
EPSY 563	Theories in Second Language Acquisition (CI/EALC/EIL/FR/GER/ITAL/LING/PORT/SPAN/SLS 584 Theories in SLA)	
And other courses as approved by the SLATE Director and Executive Committee [2,3]		
Research Methods		
1. Select one of the following:		4
LING 514	Design and Methodology in Linguistic Research	
EPSY 480	Educational Statistics (And one course from 2.)	

2. An advanced course in quantitative or qualitative research (selected in consultation with student's advisor) that is related to the student's research topic including (but not limited to) courses on the following list:		4
LING 514	Design and Methodology in Linguistic Research	
EPSY 590	Advanced Seminar in Educational Psychology (Section AE: "Theoretical and Methodological Issues in SLA Research")	
EPSY 578	Qualitative Inquiry Methods	
EPSY 584	Multivar Anlys in Psych and Ed	
EPSY 580	Statistical Inference in Education	
EPSY 582	Advanced Statistical Methods	
CI 509	Curriculum Research (some sections) [1]	
EIL 587	Seminar in Second Lang Studies (some sections, e.g., "Language Assessment and Data Handling") [1]	
SPAN 588	Sem Second Lang Learn (EALC/FR/GER/ITAL/LING/PORT/SLS 588 -- some sections)	
SOC 581	Survey Research Methods	
And other courses as approved by the Director and the SLATE Executive Committee [2,3]		
Language Requirement		
In order to earn a SLATE concentration, students must demonstrate competence in a second language. For native English speakers, a "second language" can be the second language of research/teaching, or, for those concentrating on ESL as the subject of research and teaching, any second language. For non-native speakers, the proficiency in English that is required for admission is considered more than adequate to fulfill this requirement. This requirement is designed to ensure the full appreciation and understanding of what it means to experience the learning of a second language. Second language competence is assessed in a variety of ways, to be determined by the student's advisor.		0
Total Hours		28

Other Requirements (may overlap)

Requirement	Description
Courses applying toward fulfillment of the SLATE course requirements must be taken for a minimum of 3 graduate credit hours.	
Of the courses required for the SLATE concentration, at least four (4) must be at the 500-level.	
A single course may count toward only one requirement. For instance, LING 550: Sociolinguistics II could fulfill either the Psycholinguistics/Sociolinguistics requirement OR be counted as one of the courses toward the Linguistics/Language Structure requirement, but not both.	
In addition to the graduate concentration requirements, students must also complete the requirements of their major degree.	
In order to earn a SLATE concentration, the student's dissertation topic must be related to one or more aspects of second language studies. The SLATE Executive Committee verifies that the content qualifies.	

1 *For courses marked with a 1, only some sections satisfy SLATE requirements. Prior to early registration each semester, the SLATE Executive Committee will issue a list of the specific sections being offered the following semester that will count toward satisfying SLATE course requirements. Current and historic lists are maintained on the SLATE website:* www.slate.illinois.edu/students/courses/. *(*http://www.slate.illinois.edu/students/courses/*)*

2 *A student may petition the SLATE Executive Committee to have courses taken elsewhere accepted as equivalents for any of the UIUC courses on the list. Before filing such a petition, students are advised to contact the SLATE Director. At least 5 of the required courses must be taken in residence at UIUC. Instructions for the petition may be found* here *(*https://apps.atlas.illinois.edu/FormBuilderSurvey/Survey/LAS/SLATE/Petition_for_Course_Substitution_or_Waiver_of_Requirement/*).*

3 *A student may fill out a petition if s/he believes that a course s/he has taken that is not included in the list for a given category could be substituted for one that is on the list. Instructions for the petition may be found* here *(*https://apps.atlas.illinois.edu/FormBuilderSurvey/Survey/LAS/SLATE/Petition_for_Course_Substitution_or_Waiver_of_Requirement/*).*

Social Sciences & Education Policy Concentration

for the Social Sciences & Education Policy Concentration

head of the department: Yoon Pak
directors of graduate studies: Wen-Hao Huang, Mary Allison Witt
graduate admissions information: Linda Stimson (on campus) and Jena Pfoff (online/off-campus)
overview of admissions & requirements: College of Education (https://education.illinois.edu/programs/grad/how-to-apply/?url=/programs/grad)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://education.illinois.edu/epol (https://education.illinois.edu/epol/)
program website: College of Education Programs (https://education.illinois.edu/faceted-search/programs/)
department faculty: Education Policy, Organization & Leadership Faculty (https://education.illinois.edu/faculty-finder/epol/)
college website: http://education.illinois.edu/
department office: 142 Education Building, 1310 South Sixth Street, Champaign, IL 61820
phone: (217) 244-3542
email: gradservices@education.illinois.edu

This concentration is available for:

Education Policy, Organization and Leadership, EdM (p. 718) **(on campus)**
Education Policy, Organization and Leadership, MA (p. 720)
Education Policy, Organization and Leadership, CAS (p. 716) **(on campus)**
Education Policy, Organization and Leadership, EdD (p. 722) **(on campus)**
Education Policy, Organization and Leadership, PhD (p. 723)

for the Social Sciences & Education Policy Concentration

The graduate credit needed for this concentration fulfills general coursework requirements for:

Education Policy, Organization and Leadership, EdM (p. 718) **(on campus)**
Education Policy, Organization and Leadership, MA (p. 720)
Education Policy, Organization and Leadership, CAS (p. 716) **(on campus)**
Education Policy, Organization and Leadership, EdD (p. 722) **(on campus)**
Education Policy, Organization and Leadership, PhD (p. 723)

Code	Title	Hours
Select 12 hours from the following courses:		**12**
EPS 420	Sociology of Education	
EPS 422	Race, Educational Policy, and Sociology	
EPS 423	Politics of Education	
EPS 508	Uses and Abuses of Educational Research	
EPS 522	Ethical Dimensions in Educational Leadership	
EPS 531	Critical Race Theory and Education	
EOL 577	Public Policy in Higher Education	
Total Hours		12

Supply Chain Management Graduate Concentration

for the Graduate Concentration in Supply Chain Management

interim chair of department: Cele Otnes
director of graduate studies: Deepak Somaya
director of admissions committee: Rakesh Bhatt
email: ba@business.illinois.edu
department website: https://giesbusiness.illinois.edu/msba (https://giesbusiness.illinois.edu/msba/)
department faculty: https://business.illinois.edu/people/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://giesbusiness.illinois.edu/
department office: 350 Wohlers Hall, 1206 S. Sixth Street, Champaign, IL 61820
phone: (217) 333-4240

This concentration is available for these programs:

Accountancy, MAS (p. 542)
Accountancy, MS (p. 544) **(on campus)**
Business Administration, MBA (p. 646)
Business Administration, MS (p. 646)
Technology Management, MS (p. 1048)

The concentration in Supply Chain Management is designed to develop leaders who understand (1) how to assess the trade-offs and make the decisions necessary to sustain high quality products and services at lower costs while maintaining the flexibility necessary to adapt and to respond to evolving market trends; and (2) how to coordinate and integrate supply chain solutions across various intra -organizational and inter -organizational interfaces in any business or organization. The minor or concentration not only will provide a strong foundation in supply chain management principles and practices, but also can be tailored to fit the specific needs of students interested in careers across a wide variety of industries. This minor or concentration requires submission of twelve graduate hours of Supply Chain Management coursework. Successful completion of the minor or concentration assumes certain knowledge of business and prior coursework.

Graduate Degree Programs in Business Administration

Majors:

Business Administration, MBA (p. 642) **(online-iMBA)**
Business Administration, MS (p. 646)
with optional concentrations: Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Corporate Governance & International Business (p. 1090), Finance (p. 1096), Supply Chain Management (p. 1109)
Business Analytics, MS (p. 649)
Management, MS (p. 858)
with optional concentrations: Business Data Analytics (p. 1086), Finance, (p. 1096) Corporate Governance & International Business (p. 1090)
Technology Management, MS (p. 1048)
with optional concentrations: Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Finance (p. 1096), Information Technology & Control (p. 1100), Supply Chain Management (p. 1109)
Business Administration, PhD (p. 647)

Minors:

Information Technology & Control (p. 1136)
Corporate Governance & International Business (p. 1130)
Supply Chain Management (p. 1144)

Concentrations:

Business Data Analytics (p. 1086)
Corporate Governance & International Business (p. 1090)
Information Technology & Control (p. 1100)
Supply Chain Management (p. 1109)

Certificates:

Digital Marketing, CERT (p. 1115)
Entrepreneurship & Strategic Innovation, CERT (p. 1116)
Financial Management, CERT (p. 1117)
Global Challenges in Business, CERT (p. 1118)
Managerial Economics & Business Analysis, CERT (p. 1119)
Strategic Leadership Management, CERT (p. 1120)
Value Chain Management, CERT (p. 1121)

Joint Degree Program:

Accountancy, MS (iMSA) & Business Administration, MBA (iMBA) (http://catalog.illinois.edu/graduate/bus/joint-degree/accountancy-ms-business-mba-online/)

Admission

Admission to the concentration requires submitting a Curriculum Change Form to the Department and Graduate College and admission to one of the approved programs. Admission is limited, and acceptance is on a competitive basis.

for the Graduate Concentration in Supply Chain Management

In addition to the concentration requirements, students must also complete the requirements of their major degree.

Code	Title	Hours
BADM 566	Supply Chain Management	2-4
BADM 567	Process Management	2-4
Select from the following:		
BADM 564	Business Process Improvement	
BADM 565	Strategic Sourcing	
BADM 575	Supply Chain Analytics	
BADM 589	Project Management	
Total Hours		**12**

Taxation Graduate Concentration

for the graduate Taxation concentration

chair of department: Theo Sougiannis
director of graduate studies: Nerissa Brown
associate director of graduate studies: Ashley Lamb
department website: https://giesbusiness.illinois.edu/accountancy (https://giesbusiness.illinois.edu/accountancy/)
program website: https://giesbusiness.illinois.edu/accountancy/programs/msa/
college website: https://giesbusiness.illinois.edu/ (https://business.illinois.edu/)
overview of graduate college admissions & requirements: Graduate Admissions (https://grad.illinois.edu/admissions/apply/)
overview of college admissions & requirements: Gies Catalog (http://catalog.illinois.edu/schools/gies-business/academic-units/)
department office: 360 Wohlers Hall, 1206 South Sixth, Champaign, IL 61820
phone: (217) 333-0857
email: accy@illinois.edu

The Taxation concentration is available for:

Accountancy, MAS (p. 542)
Accountancy, MS (p. 544) **(on campus)**

The MAS program is a one-year program for students who have completed or are pursuing a Bachelor of Science in Accountancy from a regionally accredited U.S. institution. The Concentration in Taxation is one of the core concentrations available within the MAS program.

Students in the Taxation concentration are also required to choose a secondary concentration. Elective concentration options include: Corporate Governance & International Business (p. 1090), Data Analytics in Accountancy (p. 1091), Finance (http://catalog.illinois.edu/graduate/bus/concentration/finance/finance/), Financial Reporting & Assurance (p. 543), Information Technology & Control (p. 1100), Real Estate (p. 1105), and Supply Chain Management (p. 1109).

Graduate Degree Programs in Accountancy

Accountancy, MAS (p. 542)
with optional concentrations:
Business & Public Policy (p. 1087) | Corporate Governance & International Business (p. 1090) | Data Analytics in Accountancy (p. 1091) | Finance (http://catalog.illinois.edu/graduate/bus/concentration/finance/finance/) | Financial Reporting & Assurance (p. 543) | Information Technology & Control (p. 1100) | Real Estate (p. 1105) | Supply Chain Management (p. 1109) | Taxation (p. 1110)
Accountancy, MS (p. 544) **(on campus & online)**
on campus concentrations:
Business & Public Policy (p. 1087) | Corporate Governance & International Business (p. 1090) | Data Analytics in Accountancy (p. 1091) | Finance (http://catalog.illinois.edu/graduate/bus/concentration/finance/finance/) | Information Technology & Control (p. 1100) | Supply Chain Management (p. 1109) | Taxation (p. 1110)
online concentrations:
Accountancy Analytics (p. 546)
Accountancy, PhD (p. 547)
Minor:
Accountancy (p. 1122)

for the graduate Taxation concentration

Code	Title	Hours
ACCY 551	Corporate Income Taxation	4
ACCY 552	Partnership Income Taxation	4
ACCY 556	Tax Research	4
Total Hours		12

Other Requirements

Requirement
Course substitutions may be approved by the Department of Accountancy.
Other requirements may overlap.

Writing Studies Graduate Concentration

for the Writing Studies Graduate Concentration

center director & director of graduate studies: Paul Prior
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
program website: http://www.cws.illinois.edu/
office manager: Deborah Carrier
center office: 288 English Building, 608 South Wright Street, Urbana, IL 61801
phone: (217) 333-3251
email: carrier@illinois.edu

The Center for Writing Studies (CWS) facilitates research and promotes graduate study in the areas of rhetoric, written composition, language, and literacy. CWS offers graduate students pursuing doctoral degrees in participating departments a program leading to a concentration in Writing Studies. Graduate students pursuing the concentration may be enrolled in the participating departments of English, Communication, Art and Design, Curriculum and Instruction, Library and Information Science, or other departments from across campus with the approval of the student's home department.

Writing Studies Graduate Concentration

Participating Programs:

Communication, PhD (p. 671)
Curriculum & Instruction, PhD (p. 699)
Educational Policy, Organization & Leadership, EdD (p. 722)
Educational Policy, Organization & Leadership, PhD (p. 723)
English, PhD (p. 753)
Information Sciences, PhD (p. 821)

Graduate students may elect to pursue a concentration in Writing Studies at the PhD level. Students take two foundational courses for the concentration to introduce them to the field, along with two methodology courses to ready them for their research. The first pair of requirements (ENGL 505/CI 563; and one of the following theme-focused courses: ENGL 506/CI 564, ENGL 583/CI 566, ENGL 584/CI 569 or a 500-level course approved for this requirement by the CWS Graduate Programs Committee provides a historical background in Writing Studies while at the same time assuring knowledge of current issues through the reading and analysis of texts that mark the field. The second pair of requirements (ENGL 582/CI 565 and a second approved methodology course) introduces students in depth to strands of writing studies research - historical, empirical, and theoretical. In addition, graduate students take two courses from across the university that focus on the study of writing but that also open up avenues for interdisciplinary inquiry, a key dimension of this area of study. English, Anthropology, Curriculum and Instruction, Library and Information Science, Educational Policy Studies, Sociology, Communication, and Art and Design are among the departments from which students commonly select courses.

Admission

Students are admitted into graduate study through their home departments and the Graduate College. Students may petition to add the concentration at the point of admission or after they have begun graduate study. The petition to add the concentration must be approved by the Center for Writing Studies, the home department, and the Graduate College. (Please note that the Department of English offers separate MA and PhD tracks specializing in Writing Studies; see the Department of English for admission requirements to these degree programs.) Graduate students planning to concentrate in Writing Studies must fulfill the degree requirements of their home department in addition to the Writing Studies' requirements. In consultation with the home department, students determine whether the Writing Studies' concentration is appropriate for their plan of study. Students should meet with a faculty advisor in their own department and also set up a meeting to discuss their program of concentration with the Director of the Center for Writing Studies.

Faculty Research Interests

Specific faculty interests include research in literacy studies, digital media, rhetorical studies, globalization and language, disability studies, cultural-historical activity theory, feminist theory and pedagogy, genre

theory, technical communication and other areas of study related to the development of language and policy.

Facilities and Resources

CWS has a multidisciplinary group of core and affiliated faculty. It is home to the campus's Writing across the Curriculum Program and the Writers Workshop, a campus-wide tutorial facility; a sponsor of an electronic discussion group on writing across the curriculum, and a co-founder of the University of Illinois Writing Project (UIWP), a site of the National Writing Project

Financial Aid

Graduate students may receive assistantships as consultants in the Writers Workshop, as teachers in the Writing Across Media courses, as assistant directors of CWS programs, and as research assistants to CWS faculty.

for the Writing Studies Graduate Concentration

For additional details and requirements refer to the department's concentration requirements *(*http://www.cws.illinois.edu/graduate/phd/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Code	Title	Hours
Theme-focused Writing Studies		**8**
ENGL 505 & ENGL 583	Writing Studies and Topics Writ Pedagogy & Design	
or ENGL 584	Topics Discourse and Writing	
Or 500-level course approved for this requirement by the CWS Graduate Programs Committee		
Methods Courses		**8**
ENGL 582	Topics Research and Writing	
& one other methods course approved by the Director of the Center for Writing Studies		
Elective hours from approved CWS list in consultation with your advisor		8
Total Hours		24

Other Requirements

Requirement	Description
Other requirements may overlap	
Students must prepare and deliver a lecture based on their research to faculty and students for the CWS Colloquium Series: Graduate Research Forum.	
The dissertation must demonstrably focus on Writing Studies (with a topic approved by the CWS Director) and be guided by CWS-affiliated faculty that serve on the dissertation committee.	

Learning Outcomes: Writing Studies Concentration

Learning Outcomes for the Writing Studies Graduate Concentration

1. **The completion of an original and in-depth research project (the dissertation)in a specific field of Writing Studies:** The dissertation (a book-length manuscript required for the doctoral degree) is the ultimate project of the MA/PhD program. The goal of the dissertation is the culmination of coursework and special fields work (see below), but it also goes beyond these preparatory steps. It demonstrates expertise and is comprised of original research that is meant to contribute to the field of Writing Studies and to be a key source for additional publications(articles, chapters, and perhaps a book). The dissertation is necessary for tenure-track academic jobs, and is also valued by alternative-academic (alt-ac) employers as a sign of independent research skills.
2. **Preparation for teaching writing studies at the college level:** College-level teaching in English demands breadth across the field of study one is hired in, well beyond the expertise on display in the dissertation (e.g., literate practices in university classes), and it also requires preparation and practice in pedagogy and often writing program administration. The former is built out of the foundation of coursework, but is developed more assiduously in the Special Fields Exam which tasks students with reading scholarship in a field more broadly defined than the dissertation's focus. The ProSemin the Teaching of Rhetoric and Compositionoffers Writing Studies graduate students both a resource for teaching and for doing professional development with writing teachers. Graduate students in Writing Studies typically teach in the Rhetoric program plus other programs (e.g., BTW in English, INFO/WRIT 303; the Writers Workshop).
3. **Generalist knowledge for the field of English Writing Studies:** Graduate coursework is divided into two parts: MA coursework and PhD coursework. While the dissertation and field exam prepares students to be experts in particular fields, the MA coursework introduces students to key and active areas of theory, research, pedagogy and practice in Writing Studies. Given the interdisciplinarity that marks Writing Studies, MA and PhD students typically take classes that reflect different areas of specialization in English and in other Rhetoric and Writing Studies programs on campus (e.g., Communication, Curriculum and Instruction, Educational Policy, Organization and Leadership). The MA students'preparation to pass from this stage into the PhD program is judged through the application to Stage II of the program, in which the students' portfolios are reviewed by the Graduate Studies Committee. The foreign language requirement is part of this training as well, and it is expected to be finished by application to Stage II.
4. **Professionalization:** The department has several modes of preparing students for both the professional demands of academia and for the job market for faculty positions. In coursework, students typically write seminar papers that match the demands of scholarly articles published in journals. On top of this, seminars routinely include practice in preparing and delivering conferences papers and presentations; researching and writing bibliographies of scholarship; doing original archival research; employing ethnographic and other situated research methods; and exploring different genres and media for disciplinary writing. Thus, students enter their dissertation years having had practice in common genres of academic writing. Students also get encouragement and financial support to attend up to two conferences per year. We regularly offer a summer ProSemon the topic of Publication, in which student articles are workshopped with the final assignment to submit them to peer-reviewed journals. This ProSem is taught as a Summer Session I seminar by faculty members who edit important journals. Graduate students in Writing Studies often participate in writing program administration, getting

experience in leadership roles in the Rhetoric and/or Professional Writing Programs in English or in the Center for Writing Studies in LAS.

Graduate Certificates

Accounting Data Analytics, CERT (p. 1114)
Digital Marketing, CERT (p. 1115)
Entrepreneurship & Strategic Innovation, CERT (p. 1116)
Financial Management, CERT (p. 1117)
Global Challenges in Business, CERT (p. 1118)
Managerial Economics & Business Analysis, CERT (p. 1119)
Strategic Leadership Management, CERT (p. 1120)
Value Chain Management, CERT (p. 1121)

Accounting Data Analytics, CERT

for the Accounting Data Analytics, CERT (online)

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chair of department: Theo Sougiannis
director of graduate studies: Nerissa Brown
associate director of graduate studies: Ashley Lamb
department website: https://giesbusiness.illinois.edu/accountancy (https://giesbusiness.illinois.edu/accountancy/)
program website: https://giesbusiness.illinois.edu/accountancy/programs/msa/
college website: https://giesbusiness.illinois.edu/ (https://business.illinois.edu/)
overview of graduate college admissions & requirements: Graduate Admissions (https://grad.illinois.edu/admissions/apply/)
overview of college admissions & requirements: Gies Catalog (http://catalog.illinois.edu/schools/gies-business/academic-units/)
department office: 360 Wohlers Hall, 1206 South Sixth, Champaign, IL 61820
phone: (217) 333-0857
email: accy@illinois.edu

The Accounting Data Analytics Campus Graduate Certificate is designed to develop leaders who understand (1) how to apply data analytics in a variety of accounting and business contexts, (2) critically solve business problems using data-intensive business and accounting information, and (3) synthesize and effectively communicate data-intensive information, findings, and conclusions to other environment-constituents, including supervisors, peers and subordinates, clients, and regulatory agencies. This Campus Graduate Certificate will not only provide a strong foundational knowledge of data analytics, but also provide students multiple opportunities to apply this knowledge.

Students who have successfully completed this certificate may use the certificate to satisfy the following degree requirements, provided they apply and are admitted to the degree program:

12 hours of elective coursework requirements of the iMBA (p. 642) degree program
12 hours of elective coursework requirements of the iMSM (p. 858) degree program
12 hours of elective coursework requirements of the iMSA (p. 544) degree program

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Graduate Degree Programs in Accountancy

Accountancy, MAS (p. 542)
with optional concentrations:
Business & Public Policy (p. 1087) | Corporate Governance & International Business (p. 1090) | Data Analytics in Accountancy (p. 1091) | Finance (http://catalog.illinois.edu/graduate/bus/concentration/finance/finance/) | Financial Reporting & Assurance (p. 543) | Information Technology & Control (p. 1100) | Real Estate (p. 1105) | Supply Chain Management (p. 1109) | Taxation (p. 1110)
Accountancy, MS (p. 544) **(on campus & online)**
on campus concentrations:
Business & Public Policy (p. 1087) | Corporate Governance & International Business (p. 1090) | Data Analytics in Accountancy (p. 1091) | Finance (p. 1096) | Information Technology & Control (p. 1100) | Supply Chain Management (p. 1109) | Taxation (p. 1110)
online concentrations:
Accountancy Analytics (p. 546)
Accountancy, PhD (p. 547)
Minor:
Accountancy (p. 1122)
Certificate:
Accounting Data Analytics, CERT (p. 1114)

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for the Accounting Data Analytics, CERT (online)

Students who have successfully completed this certificate may use the certificate to satisfy the following degree requirements, provided they apply and are admitted to the degree program:

12 hours of elective coursework requirements of the iMBA (p. 642) degree program
12 hours of elective coursework requirements of the iMSM (p. 858) degree program
12 hours of elective coursework requirements of the iMSA (p. 544) degree program

Code	Title	Hours
Required:		
ACCY 569	Data Driven Decisions in Accounting	2
ACCY 576	Data Preparation for Accounting	2
Select 8 hours from the list below:		**8**
Students should consult with their program advisor before selecting Campus Graduate Certificate electives.		
ACCY 577	Machine Learning for Accounting	
ACCY 578	Accounting Analytics Applications	
MBA 563	Data Toolkit: Business Data Modeling & Predictive Analytics	
MBA 564	Data Analytics Applications in Business	
MBA 565	Infonomics	
Total Hours		**12**

Digital Marketing, CERT

for the Campus Graduate Certificate in Digital Marketing (online)

associate dean: W. Brooke Elliott
email: giesonline@illinois.edu (%20giesonline@illinois.edu)
department website: https://giesbusiness.illinois.edu/graduate-hub/online (https://giesbusiness.illinois.edu/graduate-hub/online/)
department faculty: https://business.illinois.edu/people/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://giesbusiness.illinois.edu/
department office: 2302 Fox Drive, Suite D, Champaign, IL 61820
phone: (217) 333-4240

The Digital Marketing Campus Graduate Certificate is designed to develop leaders who (1) understand the foundations of the new digital marketing landscape and the application of marketing tools and strategies in the digital environment, (2) employ marketing analytics to visualize and use data, and (3) understand how digital channels are used in marketing. This Campus Graduate Certificate will not only provide a strong foundational knowledge of digital marketing, but also provide students multiple opportunities to apply this knowledge.

Students who have successfully completed this certificate may use the certificate to satisfy the following degree requirements, provided they apply and are admitted to the degree program:

12 hours of elective coursework requirements of the iMBA (p. 642) degree program
12 hours of elective coursework requirements of the iMSM (p. 858) degree program
12 hours of elective coursework requirements of the iMSA (p. 544) degree program

Graduate Degree Programs in Business Administration

Majors:

Business Administration, MBA (p. 642) **(online-iMBA)**
Business Administration, MS (p. 646)
with optional concentrations: Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Corporate Governance & International Business (p. 1090), Finance (p. 1096), Supply Chain Management (p. 1109)
Business Analytics, MS (p. 649)
Management, MS (p. 858)
with optional concentrations: Business Data Analytics (p. 1086), Finance, (p. 1096) Corporate Governance & International Business (p. 1090)
Technology Management, MS (p. 1048)
with optional concentrations: Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Finance (p. 1096), Information Technology & Control (p. 1100), Supply Chain Management (p. 1109)
Business Administration, PhD (p. 647)

Minors:

Information Technology & Control (p. 1136)
Corporate Governance & International Business (p. 1130)
Supply Chain Management (p. 1144)

Concentrations:

Business Data Analytics (p. 1086)
Corporate Governance & International Business (p. 1090)
Information Technology & Control (p. 1100)
Supply Chain Management (p. 1109)

Certificates:

Digital Marketing, CERT (p. 1115)
Entrepreneurship & Strategic Innovation, CERT (p. 1116)
Financial Management, CERT (p. 1117)
Global Challenges in Business, CERT (p. 1118)
Managerial Economics & Business Analysis, CERT (p. 1119)
Strategic Leadership Management, CERT (p. 1120)
Value Chain Management, CERT (p. 1121)

Joint Degree Program:

Accountancy, MS (iMSA) & Business Administration, MBA (iMBA) (http://catalog.illinois.edu/graduate/bus/joint-degree/accountancy-ms-business-mba-online/)

Admission

for the Campus Graduate Certificate in Digital Marketing (online)

Students who have successfully completed this certificate may use the certificate to satisfy the following degree requirements, provided they apply and are admitted to the degree program:

12 hours of elective coursework requirements of the iMBA (p. 642) degree program
12 hours of elective coursework requirements of the iMSM (p. 858) degree program

12 hours of elective coursework requirements of the iMSA (p. 544) degree program

Code	Title	Hours
MBA 541	Marketing in a Digital World	2
MBA 542	Digital Marketing Analytics	4
MBA 543	Digital Media & Marketing	4
MBA 544	Marketing in an Analog World	2
Total Hours		**12**

Entrepreneurship & Strategic Innovation, CERT

for the Campus Graduate Certificate in Entrepreneurship and Strategic Innovation (online)

associate dean: W. Brooke Elliott
email: giesonline@illinois.edu (%20giesonline@illinois.edu)
department website: https://giesbusiness.illinois.edu/graduate-hub/online (https://giesbusiness.illinois.edu/graduate-hub/online/)
department faculty: https://business.illinois.edu/people/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://giesbusiness.illinois.edu/
department office: 2302 Fox Drive, Suite D, Champaign, IL 61820
phone: (217) 333-4240

The Entrepreneurship and Strategic Innovation Campus Graduate Certificate is designed to develop leaders who (1) recognize an entrepreneurial mindset, (2) understand how to manage and innovate in uncertainty, (3) understand when, why, and how to think creatively, and (4) assess the feasibility of a new venture and the diversity of challenges involved. This Campus Graduate Certificate will not only provide a strong foundational knowledge of creativity and entrepreneurship, but also provide students multiple opportunities to apply this knowledge.

Students who have successfully completed this certificate may use the certificate to satisfy the following degree requirements, provided they apply and are admitted to the degree program:

12 hours of elective coursework requirements of the iMBA (p. 642) degree program
12 hours of elective coursework requirements of the iMSM (p. 858) degree program
12 hours of elective coursework requirements of the iMSA (p. 544) degree program

Graduate Degree Programs in Business Administration

Majors:

- Business Administration, MBA (p. 642) **(online-iMBA)**
- Business Administration, MS (p. 646)
  - **with optional concentrations:** Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Corporate Governance & International Business (p. 1090), Finance (p. 1096), Supply Chain Management (p. 1109)
- Business Analytics, MS (p. 649)
- Management, MS (p. 858)
  - **with optional concentrations:** Business Data Analytics (p. 1086), Finance, (p. 1096) Corporate Governance & International Business (p. 1090)
- Technology Management, MS (p. 1048)
  - **with optional concentrations:** Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Finance (p. 1096), Information Technology & Control (p. 1100), Supply Chain Management (p. 1109)
- Business Administration, PhD (p. 647)

Minors:

- Information Technology & Control (p. 1136)
- Corporate Governance & International Business (p. 1130)
- Supply Chain Management (p. 1144)

Concentrations:

- Business Data Analytics (p. 1086)
- Corporate Governance & International Business (p. 1090)
- Information Technology & Control (p. 1100)
- Supply Chain Management (p. 1109)

Certificates:

- Digital Marketing, CERT (p. 1115)
- Entrepreneurship & Strategic Innovation, CERT (p. 1116)
- Financial Management, CERT (p. 1117)
- Global Challenges in Business, CERT (p. 1118)
- Managerial Economics & Business Analysis, CERT (p. 1119)
- Strategic Leadership Management, CERT (p. 1120)
- Value Chain Management, CERT (p. 1121)

Joint Degree Program:

- Accountancy, MS (iMSA) & Business Administration, MBA (iMBA) (http://catalog.illinois.edu/graduate/bus/joint-degree/accountancy-ms-business-mba-online/)

Admission

for the Campus Graduate Certificate in Entrepreneurship and Strategic Innovation (online)

Students who have successfully completed this certificate may use the certificate to satisfy the following degree requirements, provided they apply and are admitted to the degree program:

12 hours of elective coursework requirements of the iMBA (p. 642) degree program
12 hours of elective coursework requirements of the iMSM (p. 858) degree program

12 hours of elective coursework requirements of the iMSA (p. 544) degree program

Code	Title	Hours
MBA 551	Strategic Innovation	4
MBA 552	Fostering Creative Thinking	4
MBA 553	Entrepreneurship: From Startup to Growth	4

Financial Management, CERT

for the Campus Graduate Certificate in Financial Management (online)

associate dean: W. Brooke Elliott
email: giesonline@illinois.edu (%20giesonline@illinois.edu)
department website: https://giesbusiness.illinois.edu/graduate-hub/online (https://giesbusiness.illinois.edu/graduate-hub/online/)
department faculty: https://business.illinois.edu/people/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://giesbusiness.illinois.edu/
department office: 2302 Fox Drive, Suite D, Champaign, IL 61820
phone: (217) 333-4240

The Financial Management Campus Graduate Certificate is designed to develop leaders who (1) have a solid foundation in developing an integrated framework for strategic financial decision making, (2) understand of financial statements and the financial information they provide and possess the ability to critically evaluate and analyze cash flows statement, (3) understand the management and evaluation of portfolios and firm valuation techniques, and (4) understand how to incorporate risk and uncertainty into investment decisions and how companies make financing and investment decisions. This Campus Graduate Certificate will not only provide a strong foundational knowledge of strategic corporate and investment decisions and markets and institutions from a financial perspective, but also provide students multiple opportunities to apply this knowledge.

Students who have successfully completed this certificate may use the certificate to satisfy the following degree requirements, provided they apply and are admitted to the degree program:

12 hours of core coursework requirements of the iMBA (p. 642) degree program
4 hours of core and 8 hours of elective coursework requirements of the iMSM (p. 858) degree program
8 hours of elective coursework requirements of the iMSA (p. 544) degree program

Graduate Degree Programs in Business Administration

Majors:

- Business Administration, MBA (p. 642) **(online-iMBA)**
- Business Administration, MS (p. 646)
  - **with optional concentrations:** Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Corporate Governance & International Business (p. 1090), Finance (p. 1096), Supply Chain Management (p. 1109)
- Business Analytics, MS (p. 649)
- Management, MS (p. 858)
  - **with optional concentrations:** Business Data Analytics (p. 1086), Finance, (p. 1096) Corporate Governance & International Business (p. 1090)
- Technology Management, MS (p. 1048)
  - **with optional concentrations:** Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Finance (p. 1096), Information Technology & Control (p. 1100), Supply Chain Management (p. 1109)
- Business Administration, PhD (p. 647)

Minors:

- Information Technology & Control (p. 1136)
- Corporate Governance & International Business (p. 1130)
- Supply Chain Management (p. 1144)

Concentrations:

- Business Data Analytics (p. 1086)
- Corporate Governance & International Business (p. 1090)
- Information Technology & Control (p. 1100)
- Supply Chain Management (p. 1109)

Certificates:

- Digital Marketing, CERT (p. 1115)
- Entrepreneurship & Strategic Innovation, CERT (p. 1116)
- Financial Management, CERT (p. 1117)
- Global Challenges in Business, CERT (p. 1118)
- Managerial Economics & Business Analysis, CERT (p. 1119)
- Strategic Leadership Management, CERT (p. 1120)
- Value Chain Management, CERT (p. 1121)

Joint Degree Program:

- Accountancy, MS (iMSA) & Business Administration, MBA (iMBA) (http://catalog.illinois.edu/graduate/bus/joint-degree/accountancy-ms-business-mba-online/)

Admission

for the Campus Graduate Certificate in Financial Management (online)

Students who have successfully completed this certificate may use the certificate to satisfy the following degree requirements, provided they apply and are admitted to the degree program:

12 hours of core coursework requirements of the iMBA (p. 642) degree program
4 hours of core and 8 hours of elective coursework requirements of the iMSM (p. 858) degree program

8 hours of elective coursework requirements of the iMSA (p. 544) degree program

Code	Title	Hours
ACCY 500	Accounting Measurement, Reporting, and Control	4
FIN 511	Investments	4
FIN 584	Corporate Finance	4

Global Challenges in Business, CERT

for the Campus Graduate Certificate in Global Challenges in Business (online)

associate dean: W. Brooke Elliott
email: giesonline@illinois.edu (%20giesonline@illinois.edu)
department website: https://giesbusiness.illinois.edu/graduate-hub/online (https://giesbusiness.illinois.edu/graduate-hub/online/)
department faculty: https://business.illinois.edu/people/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://giesbusiness.illinois.edu/
department office: 2302 Fox Drive, Suite D, Champaign, IL 61820
phone: (217) 333-4240

The Global Challenges in Business Campus Graduate Certificate is designed to develop leaders who (1) understand how businesses function in the global marketplace, (2) consider ethical decisions to run a responsible business in the global marketplace, (3) understand the role of business in addressing global challenges such as poverty and the environment, (4) understand how business can pursue opportunities and confront challenges in the complex global marketplace. This Campus Graduate Certificate will not only provide a strong foundational knowledge of global business challenges, but also provide students multiple opportunities to apply this knowledge.

Students who have successfully completed this certificate may use the certificate to satisfy the following degree requirements, provided they apply and are admitted to the degree program:

12 hours of elective coursework requirements of the iMBA (p. 642) degree program
12 hours of elective coursework requirements of the iMSM (p. 858) degree program
12 hours of elective coursework requirements of the iMSA (p. 544) degree program

Graduate Degree Programs in Business Administration

Majors:

- Business Administration, MBA (p. 642) **(online-iMBA)**
- Business Administration, MS (p. 646)
  - **with optional concentrations:** Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Corporate Governance & International Business (p. 1090), Finance (p. 1096), Supply Chain Management (p. 1109)
- Business Analytics, MS (p. 649)
- Management, MS (p. 858)
  - **with optional concentrations:** Business Data Analytics (p. 1086), Finance, (p. 1096) Corporate Governance & International Business (p. 1090)
- Technology Management, MS (p. 1048)
  - **with optional concentrations:** Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Finance (p. 1096), Information Technology & Control (p. 1100), Supply Chain Management (p. 1109)
- Business Administration, PhD (p. 647)

Minors:

- Information Technology & Control (p. 1136)
- Corporate Governance & International Business (p. 1130)
- Supply Chain Management (p. 1144)

Concentrations:

- Business Data Analytics (p. 1086)
- Corporate Governance & International Business (p. 1090)
- Information Technology & Control (p. 1100)
- Supply Chain Management (p. 1109)

Certificates:

- Digital Marketing, CERT (p. 1115)
- Entrepreneurship & Strategic Innovation, CERT (p. 1116)
- Financial Management, CERT (p. 1117)
- Global Challenges in Business, CERT (p. 1118)
- Managerial Economics & Business Analysis, CERT (p. 1119)
- Strategic Leadership Management, CERT (p. 1120)
- Value Chain Management, CERT (p. 1121)

Joint Degree Program:

- Accountancy, MS (iMSA) & Business Administration, MBA (iMBA) (http://catalog.illinois.edu/graduate/bus/joint-degree/accountancy-ms-business-mba-online/)

Admission

for the Campus Graduate Certificate in Global Challenges in Business (online)

Students who have successfully completed this certificate may use the certificate to satisfy the following degree requirements, provided they apply and are admitted to the degree program:

12 hours of elective coursework requirements of the iMBA (p. 642) degree program
12 hours of elective coursework requirements of the iMSM (p. 858) degree program

12 hours of elective coursework requirements of the iMSA (p. 544) degree program

Code	Title	Hours
MBA 546	Global Business Horizons	4
MBA 547	Global Impact: Cultural Psychology & Business Ethics	4
MBA 548	Global Strategy	4

Managerial Economics & Business Analysis, CERT

for the Campus Graduate Certificate in Managerial Economics & Business Analysis (online)

associate dean: W. Brooke Elliott
email: giesonline@illinois.edu
department website: https://giesbusiness.illinois.edu/graduate-hub/online (https://giesbusiness.illinois.edu/graduate-hub/online/)
department faculty: https://business.illinois.edu/people/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://giesbusiness.illinois.edu/
department office: 2302 Fox Drive, Suite D, Champaign, IL 61820
phone: (217) 333-4240

The Managerial Economics and Business Analysis Campus Graduate Certificate is designed to develop leaders who (1) have a solid understanding of the operation of markets, (2) understand how to assess the macro-economic environment with examples of real-world events, and (3) have developed an analytical framework to combine the power of theory and data to make effective business decisions. This Campus Graduate Certificate will not only provide a strong foundational knowledge of market characteristics and economic environments and how these factors impact business management and operation, but also provide students multiple opportunities to apply this knowledge.

Students who have successfully completed this certificate may use the certificate to satisfy the following degree requirements, provided they apply and are admitted to the degree program:

12 hours of core coursework requirements of the iMBA (p. 642) degree program
12 hours of elective coursework requirements of the iMSM (p. 858) degree program
12 hours of elective coursework requirements of the iMSA (p. 544) degree program

Graduate Degree Programs in Business Administration

Majors:

Business Administration, MBA (p. 642) **(online-iMBA)**
Business Administration, MS (p. 646)
with optional concentrations: Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Corporate Governance & International Business (p. 1090), Finance (p. 1096), Supply Chain Management (p. 1109)
Business Analytics, MS (p. 649)
Management, MS (p. 858)
with optional concentrations: Business Data Analytics (p. 1086), Finance, (p. 1096) Corporate Governance & International Business (p. 1090)
Technology Management, MS (p. 1048)
with optional concentrations: Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Finance (p. 1096), Information Technology & Control (p. 1100), Supply Chain Management (p. 1109)
Business Administration, PhD (p. 647)

Minors:

Information Technology & Control (p. 1136)
Corporate Governance & International Business (p. 1130)
Supply Chain Management (p. 1144)

Concentrations:

Business Data Analytics (p. 1086)
Corporate Governance & International Business (p. 1090)
Information Technology & Control (p. 1100)
Supply Chain Management (p. 1109)

Certificates:

Digital Marketing, CERT (p. 1115)
Entrepreneurship & Strategic Innovation, CERT (p. 1116)
Financial Management, CERT (p. 1117)
Global Challenges in Business, CERT (p. 1118)
Managerial Economics & Business Analysis, CERT (p. 1119)
Strategic Leadership Management, CERT (p. 1120)
Value Chain Management, CERT (p. 1121)

Joint Degree Program:

Accountancy, MS (iMSA) & Business Administration, MBA (iMBA) (http://catalog.illinois.edu/graduate/bus/joint-degree/accountancy-ms-business-mba-online/)

Admission

for the Campus Graduate Certificate in Managerial Economics & Business Analysis (online)

Students who have successfully completed this certificate may use the certificate to satisfy the following degree requirements, provided they apply and are admitted to the degree program:

12 hours of core coursework requirements of the iMBA (p. 642) degree program
12 hours of elective coursework requirements of the iMSM (p. 858) degree program

12 hours of elective coursework requirements of the iMSA (p. 544) degree program

Code	Title	Hours
BADM 572	Stat for Mgt Decision Making	4
ECON 528	Microeconomics for Business	4
ECON 529	Macroeconomics for Business	4

Strategic Leadership & Management, CERT

for the Campus Graduate Certificate in Strategic Leadership & Management, CERT (online)

associate dean: W. Brooke Elliott
email: giesonline@illinois.edu
department website: https://giesbusiness.illinois.edu/graduate-hub/online (https://giesbusiness.illinois.edu/graduate-hub/online/)
department faculty: https://business.illinois.edu/people/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://giesbusiness.illinois.edu/

department office: 2302 Fox Drive, Suite D, Champaign, IL 61820
phone: (217) 333-4240

The Strategic Leadership and Management Campus Graduate Certificate is designed to develop leaders who (1) understand how to effectively work with and manage people individually and in teams, (2) understand how organizations are designed and managed, and (3) analyze business situations and formulate and implement strategies to gain and sustain competitive advantage This Campus Graduate Certificate will not only provide a strong foundational knowledge of team and organizational leadership and strategy, but also provide students multiple opportunities to apply this knowledge.

Students who have successfully completed this certificate may use the certificate to satisfy the following degree requirements, provided they apply and are admitted to the degree program:

12 hours of core coursework requirements of the iMBA (p. 642) degree program
8 hours of core and 4 hours of elective coursework requirements of the iMSM (p. 858) degree program
12 hours of elective coursework requirements of the iMSA (p. 544) degree program

Graduate Degree Programs in Business Administration

Majors:

- Business Administration, MBA (p. 642) **(online-iMBA)**
- Business Administration, MS (p. 646)
  - **with optional concentrations:** Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Corporate Governance & International Business (p. 1090), Finance (p. 1096), Supply Chain Management (p. 1109)
- Business Analytics, MS (p. 649)
- Management, MS (p. 858)
  - **with optional concentrations:** Business Data Analytics (p. 1086), Finance, (p. 1096) Corporate Governance & International Business (p. 1090)
- Technology Management, MS (p. 1048)
  - **with optional concentrations:** Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Finance (p. 1096), Information Technology & Control (p. 1100), Supply Chain Management (p. 1109)
- Business Administration, PhD (p. 647)

Minors:

- Information Technology & Control (p. 1136)
- Corporate Governance & International Business (p. 1130)
- Supply Chain Management (p. 1144)

Concentrations:

- Business Data Analytics (p. 1086)
- Corporate Governance & International Business (p. 1090)
- Information Technology & Control (p. 1100)
- Supply Chain Management (p. 1109)

Certificates:

- Digital Marketing, CERT (p. 1115)
- Entrepreneurship & Strategic Innovation, CERT (p. 1116)
- Financial Management, CERT (p. 1117)
- Global Challenges in Business, CERT (p. 1118)
- Managerial Economics & Business Analysis, CERT (p. 1119)
- Strategic Leadership Management, CERT (p. 1120)
- Value Chain Management, CERT (p. 1121)

Joint Degree Program:

- Accountancy, MS (iMSA) & Business Administration, MBA (iMBA) (http://catalog.illinois.edu/graduate/bus/joint-degree/accountancy-ms-business-mba-online/)

Admission

for the Campus Graduate Certificate in Strategic Leadership & Management, CERT (online)

Students who have successfully completed this certificate may use the certificate to satisfy the following degree requirements, provided they apply and are admitted to the degree program:

12 hours of core coursework requirements of the iMBA (p. 642) degree program
8 hours of core and 4 hours of elective coursework requirements of the iMSM (p. 858) degree program

12 hours of elective coursework requirements of the iMSA (p. 544) degree program

Code	Title	Hours
BADM 508	Leadership and Teams	4
BADM 509	Managing Organizations	4
BADM 544	Strategic Management	4
Total Hours		**12**

Value Chain Management, CERT

for the Campus Graduate Certificate in Value Chain Management, CERT (online)

associate dean: W. Brooke Elliott
email: giesonline@illinois.edu (%20giesonline@illinois.edu)
department website: https://giesbusiness.illinois.edu/graduate-hub/online (https://giesbusiness.illinois.edu/graduate-hub/online/)
department faculty: https://business.illinois.edu/people/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://giesbusiness.illinois.edu/
department office: 2302 Fox Drive, Suite D, Champaign, IL 61820
phone: (217) 333-4240

The Strategic Leadership and Management Campus Graduate Certificate is designed to develop leaders who (1) understand how to effectively work with and manage people individually and in teams, (2) understand how organizations are designed and managed, and (3) analyze business situations and formulate and implement strategies to gain and sustain competitive advantage This Campus Graduate Certificate will not only provide a strong foundational knowledge of team and organizational leadership and strategy, but also provide students multiple opportunities to apply this knowledge.

Students who have successfully completed this certificate may use the certificate to satisfy the following degree requirements, provided they apply and are admitted to the degree program:

12 hours of core coursework requirements of the iMBA (p. 642) degree program
12 hours of core coursework requirements of the iMSM (p. 858) degree program
8 hours of elective coursework requirements of the iMSA (p. 544) degree program

Graduate Degree Programs in Business Administration

Majors:

Business Administration, MBA (p. 642) **(online-iMBA)**
Business Administration, MS (p. 646)
with optional concentrations: Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Corporate Governance & International Business (p. 1090), Finance (p. 1096), Supply Chain Management (p. 1109)
Business Analytics, MS (p. 649)
Management, MS (p. 858)
with optional concentrations: Business Data Analytics (p. 1086), Finance, (p. 1096) Corporate Governance & International Business (p. 1090)
Technology Management, MS (p. 1048)
with optional concentrations: Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Finance (p. 1096), Information Technology & Control (p. 1100), Supply Chain Management (p. 1109)
Business Administration, PhD (p. 647)

Minors:

Information Technology & Control (p. 1136)
Corporate Governance & International Business (p. 1130)
Supply Chain Management (p. 1144)

Concentrations:

Business Data Analytics (p. 1086)
Corporate Governance & International Business (p. 1090)
Information Technology & Control (p. 1100)
Supply Chain Management (p. 1109)

Certificates:

Digital Marketing, CERT (p. 1115)
Entrepreneurship & Strategic Innovation, CERT (p. 1116)
Financial Management, CERT (p. 1117)
Global Challenges in Business, CERT (p. 1118)
Managerial Economics & Business Analysis, CERT (p. 1119)
Strategic Leadership Management, CERT (p. 1120)
Value Chain Management, CERT (p. 1121)

Joint Degree Program:

Accountancy, MS (iMSA) & Business Administration, MBA (iMBA) (http://catalog.illinois.edu/graduate/bus/joint-degree/accountancy-ms-business-mba-online/)

Admission

for the Campus Graduate Certificate in Value Chain Management, CERT (online)

Students who have successfully completed this certificate may use the certificate to satisfy the following degree requirements, provided they apply and are admitted to the degree program:

12 hours of core coursework requirements of the iMBA (p. 642) degree program
12 hours of core coursework requirements of the iMSM (p. 858) degree program

8 hours of elective coursework requirements of the iMSA (p. 544) degree program

Code	Title	Hours
ACCY 503	Managerial Accounting	4
BADM 520	Marketing Management	4
BADM 567	Process Management	4

Graduate Minors

For more information about graduate minors, please see the Graduate College (http://www.grad.illinois.edu/gradhandbook/).

Accountancy (p. 1122)
African American Studies (p. 1122)
African Studies (p. 1123)
American Indian & Indigenous Studies (p. 1124)
Art History (p. 1125)
Asian American Studies (p. 1126)
Balkan Studies (p. 1127)
Cinema Studies (p. 1128)
College Teaching (p. 1129)
Corporate Governance & International Business (p. 1130)
Dance (p. 1131)
European Union Studies (p. 1132)
Finance (p. 1133)
Gender & Women's Studies (p. 1134)
Gender Relations in International Development (p. 1135)
Global Studies (http://catalog.illinois.edu/graduate/provost/minors/global-studies/)
Heritage Studies (p. 1136)
Information Technology and Control (p. 1136)
Latin American & Caribbean Studies (p. 1137)
Latina/Latino Studies (p. 1139)
Museum Studies (p. 1140)
Queer Studies (p. 1141)
Religion (p. 1142)
Russian, East European, & Eurasian Studies (p. 1142)
Statistics (p. 1144)
Supply Chain Management (p. 1144)

Accountancy Graduate Minor

for the Graduate Minor in Accountancy

department office: 360 Wohlers Hall, 1206 South Sixth, Champaign, IL 61820
phone: (217) 333-0857
department website: https://giesbusiness.illinois.edu/mas (https://giesbusiness.illinois.edu/mas/)
college website: https://giesbusiness.illinois.edu/ (https://business.illinois.edu/)
overview of graduate college admissions & requirements: Graduate Admissions (https://grad.illinois.edu/admissions/apply/)
overview of college admissions & requirements: Gies Catalog (http://catalog.illinois.edu/schools/gies-business/academic-units/)

The minor in Accountancy seeks to develop business leaders who understand the role of accountancy and accounting in the conduct of business and the allocation of resources within society.

This minor requires twelve graduate hours of coursework.

Note: Students within the major cannot minor in the same program.

Graduate Degree Programs in Accountancy

Accountancy, MAS (p. 542)
with optional concentrations:
Business & Public Policy (p. 1087) | Corporate Governance & International Business (p. 1090) | Data Analytics in Accountancy (p. 1091) | Finance (p. 763) | Financial Reporting & Assurance (p. 543) | Information Technology & Control (p. 1100) | Real Estate (p. 1105) | Supply Chain Management (p. 1109) | Taxation (p. 1110)
Accountancy, MS (p. 544) **(on campus & online)**
on campus concentrations:
Business & Public Policy (p. 1087) | Corporate Governance & International Business (p. 1090) | Data Analytics in Accountancy (p. 1091) | Finance (p. 1096) | Information Technology & Control (p. 1100) | Supply Chain Management (p. 1109) | Taxation (p. 1110)
online concentrations:
Accountancy Analytics (p. 546)
Accountancy, PhD (p. 547)
Minor:
Accountancy (p. 1122)

Admission

Admission to the minor requires an application to the Department and admission to one of the M.S. programs in the College of Business. Admission is limited and acceptance is on a competitive basis.

Note: Students within the major cannot minor in the same program.

for the Graduate Minor in Accountancy

For additional details and requirements refer to the Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Code	Title	Hours
ACCY 501	Accounting Analysis I	4
ACCY 502	Accounting Analysis II	4
ACCY 503	Managerial Accounting	4
or ACCY 517	Financial Statement Analysis and Valuation	
or substitute graduate accountancy courses approved by a program advisor		
Total Hours		12

African American Studies Graduate Minor

for the Graduate Minor in African American Studies

department head: Ronald Bailey
overview of admissions & requirements: http://www.afro.illinois.edu/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department website: http://www.afro.illinois.edu/
department faculty:
department office: 1201 West Nevada, Urbana, IL 61801
phone: (217) 333-7781
fax: (217) 244-4809
email: aasrp@illinois.edu

The Department of African American Studies also offers a graduate minor in African American Studies. The minor is designed to complement graduate work in a variety of disciplines. Students wishing to take advantage of the minor must be in good standing, and must apply for acceptance into the minor.

Graduate Programs in African American Studies

African American Studies Concentration (p. 1075)
participating programs:
African Studies, MA (p. 556)|Educational Policy, Organization and Leadership, MA (p. 720)|Educational Policy, Organization and Leadership, PhD (p. 723)|Educational Psychology, EdM (p. 725) **(not online)**|Educational Psychology, MA (p. 728) **(not online)**|Educational Psychology, MS (p. 731) **(not online)**|Educational Psychology, PhD (p. 734) **(not online)**|History, MA (p. 802)|History, PhD (p. 803)|Political Science, MA (p. 968)|Political Science, PhD (p. 969)|Sociology, MA (p. 1009)|Sociology, PhD (p. 1009)
African American Studies Graduate Minor (p. 1122)

Code	Title	Hours
AFRO 500	Core Probs African-Am Studies	4
Elective hours from approved departmental list, 4 of which must be at the 500 level		8
Total Hours		12

African Studies Minor

for the Graduate Minor in African Studies

director: Teresa Barnes
overview of admissions & requirements: http://(http://www.afrst.illinois.edu/academics/grad/apply/)www.afrst.illinois.edu/academics/grad/apply/ (http://www.afrst.illinois.edu/academics/grad/apply/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department website: http://www.afrst.illinois.edu/academics/grad/
department faculty:
department office: 210 International Studies Building, 910 South Fifth Street, Champaign, IL 61820
phone: (217) 333-6335
fax: (217) 244-2429
email: african@illinois.edu

The interdisciplinary graduate minor in African Studies promotes training in African Studies for masters and doctoral students in other disciplines interested in complementing their degree program with an interdisciplinary perspective on Africa.

Note: Students within the major cannot minor in the same program.

Graduate Degree Programs in African Studies

African Studies, MA (p. 556)
African Studies Graduate Minor (p. 1123)
Joint Degree Program:
African Studies, MA and Library and Information Science, MS (p. 1149)

Admissions

The Center for African Studies admits students in the fall term only. Applicants to the Masters degree in African Studies should hold at least a Bachelor's degree from an accredited college or university in the United States or from a recognized institution of higher education abroad. All graduate college admission requirements also apply. The Center does not require the Graduate Record Examination (GRE) scores, but it is highly recommended for students applying for the Foreign Language and Area Studies (FLAS) fellowship. Successful applicants should have a grade point average of at least 3.0 (4.0=A) calculated for the last 60 semester hours of undergraduate course work. International applicants or applicants whose native language is not English must have a minimum TOEFL score of 550 on the paper-based test (PBT) -- 213 on the computer-based test (CBT) or 79 on the internet-based test (IBT). For information about the application process and to access both domestic and international student applications, start here: https://grad.illinois.edu/admissions/apply/.

For more information about the Center's admission requirements and procedures, and deadlines please visit www.afrst.illinois.edu/academics/grad/apply/ (http://www.afrst.illinois.edu/academics/grad/apply/).

Students interested in the graduate minor in African Studies must be in good standing in a graduate program, have permission from the major program, and demonstrate an interest in African Studies. For more information, contact Dr. Maimouna Barro (barro@illinois.edu).

Faculty Research

The Center for African Studies' has both core and affiliate faculty represented in over 34 units across campus encompassing various

disciplines in the humanities and social sciences, as well as in professional schools. The faculty is the backbone of the Center and constitutes the most critical element of the graduate experience. They excel in teaching at all levels and have a strong commitment to innovative research. Both Center faculty and teaching assistants have received numerous college and campus teaching awards. For more information about the Center faculty, please visit: http://www.afrst.illinois.edu/people/faculty/

Facilities and Resources

Established since 1970, the Center for African Studies is one the largest and most dynamic African National resource Centers in the country. The Center promotes excellence in research and teaching on Africa in all disciplines. The Center also exists to increase and disseminate knowledge about Africa to the larger community through various outreach activities to colleges, schools, community groups and businesses. At a time when the university of Illinois is expanding its international dimension, the Center for African Studies is dedicated to promoting a vibrant African Studies program and to fostering an understanding of Africa and African peoples through research, teaching and various Africa-related programs and events. The Center organizes a wide range of activities including conferences, lectures, film festivals, art exhibits, language institutes, workshops, and symposia. In addition, the Center regularly hosts visitors from the United States and abroad, namely Africa, and is strongly committed to developing linkages with individuals and institutions based in the African continent.

In 2012, the University of Illinois Library reorganized its international and area studies units into one large International and Area Studies Library (IASL) in an excellent renovated space. This new unit includes the African Studies library and other world areas library collections. The University Library has supported a full-time African Studies Bibliographer since 1969, and has provided the necessary acquisitions, cataloging, and processing staff since then.

The African Studies collection include over 354,000 items in all formats, with more than 300,000 in printed volumes and in English and French and a smaller number in Portuguese, German and other European languages. The Library adds about 900 items written in African languages each year. About 16,000 volumes written in Arabic deal with topics related to Africa, and more than 7000 are in Amharic, Bamana, Hausa, Lingala, Swahili, Tigrinya, Wolof, and Zulu. There are roughly 2,900 serials and 46,000 maps, of which 2849 have been digitized, as well as 12,000 microforms, and more than 800 audio-visual materials. The collection covers all African countries and includes materials in about 80 African languages. Priority countries for collecting include: Burkina Faso, Côte d'Ivoire, Democratic Republic of the Congo, Egypt, Eritrea, Ethiopia, Gambia, Kenya, Morocco, Mozambique, Nigeria, Senegal, South Sudan, South Africa, Tanzania, Tunisia, Zambia, and Zimbabwe. The collection is interdisciplinary and concentrated mainly in the humanities, social sciences, human rights and law, and agriculture. Our large collection of primary source materials, covering all of Africa, includes 120,000 pages of Arabic manuscripts and thousands of United States, United Kingdom, and African government documents. The Africana film collection is one of the finest in the US, and our African film database provides access to more than 800 films from or about Africa. UI's rich museum collections include the Krannert Art Museum and the Spurlock Museum and hold over 10,000 African artifacts. The museums present interesting exhibits and host African performances. Teacher kits on various African topics are also provided by the Krannert Art Museum.

The African studies bibliographer runs the Africana library and teaches IS 530, one of the Center's core courses and plays a key role in the Center's graduate program. For further information about the Africana library, please visit: http://www.library.illinois.edu/ias/africana/

Financial Aid

Students must apply and be admitted according to the set deadlines to be considered for assistantships and fellowships. The Center evaluates and ranks entering students on the basis of academic promise. This ranking becomes part of the basis for financial aid decisions. Funding is generally awarded to cover the fall and spring semesters and occasionally on a semester-by-semester basis. Multiple years of funding cannot be guaranteed, but the Center considers it a priority to fund students and see them through the program. Continued funding is based on academic (in the case of Foreign Language and Area Studies Fellowships) and job performance (in the case of assistantships), the availability of positions, and the Center's budget in a given year or US Department of Education Title VI funding cycle.

Students are encouraged to check the Graduate College's website (http://www.grad.uiuc.edu/) for funding opportunities--whether they are fellowships or assistantships: https://grad.illinois.edu/

For information about available awards and application deadlines, visit: http://www.afrst.illinois.edu/academics/grants/.

for the Graduate Minor in African Studies

Code	Title	Hours
AFST 522	Development of African Studies	4
Electives hours that relate to Africa that are outside the student's major department. At least four hours must be at the 500 level.		8
A minimum of four semesters of college level study of an African language. NOTE: Hours for language cannot be applied toward minor requirements.		
Total Hours		12

Other Requirements [1]

Requirement	Description
If the student's thesis deals in whole or in part with Africa, it is strongly recommended that a faculty member from the Center be a formal member of the student's committee.	

[1] *For additional details and requirements refer to the department's* Graduate Programs *(*http://www.afrst.illinois.edu/academics/grad/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

American Indian & Indigenous Studies Minor

for the degree of Graduate Minor in American Indian & Indigenous Studies

director: Jenny L. Davis
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
overview of program admissions requirements: https://ais.illinois.edu/academics/graduate-studies-illinois (https://ais.illinois.edu/academics/graduate-studies-illinois/)
program website: https://ais.illinois.edu/
college website: https://las.illinois.edu/
program office: 1204 W. Nevada, Urbana, IL 61801
phone: (217) 265-9870
email: loksi@illinois.edu

Graduate Degree Programs in American Indian Studies

Graduate Minor in American Indian & Indigenous Studies (p. 1124)

The American Indian and Indigenous Studies graduate minor is grounded by a strong commitment to the worlds, histories, representations, and political struggles of indigenous peoples internationally, and uses interdisciplinary methods of critical inquiry as a means through which students engage research and scholarship in their major.

Admission

Applicants to the graduate minor must be in good standing in a masters or doctoral program at the University of Illinois at Urbana-Champaign. Applications must include a statement of purpose that describes how the student's graduate work and/or research interests intersect with American Indian and Indigenous studies. The intent to pursue the graduate minor must be approved by the student's major advisor and graduate program director in their home department.

for the degree of Graduate Minor in American Indian & Indigenous Studies

The student must successfully petition the Graduate College to add the American Indian and Indigenous Studies graduate minor to their academic records and transcripts.

Code	Title	Hours
AIS 501	Indigenous Critical Theory	4
or AIS 502	Indigenous Decolonial Methods	
or AIS 503	Seminar in Indigenous Studies	
Elective hours selected from a list of approved courses maintained in the Program office by the AIS advisor, 4 of which must be at the 500 level.		8
Total Hours		**12**

[1] *For additional details and requirements refer to the* department's program information online *(*http://www.ais.illinois.edu/programs/grad/minor/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Art History Graduate Minor

for the Graduate Minor in Art History

school director: Alan Mette
associate director & director of graduate studies: Joel Ross
graduate studies advisors:
MA; PhD in Art History: David O'Brien (obrien1@illinois.edu)
MA; EdM; PhD in Art Education: Sarah Travis (stravis2@illinois.edu)
MFA in Studio: Deke Weaver (dekew@illinois.edu) **and** Conrad Bakker (cbakker@illinois.edu)
MFA in Photography: Luke Batten (lbatten@illinois.edu)
MFA in Industrial Design: David Weightman (diw@illinois.edu)
MFA in Graphic Design: Molly Briggs (mbriggs@illinois.edu) **and** Angelica Sibrian (asibrian@illinois.edu)
MFA in Design for Responsible Innovation: Molly Briggs (mbriggs@illinois.edu) **and** Angelica Sibrian (asibrian@illinois.edu)
MFA in Crafts: Billie Theide (theide@illinois.edu)
overview of admissions & requirements:
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
school website: School of Art + Design (https://art.illinois.edu/)
program website: program website link
school faculty: Art + Design Faculty (https://art.illinois.edu/index.php/people/faculty-staff/)
college website: College of Fine & Applied Arts (https://faa.illinois.edu/)
department office: 138 Art and Design Building, 408 East Peabody Drive, Champaign, IL 61820
phone: (217) 333-0642

The Graduate Minor in Art History is designed to provide UIUC graduate students, both at the master's and doctoral levels from any discipline, a foundation in the histories, theories and methods of art history and visual cultures. The Minor is taken in conjunction with, and is intended to complement the student's work in their primary disciplines.

In addition to the minor requirements, students must also complete the requirements of their major degree. Students interested in the Art History Graduate Minor should contact the Director of Graduate Studies in Art History.

Graduate Degree Programs in Art & Design

Art & Design, MFA (p. 585)
concentrations:
Crafts (p. 586), Design for Responsible Innovation (p. 587), Graphic Design (p. 588), Industrial Design (p. 590), Metals (p. 591), Painting (p. 592), Photography (p. 593), Printmaking (p. 594), Sculpture (p. 595)
specialization: New Media
Art Education, EdM (p. 597)
Art Education, MA (p. 598)
Art Education, PhD (p. 599)
Art History, MA (p. 601)
Art History, PhD (p. 602)
Art History Minor (p. 1125)

Admission

Applications are considered for Fall Semester admissions only. The Art History Program requires Graduate Record Examination (GRE) scores. International applicants or applicants who are not native English

speakers must present a recent TOEFL score of at least 590 on the paper-based version, 250 score on the Computer-based exam, and a score of 96 on IBT exam. Applications are not currently being accepted for the concentration in Printmaking.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience for master and doctoral students.

Facilities and Resources

Resources for graduate students in art and design include the Krannert Art Museum's excellent permanent collections and changing exhibitions; the Ricker Library of Art and Architecture, one of the largest art and architecture libraries in the nation; the Krannert Center for the Performing Arts; School of Art and Design facilities, which include extensive computer laboratories, digital photography and video editing equipment, wireless networking, ink-printing facilities, ceramic, woodworking, and metal shops, rapid prototyping and laser cutting, black/white and color darkrooms, shooting studios, and a wide selection of production and presentation equipment via reservation and checkout facility. A variety of lectures, symposia, musical programs, dramatic productions, and other cultural events associated with a large and progressive university complement the Art and Design Facilities.

Financial Aid

Fellowships, assistantships, and tuition and service fee waivers are awarded each year on a competitive basis, with consideration given to the applicant's grade point average and, in the case of applicants for the M.F.A. programs, quality of creative work.

for the Graduate Minor in Art History

For additional details and requirements refer to the department's Graduate Program's Web page (https://art.illinois.edu/index.php/prospective/academics/graduate-programs/art-history-minor/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
ARTH 593	Theory and Methodology	4
Two different 500-level graduate seminars in Art History chosen with the prior approval of the Graduate Minor Advisor.		8
Total Hours		12

Asian American Studies Minor

for the Graduate Minor in Asian American Studies

head of department: Soo Ah Kwon
associate head: Fiona Ngô
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
overview of program admissions requirements:
program website: https://aasp.illinois.edu/
college website: https://las.illinois.edu/
program office: 1208 W. Nevada, Urbana, IL 61801
phone: (217) 244-9530
email:

Graduate Degree Programs in Asian American Studies

Graduate Minor in Asian American Studies (p. 1126)

The Asian American Studies Program offers a graduate minor in Asian American Studies that is interdisciplinary in nature. The graduate minor is designed to complement the graduate work of the students' area of concentration.

Admission

Students must be in good academic standing in a graduate or professional program at the University of Illinois at Urbana-Champaign and demonstrate an interest in Asian American Studies. Those wishing to apply to the minor must submit a written statement indicating why they wish to pursue the minor, demonstrate successful completion of one course in Asian American Studies at the undergraduate or graduate level, and provide written approval to pursue the minor from their graduate advisor and graduate program director. The written statement should specifically discuss how the student's prior academic training and/or work experiences are related to Asian American Studies, how a graduate minor in Asian American Studies fits in to their major academic program on campus, as well as how the minor would contribute to future professional development. The written statement and other supporting material must be submitted to the Director of the Asian American Studies Program.

for the Graduate Minor in Asian American Studies

For the Graduate Minor in Asian American Studies to appear on the academic transcript, the student must successfully petition the Graduate College to add the Graduate Minor in Asian American Studies to their academic records.

Code	Title	Hours
AAS 501	Theory and Methods in AAS	4
or AAS 561	Race and Cultural Critique	
AAS 590	Asian Am Studies Seminar	4
Two graduate courses from an approved list of Asian American Studies courses at either the 400 or 500 level.		8
Total Hours		16

[1] *For additional details and requirements refer to the department's* Graduate Program's Web page *(*http://www.asianam.illinois.edu/academics/grad-minor/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Asian American Studies, Minor

Learning Outcomes for the Graduate Minor in Asian American Studies

1. Theoretical ApproachesGraduate students acquire proficiency in the field and area of Asian American Studies, and more generally the field of Ethnic Studies. This includes knowledge-based in intersectional, comparative, and interdisciplinary approaches and critical theories. While largely based in an area approach to the United States, Asian American Studies is also deeply concerned with transnational, diasporic, and global studies. Students learn the theories and methods of the social sciences and humanistic approaches toward the graduate concentration in Asian American Studies.

2. Critical Inquiry and DiscoveryApplying theories in Asian American Studies, students develop skills of critical inquiry that draw on intersectional and comparative approaches. As a mode of discovery students exercise their skills using methods of the social sciences and humanities through verbal communication in the classroom and written research projects. Students are asked to apply their critical modes of learning in original and unique projects of discovery through advanced research in a professional concentration.
3. Effective Teaching and Community Engagement Graduate students study analytical concepts and models of community engagement related to the history of Asian American Studies. Reflection based on these approaches provides a context from which to understand the role of classroom learning and the application of theories of social change in community engagement.
4. Social Awareness and Cultural UnderstandingGraduate students learn the dimensions and breadth of intersectional analysis. This includes the social, cultural, economic, and political issues concerning Asian Americans, and in relation to other social groups. The different social theories of power are examined to understand the categories of analysis such as race, gender, sexuality, class, ethnicity, religion, and disability, to name a few.
5. Intersectional Analysis and Interdisciplinary MethodsGraduate students gain an understanding of the global dimensions of intersectional approaches in a broad range of fields and disciplines including literary, historical, cultural and ethnographic methods. Through the study of migration and diaspora, the broad understanding of individual and collective dynamics are observed, analyzed, and theorized. Students are presented with comparative frameworks to understand how race, gender, and sexuality, for example, are thought of from a number of vantage points. Students are introduced to the practice of interdisciplinary methodologies that emerge out of Asian American Studies and related fields.

Balkan Studies Graduate Minor

for the Graduate Minor in Balkan Studies

director of center and graduate studies: John Randolph
email: reec@illinois.edu
department website: https://reeec.illinois.edu/
department faculty: REEEC Faculty (https://reeec.illinois.edu/people/groups/faculty/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department office: 104 International Studies Building, 910 South Fifth Street, Champaign, IL 61820
phone: (217) 333-1244

About the Minor

The Balkan Studies graduate minor is designed for M.A. or Ph.D. students in other disciplines who wish to complement their degree program with interdisciplinary study of the Balkans. Students interested in pursuing the minor must have a minimum of two years of college-level study of a language of the region: e.g., Albanian, BCS (Bosnian, Croatian, Serbian), Bulgarian, modern Greek, Hungarian, Macedonian, Romani, Romanian, Sloveneian, Turkish, Yiddish. A program of study can be tailored to the needs and interests of the individual student in consultation with Center staff; for admission to the program contact the Center.

Graduate Degree Programs in Russian, East European, and Eurasian Studies

The Russian, East European, and Eurasian Center offers a two-year program of language and area studies courses leading to an interdisciplinary Master of Arts degree. The program is designed to meet the needs of students proceeding to disciplinary-based doctoral work and those planning non-academic professional careers with area expertise. Programs offered by the Center:

Russian, East European, and Eurasian Studies, MA (p. 991)
Russian, East European, and Eurasian Studies Minor (p. 1142)
Balkan Studies Minor (p. 1127)
Joint Degree in Russian, East European, & Eurasian Studies, MA and Library & Information Science, MS (p. 1166)

Admission

Prospective graduate students should have completed at least two years of Russian or another language of Eastern Europe or Eurasia. Applicants must submit the Graduate College application for admission, certified transcripts of all undergraduate and graduate work, Graduate Record Examination (GRE) scores (verbal, quantitative, and written), three letters of reference, and a writing sample. International students must submit Test of English as a Foreign Language (TOEFL) scores. All applicants must meet the requirements of the Graduate College. Admission is ordinarily in the fall semester, but occasional exceptions are made for spring and summer admission.

Faculty Research Interests

The faculty (https://reeec.illinois.edu/people/groups/faculty/) affiliated with the Center represent a broad range of interests and methodological approaches in the social sciences and the humanities, as well as the professional schools.

Facilities and Resources

The Russian, East European, and Eurasian Center was founded in 1959 and designated a National Resource Center by the U.S. Department of Education. It serves as an intellectual and institutional hub for the University community and the public through conferences, lectures, colloquia, visiting scholars, study groups, exhibits, films, and other activities.

The annual Summer Research Laboratory on Russia, Eastern Europe, and Eurasia features special workshops, seminars, lectures, films, and other events, most of which are free and open to the public.

The International and Area Studies Library (https://www.library.illinois.edu/ias/) at the University of Illinois has one of the country's three outstanding Slavic library collections (https://www.library.illinois.edu/ias/spx/). The Slavic Reference Service (https://www.library.illinois.edu/ias/spx/srs/) serves all faculty and students with expert bibliographers.

Language training is provided by the Departments of Germanic Languages & Literatures (https://germanic.illinois.edu/), Linguistics

(https://linguistics.illinois.edu/), and Slavic Languages & Literatures (https://slavic.illinois.edu/) in:

- Bulgarian
- Bosnian, Croatian, Serbian
- Czech
- Old Church Slavonic
- Polish
- Russian
- Turkish
- Ukrainian
- Yiddish

Financial Aid

Financial aid is awarded on an academic-year basis. All fellowships and assistantships include a stipend plus tuition and fee waiver. Qualified incoming students who are U.S. citizens or permanent residents should also apply for U.S. Department of Education Title VI Foreign Language and Area Studies (FLAS) fellowships (http://publish.illinois.edu/illinoisflas/) offered through REEEC or other FLAS-granting campus centers.

Qualified students may also be eligible for other fellowships at the campus or departmental level. A limited number of teaching and graduate assistantships, which include a tuition and fee waiver, may also be available to outstanding students through REEEC and other units.The Graduate College maintains a list of available assistantships (https://grad.illinois.edu/clearinghouse/); additional information on need-based financial aid may be obtained from the Graduate College Fellowships Office (https://grad.illinois.edu/fellowships/about/).

for the Graduate Minor in Balkan Studies

For additional details and requirements refer to the department's Graduate Programs (https://reeec.illinois.edu/academics/ma-program/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
IS 530	Collection Development (Section C: REEES Bibliog Research Methods)	2 or 4
or REES 550	Seminar in REEE Studies	
Electives (4 hours at the 500 level) At least 8 graduate hours that relate to the Balkans chosen from the list of approved courses maintained by REEEC and taken outside the student's enrolling department.		8
Language Requirement: A minimum of two years college-level study of a language of the area or equivalent, including but not limited to Albanian, BCS (Bosnian, Croatian, Serbian), Bulgarian, modern Greek, Hungarian, Macedonian, Romani, Romanian, Slovenian, Turkish, and Yiddish. For professional work in the region or scholarly research on area topics at least three years of relevant language study are recommended.		
Students must also submit a research paper primarily on the region.		
Total Hours		10-12

Other Requirements

Requirement
Other requirements may overlap
If students take both IS 530C and REES 550, credit for one may be applied to the elective requirement.
A research paper primarily on the Balkans is required. Typically this paper is written in a research seminar in a disciplinary department. A master's thesis or doctoral dissertation can be submitted in lieu of the research paper, if it deals primarily with the region. Students are encouraged to present their work in a public forum at the University, such as the REEEC Noontime Scholars lecture series.

Cinema Studies Graduate Minor

for the Graduate Minor in Cinema Studies

head of department: C.L. Cole
email: clcole@illinois.edu
department website: https://media.illinois.edu/media-cinema-studies (https://media.illinois.edu/media-cinema-studies/)
department faculty: https://media.illinois.edu/media-cinema-studies/faculty (https://media.illinois.edu/media-cinema-studies/faculty/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: College of Media (https://media.illinois.edu/)
department office: 119 Gregory Hall, 810 S. Wright St., Urbana, IL 61801
phone: (217) 333-1549

Programs in Cinema Studies

Undergraduate Programs:
major: Media & Cinema Studies, BS (p. 301)
minors: Cinema Studies (p. 484) | Critical Film Production (p. 489) | Media (p. 513)
Graduate Programs:
minor: Cinema Studies (p. 1128)

The Graduate Minor in Cinema Studies promotes the graduate-level study of cinema and related screen media and their cultural and institutional contexts and offers formal recognition of such work, undertaken alongside and in conjunction with Illinois graduate students' primary fields of study.

Admission

Applicants to the Graduate Minor program must be in residence and in good standing in a qualifying master's or doctoral program at Illinois and must designate Cinema Studies as a field/area of concentration for the master's or the doctoral degree and have that designation formally accepted by the student's home department.

Applications to the Department Head are accepted on a rolling basis. The Department Head will monitor students' advancement toward completion of the Minor.

for the Graduate Minor in Cinema Studies

For additional details and requirements refer to the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
MACS 503	Historiography of Cinema	4
MACS 504	Theories of Cinema	4
Two graduate courses in cinema or related media, chosen with the prior approval of the Minor Advisor. (One of the two electives may be satisfied by an independent study course or by an approved graduate-level course taken at another institution.)		6-8
Total Hours		**14-16**

Other Requirements

Requirement	Description
The student's master's examination (if applicable) or preliminary / qualifying examination must include a Cinema Studies topic.	
If the student's master's thesis or doctoral dissertation deals in whole or in part with a Cinema Studies or related screen media topic, a member of the Department of Media and Cinema Studies must be a formal member of the student's committee.	

College Teaching Graduate Minor

for the Graduate Minor in College Teaching

interim department head: Yoon Pak
director of graduate studies: David Huang & Allison Witt
graduate admissions information: Linda Stimson
overview of admissions & requirements: http://education.illinois.edu/epol/admissions/howtoapply (http://education.illinois.edu/epol/admissions/howtoapply/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: http://education.illinois.edu/epol (http://education.illinois.edu/epol/)
program website: College of Education Programs (https://education.illinois.edu/faceted-search/programs/)
department faculty: Education Policy, Organization & Leadership Faculty (https://education.illinois.edu/faculty-finder/epol/)
college website: http://education.illinois.edu/
department office: 349 Education Building, 1310 South Sixth Street, Champaign, IL 61820
phone: (217) 333-0807
fax: (217) 244-5632
email: gradservices@education.illinois.edu

The Department of Education Policy, Organization and Leadership (EPOL) offers a Graduate Minor in College Teaching. The minor provides students with the opportunity to explore the scholarly literature on and practice of teaching and learning in postsecondary settings. Students in good standing in the Illinois Graduate College are eligible to apply for the minor. For additional information, please contact EPOL.
Students within the major can not minor in the same program.

Graduate Degree Programs in Education Policy, Organization & Leadership (http://catalog.illinois.edu/graduate/graduate-majors/ed-pol-org-leadership/socialsciandedpolicyconcentration/)

Education Policy, Organization and Leadership, EdM (on campus, off-campus & online) (http://catalog.illinois.edu/graduate/graduate-majors/ed-pol-org-leadership/socialsciandedpolicyconcentration/)
Education Policy, Organization and Leadership, MA (http://catalog.illinois.edu/graduate/graduate-majors/ed-pol-org-leadership/socialsciandedpolicyconcentration/)
Education Policy, Organization and Leadership, CAS (p. 716) **(on campus, off-campus & online)**
Education Policy, Organization and Leadership, EdD (p. 722) **(on campus, off-campus & online)**
Education Policy, Organization and Leadership, PhD (p. 723)
optional concentrations:
- African American Studies (p. 1075)
- Diversity & Equity in Education (p. 1094)
- Educational Administration & Leadership (p. 1095)
- Global Studies in Education (p. 1098)
- Higher Education (p. 1098)
- History of Education (p. 1099)
- Human Resource Development (p. 1099)
- Learning Design & Leadership (p. 1101)
- Philosophy of Education (p. 1104)
- Social Sciences & Education Policy (p. 1108)
- Writing Studies (p. 1111)

College Teaching Minor (p. 1129)
joint programs:
- Education Policy, Organization and Leadership, EdM and Business Administration, MBA (p. 1158)
- Education Policy, Organization and Leadership, MA and Business Administration, MBA (p. 1158)

Graduate Degree Programs

Degree programs in the Department of Education Policy, Organization and Leadership are designed to meet the academic and professional interests of individuals preparing for careers as academic professionals, adult educators, college professors, corporate trainers, educational policy analysts, governmental administrators, instructional designers/technologists, non-profit representatives, organizational development specialists, and university administration leaders.

Admission

The Department of Education Policy, Organization and Leadership carefully considers all applicants for graduate study. Applicants should consult the department website for more detailed application information http://education.illinois.edu/epol/admissions/howtoapply (http://education.illinois.edu/epol/admissions/howtoapply/) and should apply online at http://www.grad.illinois.edu/admissions/apply (http://www.grad.illinois.edu/admissions/apply/). The quality of the applicant's

undergraduate and graduate training and grade point average are primary considerations. Other important factors evaluated include the three letters of recommendation and statement of purpose. International applicants must submit a TOEFL score.

Off-Campus Programs

The Education Policy, Organization and Leadership department offers selected off-campus programs in the Chicago region, through the use of a cohort model. The Ed.M. and C.A.S. degree options with General Administrative Endorsement are offered in the Chicago region. An Ed.D. degree cohort also is available in School Executive Leadership. Requirements for the off-campus Ed.M., C.A.S., and Ed.D. programs are identical to the on-campus degrees.

Facilities and Resources

The College of Education also has many resources to assist graduate students through their academic career. The Bureau of Educational Research works with students to secure research funding. The Council on Teacher Education entitles candidates seeking a Professional Educator License and provides accreditation of professional education programs. Each student completing a degree program is assigned a graduate adviser, who is available to assist the student with planning the program of study and determining degree requirements, courses and timelines for degree completion.

Information on University resources can be found at http://www.grad.illinois.edu/current-students (http://www.grad.illinois.edu/current-students/).

Financial Aid

Financial aid in the form of assistantships, scholarships, fellowships, and tuition waivers can be found throughout the college and campus. There are opportunities available through the department (http://education.illinois.edu/epol/), the College of Education (http://education.illinois.edu/students/graduate-financialaid/), and the Bureau of Educational Research (https://education.illinois.edu/associate-dean-for-research/bureau-of-educational-research/college-research-awards/). Please note: Graduate students employed as Staff by the University of Illinois at Urbana-Champaign are not eligible for a College of Education Award or Scholarship. Campus opportunities can be found at the Graduate College (http://www.grad.illinois.edu/financial-aid/) and the Office of Student Financial Aid (http://www.osfa.illinois.edu/).

for the Graduate Minor in College Teaching

The Department of Education Policy, Organization and Leadership (EPOL) offers a Graduate Minor in College Teaching. The minor provides students with the opportunity to explore the scholarly literature on and practice of teaching and learning in postsecondary settings. Students in good standing in the Illinois Graduate College are eligible to apply for the minor. For additional information, please contact EPOL.

Students within the major can not minor in the same program.

Code	Title	Hours
EOL 572	The College Student	4
EOL 585	College Teaching	4
Select one of the following:		4
EOL 573	The Community College	
EOL 574	Diversity in Higher Education	
EOL 582	College Student Development	
EOL 586	Changing College Curriculum	
Total Hours		12

[1] *For additional details and requirements refer to the department's Web site, the College of Education Graduate Programs Handbook, and the Graduate College Handbook.*

Corporate Governance and International Business Graduate Minor

for the Graduate Minor in Corporate Governance and International Business

interim chair of department: Cele Otnes
director of graduate studies: Deepak Somaya
director of admissions committee: Rakesh Bhatt
email: ba@business.illinois.edu
department website: https://giesbusiness.illinois.edu/msba (https://giesbusiness.illinois.edu/msba/)
department faculty: https://business.illinois.edu/people/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://giesbusiness.illinois.edu/
department office: 350 Wohlers Hall, 1206 S. Sixth Street, Champaign, IL 61820
phone: (217) 333-4240

The minor in Corporate Governance and International Business is designed to develop leaders in various business fields who understand international business and corporate governance issues within the global economy. It specifically covers topics such as

1. how to create value for multinational partners, employees with diverse cultural backgrounds, and shareholders by designing better organizations and corporate governance; and
2. how managerial practices differ in various national/cultural contexts and why manages must be able to understand the strategic, financial, and economic implications of these differences in managing multinational corporations.

The minor will provide not only a strong foundation in the International Business and Governance area but could be tailored to fit the specific career needs of our students.

Graduate Degree Programs in Business Administration

Majors:

Business Administration, MBA (p. 642) **(online-iMBA)**
Business Administration, MS (p. 646)
with optional concentrations: Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Corporate Governance & International Business (p. 1090), Finance (p. 1096), Supply Chain Management (p. 1109)
Business Analytics, MS (p. 649)
Management, MS (p. 858)
with optional concentrations: Business Data Analytics (p. 1086), Finance, (p. 1096) Corporate Governance & International Business (p. 1090)
Technology Management, MS (p. 1048)
with optional concentrations: Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Finance (p. 1096), Information Technology & Control (p. 1100), Supply Chain Management (p. 1109)
Business Administration, PhD (p. 647)

Minors:

Information Technology & Control (p. 1136)
Corporate Governance & International Business (p. 1130)
Supply Chain Management (p. 1144)

Concentrations:

Business Data Analytics (p. 1086)
Corporate Governance & International Business (p. 1090)
Information Technology & Control (p. 1100)
Supply Chain Management (p. 1109)

Certificates:

Digital Marketing, CERT (p. 1115)
Entrepreneurship & Strategic Innovation, CERT (p. 1116)
Financial Management, CERT (p. 1117)
Global Challenges in Business, CERT (p. 1118)
Managerial Economics & Business Analysis, CERT (p. 1119)
Strategic Leadership Management, CERT (p. 1120)
Value Chain Management, CERT (p. 1121)

Joint Degree Program:

Accountancy, MS (iMSA) & Business Administration, MBA (iMBA) (http://catalog.illinois.edu/graduate/bus/joint-degree/accountancy-ms-business-mba-online/)

Admission

Admission to the minor requires an application to the Department and admission to one of the M.S. programs in the Gies College of Business or a graduate program in a related discipline approved by the Department. Admission is limited and acceptance is on a competitive basis.

for the Graduate Minor in Corporate Governance and International Business

This minor requires twelve graduate hours of related coursework.

Code	Title	Hours
Select three of the following:		12
BADM 582	Multinational Management	
BADM 583	Current Topics in Intl Bus	
BADM 584	Global Marketing	
BADM 586	Intl Comparative Management	
BADM 590	Seminar in Business Admin (Corporate Governance in International Context)	
BADM 590	Seminar in Business Admin (Management Challenges in Emerging Economies)	
or substitutions approved by the Department of Business Administration		
Total Hours		12

Other Requirements [1]

Requirement	Description
In addition to the minor requirements, students must also complete the requirements of their major degree.	
Please contact your department for more information regarding the addition of a minor to your program of study.	

[1] *For additional details and requirements refer to the department's* Programs of Study *(*http://www.business.illinois.edu/ba/programs/phd/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Dance Graduate Minor

for the Graduate Minor in Dance

department head: Jan Erkert
director of the MFA program: Jennifer Monson
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: Dance (https://dance.illinois.edu/)
college website: College of Fine & Applied Arts (https://faa.illinois.edu/)
department office: 907 1/2 West Nevada Street, Urbana, IL 61801
phone: (217) 333-3890
email: dance@illinois.edu

The Graduate Minor in Dance offers physical, creative, and theoretical engagement with contemporary dance and performance. The program of study presents interested graduate students the chance to endow their major graduate degree studies with interdisciplinary ideas and presents an alternate pedagogic window into research through the body. Prospective graduate minor students will be required to have successfully completed one of the required Dance Graduate Minor courses prior to official admission to the program. In addition, they will have to be interviewed by the MFA in Dance Program Director, and they will have to provide a letter of endorsement from their home department advisor that is co-signed by their home department Graduate Program Director.

For additional information, please contact dance@illinois.edu.

Graduate Degree Programs in Dance

Dance, MFA (p. 701)
Graduate Minor in Dance (p. 1131)

The Department of Dance offers a graduate program leading to the Master of Fine Arts degree. The mission of the MFA Program is to foster substantive choreographic research that posits dance as a force in contemporary culture. The program embraces a wide spectrum of individual movement research and embodied practice to create a dynamic learning atmosphere for critical engagement with choreographic process.

The Dance Department expects MFA candidates to conduct a creative inquiry that leads to the development of a sophisticated sense of self-definition. Individual research and analysis should culminate in the development of a personal artistic process and mission and should be evident in the following contexts:

- Choreographing- Candidates will develop a distinctive choreographic research methodology and demonstrate its skillful application in a performative context. This ideology must establish solid foundation for ongoing research and engagement that contributes to the global dialogue about dance and contemporary culture.
- Communicating- Candidates will develop the ability to express their choreographic vision and process in verbal and written language that is clear, cogent, and convincing and demonstrates clear analytic skill, critical thinking, awareness of historical context, and knowledge of contemporary culture.
- Moving- Candidates will demonstrate a commitment to movement investigation and practice that defines, advances, and sustains their choreographic vision.
- Teaching-Candidates will apply their research vision in clear pedagogic principles while fostering a stimulating teaching/ learning environment.
- Career Planning-Candidates are assessed on their ability to develop innovative career strategies in order to advance their artistic mission in the field and demonstrate the capacity to implement these plans with professionalism in all the above contexts.

Admission Requirements

Prerequisites for admission to the MFA program are:

1. An undergraduate degree and significant experience in dance is required.
2. Demonstrated choreographic achievement and potential to make innovative contributions to the field.
3. Demonstrated potential to engage in critical thinking and writing.
4. A minimum grade point average of 3.0 on a 4 point scale, computed from the last 60 hours of undergraduate work and any graduate work completed.

International students must be eligible for full status admission. International students who receive a TOEFL score greater than 103 on the internet-based test, 257 on the computer-based test, or 613 on the paper test are eligible for full status admission. Students with these scores are exempt from the English as a Second Language Placement Test. The GRE is not required.

Faculty Research Interests

An extraordinary faculty of artists, researchers and scholars has gathered at Illinois, who are creating new paradigms for interactions between the professional arena and the academic training ground. Our group of professional artists includes Jan Erkert, Sara Hook, Philip Johnston, Linda Lehovec, Jennifer Monson, Kemal Nance, Rebecca Nettl-Fiol, Tere O'Connor, Cynthia Oliver, Kirstie Simson, Endalyn Taylor, John Toenjes, and Abby Zbikowski, all of whom share a commitment to teaching and preparing students for leadership roles in the field of dance.

Financial Aid

Two forms of financial aid are offered to graduate students by the Department of Dance:

- Teaching and administration assistantships are available to graduate students. Assistantships of 25% or greater qualify the student for a tuition waiver. All students are required to apply for Federal Work Study.
- A variety of Fellowships are available through The Graduate College each year, including: (A full listing of Fellowships can be found at: www.grad.illinois.edu/fellowships (http://www.grad.illinois.edu/fellowships/))
  - The Creative and Performing Arts Fellowship, which may include stipends up to a maximum of $6,000 for a student demonstrating outstanding choreographic and performance talent.
  - The Graduate College Fellowship for Underrepresented Students provides fellowships in the amount of $8,000 and are available to outstanding minority students.

Prospective MFA candidates are encouraged to apply for financial assistance through the Office of Student Financial Aid, 420 Student Services Bldg., University of Illinois at Urbana-Champaign, Champaign, IL 61820. (217) 333-0100.

for the Graduate Minor in Dance

Code	Title	Hours
DANC 510	Grad Seminar/Special Topics	4
DANC 541	Contemporary Directions I	2
or DANC 542	Contemporary Directions II	
DANC 462	Composition Workshop	2
or DANC 562	Graduate Composition II	
DANC 550	Advanced Research in Dance (or additional enrollment in DANC 541, 542, 462, or 562)	1 to 4
DANC 560	Advanced Physical Practice	1 to 4
Total Hours		12

Requirement	Description
Minimum 500-level hours required overall:	10

European Union Studies Minor

for the Graduate Minor in European Union Studies

center director: Emanuel Rota
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
center website: European Union Center (http://europe.illinois.edu/)
college website: College of Liberal Arts & Sciences (https://las.illinois.edu/)
department office: European Union Center, 328 International Studies Building, MC-429, 910 S. Fifth Street Champaign, IL 61820
phone: (217) 265-7515
email: eucenter@illinois.edu

The graduate minor in European Union Studies complements PhD programs in many departments and provides an opportunity for students to pursue an area studies program as well as their primary field. Graduate students may also come from professional schools, such as law, business, and education, and departments with professional degree programs, such as urban and regional planning.

Graduate students seeking admission to the graduate minor in European Union Studies program should check with an academic advisor in their major degree-granting school or department to confirm eligibility prior to pursuing an application. Students must submit a graduate minor application, available from the Center, and if approved, a petition to the Graduate College requesting to add the European Union Studies minor.

Graduate Degree Programs in European Union Studies

European Union Studies, MA (p. 762)
European Union Studies Minor (p. 1132)

Admission

Applicants for admission to the Master of Arts program should have completed at least two years of a language of the European Union and hold a bachelor's degree from an accredited institution of higher education. The Graduate Record Examination (GRE), or another post-secondary examination such as the LSAT, GMAT, MCAT, is required and international students are required to take the Test of English as a Foreign Language (TOEFL), with minimum scores set by the Graduate College. All admission requirements of the Graduate College also apply.

Applicants must submit the Graduate College application for admission, certified transcripts of all undergraduate and graduate work, Graduate Record Examination (GRE) scores (verbal quantitative, and written) or other post-secondary examination scores, a writing sample, and three letters of reference." Applicants must also submit to the European Union Center a statement of purpose showing how the M.A. degree in European Union Studies fits into their educational and career plans. This statement must show that the interdisciplinary nature of the MA in EU Studies will serve the student better than a disciplinary degree. Admission is ordinarily limited to the fall semester, but exceptions are made for spring and summer admission.

for the Graduate Minor in European Union Studies

Students in the European Union Studies graduate minor program must earn at least 16 hours of graduate credit in approved courses in at least two departments. Two of the courses must be EURO 501 and EURO 502. The graduate minor requires that students demonstrate the equivalent of two years of college-level study of a language of the European Union other than English, to support development of a technical vocabulary in fields such as business, law, and agriculture. A list of courses fulfilling the minor is available from the Center.

For additional details and requirements refer to the department's graduate degree requirements (http://euc.illinois.edu/academic/graduate.html) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Note: Students within the major can not minor in the same program.

Code	Title	Hours
EURO 501 & EURO 502	EU Institutions and Governance and The EU in a Global Context	8
Courses from the Center's approved course list. Courses must be from two departments		8
Language Requirement: Students demonstrate the equivalent of two years of college-level study of a language of the European Union other than English, to support development of a technical vocabulary in fields such as business, law, or agriculture.		0
Total Hours		16

Other Requirements

Requirement	Description
Other requirements may overlap	

Finance Graduate Minor

for the Graduate Minor in Finance

chair of department: Louis Chan
director of graduate studies: Martin Widdicks (MSF); George Pennacchi (PhD)
email: grad@business.illinois.edu
department website: https://giesbusiness.illinois.edu/msf (https://giesbusiness.illinois.edu/msf/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://giesbusiness.illinois.edu/
department office: 340 Wohlers Hall, 1206 S. Sixth Street, Champaign, IL 61820
phone: (217) 244-2239

Graduate Degree Programs in Finance

Majors

Finance, MS (p. 763)

optional concentrations for the Finance, MS: Accountancy (p. 1073), Business & Public Policy (p. 1087), Corporate Governance & International Business (p. 1090), Data Analytics in Finance (p. 1092), Information Technology & Control (p. 1100)

Financial Engineering, MS (p. 765) (**administered by** Finance and Industrial & Enterprise Systems Engineering (https://msfe.illinois.edu/))

optional concentration for the Financial Engineering, MS: Data Analytics in Finance (p. 1092)

Finance, PhD (p. 764)

Minors

Finance (p. 1133)

Concentrations

Data Analytics in Finance (p. 1092)
Finance (p. 1096)
Business & Public Policy (p. 1087)
Real Estate (p. 1105)

The graduate minor in Finance is reserved for students admitted to the Master of Accounting Science program. Accountants with expertise in finance are increasingly highly valued by many employers. The graduate minor in Finance is designed to allow students in the MAS program to demonstrate substantive competency in the field of Finance. Counting the prerequisite requirement, the graduate minor is the equivalent of four graduate courses. Admission is limited and acceptance is on a competitive basis.

Admission to the Minor

Admitted MAS students should first consult with the MAS Program Advisor to determine if the minor is appropriate for the student. Information on how to apply will be available through the MAS Program Advisor. Students admitted to the MAS program may also email finance@illinois.edu for more information on the Finance Minor.

Prerequisites for the Minor

Admission to the minor requires the completion of either FIN 221 and FIN 300 or FIN 520 as a prerequisite. All courses must have been taken for a grade.

Advising Notes

The graduate minor can only be completed within the Fall semester of the fifth year of the MAS program. The three required graduate courses are not available in the Spring semester. Students who drop any of the three required courses in Fall will be treated as having dropped the minor.

Students should have already completed FIN 300 before enrolling in the graduate minor. Students may apply while enrolled in FIN 300; however, the application decision may be deferred until successful completion of FIN 300. FIN 300 must be taken on this campus. Students who plan to take the graduate minor SHOULD NOT register for FIN 321, FIN 411, or FIN 412 as undergraduates. Students who have completed any of the following courses are not eligible to pursue the minor: FIN 411, FIN 321, or FIN 412.

Note: Students within the major can not minor in the same program.

For the Graduate Minor in Finance

Advising Notes

The graduate minor can only be completed within the Fall semester of the fifth year of the MAS program. The three required graduate courses are not available in the Spring semester. Students who drop any of the three required courses in Fall will be treated as having dropped the minor.

Students should have already completed FIN 300 before enrolling in the graduate minor. Students may apply while enrolled in FIN 300; however, the application decision may be deferred until successful completion of FIN 300. FIN 300 must be taken on this campus. Students who plan to take the graduate minor SHOULD NOT register for FIN 321, FIN 411, or FIN 412 as undergraduates. Students who have completed any of the following courses are not eligible to pursue the minor: FIN 411, FIN 321, or FIN 412.

Note: Students within the major can not minor in the same program.

For additional details and requirements refer to the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
FIN 511	Investments	4
FIN 512	Financial Derivatives	4
FIN 521	Advanced Corporate Finance	4
Total Hours		12

Other Requirements

Requirement	Description
The Finance minor consists of these 3 courses, designated for the MAS students, completed during the Fall semester. There are no substitute courses.	
Please contact your department for more information regarding the addition of a minor to your program of study.	

Gender & Women's Studies Minor

for the Graduate Minor in Gender & Women's Studies

department chair: Siobhan Somerville
department website: http://gws.illinois.edu/
college website: https://las.illinois.edu/
overview of graduate college admissions & requirements: Graduate Admissions (https://grad.illinois.edu/admissions/apply/)
overview of college admissions & requirements:
program office: 1205 West Nevada, Urbana, IL 61801
phone: (217) 333-2990
email: gws-email@illinois.edu

Graduate Degree Programs in Gender & Women's Studies

Gender and Women's Studies Graduate Minor (p. 1134)
Queer Studies Graduate Minor (p. 1141)

The graduate minor in Gender & Women's Studies offers sophisticated training in feminist theory and methodology to graduate students who

want to incorporate gender & women's studies into their degree work. Because gender has become a central category of analysis in many disciplines and fields, the graduate minor strengthens students' formal credentials and offers a versatile area of specialization. Please see our website for more information, https://gws.illinois.edu/academics/graduate-minors.

The graduate minor in Queer Studies offers students the opportunity to gain expertise in queer theory and methodology as part of their graduate degree work. The graduate minor in queer studies offers students a versatile interdisciplinary framework to complement and strengthen their research and pedagogy in their chosen field of study. Please see our website for more information, www.gws.illinois.edu (http://www.gws.illinois.edu/).

Admission

Applicants must be in good standing in a graduate or professional program at the University of Illinois at Urbana-Champaign. The Department required a formal application, including a personal statement about how the student's graduate work and/or research interests intersect with gender and women's studies. Students must also have signed approval of the graduate director of their program.

for the Graduate Minor in Gender & Women's Studies

Code	Title	Hours
GWS 550	Feminist Theories & Methods	4
GWS 590	Topics in GWS	4
An additional 400 or 500 level GWS course selected from a list of approved courses maintained in the department office by the GWS advisor. An independent study in GWS may also serve as the additional course.		4
Total Hours		12

[1] *For additional details and requirements refer to the department's* Graduate Minor *(*http://www.gws.illinois.edu/student/grad/minor/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Gender Relations in International Development

for the Graduate Minor in Gender Relations in International Development

school office: 1010 W. Nevada St., Urbana, IL 61801
director of graduate studies: Associate Dean Min Zahn
email:
phone: (217) 244-5246
school website: https://socialwork.illinois.edu/
school faculty: School of Social Work Faculty (http://socialwork.illinois.edu/about-ssw/faculty-and-staff-directory/?doing_wp_cron=1546290133.2576510906219482421875)
overview of school admissions & requirements: School of Social Work (http://catalog.illinois.edu/social-work/)

Gender Relations in International Development – Graduate Minor

Code	Title	Hours
WGGP 581	Gender Relations & Intl Dev	4
One elective at the 500 level from a list approved by the GRID faculty advisory committee.		4
One elective from a list of 400- and 500-level courses approved by the GRID faculty advisory committee.		4
Total Hours		12

Other requirements:

Requirement	Description
Other requirements may overlap.	
For this multi-disciplinary graduate minor, students must select courses from at least two departments or units.	

[1] *For additional details and requirements refer to the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Global Studies Graduate Minor

for the Graduate Minor in Global Studies

Director: Steve W. Witt
department website: https://cgs.illinois.edu/
college website: https://las.illinois.edu/
overview of graduate college admissions & requirements: Graduate Admissions (https://grad.illinois.edu/admissions/apply/)
overview of college admissions & requirements: http://catalog.illinois.edu/graduate/provost/minors/global-studies/
overview of global studies minor: https://cgs.illinois.edu/academics/gradminor/
department office: 303 International Studies Building, 910 South Fifth Street, Champaign, IL 61820
phone: (217) 265-5186
fax: (217) 244-4809
email: global-studies@illinois.edu

Graduate Program in Global Studies

The Center for Global Studies, with the assistance of an all-campus Faculty Advisory Committee, administers an interdisciplinary and inter-professional Graduate Minor in Global Studies in cooperation with 25 units across 8 colleges as well as the School of Labor and Employment Relations and the Graduate School of Library and Information Science. The Minor develops awareness and knowledge of globalization and the relevance of this process to student degree programs and career objectives. It is intended to serve three constituencies of students: those seeking to integrate their specialized skills within the broader intellectual and public policy demands of a global society; those proceeding to disciplinary or professionally-based doctoral work; and those for whom the Minor enhances their disciplinary and professional credentials in seeking public or private employment for posts relevant to global studies and policy-making.

for the Graduate Minor in Global Studies

For additional details and requirements refer to the unit's web site (https://cgs.illinois.edu/academics/graduate-minor/), and the Graduate College Handbook (http://www.grad.uiuc.edu/gradhandbook/).

Code	Title	Hours
GLBL 500	Global Society	4
or GLBL 501	Perspectives on Global Studies	
Two courses relevant to a student's proposed minor as approved by the Director of the Center for Global Studies. At least of one the courses must be at the 500-level and only one can be from the student's home department.		8
Total Hours		12

Heritage Studies Graduate Minor

for the Graduate Minor in Heritage Studies

overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
program website: http://champ.anthro.illinois.edu/academics/
department website: http://landarch.illinois.edu
college website: http://faa.illinois.edu
school office: 101 Temple Hoyne Buell Hall MC-620, 611 Lorado Taft Drive, Champaign, IL 61820
phone: (217) 333-0176
email: d (dfr1@illinois.edu)**rlori@illinois.edu, Lori Davis, Academic Affairs Coordinator, Landscape Architecture**

The Heritage Studies Minor (HSM) is pursued at the graduate level in a student's home department through completion of four courses (4 hours each) plus a culminating project arising out of normal coursework undertaken in consultation with the HSM Committee Head.

Admission

Admission for the Heritage Studies Minor (HSM) is contingent upon the approval of the home department. Students are admitted to the graduate program of the particular academic department in which they will pursue their Master's or PhD degree. A student interested in the HSM should clearly indicate this in the application statement to the University and, upon matriculation, should inform the HSM Committee of the intent to pursue the Minor and begin planning how to satisfy the requirements. The HSM Steering Committee reviews student progress in consultation with the student's academic advisor. Students must be admitted to the graduate program of an academic department in order to participate in the HSM. Students already enrolled in one of the University of Illinois at Urbana-Champaign graduate programs may also apply for admission to the HSM at any time, but are advised to do so in their first year of study.

There are no prerequisites for admission to the HSM other than admission to a university graduate program. The HSM does not require prior practical experience in heritage work for admission. However, the HSM will encourage students to obtain such practical experience during their graduate work at the University of Illinois.

Faculty Research Interests

The HSM courses offer broad coverage of different approaches to heritage theory and practice, including interdisciplinary perspectives from Anthropology, Landscape Architecture, Urban and Regional Planning, Architecture, History, Geography, Education, and other fields. Faculty work collaboratively with each other and across the globe, focusing on a range of cultures and time periods from prehistoric to contemporary.

Financial Aid

The Minor itself does not provide financial aid. Financial aid may be requested from the admitting graduate program of the particular academic department.

for the Graduate Minor in Heritage Studies

Heritage Studies – Graduate Minor

Code	Title	Hours
Take two from the following list:		6 or 8
ANTH 460	Heritage Management (4 hours)	
LA 594	Cultural Heritage (2 or 4 hours)	
RST 570	Cultural Aspects of Tourism (4 hours)	
Additional course(s) from an approved list, chosen by the student and the H.S.M. committee head, must also be completed.		4 or 6
Total Hours		12

Other Requirements [1]

Requirement	Description
A culminating project (fulfilled by a project, paper, or design: choice is determined in consultation with the Minor's Steering Committee) is required.	

1 *For additional details and requirements refer to the* program information online *(*http://champ.anthro.illinois.edu/academics/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Information Technology & Control Graduate Minor

for the Graduate Minor in Information Technology and Control

interim chair of department: Cele Otnes
director of graduate studies: Deepak Somaya
director of admissions committee: Rakesh Bhatt
email: ba@business.illinois.edu
department website: https://giesbusiness.illinois.edu/msba (https://giesbusiness.illinois.edu/msba/)
department faculty: https://business.illinois.edu/people/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://giesbusiness.illinois.edu/
department office: 350 Wohlers Hall, 1206 S. Sixth Street, Champaign, IL 61820
phone: (217) 333-4240

The minor in Information Technology and Control is designed to develop leaders in various business fields who understand

1. how to leverage information technology to create value for customers, external partners, and shareholders by designing better information systems to improve business processes and controls; and
2. how managers can assess the strategic, financial, and economic benefits of investing in advanced information systems.

The minor will provide not only a strong foundation in IS/IT area but could be tailored to fit the specific career needs of our students.

Graduate Degree Programs in Business Administration

Majors:

Business Administration, MBA (p. 642) **(online-iMBA)**
Business Administration, MS (p. 646)
with optional concentrations: Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Corporate Governance & International Business (p. 1090), Finance (p. 1096), Supply Chain Management (p. 1109)
Business Analytics, MS (p. 649)
Management, MS (p. 858)
with optional concentrations: Business Data Analytics (p. 1086), Finance, (p. 1096) Corporate Governance & International Business (p. 1090)
Technology Management, MS (p. 1048)
with optional concentrations: Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Finance (p. 1096), Information Technology & Control (p. 1100), Supply Chain Management (p. 1109)
Business Administration, PhD (p. 647)

Minors:

Information Technology & Control (p. 1136)
Corporate Governance & International Business (p. 1130)
Supply Chain Management (p. 1144)

Concentrations:

Business Data Analytics (p. 1086)
Corporate Governance & International Business (p. 1090)
Information Technology & Control (p. 1100)
Supply Chain Management (p. 1109)

Certificates:

Digital Marketing, CERT (p. 1115)
Entrepreneurship & Strategic Innovation, CERT (p. 1116)
Financial Management, CERT (p. 1117)
Global Challenges in Business, CERT (p. 1118)
Managerial Economics & Business Analysis, CERT (p. 1119)
Strategic Leadership Management, CERT (p. 1120)
Value Chain Management, CERT (p. 1121)

Joint Degree Program:

Accountancy, MS (iMSA) & Business Administration, MBA (iMBA) (http://catalog.illinois.edu/graduate/bus/joint-degree/accountancy-ms-business-mba-online/)

Admission

Admission to the minor requires an application to the Department of Business Administration and admission to one of the MS programs in the College of Business or a graduate program in a related discipline approved by the Department. Admission is limited and acceptance is on a competitive basis.

In addition to the minor requirements, students must also complete the requirements of their major degree.

Please contact your department for more information regarding the addition of a minor to your program of study.

For additional details and requirements refer to the Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Code	Title	Hours
Select three of the following:		12
BADM 554	Enterprise Database Management	
BADM 555	Info Sys Development and Mgt	
BADM 556	Electronic Commerce	
BADM 557	Business Intelligence	
BADM 559	Enterprise IT Governance	
or substitutions approved by the Department of Business Administration		
Total Hours		12

Latin American & Caribbean Studies Minor

for the Graduate Minor in Latin American & Caribbean Studies

acting center director: Andrew Orta
associate director & academic programs coordinator: Angelina Cotler
director of graduate studies: Anna Escobar
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
overview of department admissions requirements:
center website: http://www.clacs.illinois.edu/
center faculty: http://www.clacs.illinois.edu/about/people/faculty.aspx.
college website: https://las.illinois.edu/
center office: 201 International Studies Building, 910 South Fifth Street, Champaign, IL 61820
phone: (217) 333-4971
email: clacs@illinois.edu

Including classroom and online courses in Quechua, the most spoken native language in the American continent.

The graduate minor in Latin American and Caribbean Studies promotes training for Master's and Doctoral students in other disciplines interested in complementing their degree program with an interdisciplinary perspective on Latin America and the Caribbean region. There are no prerequisites for the graduate minor. The Center will provide an online admission form to be submitted to the student's advisor for review. The form will require the student's graduate advisor and program director

approval. Applicants must be in good standing in a graduate program at the University of Illinois and should demonstrate an interest in Latin American Studies.

Note: Students within the major cannot minor in the same program.

Graduate Degree Programs in Latin American & Caribbean Studies

Latin American Studies, MA (p. 835)
Graduate Minor in Latin American & Caribbean Studies (p. 1137)

The Center for Latin American and Caribbean Studies administers a program of language and area courses leading to an interdisciplinary Master of Arts degree. The master's program facilitates studies in the languages, cultures, and affairs of the region for three constituencies of students: those seeking to match area expertise with professional training; those proceeding to disciplinary-based doctoral work; and those for whom the degree would stand on its own. The center also administers graduate specializations in Latin American and Caribbean Studies with various departments. The center is a Title VI National Resource Center. The center houses the Lemann Institute for Brazilian Studies.

Language Instruction

The Center offers 3 levels of Quechua, the most spoken language in the American continent, with approximately 13 million of speakers in 6 countries. The Center also offers Quechua online courses and free access to the publication Correo de Linguistica Andina and free exercises on Quechua. Visit www.clacs.illinois.edu/quechua/ (http://www.clacs.illinois.edu/quechua/).

Other languages in the University that fulfill the M.A. requirements are Spanish and Portuguese, both offered at the School Literatures, Cultures, and Linguistics.

Faculty Research Interests

More than 100 faculty throughout the University are currently affiliated with the Center. The Center's faculty devote all or a portion of their teaching and research to Latin American subjects, from agriculture to politics, culture and linguistics. Their expertise spans every important discipline and sub-region of Latin America and the Caribbean, with particular strength in the Andean countries, the Caribbean, lowland South America, Mexico, and Brazil.

For a complete list of our affiliated faculty and their research and teaching interests check our people page at http://www.clacs.illinois.edu/about/people/faculty.aspx.

Facilities and Resources

Latin American Library Collection (LALC)

The Center assist the Latin American Collection (http://www.library.illinois.edu/lat/) at the University Library in purchasing teaching and research materials to develop a strong collection that supports teaching and research in those programs sponsored and coordinated by the Center as well as interdisciplinary courses with Latin American subject matter offered by other departments.

The LACL collection ranks among the six largest in the country and is the largest collection in the Midwest region in purchasing teaching and research materials to develop a strong collection that supports teaching and research in those programs sponsored and coordinated by the Center as well as interdisciplinary courses with Latin American subject matter offered by other departments. It is located in the third floor of the main UIUC library in room 324 and while the Library itself does not house a circulating collection, our knowledgeable staff is available to help locate relevant materials, answer reference questions, and assist you in developing effective searching strategies.

The Latin American and Caribbean Library collection includes:

- **More than 400,000 monograph titles;**
- **Newspapers and magazines from over 20 Latin American and Caribbean countries;**
- **A strong collection of journals in the humanities and social sciences, as well as publications of professional associations, government agencies, central banks, and non-governmental organizations;**
- **Access to HAPI Online (Hispanic American Periodicals Index), the** Handbook of Latin American Studies (http://lcweb2.loc.gov/hlas/**), and other online databases;**
- **An extensive collection of videos available at the Media Center in the Undergraduate Library;**
- **over 32,000 maps of Latin America (housed in the Map and Geography Library);**
- **comprehensive holdings of Brazilian and Andean materials;**
- **Extensive holdings by and about Gabriel Garcia Marquez;**
- **Publications from the Archivo General de la Nacion de Mexico; and**
- **A comprehensive Latin American music collection.**

List-serv

The Center administers a listserv with more than 500 subscribers. Weekly mass messages "CALCS/Lemann Institute this Week" contain information on activities in campus related to Latin America and the Caribbean region (conferences, workshops, movies), new courses and job positions as well as future conferences in other Universities. To subscribe contact: Angelina Cotler (cotler@illinois.edu).

CLACS Brownbags

Every Thursday at Noon in Room 101 International Studies Building (910 S. Fifth Street in Champaign) CLACS presents a lecture offered by a faculty, graduate student or outside faculty on topics relevant to the region. These are open and free brownbag lectures. For complete list of presentations during the semester visit our website on the events section.

Opportunities and Events

The Center keeps update a complete list of jobs, grants, conferences, and fellowships in the U.S. and abroad for graduate students and faculty. Check it at http://www.clacs.illinois.edu/news/opportunities.aspx.

Outreach Program (http://www.clacs.illinois.edu/outreach/default.aspx)

One of the goals of our mission is to increase knowledge and awareness of Latin America and the Caribbean in the educational community and the general public by promoting language and area studies in their broadest sense. Outreach at CLACS is a service-oriented program funded through a Title VI Federal Area Studies grant. It is designed to increase public knowledge about Latin America and the Caribbean and Latin American and Caribbean peoples and cultures. All our services are free!
Services include

- Speakers Bureau composed by graduate students and faculty for presentations in schools on Latin American topics.
- Outreach Library for k-14 teachers and instructors that includes books and DVDs.

- Collaborates with the Illinois International Review, the University of Illinois' new international publication; produces CLACS this Week, a weekly Calendar of Events; and an annual newsletter on Quechua instruction, Correo de Linguistica Andina.
- Publishes several curriculum development workbooks including: Columbus: Beyond the Myth, A Teacher's Workbook on Tropical Rain Forests, and Historia Oral: The Latina/o Experience in the United States.
- Organizes the Latin American Brownbag Colloquium, a weekly series of noon seminars in which faculty, students, and visiting scholars present current research and speak on topics of special interest. Additionally, the Center sponsors many cultural events, such as Latin American music and dance ensembles, and art exhibitions.
- Maintains links to Web based curriculum-related materials on its outreach Web pages as a means of facilitating access to curriculum resources and research materials on Latin America and the Caribbean.

For more information visit http://www.clacs.illinois.edu/outreach/default.aspx.

Links

Links to local museums, units and clubs that offer Latin American and Caribbean services as well as external links to institutions abroad and in the U.S. www.clacs.illinois.edu/resources/ (http://www.clacs.illinois.edu/resources/).

Financial Aid

The Center is a recipient of Federal Government Title VI Foreign Language and Area Studies (FLAS) Fellowships for Graduate Studies in any discipline that includes a specialization in Latin American Studies and an intensive program of language instruction. Academic year language courses and summer fellowships for intensive language courses abroad or in the United States are available. Information on how to apply, requirements and datelines are posted in http://publish.illinois.edu/illinoisflas/.

The Center offers Tinker Summer Fellowship Research Grants for graduate students in any department wishing to do research during the summer in Latin America, the Caribbean and the Iberian Peninsula. Both these programs depend on outside funding and thus cannot be guaranteed in any given year. Information on how to apply, requirements and datelines are posted in http://www.clacs.illinois.edu/academics/fellowships/tinker.aspx.

for the Graduate Minor in Latin American & Caribbean Studies

The graduate minor in Latin American and Caribbean Studies promotes training for Master's and Doctoral students in other disciplines interested in complementing their degree program with an interdisciplinary perspective on Latin America and the Caribbean region. There are no prerequisites for the graduate minor. The Center will provide an online admission form to be submitted to the student's advisor for review. The form will require the student's graduate advisor and program director approval. Applicants must be in good standing in a graduate program at the University of Illinois and should demonstrate an interest in Latin American Studies.

Note: Students within the major cannot minor in the same program.

Code	Title	Hours
Area Courses: 400-/500-level courses from two different departments from a list approved by CLACS every semester and posted in our website and announced through our listserv		8
Language coursework taken on this campus in either Portuguese, Spanish or Native American Language or Haitian Creole, OR the language course could also be selected from the area courses offered in these languages, i.e. literature class taught in any of these languages.		4
The chosen language course must be at the 400-or 500 level to count towards the required 12 hours for Graduate Minor.		
Total Hours		12

Other Requirements [1]

Requirement	Description
If the student's master's thesis or doctoral dissertation deals with Latin America and the Caribbean, students are strongly recommended that a faculty member from the Center be a formal member of their committee	

[1] *For additional details and requirements refer to the department's* graduate program information online *(*http://www.clacs.illinois.edu/academics/graduate/graduate.aspx*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Latina/Latino Studies Minor

for the Graduate Minor in Latina/Latino Studies

department chair: Jonathan X. Inda
overview of admissions & requirements:
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: http://www.lls.illinois.edu
department faculty:
college website: College of Liberal Arts & Sciences (https://las.illinois.edu/)
department office: 1207 West Oregon, Urbana, IL 61801
phone: (217) 265-0370
email:

Graduate Degree Programs in Latina/Latino Studies

Graduate Minor in Latina/Latino Studies (p. 1139)

The graduate minor offers a comprehensive program of study in Latina/Latino Studies research, theories and methodologies to graduate students who wish to structurally incorporate Latina/Latino Studies into their degree work. As U.S. Latina/os have become a central category of analysis in theories of ethnicity, race, gender, sexuality, and class in many disciplines and fields, the graduate minor strengthens students' formal credentials and offers a versatile area of specialization. The graduate minor provides students with a theoretical and methodological foundation and a firm background in the history and culture of Latinas and Latinos in the United States from the perspective of the humanities, the social sciences, and other fields. The program will allow students to assess how historical and cultural processes affect U.S. Latina/

os in contemporary society. Furthermore, the transdisciplinary and transnational nature of the program will provide students, whether or not they focus their graduate studies on Latina/o Studies, with the breadth of research and approaches taken by scholars in the field.

Admission

Applicants must be in good academic standing in a graduate or professional program at the University of Illinois at Urbana-Champaign and demonstrate a proven interest and commitment in Latina/Latino Studies. Interested students must submit an application to the Department of Latina/Latino Studies and receive approval to pursue the minor from their graduate or professional program. Application materials can be obtained at the Latina/Latino Studies Department office and at the Program's website (https://lls.illinois.edu/academics/graduate-minor/).

for the Graduate Minor in Latina/Latino Studies

Latina/Latino Studies – Graduate Minor

Code	Title	Hours
LLS 577	Perspectives in LLS	4
Two courses from approved departmental list.		8
Total Hours		12

Other Requirements [1]

Requirement
Only 4 hours of credit may be cross listed with the student's disciplinary unit.

[1] *For additional details and requirements refer to the department's* program information *(*http://www.lls.illinois.edu/education/graduate/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Museum Studies Graduate Minor

for the Graduate Minor in Museum Studies

head of the department: Brenda Farnell
director of graduate studies: Ellen Moodie
museum studies program coordinator: Susan Frankenberg
overview of admissions & requirements: http://www.anthro.illinois.edu
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department website: http://www.anthro.illinois.edu
department faculty:
department office: 109 Davenport Hall, 607 South Mathews Avenue, Urbana, IL 61801
phone: (217) 333-3616

email: anthro@illinois.edu

The Graduate Minor in Museum Studies is designed for MA and PhD students who wish to complement their degree program with interdisciplinary study of the theory, organization and management of museums and museum collections. The program offers broad coverage of different disciplines' approaches to museum theory, and practice, including interdisciplinary perspectives from Anthropology, Art History, Landscape Architecture, History, Education, and Library and Information Sciences. The program also focuses on the collaborative, international and multicultural nature of museum work in curating, researching and communicating the tangible and intangible evidence of people and their environment. Students acquire the applied theory required to successfully work on, with or in museums. Students may tailor the minor to their career goals by choosing among electives that emphasize different theoretical and technical aspects of museum studies.

Graduate Degree Programs in Anthropology

Anthropology, MA (p. 571)
Anthropology, PhD (p. 572)
optional concentration: Second Language Acquisition and Teacher Education (p. 1106)

Museum Studies Graduate Minor (p. 1140)

Admission

Students without the equivalent of the department's undergraduate concentration may be admitted to either degree program, but they may be required to make up any deficiencies in their anthropological backgrounds. In addition to the Graduate College admission requirements, students are required to submit Graduate Record Examination (GRE) scores. Students whose native language is not English are required to take the Test of English as a Foreign Language (TOEFL) (http://www.grad.illinois.edu/admissions/instructions/04c/), with minimum scores set by the Graduate College. Students are admitted for the fall term only.

Students wishing to pursue the minor in Museum Studies must be in good standing in the graduate program of an academic department, and must apply for acceptance into the minor. Admission to the minor is contingent upon approval of the student's home department and the Museum Studies Steering Committee. Students may apply to the minor during the first week of the fall and spring semesters in any academic year, and should contact the Museum Studies Program Coordinator for application instructions or more information.

Degree Requirements

Each subfield (Archaeology, Biological Anthropology, and Sociocultural/Linguistic Anthropology) requires a specific set of courses for graduation. Achieving doctoral candidacy in all three subfields entails passing (a) language (and/or skill) exam(s), (b) passing a set of preliminary examinations, and (c) successfully submitting a predissertation paper, and/or a doctoral proposal, all to be defended in an oral examination. For specific details and requirements for admission to and navigation of the Ph.D. program, please refer to the Anthropology Department Graduate Programs Handbook (http://www.anthro.illinois.edu/programs/graduate/resources/AnthGradHandbook.pdf) and the University of Illinois Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, the Anthropology Department recognizes the importance of teaching experience as part of a graduate education. Most Anthropology graduate students will have the opportunity to work as teaching assistants, to learn to design their own classes, and possibly teach their own classes.

Faculty Research Interests and Facilities

Courses and individualized study provide broad coverage of sociocultural, linguistic, archaeological, and physical anthropology. The department

provides special emphases in the analyses of state ideologies and cultural transformations; complex societies in transition; kinship and gender relations; politics, economics, and business studies; social movements and youth; border studies, criminalities, violence, and security; religion, race, and ethnicity; democracy, governance, and policing; social classification; performance and embodiment; food and environment; language and culture; discourse and narrative analysis; transnationalism and diasporas; human evolution; agricultural origins and development; landscape histories and heritage; hunter-gatherer adaptations; climate change and sustainability; diet and nutrition; paleoecology and paleobiology; evolutionary genetics; population genetics; peopling of the Americas; ancient DNA; biomechanics of locomotion; exercise and neurobiology; functional morphology; comparative and analytical osteology; forensics; demography; immunology; evolutionary medicine; microbe-host interaction; reproductive ecology; female reproductive physiology; conservation; and nonhuman primate evolution, morphology, behavior, and ecology. The department's research facilities include laboratories for archaeology, GIS and spatial computing, faunal analysis, casting, stable-isotope analysis, ethnography, ancient DNA, skeletal biology, locomotion and motion analysis, and endocrinology.

Departmental funds and a grant from the National Science Foundation, as well as from area studies centers, are available for graduate students' summer field research. An archaeology field school is held at various locations in Illinois and outside of the US (location varies from year to year). Graduate student programs are enriched by close departmental relationships with the various interdisciplinary units, including area studies centers on campus (African, East Asian and Pacific, European Union, Latin America and Caribbean, Russian and East European; South Asian and Middle Eastern Studies), the ethnic and gender studies units (the American Indian Studies Program and the departments of African-American Studies, Asian American Studies, Gender and Women's Studies, and Latina/Latino Studies), along with the Women and Gender in Global Perspectives Program, Spurlock Museum, the Museum of Natural History, Krannert Art Museum, the Institute for Genomic Biology, and the Program in Ancient Technologies and Archaeological Materials.

Agreements between the University and various governments and institutes facilitate research in many nations. Training is available in various languages (some with funding available), including Arabic, Bengali, Burmese, Chinese, Hausa, Hebrew, Hindi, Indonesian, Japanese, Korean, Portuguese, Quechua, Lingala, Russian, Shona, Swahili, Thai, and Urdu. Students have ready access to the extensive computer facilities of the University and to the department's facilities.

Financial Aid

University fellowships, Graduate College fellowships for under-represented minorities, and teaching and research assistantships provide variable levels of funding for most graduate students who do not hold external awards. Tuition and service fee waivers accompany most fellowships and assistantships. Foreign Language and Area Studies (FLAS) fellowships are available through various area centers. University of Illinois public archaeology programs, including the Illinois State Archaeological Survey and the Public Service Archaeology and Architecture Program, have provided support and research employment for graduate students in the past, as has the U.S. Army Construction Engineering Research Laboratory in Champaign.

for the Graduate Minor in Museum Studies

Code	Title	Hours
MUSE 500	Core Prob Museum Theory & Prac	4
Electives from an approved list of museum-related courses, at least one of which must be at the 500-level.		12
The student must participate in a capstone experience consisting of an approved museum-based internship, museum-related project or museum-related research paper. Every student must provide a product of this experience in the form of either a formal professional presentation or a written document. If a student chooses to write their MS thesis or PhD dissertation on a museum topic, this will fulfill (but is not required for) the capstone experience, provided that a member of the Museum Studies Steering Committee is a formal member of the student's thesis or dissertation committee. Student may receive academic credit for their capstone experience through their home department or MUSE 590.		
Total Hours		16

Other Requirements [1]

Requirement	Description
Minimum 500-level Hours Required Overall	8

[1] *For additional details and requirements refer to the department and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Queer Studies Minor

for the Graduate Minor in Queer Studies

department chair: Siobhan Somerville
department website: http://gws.illinois.edu/
college website: https://las.illinois.edu/
overview of graduate college admissions & requirements: Graduate Admissions (https://grad.illinois.edu/admissions/apply/)
overview of college admissions & requirements:
program office: 1205 W. Nevada, Urbana, IL 61801
phone: (217) 333-2990
email: gws-email@illinois.edu

Graduate Degree Programs in Gender & Women's Studies

Gender and Women's Studies Graduate Minor (p. 1134)
Queer Studies Graduate Minor (p. 1141)

The graduate minor in Gender & Women's Studies offers sophisticated training in feminist theory and methodology to graduate students who want to incorporate gender & women's studies into their degree work. Because gender has become a central category of analysis in many disciplines and fields, the graduate minor strengthens students' formal credentials and offers a versatile area of specialization. Please see our website for more information, https://gws.illinois.edu/academics/graduate-minors.

The graduate minor in Queer Studies offers students the opportunity to gain expertise in queer theory and methodology as part of their graduate degree work. The graduate minor in queer studies offers students a versatile interdisciplinary framework to complement and strengthen their research and pedagogy in their chosen field of study. Please see

our website for more information, https://gws.illinois.edu/academics/graduate-minors.

Admission

Applicants must be in good standing in a graduate or professional program at the University of Illinois at Urbana-Champaign. The Department required a formal application, including a personal statement about how the student's graduate work and/or research interests intersect with gender and women's studies. Students must also have signed approval of the graduate director of their program.

for the Graduate Minor in Queer Studies

Code	Title	Hours
GWS 580	Queer Theories & Methods	4
GWS 581	Topics in Queer Studies	4
One additional 400 or 500 level course selected from a list of approved courses maintained in the department office by the GWS Advisor. An independent study in GWS may, with the approval of the GWS Advisor, also serve as the additional course.		4
Total Hours		12

[1] *For additional details and requirements refer to the department's* Graduate Minor *(*http://www.gws.illinois.edu/student/grad/queer-studies-minor/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Religion Graduate Minor

for the Graduate Minor in Religion

head of department: Jonathan Ebel
director of graduate studies: Bruce Rosenstock
email: religion@illinois.edu
department website: http://www.religion.illinois.edu
department faculty:
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department office: 2090 Foreign Language Building, MC-166, 707 South Mathews, Urbana, IL 61801
phone: (217) (217) 333-0473
fax: (217) 244-4019

Graduate Degree Programs in Religion

Religion, MA (p. 990)
Graduate Minor: Religion (p. 1142)

Admission

The Graduate College admission requirements apply. Applicants need not have an undergraduate major in the study of religion, but they must demonstrate a capacity to undertake advanced study in this area of inquiry. All applications for admission must be supported by three letters of recommendation from persons qualified to comment on the applicant's aptitude for graduate study in religion. Applicants are required to submit a sample of their written work. The Graduate Record Examination (GRE) is required. International applicants whose native language is not English must take the IELTS or the Test of English as a Foreign Language (TOEFL) and have their scores submitted to Institution Code #1836, Dept. #00. A score of at least 600 on the paper-based test (PBT), or 250 on the computer-based test (CBT), or 100 on the internet-based test (iBT) is required for admission to this program.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program.

Facilities and Resources

The extraordinary University Library is the department's main research facility; within it, the History, Philosophy & Newspaper Library, the Rare Book Room, and the International and Area Studies Library all serve faculty and students with expert bibliographers and focused collections. Among other special collections that are likely to be useful to our students are Afro-Americana and Women's Studies; the library is also a major repository for government documents.

Financial Aid

Financial aid is available to many students in the form of fellowships or assistantships. More information is available on the Graduate College web site, http://www.grad.illinois.edu/fellowship/finaid (http://www.grad.illinois.edu/fellowship/finaid/).

for the Graduate Minor in Religion

The graduate minor in Religion is designed for graduate or professional students in other disciplines who desire to complement their degree program with a study of Religion. The Minor will consist of any coherent set of at least 12 graduate hours of courses that is approved by the Director of Graduate Studies in the Department of Religion. It will include at least one graduate seminar in the Department of Religion. The successful completion of a minor is noted on the student's transcript. For admission to the program contact the department.

Code	Title	Hours
Any graduate seminar in Religion		4
Graduate electives in Religion at the 400 level or above		8
Total Hours		12

Other Requirements [1]

Requirement
Minimum 500-level Hours Required Overall: 8

[1] *For additional details and requirements refer to the department's graduate degree requirements and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Russian, East European, & Eurasian Studies Graduate Minor

for the Graduate Minor in Russian, East European, and Eurasian Studies

director of center and graduate studies: John Randolph
email: reec@illinois.edu
department website: https://reeec.illinois.edu/
department faculty: REEEC Faculty (https://reeec.illinois.edu/people/groups/faculty/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department office: 104 International Studies Building, 910 South Fifth Street, Champaign, IL 61820
phone: (217) 333-1244

About the Minor

The Russian, East European, and Eurasian Studies graduate minor is designed for M.A. or Ph.D. students in other disciplines who wish to complement their degree program with interdisciplinary study of Russia, Eastern Europe, and Eurasia. A program of study can be tailored to the needs and interests of the individual student in consultation with Center staff; for admission to the program contact the Center.

Graduate Degree Programs in Russian, East European, and Eurasian Studies

The Russian, East European, and Eurasian Center offers a two-year program of language and area studies courses leading to an interdisciplinary Master of Arts degree. The program is designed to meet the needs of students proceeding to disciplinary-based doctoral work and those planning non-academic professional careers with area expertise. Programs offered by the Center:

Russian, East European, and Eurasian Studies, MA (p. 991)
Russian, East European, and Eurasian Studies Minor (p. 1142)
Balkan Studies Minor (p. 1127)
Joint Degree in Russian, East European, & Eurasian Studies, MA and Library & Information Science, MS (p. 1166)

Admission

Prospective graduate students should have completed at least two years of Russian or another language of Eastern Europe or Eurasia. Applicants must submit the Graduate College application for admission, certified transcripts of all undergraduate and graduate work, Graduate Record Examination (GRE) scores (verbal, quantitative, and written), three letters of reference, and a writing sample. International students must submit Test of English as a Foreign Language (TOEFL) scores. All applicants must meet the requirements of the Graduate College. Admission is ordinarily in the fall semester, but occasional exceptions are made for spring and summer admission.

Faculty Research Interests

The faculty (https://reeec.illinois.edu/people/groups/faculty/) affiliated with the Center represent a broad range of interests and methodological approaches in the social sciences and the humanities, as well as the professional schools.

Facilities and Resources

The Russian, East European, and Eurasian Center was founded in 1959 and designated a National Resource Center by the U.S. Department of Education. It serves as an intellectual and institutional hub for the University community and the public through conferences, lectures, colloquia, visiting scholars, study groups, exhibits, films, and other activities.

The annual Summer Research Laboratory on Russia, Eastern Europe, and Eurasia features special workshops, seminars, lectures, films, and other events, most of which are free and open to the public.

The International and Area Studies Library (https://www.library.illinois.edu/ias/) at the University of Illinois has one of the country's three outstanding Slavic library collections (https://www.library.illinois.edu/ias/spx/). The Slavic Reference Service (https://www.library.illinois.edu/ias/spx/srs/) serves all faculty and students with expert bibliographers.

Language training is provided by the Departments of Germanic Languages & Literatures (https://germanic.illinois.edu/), Linguistics (https://linguistics.illinois.edu/), and Slavic Languages & Literatures (https://slavic.illinois.edu/) in:

- Bulgarian
- Bosnian, Croatian, Serbian
- Czech
- Old Church Slavonic
- Polish
- Russian
- Turkish
- Ukrainian
- Yiddish

Financial Aid

Financial aid is awarded on an academic-year basis. All fellowships and assistantships include a stipend plus tuition and fee waiver. Qualified incoming students who are U.S. citizens or permanent residents should also apply for U.S. Department of Education Title VI Foreign Language and Area Studies (FLAS) fellowships (http://publish.illinois.edu/illinoisflas/) offered through REEEC or other FLAS-granting campus centers.

Qualified students may also be eligible for other fellowships at the campus or departmental level. A limited number of teaching and graduate assistantships, which include a tuition and fee waiver, may also be available to outstanding students through REEEC and other units.The Graduate College maintains a list of available assistantships (https://grad.illinois.edu/clearinghouse/); additional information on need-based financial aid may be obtained from the Graduate College Fellowships Office (https://grad.illinois.edu/fellowships/about/).

for the Graduate Minor in Russian, East European, and Eurasian Studies

For additional details and requirements refer to the department's Graduate Programs (https://reeec.illinois.edu/academics/ma-program/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
IS 530	Collection Development (Section C: REEES Bibliog Research Methods)	2 or 4
or REES 550	Seminar in REEE Studies	

Electives (4 hours at the 500 level) At least 8 graduate hours that relate to Russia, Eastern Europe, or Eurasia chosen from the list of approved courses maintained by REEEC and taken outside the student's enrolling department.	8
Language Requirement: A minimum of two years or equivalent college-level study of a language of the area. For professional work in the region or scholarly research on area topics at least three years of relevant language study are recommended.	
Students must also submit a research paper primarily on the region.	
Total Hours	10-12

Other Requirements

Requirement	Description
Other requirements may overlap	
If students take both IS 530C and REES 550, credit for one may be applied to the elective requirement.	
A research paper primarily on the region. Typically this paper is written in a research seminar in a disciplinary department. A master's thesis or doctoral dissertation can be submitted in lieu of the research paper, if it deals primarily with the region. Students are encouraged to present their work in a public forum at the University, such as the REEEC Noontime Scholars lecture series.	

Statistics Graduate Minor

for the Graduate Minor in Statistics

Department Chair: Bo Li (https://stat.illinois.edu/directory/profile/libo/)
Associate Department Chair: Jeff Douglas (https://stat.illinois.edu/directory/profile/jeffdoug/)
MS Program Director: Darren Glosemeyer (https://stat.illinois.edu/directory/profile/glosemey/)
Graduate Contact: Joseph Zarnsy (stat-grad@illinois.edu)
Department Website: http://www.stat.illinois.edu/
College Website: https://las.illinois.edu/
Graduate College Admissions Info & Requirements (https://grad.illinois.edu/admissions/apply/)
Department Admissions Info & Requirements (https://stat.illinois.edu/admissions/prospective-graduate-students/)
Department Contact: Aaron Thompson
Department Office: Computing Applications Building, 605 E Springfield Ave, Champaign, IL 61820
Phone: (217) 333-2167
Email: stat-grad@illinois.edu

The Graduate Minor in Statistics is designed for doctoral students pursuing degrees in other fields who wish to enhance their statistical knowledge and credentials. Students within the major cannot minor in the same program. The Minor is taken in conjunction with, and is intended to complement the student's work in their primary disciplines. Admission to the minor requires an application to the Department and admission to a PhD program (MS track to PhD cannot apply until they are in the PhD program) in another field at the University of Illinois. Applications for the Minor are submitted upon completion of the required courses. Approval is contingent on having grade point average of 3.0 or better in the Minor. A total of three courses, constituting 12 graduate credit hours, are required for the minor in Statistics degree. At least 8 credit hours must be taken at the 500 level. No course substitutions allowed.

Graduate Degree Programs in Statistics

Statistics, MS (p. 1027)
concentrations:
Analytics (p. 1028)|Applied (p. 1029)
Statistics, PhD (p. 1029)
concentration:
Computational Science & Engineering (p. 1089)
Graduate Minor in Statistics (p. 1144)

for the Graduate Minor in Statistics

The Graduate Minor in Statistics is designed for doctoral students pursuing degrees in other fields who wish to enhance their statistical knowledge and credentials. Students within the major cannot minor in the same program. The Minor is taken in conjunction with, and is intended to complement the student's work in their primary disciplines. Admission to the minor requires an application to the Department and admission to a PhD program (MS track to PhD cannot apply until they are in the PhD program) in another field at the University of Illinois. Applications for the Minor are submitted upon completion of the required courses. Approval is contingent on having grade point average of 3.0 or better in the Minor. A total of three courses, constituting 12 graduate credit hours, are required for the minor in Statistics degree. At least 8 credit hours must be taken at the 500 level. No course substitutions allowed.

Code	Title	Hours
400-level Statistics coursework chosen from approved departmental list		4
500-level Statistics coursework chosen from approved departmental list		8
Total Hours		12

Students wishing information beyond that provided here should contact the Director of MS Studies in Statistics.

Supply Chain Management Graduate Minor

for the Graduate Minor in Supply Chain Management

interim chair of department: Cele Otnes
director of graduate studies: Deepak Somaya
director of admissions committee: Rakesh Bhatt
email: ba@business.illinois.edu
department website: https://giesbusiness.illinois.edu/msba (https://giesbusiness.illinois.edu/msba/)
department faculty: https://business.illinois.edu/people/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://giesbusiness.illinois.edu/
department office: 350 Wohlers Hall, 1206 S. Sixth Street, Champaign, IL 61820
phone: (217) 333-4240

This minor is available for these programs:

Accountancy, MAS (p. 542)
Accountancy, MS (p. 544)
Business Administration, MBA (p. 646)
Business Administration, MS (p. 646)
Technology Management, MS (p. 1048)

The minor in Supply Chain Management is designed to develop leaders who understand (1) how to assess the trade-offs and make the decisions necessary to sustain high quality products and services at lower costs while maintaining the flexibility necessary to adapt and to respond to evolving market trends; and (2) how to coordinate and integrate supply chain solutions across various intra -organizational and inter -organizational interfaces in any business or organization. The minor or concentration not only will provide a strong foundation in supply chain management principles and practices, but also can be tailored to fit the specific needs of students interested in careers across a wide variety of industries. This minor or concentration requires submission of twelve graduate hours of Supply Chain Management coursework. Successful completion of the minor or concentration assumes certain knowledge of business and prior coursework.

Graduate Degree Programs in Business Administration

Majors:

Business Administration, MBA (p. 642) **(online-iMBA)**
Business Administration, MS (p. 646)
with optional concentrations: Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Corporate Governance & International Business (p. 1090), Finance (p. 1096), Supply Chain Management (p. 1109)
Business Analytics, MS (p. 649)
Management, MS (p. 858)
with optional concentrations: Business Data Analytics (p. 1086), Finance, (p. 1096) Corporate Governance & International Business (p. 1090)
Technology Management, MS (p. 1048)
with optional concentrations: Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Finance (p. 1096), Information Technology & Control (p. 1100), Supply Chain Management (p. 1109)
Business Administration, PhD (p. 647)

Minors:

Information Technology & Control (p. 1136)
Corporate Governance & International Business (p. 1130)
Supply Chain Management (p. 1144)

Concentrations:

Business Data Analytics (p. 1086)
Corporate Governance & International Business (p. 1090)
Information Technology & Control (p. 1100)
Supply Chain Management (p. 1109)

Certificates:

Digital Marketing, CERT (p. 1115)
Entrepreneurship & Strategic Innovation, CERT (p. 1116)
Financial Management, CERT (p. 1117)
Global Challenges in Business, CERT (p. 1118)
Managerial Economics & Business Analysis, CERT (p. 1119)
Strategic Leadership Management, CERT (p. 1120)
Value Chain Management, CERT (p. 1121)

Joint Degree Program:

Accountancy, MS (iMSA) & Business Administration, MBA (iMBA) (http://catalog.illinois.edu/graduate/bus/joint-degree/accountancy-ms-business-mba-online/)

Admission

Admission to the minor or concentration requires submitting a Curriculum Change Form to the Department and Graduate College and admission to one of the approved programs. Admission is limited, and acceptance is on a competitive basis.

for the Graduate Minor in Supply Chain Management

In addition to the minor requirements, students must also complete the requirements of their major degree.

Please contact your department for more information regarding the addition of a minor to your program of study.

Code	Title	Hours
BADM 566	Supply Chain Management	2-4
BADM 567	Process Management	2-4
Select from the following:		
BADM 568	Planning and Control Systems	
BADM 569	Res Topics in Operations Mgt	
BADM 590	Seminar in Business Admin (Section OM)	
BADM 590	Seminar in Business Admin (Section SS)	
Total Hours:		**12**

Online and Site-Based Graduate Programs

Many graduate programs are offered completely online or in a format of online with some campus visits required. Some programs are offered at site-based locations throughout Illinois. Click on the programs below for more details.

Accountancy, iMSA (http://catalog.illinois.edu/graduate/graduate-majors/accountancy/msa-online/)
- Accountancy Analytics (p. 546) | Data Analytics in Accountancy (p. 1091) | Taxation (p. 1110)

Aerospace Engineering, MS (http://catalog.illinois.edu/graduate/ms-aero-engin/#degreerequirementstext)
Agricultural Education, MS (http://catalog.illinois.edu/graduate/graduate-majors/ag-education/ms-ag-ed/)
Animal Sciences, MANSC (p. 568)
Bioengineering, MEng (http://catalog.illinois.edu/graduate/meng_bioengin/)
- Bioinstrumentation (p. 617) | Computational Genomics (p. 618) | Entrepreneurship & Innovation (http://catalog.illinois.edu/graduate/engineering/concentration/entrepreneurship-innovation/) | General Bioengineering (p. 620) | Pharmaceutical Engineering (p. 1103)

iMBA, Online MBA (p. 642)
Civil Engineering, MS (http://catalog.illinois.edu/graduate/graduate-majors/civil-environ-engin/ms-all/)
Communication, MA (p. 670)
Computer Science, MCS (http://catalog.illinois.edu/graduate/graduate-majors/computer-science/master-sci-comp-sci/)
Crop Sciences, MS (http://catalog.illinois.edu/graduate/graduate-majors/crop-sciences/ms-crop/)
Curriculum and Instruction, EDM (http://catalog.illinois.edu/graduate/graduate-majors/ed-curriculum-inst/me-curr-instr/)
Education Policy, Organization and Leadership, EdM (p. 718)
Education Policy, Organization and Leadership, EdD (p. 722)
Environmental Engineering in Civil Engineering, MS (http://catalog.illinois.edu/graduate/graduate-majors/civil-environ-engin/ms-all/)
Food Science and Human Nutrition, MS (p. 766)
Health Communication, MS (http://catalog.illinois.edu/graduate/graduate-majors/communication/ms-health-comm/)
Human Resources and Industrial Relations, MHRIR (http://catalog.illinois.edu/graduate/ms-mhrir/#degreerequirementstext)
Industrial Engineering, MS (p. 814)
Information Management, MS (http://catalog.illinois.edu/graduate/graduate-majors/library-info-sci/ms-info-mngmt/#degreerequirementstext)
Library and Information Science, CAS (http://catalog.illinois.edu/graduate/cas_lis/)
Library and Information Science, MS (http://catalog.illinois.edu/graduate/graduate-majors/library-info-sci/ms-library-info-sciences/#degreerequirementstext)
Management, MS (iMSM) (p. 858)
Mechanical Engineering, MENG (p. 869)
Mechanical Engineering, MS (p. 870)
Natural Resources and Environmental Sciences, MS (http://catalog.illinois.edu/graduate/graduate-majors/nres/ms-nres/)
Recreation, Sport and Tourism, MS (http://catalog.illinois.edu/graduate/graduate-majors/rec-sport-tourism/ms-rec-sport-tour/)
Social Work, MSW (p. 1003)
Special Education, EdM (http://catalog.illinois.edu/graduate/graduate-majors/ed-specialed/edm-special-education/)
Strategic Brand Communication, MS (http://catalog.illinois.edu/graduate/graduate-majors/bus-admin-ms/ms-strategic-brand-communication/#text)
Taxation, MS (p. 1149)
Teaching of Biological Science, MS (http://catalog.illinois.edu/graduate/graduate-majors/biology-mst/#onlinetext)
Translation and Interpreting, MA (p. 1059)

GRADUATE JOINT DEGREE PROGRAMS

Joint degree programs allow students to pursue two graduate degrees simultaneously, where the total time for the two degrees is decreased. A student who wishes to enter a joint degree program must be admitted separately to each program as a joint degree candidate. Find out more about joint degree programs at the Graduate College (http://www.grad.illinois.edu/gradhandbook/)**. These degrees listed can be earned jointly with any one listed below it:**

Accountancy

Accountancy, MS (iMSA) & Business Administration, MBA (iMBA) (http://catalog.illinois.edu/graduate/bus/joint-degree/accountancy-ms-business-mba-online/)

African Studies

African Studies, MA & Library & Information Science, MS (p. 1149)

Architecture

Architecture, MARCH & Architectural Studies, MS (p. 1150)
Architecture, MARCH & Civil Engineering, MS (p. 1150)
Architecture, MARCH & Computer Science, MCS (p. 1151)
Architecture, MARCH & Urban Planning, MUP (p. 1151)

Business Administration

Business Administration, MBA (iMBA) & Accountancy, MS (iMSA) (http://catalog.illinois.edu/graduate/bus/joint-degree/accountancy-ms-business-mba-online/)

Chemistry

Chemistry, MS & Law, JD (p. 1157)

Civil Engineering

Civil Engineering, MS & Architecture, MARCH (p. 1150)

Community Health

Community Health, PhD & Public Health, MPH (p. 1162)

Computer Science

Computer Science, MCS & Architecture, MARCH (p. 1151)
Computer Science, MCS & Law, JD (p. 1151)

Food Science & Human Nutrition

Food Science & Human Nutrition, PhD & Public Health, MPH (p. 1152)

History

History, MA & Library and Information Science, MS (p. 1153)

Human Development & Family Studies

Human Development & Family Studies, PhD & Public Health, MPH (p. 1154)

Human Resources & Industrial Relations

Human Resources & Industrial Relations, MHRIR and Law, JD (p. 1156)

Journalism

Journalism, MS and Law, JD (p. 1156)

Kinesiology

Kinesiology, PhD & Public Health, MPH (p. 1162)

Landscape Architecture

Landscape Architecture, MLA & Urban Planning, MUP (p. 1157)

Law

Law, JD & Chemistry, MS (p. 1157)
Law, JD & Computer Science, MCS (p. 1151)
Law, JD & Human Resources & Industrial Relations, MHRIR (p. 1156)
Law, JD & Journalism, MS (p. 1156)
Law, JD & Natural Resources and Environmental Sciences, MS (p. 1158)
Law, JD & Political Science: Civic Leadership Concentration, MA (p. 1162)
Law, JD & Political Science, PhD (p. 1162)
Law, JD & Urban Planning, MUP (p. 1168)

Library and Information Science, MS

African Studies, MA and Library & Information Science, MS (p. 1149)
History, MA & Library and Information Science, MS (p. 1153)
Library and Information Science, MS & (p. 1166)
Russian, East European, and Eurasian Studies, MA (http://catalog.illinois.edu/graduate/graduate-majors/russ-east-euro-studies/ma-rees-ms-lis/)

Medical Scholars Program

MD & any PhD program offered on campus (p. 1170)

Natural Resources & Environmental Sciences

Accountancy: Taxation, MAS

for the degree of Master of Accounting Science, Taxation concentration

chair of department: Theo Sougiannis
director of graduate studies: Nerissa Brown
associate director of graduate studies: Ashley Lamb
department website: https://giesbusiness.illinois.edu/accountancy (https://giesbusiness.illinois.edu/accountancy/)
program website: https://giesbusiness.illinois.edu/accountancy/programs/msa/
college website: https://giesbusiness.illinois.edu/ (https://business.illinois.edu/)
overview of graduate college admissions & requirements: Graduate Admissions (https://grad.illinois.edu/admissions/apply/)
overview of college admissions & requirements: Gies Catalog (http://catalog.illinois.edu/schools/gies-business/academic-units/)
department office: 360 Wohlers Hall, 1206 South Sixth, Champaign, IL 61820
phone: (217) 333-0857
email: accy@illinois.edu

The MAS program is a one-year program for students who have completed or are pursuing a Bachelor of Science in Accountancy from a regionally accredited U.S. institution. The Concentration in Taxation is one of the core concentrations available within the MAS program.

Students in the Taxation concentration are also required to choose a secondary concentration. Elective concentration options include: Corporate Governance & International Business (p. 1090), Data Analytics in Accountancy (p. 1091), Finance (http://catalog.illinois.edu/graduate/bus/concentration/finance/finance/), Financial Reporting & Assurance (http://catalog.illinois.edu/graduate/bus/concentration/accy/data-analytics-accountancy/), Information Technology & Control (p. 1100), Real Estate (p. 1105), and Supply Chain Management (p. 1109).

Graduate Degree Programs in Accountancy

Graduate Majors:

Accountancy, MAS (p. 542)
with optional concentrations: Business & Public Policy (p. 1087), Corporate Governance & International Business (p. 1090), Data Analytics in Accountancy (p. 1091), Finance (http://catalog.illinois.edu/graduate/bus/concentration/finance/finance/), Information Technology & Control (p. 1100), Real Estate (p. 1105), Supply Chain Management (p. 1109), Taxation (p. 1149)

Accountancy, MS (p. 544) **(on campus & online)**
with optional concentrations: Business & Public Policy (p. 1087), Corporate Governance & International Business (p. 1090), Data Analytics in Accountancy (p. 1091), Finance (http://catalog.illinois.edu/graduate/bus/concentration/finance/finance/), Information Technology & Control (p. 1100), Supply Chain Management (p. 1109)

Accountancy, PhD (p. 547)

Graduate Minors:

Accountancy (p. 1122)

Graduate Concentrations:

Accountancy (p. 1073)
Data Analytics in Accountancy (p. 1091)

for the degree of Master of Accounting Science in Accountancy, Taxation concentration

For additional details and requirements refer to the department's program information online *(*https://business.illinois.edu/accountancy/programs/mas/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Code	Title	Hours
ACCY 551	Corporate Income Taxation	4
ACCY 552	Partnership Income Taxation	4
ACCY 556	Tax Research	4
Total Hours		12

Other Requirements

Requirement
Course substitutions may be approved by the Department of Accountancy.
Other requirements may overlap.

African Studies, MA and Library & Information Science, MS

for the degrees of African Studies, MA and Library & Information Science, MS

This joint master's degree includes a program of language and area studies courses leading to an interdisciplinary Master of Arts degree in African Studies as well as a program of study leading to the Master of Science in Library and Information Science. The joint degree matches area expertise with professional education, and prepares students for

professional careers in all types of information organizations, including libraries.

Thesis Option

Code	Title	Hours
IS 505	Information Organization and Access	4
IS 510	Libraries, Information and Society	4
IS 530	Collection Development	4
IS 590	Advanced Topics in Information Foundations	1 to 4
LIS elective courses selected in consultation with an advisor who is a member of the iSchool faculty. (IS 591, 2 hours and IS 592, up to 4 hours, may be included)		12-14
AFST 522	Development of African Studies	4
African language proficiency at level of 6 semesters of course work (includes Arabic) NOTE: Hours for language can't be applied toward degree requirements, but is included in the calculation of the GPA.		
Elective courses from the approved African Studies course list selected in consultation with an advisor who is a member of the African Studies faculty (coursework must be from 3 different disciplines; 8 hours must be at the 500-level, excluding AFST 550 and AFST 599; Maximum 4 hours of AFST 550 may be used) Electives and thesis must total at least 24 hours.		16-24
AFST 599	Thesis Research	8
Total Hours		53-56

Other Requirements [1]

Requirement
Other requirements may overlap
Minimum 500-level Hours Required Overall: 24
Minimum GPA: 3.25

[1] *For additional details and requirements, refer to the unit's* Graduate Programs of Study *(*https://ischool.illinois.edu/degrees-programs/*) and the* Graduate College Handbook *(*https://grad.illinois.edu/gradhandbook/*).*

Non-Thesis Option

Code	Title	Hours
IS 505	Information Organization and Access	4
IS 510	Libraries, Information and Society	4
IS 530	Collection Development	4
IS 590	Advanced Topics in Information Foundations	1 to 4
LIS elective courses selected in consultation with an advisor who is a member of the iSchool faculty. (IS 591, 2 hours and IS 592, up to 4 hours, may be included)		12-14
AFST 522	Development of African Studies	4
African language proficiency at level of 6 semesters of course work (includes Arabic) NOTE: Hours for language can't be applied toward degree requirements, but is included in the calculation of the GPA.		
Elective courses from the approved African Studies course list selected in consultation with an advisor who is a member of the African Studies faculty (coursework must be from 3 different disciplines; 8 hours must be at the 500-level, excluding AFST 550 and AFST 599; Maximum 4 hours of AFST 550 may be used) Electives and thesis must total at least 24 hours.		24
Total Hours		53-56

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall:	24
Minimum GPA:	3.25

[1] *For additional details and requirements, refer to the unit's* Graduate Programs of Study *(*https://ischool.illinois.edu/degrees-programs/*) and the* Graduate College Handbook *(*https://grad.illinois.edu/gradhandbook/*).*

Architecture, MARCH & Architectural Studies, MS

Master of Architecture and Master of Science in Architectural Studies

The School of Architecture offers a joint Master of Architecture (M.Arch.)/ Master of Science in Architectural Studies (MS in AS) degree program for students interested in pursuing both an M.Arch. degree as well as one of the concentrations offered through the MS in AS degree program. Completion of in-depth programs (e.g. Structures) will result in recording of the Concentration on the student's transcript under the MS in AS degree.

Students interested in participating in the joint M.Arch./MS in AS degree program must complete a minimum of 82 credit hours of graduate work.

Students with no undergraduate degrees in architecture and participating in the M.Arch. 2+ degree program may petition to enter the joint M.Arch./MS in AS degree program upon completion of their required undergraduate courses.

The MS in AS degree is not a NAAB accredited program. The M.Arch. degree is a professional degree accredited by the National Architectural Accreditation Board (NAAB) and has the STEM designation.

Architecture, MARCH & Civil Engineering, MS

for the Joint Degrees in Civil Engineering, MS and Architecture, MARCH

overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)

Architecture

overview of admissions & requirements: https://arch.illinois.edu/programs-applying/admissions/
department website: http://arch.illinois.edu
address: 117 Temple Hoyne Buell Hall, 611 Taft Drive, Champaign, IL 61820
phone: (217) 333-7720
email: arch-grad@illinois.edu

Civil & Environmental Engineering

overview of admissions & requirements: https://cee.illinois.edu/academics/graduate-programs/ms-degree-and-curriculum (https://cee.illinois.edu/academics/graduate-programs/ms-degree-and-curriculum/)
department website: https://cee.illinois.edu/
address: 1108 Newmark Civil Engineering Lab, 205 N Mathews Ave, Urbana, IL 61801
phone: (217) 265-4496
email: civil@illinois.edu

Civil Engineering, MS and Architecture, MARCH

This joint degree program offers qualified applicants the opportunity to develop competence in a career that combines the disciplines of architecture and civil engineering (construction management) or (structures). For entry into these programs, applicants must satisfy the admission and performance requirements of each academic unit. Application for admission should be made to the School of Architecture. Admission to the other unit may be sought after the first semester of graduate study in architecture.

Candidates entering the program with a four-year baccalaureate in architectural studies must complete at least 78 (32 in Civil Engineering and 46 in Architecture) hours of graduate work and, if admitted with full status, may complete the program in five semesters. Candidates entering the program with a five-year Bachelor of Architecture degree must complete 64 hours of graduate work and, if admitted with full status, may complete the program in four semesters.

Architecture, MARCH & Computer Science, MCS

for the Joint Degrees in Architecture, MARCH and Computer Science, MCS

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overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)

Architecture

overview of admissions & requirements: https://arch.illinois.edu/degrees/graduate-admissions (https://arch.illinois.edu/degrees/graduate-admissions/)
department website: http://arch.illinois.edu
address: 117 Temple Hoyne Buell Hall, 611 Taft Drive, Champaign, IL 61820
phone: (217) 333-7720
email: arch-grad@illinois.edu

Computer Science

overview of admissions & requirements: https://cs.illinois.edu/admissions/graduate (https://cs.illinois.edu/admissions/graduate/)
department website: https://cs.illinois.edu/
address: 1210 Siebel Center, 201 N Goodwin Ave, Urbana, IL 61801
phone: (217) 333-4428
email: academic@cs.illinois.edu

A total of 70 graduate hours of credit are required: 38 hours for the MARCH in Architecture (p. 579) degree and 32 hours for the MCS in Computer Science (p. 679) degree. Course credit required for the individual degrees is mutually exclusive.

Architecture, MARCH & Urban Planning, MUP

Master of Architecture and Master of Urban Planning

This joint degree program offers an opportunity to obtain an education for a career that combines the disciplines of architecture and urban planning. For entry into this program, applicants must satisfy the admission requirements of each academic unit. Application for admission may be made either simultaneously to both units or in sequence.

Candidates entering the program with a four-year baccalaureate in architectural studies must complete at least 86 hours of graduate work (54 in Architecture and 32 in Urban Planning) and, if admitted with full status, may complete the program in six semesters and one summer session. Candidates entering the program with a five-year Bachelor of Architecture degree must complete at least 64 hours of graduate work (32 in Architecture and 32 in Urban Planning) and, if admitted with full status, may complete the program in four semesters and a summer session.

Computer Science, MCS & Law, JD

Joint Degrees in Computer Science, MCS & Law, JD

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overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)

Computer Science

overview of admissions & requirements: https://cs.illinois.edu/admissions/graduate (https://cs.illinois.edu/admissions/graduate/)
department website: https://cs.illinois.edu/
address: 1210 Siebel Center, 201 N Goodwin Ave, Urbana, IL 61801
phone: (217) 333-4428
email: academic@cs.illinois.edu

Law

overview of admissions & requirements: https://law.illinois.edu/admissions/jd-admissions/
department website: https://law.illinois.edu
address: 244 Law Bldg, 504 E Pennsylvania Avenue, Champaign, IL 61820
phone: (217) 333-6066
email: law-gradprograms@illinois.edu

Specific graduate hours of credit for each degree are required: 32 hours for the MCS in Computer Science (p. 679) and 90 hours for the JD in Law (http://catalog.illinois.edu/graduate/graduate-majors/law/). However, some credits used in each program may apply to the other, allowing students to earn both degrees in a shorter time. For the MCS degree

1. at least 12 credit hours must be law course work relating to legal protections for intellectual property or in related business law fields and
2. at least 6 credit hours must be from approved law courses as determined by the College of Law.

For the JD degree, 12 credit hours may be computer science or other scientific course work leading to the MCS degree.

Food Science & Human Nutrition, PhD and Public Health, MPH

for the joint program Doctor of Philosophy in Food Science & Human Nutrition and Master of Public Health in Public Health

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department head: Nicki Engeseth
associate head of graduate programs: Michael Miller (mille216@illinois.edu)
overview of admissions & requirements: https://fshn.illinois.edu/graduate/apply (https://fshn.illinois.edu/graduate/apply/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://fshn.illinois.edu/
program website: https://fshn.illinois.edu/graduate/program-overview (https://fshn.illinois.edu/graduate/program-overview/)
department faculty: https://fshn.illinois.edu/directory/faculty/
college website: https://aces.illinois.edu/
address: 260 Bevier Hall, 905 South Goodwin Avenue, Urbana, IL 61801
phone: (217) 244-4498
email: FSHNGradAdmissions@illinois.edu (fshngradadmissions@illinois.edu)

The M.P.H. can be earned jointly with the Ph.D. in Food Science & Human Nutrition. In the joint program, up to 12 hours of coursework may be applied to both degrees, and the degrees are conferred simultaneously at the completion of the program.

Graduate Degree Programs in Food Science & Human Nutrition

Graduate Majors:
- Food Science & Human Nutrition, MS (p. 766) **(on campus & online)**
  - **concentrations:**
    - Food Science (p. 768)
    - Human Nutrition (p. 770)
- Food Science and Human Nutrition, MS – Professional Science Master's (p. 773)
- Food Science and Human Nutrition, PhD (p. 775)
  - **concentrations:**
    - Food Science (p. 776)
    - Human Nutrition (p. 779)

Joint Degree Program:
- Food Science & Human Nutrition, PhD and Master of Public Health, MPH (p. 1152)

Research Areas

In addition to receiving training in the general field of food science or human nutrition, students have the opportunity to conduct research in the following areas of specialization:

- **Food processing, engineering, and biotechnology**
- **Food ingredients, properties, and interactions**
- **Food microstructures, micro-carriers, and nanotechnology**
- **Food chemistry**
- **Food microbiology and biomass conversion**
- **Food safety and security**
- **Sensory sciences**
- **Dietary quality and food and nutrition patterns for optimal health**
- **Nutrition and disease interactions, including cancer, metabolic disorders, and gastrointestinal health**
- **Nutrition across the life span**
- **Biochemical and molecular nutrition**
- **Clinical nutrition**
- **Community nutrition**

For additional information go to fshn.illinois.edu/graduate (http://fshn.illinois.edu/graduate/).

The PSM involves rigorous scientific training in the area of food science and/or human nutrition; additionally, instruction is provided in applied business knowledge and skills. This program is designed for those who seek careers in a science-based setting with significant managerial and leadership responsibilities. For additional information go to psm.illinois.edu/prospectivestudents/programs/foodscience.htm (http://psm.illinois.edu/prospectivestudents/programs/foodscience.htm).

Admission

In addition to meeting the Graduate College admission requirements, a student planning to pursue a graduate degree in the department should have a baccalaureate degree in a recognized field of biological, physical, agricultural, or engineering science. Background deficiencies

may be removed with graduate credit courses designed for this purpose. Graduate Record Examination (GRE) scores are required of all applicants, and those whose native language is not English are required to submit the results of the TOEFL or IELTS as evidence of English proficiency. Minimum TOEFL and IELTS scores can be found at grad.illinois.edu/admissions/instructions/04c (http://www.grad.illinois.edu/admissions/instructions/04c/). Students can be admitted to start in fall, spring, or summer semesters except for the PSM concentration, which admits fall semester only. For information on the role faculty have in the admissions process go to fshn.illinois.edu/graduate/applying (http://www.fshn.illinois.edu/graduate/applying/).

Internship in Dietetics

The Department of Food Science and Human Nutrition offers a dietetic internship for master's and doctoral students specializing in human nutrition. Completion of the degree and the internship qualifies the student to take the Academy of Nutrition and Dietetics registration examination administered by the Commission on Dietetic Registration. For information on our dietetic internship program please contact Ms. Jessica Madson (jamadson@illinois.edu).

Online Program

A non-thesis Master of Science in Food Science program is offered via live, synchronous online sessions using distance education technology. The program ensures the same degree of excellence, and courses are instructed by the same faculty, as the on-campus non-thesis program. Courses are typically offered in the evening. For requirements and additional information, please contact Dr. Dawn Bohn at dbrehart@illinois.edu.

Graduate Teaching Experience

Teaching is neither a Graduate College nor a FSHN requirement. A limited number of teaching assistantships are available to FSHN graduate students. Students are selected to be Graduate Teaching Assistants by the Department Head in consultation with the course instructor.

Financial Aid

Illinois PSM students may not hold assistantships or other tuition and fee waiver-generating appointments; statutory waivers and tuition scholarships are accepted. Financial aid for non-PSM graduate students is available in the form of fellowships, teaching and research assistantships, and tuition and partial fee waivers. Qualified candidates are considered for financial support upon application. Additional information on financial aid for graduate students can be found at fshn.illinois.edu/graduate/financial-assistance (http://fshn.illinois.edu/graduate/financial-assistance/).

for the joint program Doctor of Philosophy in Food Science & Human Nutrition and Master of Public Health in Public Health

The M.P.H. can be earned jointly with the Ph.D. in Food Science & Human Nutrition. In the joint program, up to 12 hours of coursework may be applied to both degrees, and the degrees are conferred simultaneously at the completion of the program.

For additional details and requirements refer to the department's graduate handbook (http://fshn.illinois.edu/graduate/student-handbook/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
CHLH 410	Public Health Practice	4
CHLH 469	Environmental Health	4
CHLH 540	Health Behavior: Theory	4
CHLH 550	Health Policy: United States	4
CHLH 572	Principles of Epidemiology	4
CHLH 573	Biostatistics in Public Health	4
CHLH 575	Chronic Disease Prevention	4
CHLH 577	Health Program Evaluation	4
CHLH 594	Special Topics	4
CHLH 587	MPH Applied Practice Experience	4
CHLH 589	MPH Integrative Learning Experience	2
Area of concentration coursework from approved list, min 3 (may be met by Ph.D. core courses)		
Electives and seminars, min 3 (may be met by Ph.D. core courses)		
FSHN Concentration-specific coursework selected in consultation with advisor [1]		26
Electives from Ph.D. departmental list (may be met by M.P.H. core courses) (At least 3 must be must be graded courses at the 500-level)		
FSHN 599	Thesis Research (min/max applied toward degree)	32-38
Total Hours		100

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum 500-level hours required overall in the program:	12 (8 within M.P.H.)
Additional courses may be required beyond the concentration minimum per Advisory Committee.	
Approved Masters Degree Required for Admission?	No
Qualifying Exam Required:	Yes
Preliminary Exam Required:	Yes
Final Exam/Dissertation Defense Required:	Yes
Minimum GPA:	3.0

History, MA and Library & Information Science, MS

for the degrees of History, MA and Library & Information Science, MS

department websites: History (http://www.history.illinois.edu) **or** School of Information Sciences (https://ischool.illinois.edu/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
phone: (217) 244-2591
history email: history@illinois.edu
school of information science email: Moises Orozco Villicana, Director of Enrollment Management at: orozco6@illinois.edu

This joint interdisciplinary master's degree program includes a program of courses leading to a Master of Arts degree in History as well as a Master of Science in Library and Information Science. The joint degree program matches expertise in historical research and writing with professional education, and prepares students for professional careers in archives, libraries, museums, historical societies, corporations, and government agencies.

The joint degree program requires 56 credit hours divided between History and iSchool courses. No more than 12 hours can double count.

for the degrees of History, MA and Library & Information Science, MS

This joint interdisciplinary master's degree program includes a program of courses leading to a Master of Arts degree in History as well as a Master of Science in Library and Information Science. The joint degree program matches expertise in historical research and writing with professional education, and prepares students for professional careers in archives, libraries, museums, historical societies, corporations, and government agencies.

The joint degree program requires 56 credit hours divided between History and iSchool courses. No more than 12 hours can double count.

Code	Title	Hours
IS 505	Information Organization and Access	4
IS 510	Libraries, Information and Society	4
Elective IS courses, selected in consultation with an advisor who is a member of the iSchool faculty. Electives may include:		20-22
IS 591	Advanced Topics in Information Services (2 hours, satisfactory/unsatisfactory)	
IS 592	Advanced Topics In Information Organizations (up to 4 hours)	
HIST 593	Approaches to History	4
HIST 594	Intro Historical Writing	4
HIST coursework in one of the graduate fields of specialization offered by the department or a constructed field approved by the department, 4 of which must be at the 500-level and 4 of which must be taken as a research seminar.		8
Electives selected in consultation with an advisor who is a member of the History Department. These may include up to 8 hours for thesis research (HIST 599).		12
Total Hours:		**56**

Other Requirements

Requirement	Description
Language Requirement: Students must demonstrate competency in one foreign language appropriate to the main field of study. Credit hours from language courses do not count towards the degree.	
Students in the joint degree must be registered in each program for at least one semester.	
Minimum GPA:	3.25

Human Development & Family Studies, PhD and Public Health, MPH

for the joint program of Master of Public Health and Doctor of Philosophy in Human Development & Family Studies

The Ph.D. in Human Development & Family Studies can be earned jointly with the M.P.H. In the joint program up to 12 hours of coursework may be applied to both degrees, and the degrees are conferred simultaneously at the completion of the program.

Code	Title	Hours
CHLH 410	Public Health Practice	4
CHLH 469	Environmental Health	4
CHLH 540	Health Behavior: Theory	4
CHLH 550	Health Policy: United States	4
CHLH 572	Principles of Epidemiology	4
CHLH 573	Biostatistics in Public Health	4
CHLH 575	Chronic Disease Prevention	4
CHLH 577	Health Program Evaluation	4
CHLH 594	Special Topics (Cultural Competence and Health Promotion)	4
CHLH 587	MPH Applied Practice Experience	4
CHLH 589	MPH Integrative Learning Experience	2
Area of concentration coursework from approved list (may be met by Ph.D. core courses)		
Electives and seminars (may be met by Ph.D. core courses)		
Ph.D. Theory Courses		
HDFS 501	Human Development Theories	4
HDFS 521	Family Theories	4
HDFS 533	Community In American Society	4
Ph.D. Substantive Courses		
Select four of the following:		16
HDFS 503	Social-Emotional Development	
HDFS 505	Advanced Adolescence	
HDFS 523	Ethnic Families	
HDFS 525	Family Interaction	
HDFS 526	Intimate Partner Violence	
HDFS 527	Family Resiliency	
HDFS 528	Parenting	
HDFS 540	Gender & Sexuality	

HDFS 534	Neighborhoods and Human Dev	
HDFS 539	Youth, Culture and Society	
HDFS 543	Ethnography Urban Communities	
WGGP 581	Gender Relations & Intl Dev	
Ph.D. Quantitative Methods		**4**
An advanced statistics course		
Ph.D. Qualitative Methods		**8**
HDFS 591	Qualitative Methods	
Professional Development		**2**
HDFS 500	Professional Development	
HDFS 599	**Thesis Research**	**0 to 16**
Total Hours		100

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
A concentration is required	
Minimum Number of 500-level Hours Required Overall in Program:	12 (8 within M.P.H.)
Approved Masters Degree Required for Admission?	No
Qualifying Exam Required	Yes
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the department's* Graduate Program Information *(*http://www.hcd.illinois.edu/student_information/graduate/grad_handbook.html*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Human Resources & Industrial Relations, MHRIR and Business Administration, MBA

for the joint degrees of Human Resources & Industrial Relations, MHRIR and Business Administration, MBA

Currently we are not accepting application for the joint MHRIR/MBA

LER school graduate office: 504 East Armory Avenue, Champaign, IL 61820
school website: https://ler.illinois.edu/
on-campus program contact: Becky Barker
email: ebarker@illinois.edu
phone:(217) 333-1482
GIES college office: Business Instructional Facility, Room 3019, 515 E. Gregory, Champaign, IL 61820
department website: https://business.illinois.edu/mba/
college catalog page: Gies Catalog (p. 1202)
college website: https://business.illinois.edu/
phone: (217) 244-7602
email: mba@illinois.edu

This joint program with the MBA program is usually completed in two-and-one-half years. Independent admission decisions are made by each unit, and the student must be accepted by both. The degrees are awarded simultaneously upon completion of all joint degree requirements. Students are required to spend three semesters in MBA and two semesters in LER.

for the joint degrees of Human Resources & Industrial Relations, MHRIR and Business Administration, MBA

For additional details and requirements refer to the department's Student Handbook (https://ler.illinois.edu/wp-content/uploads/2015/01/CurrentStudents_LERHandbook.pdf) and the Graduate College Handbook (http://www.grad.uiuc.edu/gradhandbook/).

Thesis Option

Code	Title	Hours
At least one course in each of four subject areas		16
LER 591	Employment Relations Systems	4
LER 593	Quantitative Methods in LER	4
Electives		4
LER 599	Thesis Seminar (min/max applied toward degree)	8
MBA Hours		**60**
Hours in LER		**36**

Non-Thesis Option

Code	Title	Hours
At least one course in each of four subject areas		16
LER 591	Employment Relations Systems	4
LER 593	Quantitative Methods in LER	4
Electives		12
MBA hours		**60**
Hours in LER		**36**

Other Requirements

Other requirements may overlap	
Minimum 500-level Hours Required Overall	12
Registration in MBA for at least three semesters is required	
Minimum GPA:	3.0

Human Resources & Industrial Relations, MHRIR and Law, JD

for the joint degrees of Human Resources & Industrial Relations, MHRIR and Law, JD

LER school graduate office: 504 East Armory Avenue Champaign, IL 61820
school website: https://ler.illinois.edu/
on-campus program contact: Becky Barker
email: ebarker@illinois.edu
phone:(217) 333-1482
LAW school office: 504 East Pennsylvania Avenue Champaign, IL 61820
school website: https://law.illinois.edu/
phone:(217) 333-0931

This joint degree program with the College of Law is usually completed in three-and-one-half years. Students must apply to both the College of Law and the School of Labor and Employment Relations, and must be accepted by both units. The degrees are awarded simultaneously upon successful completion of all joint degree requirements. Students must spend five semesters in law and two semesters in LER.

for the joint degrees of Human Resources & Industrial Relations, MHRIR and Law, JD

Thesis Option

Code	Title	Hours
At least one course in each of four subject areas		16
LER 591	Employment Relations Systems	4
LER 593	Quantitative Methods in LER	4
Labor and Employment Law is required but can be taken in Law or LER		
Electives		4
LER 599	Thesis Seminar (min/max applied toward degree)	8
Hours in Law		**74**
Hours in LER		**36**

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the department's* Student Handbook *(*https://ler.illinois.edu/wp-content/uploads/2015/01/CurrentStudents_LERHandbook.pdf*) and the* Graduate College Handbook *(*http://www.grad.uiuc.edu/gradhandbook/*).*

Non-Thesis Option

Code	Title	Hours
At least one course in each of four subject areas		16
LER 591	Employment Relations Systems	4
LER 593	Quantitative Methods in LER	4
Labor and Employment Law is required but can be taken in Law or LER		
Electives		12
Hours in Law		**74**
Hours in LER		**36**

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall:	12
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the department's* Student Handbook *(*https://ler.illinois.edu/wp-content/uploads/2015/01/CurrentStudents_LERHandbook.pdf*) and the* Graduate College Handbook *(*http://www.grad.uiuc.edu/gradhandbook/*).*

Journalism, MS and Law, JD

for the degrees of Master of Science in Journalism and Juris Doctor in Law

head of department: Stephanie Craft
director of graduate studies: Brant Houston
email: j (houstonb@illinois.edu)ourn@illinois.edu (journ@illinois.edu)
department website: https://media.illinois.edu/journalism (https://media.illinois.edu/journalism/degrees-programs/)
department faculty: https://media.illinois.edu/journalism/faculty (https://media.illinois.edu/journalism/faculty/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://media.illinois.edu/
department office: 119 Gregory Hall, 810 S. Wright Street, Urbana, IL 61801
phone: (217) 333-0709

Interested students should contact the JD program and their major department for more information.

Programs in Journalism

Undergraduate Programs:
- **major:** Journalism, BS (p. 250)
- **major:** Journalism, BS-MJ (p. 460)
- **minor:** Journalism (p. 506) | Media (p. 513)

Graduate Programs:
- **degree:** Journalism, BS-MJ (p. 460)
- **degree:** Journalism, MS (p. 828)
- **joint degree:** Journalism, MS and Law, JD (p. 1156)

The department does not offer a Ph.D. degree. For the program leading to the Doctor of Philosophy in Communications, see Communications and Media, PhD (p. 672).

for the degrees of Master of Science in Journalism and Juris Doctor in Law

For additional details and requirements refer to the department and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Requirements

Code	Title	Hours
Requirements for the J.D. in Law (up to 15 hours of which may be fulfilled by Journalism coursework)		90
Journalism M.S. requirements (4-16 hours may be satisfied with Law coursework depending on Journalism experience)		32
Total Hours		91

Other Requirements

Minimum 500-level Hours Required Overall in both programs:	75
Minimum GPA:	3.0

Landscape Architecture, MLA & Urban Planning, MUP

for the degrees of Master of Landscape Architecture and Master of Urban Planning

overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
overview of joint degree requirements: https://grad.illinois.edu/sites/grad.illinois.edu/files/pdfs/handbook.pdf **[Part II, section 3.5]**
Urban + Regional Planning department website: https://urban.illinois.edu/
Landscape Architecture department website: http://landarch.illinois.edu
college website: https://faa.illinois.edu/

For the joint program, at least 40 hours must be in Urban Planning, including all core courses and capstone requirements. The two programs must total a minimum of the sum of 40 Urban Planning hours plus the required number of hours for the Master of Landscape Architecture, 48. At its discretion, Landscape Architecture may count up to 8 hours of Urban Planning courses as electives in meeting its degree requirements as long as the student is required to take no fewer than 40 additional hours in Landscape Architecture. The MUP capstone requirement may be waived for a thesis completed in Landscape Architecture provided faculty from both programs participate on the thesis committee.

Code	Title	Hours
Urban Planning core capstone and area requirements		40
LA 470	Social/Cultural Design Issues	3
LA 501	Landscape Arch Theory & Prac	2
Specialization area coursework		27-35
Internship		
Additional undergraduate coursework will be required of students without a BLA. These prerequisites do not count toward the graduate degree.		
LA 599	Thesis Research (min/max applied toward degree)	8
Total Hours		80-88

Other Requirements [1]

Other requirements may overlap	
Minimum Hours Required Within the Unit:	24
Minimum 500-level Hours Required Overall:	18
Enrollment in each program at least 2 semesters	
Up to 8 hours of UP coursework may be applied to the LA degree at the department's discretion.	
If pursuing the thesis option, the thesis committee chair must be full-time in Landscape Architecture and one committee member must be from Urban Planning.	
Minimum GPA:	3.0

For additional details and requirements contact the Department of Landscape Architecture - ladept@illinois.edu

[1] *For additional details and requirements refer to the department's* Programs of Study *(*http://www.landarch.illinois.edu/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Law, JD & Chemistry, MS

for the degrees of Master of Science in Chemistry and the Juris Doctorate in Law

This joint degree program of Law, JD and Chemistry, MS is not currently accepting applications; suspension of admissions effective Fall 2021

This joint degree program is intended principally for law students who desire to specialize in an area of law in which expertise in chemistry would be a clear asset. Students electing the joint degree option will select a major area of emphasis within chemistry that complements their chosen area of legal emphasis. Each student must develop and gain approval of a coherent, focused plan of study that draws upon related coursework in both law and chemistry.

The JD/MS program involves interdisciplinary work and a flexible plan of study. Students will consult with a faculty adviser in selecting courses. While enrolled in the Department of Chemistry, students have the opportunity to hold an assistantship with a tuition and service fee waiver. It is possible that joint degree students may accelerate their programs by attending summer sessions over one or more summers and thus complete the requirements for both the MS and the JD degrees in three years.

In order to enter the joint program, students must be admitted separately to both departments. Each program's application requirements and deadlines for admission must be met.

For additional details and requirements refer to the department's Graduate Programs (https://chemistry.illinois.edu/academics/graduate-studies/), the Law Program (https://law.illinois.edu/academics/degree-programs/joint-degrees/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
Chemistry (may include up to 12 hours of thesis credit)		32
Law		78
Total Hours		122

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall	12 (8 in CHEM)
Minimum GPA:	3.0

Natural Resources & Environmental Sciences, MS and Law, JD

for the degrees of Master of Science in Natural Resources & Environmental Sciences and Juris Doctor in Law

department head: Robert Schooley
director of graduate programs: Jeffrey Matthews
department website: http://nres.illinois.edu
department faculty: https://nres.illinois.edu/directory/
overview of college admissions & requirements: https://nres.illinois.edu/graduate/apply (https://nres.illinois.edu/graduate/apply/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://aces.illinois.edu/
department office: W-503 Turner Hall, 1102 South Goodwin Avenue, Urbana, IL 61801
phone: (217) 333-2770
fax: (217) 244-3219
email: nres-ssc@illinois.edu

Graduate Degree Programs in Natural Resources and Environmental Sciences

Graduate Majors:

Natural Resources and Environmental Sciences, MS (on-campus & online) (p. 943)
Natural Resources and Environmental Sciences, PhD (p. 946)

Joint Degree Program:

Natural Resources and Environmental Sciences, MS and Law, JD (p. 1158)

Prospective students interested in specializing in environmental or natural resource law are invited to explore our joint degree program. This unique program is offered through a collaboration between the College of Law and the Department of Natural Resources and Environmental Sciences. Many law schools have responded to public concern about the environment by offering more courses in natural resources and environmental law. The University of Illinois at Urbana-Champaign goes one step further, however, allowing students to supplement a law program with training in a related scientific field.

The Department of Natural Resources and Environmental Sciences is a broad and diverse department offering flexible M.S. and Ph.D. degrees. The mission of the department is to establish and implement research and educational programs that enhance environmental stewardship in the management and use of natural, agricultural, and urban systems in a socially responsible manner. The department is composed of approximately 24 faculty, 60 affiliates, and 160 graduate students. Offering education and research in a variety of disciplines, the department provides a systems-level perspective that few other departments can offer. Further illustrating the breadth of natural resources and environmental sciences, research areas include but are not limited to:

- agronomy/agroecology
- aquatic chemistry
- conservation ecology
- ecosystem science
- environmental education
- fish and wildlife ecology and management
- forest ecology
- humans dimensions of the environment
- landscape ecology
- microbial ecology
- natural resource economics
- natural resource policy
- plant ecology
- physiology and genetics
- restoration ecology
- quantitative and spatial analysis
- soil science and conservation
- sustainability

Admission

NRES graduate advisers are seeking students with strong letters of reference, evident motivation to undertake graduate study, relevant experience, and good preparation in prerequisite courses. Graduate applicants must have an undergraduate grade point average (GPA) of 3.0 (A = 4.0) calculated on the last 2 years of undergraduate coursework to be admitted with full status. Ph.D. applicants must have earned an M.S. (or expect to be awarded the degree before beginning the NRES program) with a grade point average of at least 3.5. Applicants should have adequate preparation in the fundamental sciences and courses appropriate to their proposed field of study (applicants should talk with prospective advisers about the background they expect). Those without the necessary prerequisites may be accepted conditionally, and the undergraduate courses must be completed before the degree will be awarded. The Graduate Record Examination (GRE) is required of all students applying to the campus M.S. or Ph.D. program. There is no minimum score for admission, and the results will be examined along with GPA, letters of recommendation, statement of purpose, research experience, and other information in the application package. However, successful applicants typically have a combined quantitative/verbal/analytical GRE percentile of at least 70%. Students whose native language is not English are required to submit the results of the TOEFL or IELTS as evidence of English proficiency. Official scores are required

to be submitted directly from TOEFL/ETS or IELTS to the University. Minimum English test scores and other information for international applicants can be found at www.grad.illinois.edu/admissions/apply/begin/international (http://www.grad.illinois.edu/admissions/apply/begin/international/). Applicants who are not U.S. citizens must also submit evidence that they have sufficient financial support for their program of study. Prospective graduate students are urged to apply for admission to the degree program as early as possible, preferably six to ten months before the beginning of the semester in which they expect to enroll. Prospective students must review important application information available a http://nres.illinois.edu/graduate/prospective (http://nres.illinois.edu/graduate/prospective/). Applicants to the campus programs wishing to be considered for a university-level fellowship must apply for admission to the fall semester by December 15th, and, to be considered for any college or departmental funding, the application deadline is January 1st.

Graduate Teaching Experience

Although teaching is not a Graduate College requirement, experience in teaching is considered an important part of this graduate program, particularly for Ph.D. students.

Faculty Research Interests

Graduate degree programs in NRES are informed by the major areas of faculty research, which include:

- agronomy/agroecology
- conservation ecology
- ecosystem science
- fish and wildlife ecology and management
- forest ecology
- global environmental change
- human dimensions of natural resources and ecology
- landscape ecology
- microbial ecosystems
- natural resource policy
- plant ecology
- physiology and genetics
- quantitative and spatial methods
- restoration ecology
- soil science and conservation
- sustainability
- water/biogeochemistry
- wetland ecology

Students in NRES can participate in affiliated programs like those listed below.

Program in Environmental and Resource Economics: Students involved in the program in Environmental and Resource Economics (pERE) explore the complex relationships between natural resource allocation, environmental quality, and economic prosperity. Students and faculty from five other University departments in addition to NRES are using economics to analyze policy toward some of today's most critical environmental and natural resource issues.

Human Dimensions of Environmental Systems: NRES graduate students may participate in HDES, an interdisciplinary program comprised of faculty from six colleges at Illinois. Participants are united in the study of connections between humans and the environment. The program is built on the premise that the best insights are not limited to the domain of a single discipline and is interdisciplinary in all its pursuits.

Financial Aid

Several sources of financial aid are available within the department:

- research assistantships, supported by federal and grant funds made available to the natural resources and environmental sciences faculty
- teaching assistantships
- departmental fellowships
- University fellowships
- College of Agricultural, Consumer and Environmental Sciences Jonathan Baldwin Turner Fellowships
- waivers of tuition and fees

Most NRES graduate students with financial support have a research assistantship provided by the adviser. Appointments as research and teaching assistants and fellows provide a stipend and waive tuition and some fees.

Financial aid is granted on a competitive basis. Applicants are judged for academic potential based on past performance, experience, motivation, dedication to the designated area of interest and, where applicable, the potential to satisfy the objectives of a donor. Fellowships have minimum GPA and GRE score requirements. Information about the current availability of financial aid can be obtained from the graduate coordinator or, in the case of research assistantships, directly from faculty members working in the area of interest.

for the degrees of Master of Science in Natural Resources & Environmental Sciences and Juris Doctor in Law

Thesis Option

Code	Title	Hours
NRES 594	NRES Professional Orientation	1
LAW 616	Environmental Law and Pol I	3-4
LAW 618	Natural Resources	2-4
LAW 622	Land Use Planning	2-4
Research/Project/Independent Study Hours (Optional - min/max applied toward degree):		4-8
NRES 599	Thesis Research (min/max applied toward degree)	4-12
Requirements for the JD in Law		90
Total Hours		102

Other Requirements [1]

Other requirements may overlap	
Minimum 500-level Hours Required Overall:	12
Completion, defense and deposit of thesis.	
Students may count up to 12 hours of NRES course work toward the required 90 hours of Law course work. They may also count 8 hours of Law credit toward the 32 hours required for the M.S. degree	
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the* department's Graduate Handbook *(*http://nres.illinois.edu/graduate/handbook/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Non-Thesis Option

Code	Title	Hours
NRES 594	NRES Professional Orientation	1
LAW 616	Environmental Law and Pol I	3-4
LAW 618	Natural Resources	2-4
LAW 622	Land Use Planning	2-4
Electives		11-21
Select one of the following:		3-8
NRES 503	Capstone Research Project	
NRES 505	Capstone Internship Experience	
NRES 507	Capstone Group Research Project	
Requirements for the JD in Law		90
Total Hours		102

Other Requirements [1]

Other requirements may overlap	
Minimum 500-level Hours Required Overall:	12
Written final examination; preparation, presentation, oral exam, and approval of a capstone project report.	
Students may count up to 12 hours of NRES course work toward the required 90 hours of Law course work. They may also count 8 hours of Law credit toward the 32 hours required for the M.S. degree	
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the* department's Graduate Handbook *(*http://nres.illinois.edu/graduate/programs/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Learning Outcomes: Natural Resources & Environmental Sciences and Juris Doctor in Law, MS

Learning Outcomes for the degrees of Master of Science in Natural Resources & Environmental Sciences and Juris Doctor in Law

1. Mastery of core knowledge in major field of study and specialized knowledge related to concentration/specialization
2. Understanding the logic of science, including the philosophy of science and research design
3. Facility with research tools/techniques and data analysis techniques relevant for major and concentration/specialization
4. Strong communication skills in conversation, presentation, and writing, particularly scientific/technical writing
5. Ability to function well professionally, with good leadership skills, well-developed problem-solving abilities, and ethical thinking

Nutritional Science, PhD and Public Health, MPH

for the Master of Public Health and Doctor of Philosophy in Nutritional Science

departmental website: http://www.nutritionalsciences.illinois.edu
director of the division and of graduate studies: Elvira de Mejia
correspondence and admission Information: Ashley Negangard
department address: 240 Edward R Madigan Laboratory, 1201 W. Gregory Drive, Urbana, IL 61801
phone: (217) 333-4177
email: nutritionalsciences@illinois.edu

The M.P.H. can be earned jointly with the Ph.D. in Nutritional Science. In the joint program up to 12 hours of coursework may be applied to both degrees, and the degrees are conferred simultaneously at the completion of the program.

Graduate Degree Programs in Nutritional Sciences

Nutritional Science, MS (p. 954)
Nutritional Science, PhD (p. 956)
joint degrees:
Nutritional Science, PhD and Master of Public Health, MPH (p. 1160)

The Division of Nutritional Sciences is the interdisciplinary program for graduate education in nutrition at the University of Illinois at Urbana-Champaign. More than 60 faculty, representing 15 different departments in seven colleges on the Urbana and Chicago campuses, are members of the Division. The Division is a comprehensive program of study leading to the M.S. and Ph.D. degrees, alone or in combination with either the M.D. or M.P.H. degrees or the registration in dietetics (R.D.). Flexible graduate programs of study enable students to individualize their coursework and professional training. In addition, extensive research opportunities are available that address the spectrum from research at the level of the genome and proteome to clinical and population-based intervention studies. Specialties are classified into six broad theme areas in which our faculty and students are most active (see Research Interests (http://nutrsci.illinois.edu/research/)). These themes best reflect the areas of nutrition research for which the Division is recognized both nationally and internationally.

Admission

Applicants are expected to have an admission grade point average of 3.0 (A = 4.0) for the last two years of coursework and basic courses in chemistry, biology and mathematics. Deficiencies in these subjects must be removed during the first year of graduate study. The Graduate Record Examination (GRE) is required. Applicants whose native language is not English must achieve a minimum paper-based Test of English as a Foreign Language (TOEFL) score of 550, 213 on the computer-based test or 79 on the iBT TOEFL. Admission in the fall, spring or summer will be considered.

Internship in Dietetics

Students in the Division of Nutritional Sciences can participate in an Academy of Nutrition and Dietetics (AND) accredited graduate dietetic internship program administered through the Department of Food Science and Human Nutrition. The program includes defined graduate course requirements and a six-month dietetic clinical internship. In order to be eligible for the graduate internship program, students must complete all undergraduate course competencies required by the AND for the Registration in Dietetics (R.D.). Students are accepted into the internship by computer matching through the standard dietetic internship application process. More information on the graduate dietetic internship program can be obtained at fshn.illinois.edu/graduate/dietetic-internship/prospective (http://fshn.illinois.edu/graduate/dietetic-internship/prospective/) or from the Department of Food Science and Human Nutrition (260 Bevier Hall; (217)-244-4498).

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in this program.

Faculty Research Interests

The Division is composed of faculty whose research interests cover many disciplines within nutrition. Descriptions of faculty research interests and a listing of recent publications are available at the Division website. Six broad theme areas are:

- Animal Nutrition
- Biochemical and Molecular Nutrition
- Community Nutrition, Nutrition Education and Consumer Acceptance
- Dietary Bioactive Components
- Food Safety and Toxicology
- Human and Clinical Nutrition

Facilities and Resources

The Division (http://www.nutrsci.illinois.edu/) office is located in room 240 Edward R. Madigan Laboratory. Office and research laboratory facilities utilized by graduate students in Nutritional Sciences are administered by the home department of the student's adviser.

Financial Aid

Financial assistance is available in the form of assistantships, scholarships and fellowships. Applicants seeking fall admission and expecting to be considered for financial assistance should file their applications before the preceding December 15th. Later applications may be considered, depending on the space and support available.

for the Master of Public Health and Doctor of Philosophy in Nutritional Science

The M.P.H. can be earned jointly with the Ph.D. in Nutritional Science. In the joint program up to 12 hours of coursework may be applied to both degrees, and the degrees are conferred simultaneously at the completion of the program.

Code	Title	Hours
CHLH 410	Public Health Practice	4
CHLH 469	Environmental Health	4
CHLH 540	Health Behavior: Theory	4
CHLH 550	Health Policy: United States	4
CHLH 572	Principles of Epidemiology	4
CHLH 573	Biostatistics in Public Health	4
CHLH 575	Chronic Disease Prevention	4
CHLH 577	Health Program Evaluation	4
CHLH 594	Special Topics (Cultural Competence and Health Promotion)	4
CHLH 587	MPH Applied Practice Experience	4
CHLH 589	MPH Integrative Learning Experience	2
Area of concentration coursework from approved list, min 3 (may be met by Ph.D. core courses)		
Electives and seminars, min 3 (may be met by Ph.D. core courses)		
NUTR 500	Nutritional Sciences Seminar (enrollment each semester and one presentation during program)	1
Select one or both of the following (max 4):		1-4
FSHN 593	Seminar in Foods and Nutrition	
NUTR 590	Disciplinary Seminar	
NUTR 510	Topics in Nutrition Research	5-9
or NUTR 561	Advanced Clinical Nutrition	
NUTR 511	Regulation of Metabolism	4
Two additional courses in general nutrition		6-8
Ph.D. Research/Project/Independent Study Hours (2 max applied toward degree)		2
NUTR 599	Thesis Research (min/max applied toward degree)	40
Total Hours		100

Other Requirements [1]

Requirement	Description
Other requirements may overlap	
Minimum Number of 500-level Hours Required Overall in Program:	12 (8 within M.P.H.)
Masters Degree Required for Admission to PhD?	No
Qualifying Exam Required	Yes
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the department's* Graduate Programs information *(*http://nutrsci.illinois.edu/about_us/program_description/degree_types/*) and the* Graduate College Handbook *(*http://www.grad.uiuc.edu/gradhandbook/*).*

Political Science, PhD & Law, JD

for the joint degrees in Juris Doctor of Law and Doctor of Philosophy in Political Science

A joint J.D. and Ph.D. in International Relations is an option for students. Students must be admitted separately to each program as a joint degree candidate. To receive the joint J.D./Ph.D. in International Relations, students must satisfy all existing requirements for the Ph.D. in Political Science, including major and minor field course requirements, scope and methods sequence, tools, qualifying examinations, dissertation design seminar, and dissertation project. Joint degree students would be allowed to count 16 hours of law credit toward their Ph.D. Joint degree students would elect International Relations as their major area, and up to 8 hours of law school course credit would count toward this area. In addition, joint degree students will be permitted to select "Law" as their minor field, using 8 hours of law credit to satisfy minimum course requirements, provided such credit is from course outside the international law subfield (e.g., American constitutional law); this presents a new option for international relations students who otherwise would have to select American politics, comparative politics, or political theory as a minor field. This program allows an exception to the simultaneous conferral rule in that the J.D. may be conferred prior to completion of the Ph.D. degree.

Political Science: Civic Leadership, MA & Law, JD

for the joint degree of Juris Doctor in Law and the Master of Arts in Political Science, Civic Leadership Concentration

The M.A./J.D. joint degree program is a track in the Civic Leadership Program that provides qualified students with the opportunity to complete both degrees in just three years of post-baccalaureate study. Illinois students who have been named Civic Leadership Fellows in the fall of their junior year of undergraduate study, and who have taken the LSAT by the time they are selected as a fellow, are eligible for early admission into the College of Law. Students must fulfill the requirements for the M.A. in Political Science with a concentration in Civic Leadership as detailed above. The College of Law will recognize up to 12 hours of credit taken in fulfillment of the Civic Leadership Program M.A. requirements. In addition, a minimum of 78 hours of Law courses will be required to meet the 90 hours required for the J.D. degree. For information contact the Director, Civic Leadership Program, Department of Political Science.

Public Health, MPH & Community Health, PhD

for the degrees of Master of Public Health in Public Health and Doctor of Philosophy in Community Health

Department Head: Kim Graber
Director of Graduate Studies: Steven Petruzzello
Interim Director of Program: Laura Rice
Graduate Office: Julie Jenkins
Graduate Office Address: 906 South Goodwin Ave, 112 Freer Hall MC-052, Urbana, IL 61801
Graduate Phone: (217) 333-1083
Graduate email: jjenkns@illinois.edu
Department Website: https://ahs.illinois.edu/community-health (https://ahs.illinois.edu/community-health/)
MPH Website: https://ahs.illinois.edu/mph-phd (https://ahs.illinois.edu/mph-phd/)

The Master of Public Health degree can be earned jointly with the PhD degree in:

- Community Health
- Food Science and Human Nutrition
- Human Development and Family Studies
- Kinesiology
- Nutritional Science
- Social Work

In the joint program, up to 12 hours of coursework may be applied to both degrees, and the degrees are conferred simultaneously at the completion of the program.

Electives from PhD departmental list may be met by MPH core courses. Additionally, the fourth MPH concentration course and elective course may be met by PhD core courses.

Students enrolled in the joint degree program must meet with academic advisors from both the programs to determine the exact plan of study throughout the joint degree program.

for the degrees of Master of Public Health in Public Health and Doctor of Philosophy in Community Health

The M.P.H. can be earned jointly with the Community Health, Ph.D. In the joint program up to 12 hours of coursework may be applied to both degrees, and the degrees are conferred simultaneously at the completion of the program.

Public Health, MPH & Kinesiology, PhD

for the degrees of Master of Public Health in Public Health and Doctor of Philosophy in Kinesiology

Department Head: Kim Graber
Director of Graduate Studies: Steven Petruzzello
Interim Director of Program: Laura Rice
Graduate Office: Julie Jenkins
Graduate Office Address: 906 South Goodwin Ave, 112 Freer Hall MC-052, Urbana, IL 61801
Graduate Phone: (217) 333-1083
Graduate Email: jjenkns@illinois.edu
Department Website: https://ahs.illinois.edu/community-health (https://ahs.illinois.edu/community-health/)
MPH Website: https://ahs.illinois.edu/mph-phd (https://ahs.illinois.edu/mph-phd/)

The Master of Public Health degree can be earned jointly with the PhD degree in:

- Community Health
- Food Science and Human Nutrition
- Human Development and Family Studies
- Kinesiology
- Nutritional Science
- Social Work

In the joint program, up to 12 hours of coursework may be applied to both degrees, and the degrees are conferred simultaneously at the completion of the program.

Electives from PhD departmental list may be met by MPH core courses. Additionally, the fourth MPH concentration course and elective course may be met by PhD core courses.

Students enrolled in the joint degree program must meet with academic advisors from both the programs to determine the exact plan of study throughout the joint degree program.

for the degrees of Master of Public Health in Public Health and Doctor of Philosophy in Kinesiology

The M.P.H. can be earned jointly with the Kinesiology, Ph.D. In the joint program up to 12 hours of coursework may be applied to both degrees, and the degrees are conferred simultaneously at the completion of the program.

For additional details and requirements refer to the department's graduate programs *(*http://www.kch.illinois.edu/kines-grad-overview/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Code	Title	Hours
CHLH 410	Public Health Practice	4
CHLH/ENVS 469	Environmental Health	4
CHLH/KIN 540	Health Behavior: Theory	4
CHLH 550	Health Policy: United States	4
CHLH 572	Principles of Epidemiology	4
CHLH 573	Biostatistics in Public Health	4
CHLH 575	Chronic Disease Prevention	4
CHLH 577	Health Program Evaluation	4
CHLH 587	MPH Applied Practice Experience	4
CHLH 589	MPH Integrative Learning Experience	2
Area of concentration coursework from approved list, min 3 (may be met by Ph.D. core courses)		
Electives and seminars, min 3 (may be met by Ph.D. core courses)		
CHLH 594	Special Topics	4
KIN 591	Seminar	8
KIN 565	Teaching in the Professoriate	4
Competency in Ph.D. research methods		12
Kinesiology Research/Project Hours (8 max applied toward degree)		0-8
KIN 599	Thesis Research	32
Total Hours		**100**

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum Number of 500-level Hours Required Overall in Program:	12 (8 within M.P.H.)
Minimum Hours Required Within Kinesiology (not including 599)	24
Approved Masters Degree Required for Admission?	No
Qualifying Exam Required:	No
Preliminary Exam Required:	Yes
Final/Exam Dissertation Defense Required:	Yes
Dissertation Deposit Required:	Yes
Minimum GPA:	3.0

Public Health, MPH & Social Work, PhD

for the joint programs of Masters of Public Health in Public Health and Doctor of Philosophy in Social Work

school office: 1010 W. Nevada St., Urbana, IL 61801
director of graduate studies: Associate Dean Min Zahn
email:
phone: (217) 244-5246
school website: https://socialwork.illinois.edu/
school faculty: School of Social Work Faculty (http://socialwork.illinois.edu/about-ssw/faculty-and-staff-directory/?doing_wp_cron=1546290133.2576510906219482421875)
overview of school admissions & requirements: School of Social Work (http://catalog.illinois.edu/academics/master-of-social-work/admissions-information/)

The MPH can be earned jointly with the PhD in Social Work. In the joint program up to 12 hours of coursework may be applied to both degrees, and the degrees are conferred simultaneously at the completion of the program.

Code	Title	Hours
CHLH 410	Public Health Practice	4
CHLH 469	Environmental Health	4
CHLH 540	Health Behavior: Theory	4

CHLH 550	Health Policy: United States	4
CHLH 572	Principles of Epidemiology	4
CHLH 573	Biostatistics in Public Health	4
CHLH 575	Chronic Disease Prevention	4
CHLH 577	Health Program Evaluation	4
CHLH 594	Special Topics (Cultural Competence and Health Promotion)	4
CHLH 587	MPH Applied Practice Experience	4
CHLH 589	MPH Integrative Learning Experience	2
Area of concentration coursework from approved list, min 3 (may be met by PhD core courses)		
Electives and seminars, min 3 (may be met by PhD core courses)		
SOCW 579	Social Work Practice Theories	4
SOCW 585	National Social Welfare Policy	4
SOCW 593	Applied Qualitative Research	4
SOCW 595	Quantitative Research Designs	4
SOCW 575	Social Work Teaching Seminar	4
SOCW 594	Individual Research (2 semesters of enrollment)	8
PhD Focus Area (outside of Social Work-may be met by MPH core courses)		12
3 courses in statistics and research methodology, outside of Social Work (may be met by MPH core courses)		12
SOCW 599	Dissertation Research (min applied toward degree)	12
Total Hours		100

Other Requirements [1]

Requirement	Description
Masters Degree Required for Admission?	No
Qualifying Exam Required:	Yes
Preliminary Exam Required:	Yes
Final Exam/Dissertation Defense Required:	Yes
Dissertation Deposit Required:	Yes
Minimum GPA:	3.0

[1] *For additional details and requirements refer to the two departments' Graduate Handbooks and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

Public Health, MPH & Urban Planning, MUP

for the degrees of Master of Public Health in Public Health and Master of Urban Planning in Urban Planning

Master of Public Health

Department Head: Kim Graber
Director of Graduate Studies: Steve Petruzzello
Interim Director of Program: Laura Rice
Graduate Office: Julie Jenkins
Graduate Office Address: 906 South Goodwin Ave, 112 Freer Hall MC-052, Urbana, IL 61801
Graduate Phone: (217) 333-1083
Graduate email: jjenkns@illinois.edu
Department Website: https://ahs.illinois.edu/community-health (https://ahs.illinois.edu/community-health/)
MPH Website: https://ahs.illinois.edu/mph-mup (https://ahs.illinois.edu/mph-mup/)

Master of Urban Planning

Director of MUP Program: Bumsoo Lee
Department Website: www.urban.illinois.edu (https://urban.illinois.edu/)
MUP Website: https://urban.illinois.edu/programs-applying/master-urban-planning/

In the joint program, up to 12 hours of coursework may be applied to both degrees, and the degrees are conferred simultaneously at the completion of the program.

Electives from PhD departmental list may be met by MPH core courses. Additionally, the fourth MPH concentration course and elective course may be met by PhD core courses.

Students enrolled in the joint degree program must meet with academic advisors from both the programs to determine the exact plan of study throughout the joint degree program.

Candidates may propose joint programs combining the M.U.P. with other UIUC master's degrees (for example, but not limited to, African Studies, Agriculture and Applied Economics, Civil and Environmental Engineering, Public Health (http://catalog.illinois.edu/graduate/graduate-majors/community-health/master-pub-health/), Economics, Landscape Architecture, Latin American Studies, Library and Information Sciences, Natural Resources and Environmental Sciences, and Recreation, Sports and Tourism). For joint programs, at least 40 hours must be in Urban Planning, including all core courses and capstone requirements. The two programs must total a minimum of (a) 80 hours, or (b) the sum of 40 Urban Planning hours plus the required number of hours for the second degree, whichever is greater. (In the latter case, the other program may at its discretion count up to 8 hours of Urban Planning courses as electives in meeting its degree requirements as long as students are required to take no fewer than 40 additional hours in that program.) The MUP capstone requirement may be waived for a thesis completed in another program provided faculty from both programs participate on the thesis committee. Students must be in residence in Urban Planning for at least two semesters.

Consult the department's M.U.P. website (https://urban.illinois.edu/) for more information about the admissions process (https://urban.illinois.edu/programs-applying/master-urban-planning/how-to-apply-mup/) and joint degree requirements. (https://web.faa.illinois.edu/app/uploads/sites/2/2020/08/MUP-Program-Handbook-2020-2021.pdf) joint degree requirements. For additional guidance, please contact the Director of the M.U.P. Program.

for the degrees of Master of Public Health in Public Health and Master of Urban Planning in Urban Planning

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For additional details and requirements refer to the department's Web site *(*https://urban.illinois.edu/*) and the* Graduate College Handbook *(*http://www.grad.illinois.edu/gradhandbook/*).*

For joint programs, at least 40 hours must be in Urban Planning, including all core courses and capstone requirements. The two programs must total a minimum of the sum of 40 Urban Planning hours plus 48 hours for the Master of Public Health. The Master of Public Health may at its discretion count up to 8 hours of Urban Planning courses as electives in meeting its degree requirements as long as students are required to take no fewer than 40 additional hours in that program. The MUP capstone requirement may be waived for a thesis completed in another program provided faculty from both programs participate on the thesis committee. Students must be in residence in Urban Planning for at least two semesters.

for the degree of Master of Urban Planning in Urban Planning

Thesis Option

Code	Title	Hours
UP 501	Planning History and Theory	4
UP 503	Physical Planning	4
UP 504	Urban History and Theory	4
UP 505	Urban and Regional Analysis	4
UP 510	Plan Making	4
UP 511	Law and Planning	4
UP 590	Professional Internship (reduces the hours needed to graduate by 4)	0
Recommended concentration/electives		32
UP 591	Capstone Seminar (enrollment required for two semesters)	0
UP 599	Thesis Research (min/max applied toward degree)	8
Total Hours		64

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum Hours Required Within the Unit:	40
Minimum 500-level Hours Required Overall:	16 (12 in UP)
Minimum GPA:	3.0

Non-Thesis Option

Code	Title	Hours
UP 501	Planning History and Theory	4
UP 503	Physical Planning	4
UP 504	Urban History and Theory	4
UP 505	Urban and Regional Analysis	4
UP 510	Plan Making	4
UP 511	Law and Planning	4
UP 590	Professional Internship (reduces the hours needed to graduate by 4)	0
Recommended concentration/electives		32
UP 591	Capstone Seminar (enrollment required for two semesters)	0
UP 598	Master's Project (min/max applied toward degree)	8
Total Hours		64

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum Hours Required Within the Unit:	40
Minimum 500-level Hours Required Overall:	16 (12 in UP)
Minimum GPA:	3.0

for the degree of Master of Public Health in Public Health

The MPH degree program requires a minimum of 48 hours. The program includes:

1. six required core courses in basic content areas of public health
2. three required courses in the Health Behavior and Promotion concentration, as well as one additional concentration course from an approved list
3. an applied practice experience
4. an integrative learning experience
5. seminars and electives

MPH students must complete all core coursework before enrolling in the MPH applied practice experience. It is highly preferable for the applied practice experience to occur during summer term. The integrative learning experience must be completed in the last term of study. There is no thesis requirement. A pre-requisite for applying to the MPH program is a college level course in mathematics, statistics, biostatistics, or epidemiology. Applications for the Master of Public Health (MPH) are only accepted for Fall admission, and are accepted until **April 1**. The program generally takes 1.5 to 2 years to complete.

Code	Title	Hours
CHLH 410	Public Health Practice	4
CHLH/ENVS 469	Environmental Health	4
CHLH/KIN 540	Health Behavior: Theory	4
CHLH 550	Health Policy: United States	4
CHLH 572	Principles of Epidemiology	4
CHLH 573	Biostatistics in Public Health	4
CHLH 575	Chronic Disease Prevention	4
CHLH 577	Health Program Evaluation	4
CHLH 587	MPH Applied Practice Experience	4
CHLH 589	MPH Integrative Learning Experience	2
CHLH 594	Special Topics	1 to 4
Area of concentration coursework from approved list (min 3)		3
Electives and seminars (min 3)		3
Total Hours		48

Other Requirements

Requirement	Description
Other requirements may overlap	
Minimum 500-level Hours Required Overall:	12 (8 within the unit)
Minimum GPA:	3.0

Russian, East European, & Eurasian Studies, MA and Library & Information Science, MS

for the degrees of Master of Arts in Russian, East European, and Eurasian Studies & Master of Science in Library and Information Science

director of center and graduate studies: John Randolph
email: reec@illinois.edu
department website: https://reeec.illinois.edu/
department faculty: REEEC Faculty (https://reeec.illinois.edu/people/groups/faculty/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: https://las.illinois.edu/
department office: 104 International Studies Building, 910 South Fifth Street, Champaign, IL 61820
phone: (217) 333-1244

About the Joint Degree

This joint master's degree includes a program of language and area studies courses leading to an interdisciplinary Master of Arts degree in Russian, East European, and Eurasian Studies, as well as a program of study leading to the Master of Science in Library and Information Science. The joint degree matches area expertise with professional education, and prepares students for professional careers in all types of information organizations, including libraries.

Graduate Degree Programs in Russian, East European, and Eurasian Studies

The Russian, East European, and Eurasian Center offers a two-year program of language and area studies courses leading to an interdisciplinary Master of Arts degree. The program is designed to meet the needs of students proceeding to disciplinary-based doctoral work and those planning non-academic professional careers with area expertise. Programs offered by the Center:

Russian, East European, and Eurasian Studies, MA (p. 991)
Russian, East European, and Eurasian Studies Minor (p. 1142)
Balkan Studies Minor (p. 1127)
Joint Degree in Russian, East European, & Eurasian Studies, MA and Library & Information Science, MS (p. 1166)

Admission

Prospective graduate students should have completed at least two years of Russian or another language of Eastern Europe or Eurasia. Applicants must submit the Graduate College application for admission, certified transcripts of all undergraduate and graduate work, Graduate Record Examination (GRE) scores (verbal, quantitative, and written), three letters of reference, and a writing sample. International students must submit Test of English as a Foreign Language (TOEFL) scores. All applicants must meet the requirements of the Graduate College. Admission is ordinarily in the fall semester, but occasional exceptions are made for spring and summer admission.

Faculty Research Interests

The faculty (https://reeec.illinois.edu/people/groups/faculty/) affiliated with the Center represent a broad range of interests and methodological approaches in the social sciences and the humanities, as well as the professional schools.

Facilities and Resources

The Russian, East European, and Eurasian Center was founded in 1959 and designated a National Resource Center by the U.S. Department of Education. It serves as an intellectual and institutional hub for the University community and the public through conferences, lectures, colloquia, visiting scholars, study groups, exhibits, films, and other activities.

The annual Summer Research Laboratory on Russia, Eastern Europe, and Eurasia features special workshops, seminars, lectures, films, and other events, most of which are free and open to the public.

The International and Area Studies Library (https://www.library.illinois.edu/ias/) at the University of Illinois has one of the country's three outstanding Slavic library collections (https://www.library.illinois.edu/ias/spx/). The Slavic Reference Service (https://www.library.illinois.edu/ias/spx/srs/) serves all faculty and students with expert bibliographers.

Language training is provided by the Departments of Germanic Languages & Literatures (https://germanic.illinois.edu/), Linguistics (https://linguistics.illinois.edu/), and Slavic Languages & Literatures (https://slavic.illinois.edu/) in:

- Bulgarian
- Bosnian, Croatian, Serbian
- Czech
- Old Church Slavonic
- Polish
- Russian
- Turkish
- Ukrainian
- Yiddish

Financial Aid

Financial aid is awarded on an academic-year basis. All fellowships and assistantships include a stipend plus tuition and fee waiver. Qualified incoming students who are U.S. citizens or permanent residents should also apply for U.S. Department of Education Title VI Foreign Language and Area Studies (FLAS) fellowships (http://publish.illinois.edu/illinoisflas/) offered through REEEC or other FLAS-granting campus centers.

Qualified students may also be eligible for other fellowships at the campus or departmental level. A limited number of teaching and graduate assistantships, which include a tuition and fee waiver, may also be

available to outstanding students through REEEC and other units.The Graduate College maintains a list of available assistantships (https://grad.illinois.edu/clearinghouse/); additional information on need-based financial aid may be obtained from the Graduate College Fellowships Office (https://grad.illinois.edu/fellowships/about/).

for the degrees of Master of Arts in Russian, East European, and Eurasian Studies & Master of Science in Library and Information Science

The joint degree requires 56 credit hours divided between REEES and iSchool courses. A master's thesis or major research paper is required, to be based on research using primary sources, including sources in the language used to meet the competency requirement. A minimum GPA of 3.25 must be maintained throughout in order to remain in good academic standing.

For additional details and requirements refer to the department's Graduate Programs (https://reeec.illinois.edu/academics/ma-program/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Code	Title	Hours
REES 550	Seminar in REEE Studies	4
IS 505	Information Organization and Access	4
IS 510	Libraries, Information and Society	4
IS 530	Collection Development (Section C: REEES Bibliography & Research Methods)	4
Core courses in Russian, East European, or Eurasian Studies, including the thesis option.		**24**
These credits must be earned in at least three different disciplines outside of REEES, with at least one course at the 500-level in addition to the thesis. Hours for the thesis, REES 599, may be included up to a maximum of 8; these hours cannot be counted towards the IS electives described below.		
Elective IS courses, at least 12 hours of which must be at the 500-level.		**16-18**
These credits should be selected in consultation with an advisor who is a member of the iSchool faculty.		
Electives may include:		
IS 585	Bibliographic Metadata	
IS 591	Advanced Topics in Information Services	
IS 592	Advanced Topics In Information Organizations	
Total Credit Hours:		**56**

Other Requirements

Requirement	Description
Language Requirement: Third-year competency in Russian or another language of Eastern Europe or Eurasia. Credit hours from language courses do not count towards the degree.	
Students in the joint degree must be registered in each program for at least one semester.	
Minimum GPA:	3.25

Social Work, MSW and Social Work, PhD

for the joint program of Master of Social Work Major in Social Work and Doctor of Philosophy in Social Work

school office: 1010 W. Nevada St., Urbana, IL 61801
director of graduate studies: Associate Dean Min Zahn
email:
phone: (217) 244-5246
school website: https://socialwork.illinois.edu/
school faculty: School of Social Work Faculty (http://socialwork.illinois.edu/about-ssw/faculty-and-staff-directory/?doing_wp_cron=1546290133.2576510906219482421875)
overview of school admissions & requirements: School of Social Work (http://catalog.illinois.edu/social-work/)

for the joint program of Master of Social Work Major in Social Work and Doctor of Philosophy in Social Work

Code	Title	Hours
MSW Required Courses		
Methods (Based on Clinical or Administrative Focus)		20
Policy		4
PhD Research Courses		8
SOCW 593	Applied Qualitative Research	
SOCW 595	Quantitative Research Designs	
HBSE		8
Field Education		24
Electives (One elective will be in Focus Area for the PhD)		8
Total Hours		72
PhD Required Courses		
SOCW 575	Social Work Teaching Seminar	4
SOCW 579	Social Work Practice Theories	4
SOCW 585	National Social Welfare Policy	4
SOCW 594	Individual Research (2 semesters of enrollment)	8
Focus Area (outside of Social Work)		8
3 courses in statistics and research methodology, outside of Social Work		12
SOCW 599	Dissertation Research	12
Total Hours		52

Other Requirements [1]

Requirement	Description
A concentration is required for the MSW	
Minimum 500-level Hours Required Overall:	48
Masters Degree Required for Admission to PhD?	Yes
Qualifying Exam Required	Yes
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes

Dissertation Deposit Required	Yes
Minimum GPA:	3.0

[1] For additional details and requirements refer to the department's Graduate Handbook (http://socialwork.illinois.edu/academics/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

Urban Planning, MUP & Law, JD

for the joint degrees of Master of Urban Planning and Juris Doctor in Law

department head: Rolf Pendall
director of graduate studies: Bumsoo Lee
overview of admissions & requirements: https://urban.illinois.edu/programs-applying/master-urban-planning/how-to-apply-mup/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: https://urban.illinois.edu/
program website: https://urban.illinois.edu/prospective-students/academic-programs/master-of-urban-planning (https://urban.illinois.edu/prospective-students/academic-programs/master-of-urban-planning/)
department faculty: https://urban.illinois.edu/people/meet-our-faculty/
college website: https://faa.illinois.edu/
department office: 111 Temple Buell Hall, 611 Taft Drive, Champaign, IL 61820
phone: (217) 333-3890
email: urbplan@illinois.edu

Joint degree programs provide the opportunity to complete two degrees in a compressed time frame.

Candidates admitted to the joint Master of Urban Planning and Juris Doctor must complete a minimum of 32 hours in urban planning, including core courses and capstone, plus the requirements of the law degree.

Urban Planning, MUP Joint Degrees

for the degree of Master of Urban Planning and any other approved Master's degree

department head: Rolf Pendall
director of the MUP program: Bumsoo Lee
MUP admissions director: Andrew Greenlee
director of the PhD program: Faranak Miraftab
overview of admissions & requirements: https://urban.illinois.edu/prospective-students/admissions/master-of-urban-planning/admissions-criteria (https://urban.illinois.edu/prospective-students/admissions/master-of-urban-planning/admissions-criteria/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
department website: Urban + Regional Planning (https://urban.illinois.edu/)
program website: https://urban.illinois.edu/prospective-students/academic-programs/master-of-urban-planning (https://urban.illinois.edu/prospective-students/academic-programs/master-of-urban-planning/)
department faculty: https://urban.illinois.edu/people/meet-our-faculty/
college website: College of Fine & Applied Arts (https://faa.illinois.edu/)
department office: 111 Temple Buell Hall, 611 Taft Drive, Champaign, IL 61820
phone: (217) 333-3890
email: urbplan@illinois.edu

Candidates may propose joint programs combining the M.U.P. with other UIUC master's degrees (for example, but not limited to, Agriculture and Applied Economics, Civil Engineering, Geography, Public Health, Recreation, Sports and Tourism, Natural Resources and Environmental Sciences, African Studies, Economics, Latin American Studies, and Library and Information Sciences).

Consult the department's M.U.P. Admissions (https://urban.illinois.edu/programs-applying/master-urban-planning/how-to-apply-mup/) web page for more information about the admissions process. For additional guidance, please contact the Director of the M.U.P. Program.

Graduate Degree Programs in Urban Planning

Sustainable Urban Management, MS (p. 1032)
Urban Planning, MUP (p. 1060)
Regional Planning, PhD (p. 987)
joint programs:
- Urban Planning, MUP & (p. 1151) Architecture, MARCH (p. 1151)
- Urban Planning, MUP & Law, JD (p. 1168)
- Urban Planning, MUP & Landscape Architecture, MLA (p. 1157)
- Urban Planning, MUP & Public Health, MPH (p. 1164)
- Urban Planning, MUP & any Illinois master's degree in related field (p. 1168)

for the degree of Master of Urban Planning and any other approved Master's degree

Consult the department's M.U.P. Admissions (https://urban.illinois.edu/programs-applying/master-urban-planning/how-to-apply-mup/) web page for more information about the admissions process. For additional guidance, please contact the Director of the M.U.P. Program.

For joint programs, at least 40 hours must be in Urban Planning, including all core courses and capstone requirements. The two programs must total a minimum of (a) 80 hours, or (b) the sum of 40 Urban Planning hours plus the required number of hours for the second degree, whichever is greater. (In the latter case, the other program may at its discretion count up to 8 hours of Urban Planning courses as electives in meeting its degree requirements as long as students are required to take no fewer than 40 additional hours in that program.) The MUP capstone requirement may be waived for a thesis completed in another program provided faculty from both programs participate on the thesis committee. Students must be in residence in Urban Planning for at least two semesters.

Veterinary Medical Scholars - DVM & VMS PhD Joint Programs

for the degrees of DVM and the Doctor of Philosophy in Veterinary Medical Science

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dean of the college: Peter D. Constable
associate dean for research & advanced studies: Dr. Lois Hoyer
director of graduate studies: Timothy M. Fan
overview of admissions & requirements:
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: College of Veterinary Medicine (http://www.vetmed.illinois.edu/)
program website: Veterinary Medical Scholars Program (https://vetmed.illinois.edu/education/dvm-phd-program/)
contact: Nikki Hausmann
program office: 2001 South Lincoln Avenue, Urbana, IL 61802
phone: 217-333-4291
email: nhausman@illinois.edu
Prospective students for the D.V.M./MPH program may contact:
Dr. John Herrmann, jah1110@illinois.edu
https://vetmed.illinois.edu/education/dvm-mph-program/

Graduate Degree Programs in the Veterinary Medical Scholars Program

DVM and VMS - Comparative Biosciences, PhD
DVM and VMS - Pathobiology, PhD

Students accepted into the Veterinary Medical Scholars Program (https://vetmed.illinois.edu/education/dvm-phd-program/) can complete a D.V.M. and Ph.D. simultaneously.

Learning Outcomes: DVM and Veterinary Clinical Medicine, PhD

Learning Outcomes for the degrees of DVM and PhD

Graduates of the College of Veterinary Medicine professional program shall:

1. Demonstrate knowledge of the basic sciences that form the foundation of veterinary practice.
2. Understand the principles of scientific inquiry and shall be able to apply those principles to solve problems by posing questions, forming hypotheses, and obtaining and evaluating data relevant to the practice of veterinary medicine.
3. Demonstrate knowledge of the clinical conditions that form the foundation of veterinary practice.
4. Be able to apply their knowledge, skills, and the principles of scientific inquiry to analyze, evaluate, and solve veterinary problems and synthesize diagnostic, therapeutic, and preventative plans.
5. Possess technical skills essential for success in the practice of veterinary medicine and surgery(i.e., they shall be “practice ready” with Day 1 clinical skills).

PROFESSIONAL PROGRAMS

Degree Programs (emphasis)	School/College	Professional
Law	LAW	JD (p. 1170)
Medicine	CI MED	MD (p. 1172), MD/PhD (p. 1170)
Veterinary Medicine	VMED	DVM (http://catalog.illinois.edu/vetmed/)

Juris Doctor Program

The 3-year JD program at Illinois Law provides students with a first-rate legal education. The curriculum is both timely and robust, exposing students to a healthy blend of doctrinal law, theoretical perspectives, and real-world skills.

JD Program (http://catalog.illinois.edu//law.illinois.edu/academics/degree-programs/jd-program/)

Learning Outcomes: Law, JD

Learning Outcomes for the degree of Juris Doctor of Law

1. Demonstrate basic knowledge of American substantive and procedural law. This requires:
   a. The foundational rules governing liability for civil and criminal wrongdoing.
   b. The foundational rules that regulate the transaction of business among individuals and the ownership of property.
   c. The constitutional rules that shape the American legal system.
   d. The procedural rules that govern court adjudication.
   e. Several advanced areas of substantive or procedural law or both.
2. Use legal reasoning and legal analysis in advising and representing clients. This requires:
   a. The ability to identify, formulate, and apply legal rules.
   b. The ability to read and analyze judicial opinions.
   c. The ability to parse and interpret statutes, regulations, contracts, and other similar legal texts.
   d. The ability to construct legal arguments and evaluate critically one's own and others' legal arguments.
   e. The ability to identify and evaluate the practical consequences of various legal rules and to formulate policy arguments for and against those rules.
3. Bring practical legal skills to bear in resolving clients' legal problems. This requires:
   a. The ability to write clearly and effectively in a wide range of legal contexts and for various audiences, including courts, clients, and opposing counsel.
   b. The ability to articulate one's thoughts verbally in a clear and effective manner.
   c. Knowledge of and ability to use tools of legal research.
   d. The ability to identify and gather factual information relevant to the application of legal rules.
   e. The ability to work collaboratively with others, including others with opposing interests.
   f. Knowledge and understanding of practical aspects of the legal profession and market for legal services.
4. Conduct himself or herself professionally and in keeping with the highest standards of civic virtue. This requires:
   a. Knowledge and appreciation of the ethical rules governing legal practice.
   b. The ability to learn and grow professionally through self-reflection and continuing education.
   c. An understanding of the lawyer's distinctive role in society and of the lawyer's concomitant responsibility to contribute to society through public service and pro bono representation.
   d. The self-awareness and empathy necessary to understand and be understood across various social, economic, cultural, political, national, racial, gender, and ethnic backgrounds.

Medical Scholars Program

for the joint degrees of Medical Doctor and Doctor of Philosophy

program director: James M. Slauch, PhD
program address: 320 Illini Union Bookstore MC-325, 807 South Wright Street, Champaign, Illinois 61820
overview of Carle Illinois College of Medicine admissions & requirements: CI MED Admissions (https://medicine.illinois.edu/admissions/)
overview of graduate college admissions & requirements: Graduate Admissions (https://grad.illinois.edu/admissions/apply/)
email: MSP@medicine.illinois.edu

This program combines the MD with any PhD program available from the University of Illinois Urbana-Champaign.

Graduate Degree Programs

The Medical Scholars Program enables students to combine the study of medicine leading to the MD with graduate study in a second field leading to the PhD. The program seeks to produce leaders uniquely qualified and motivated to address the issues shaping modern medical practice, including health care systems, biomedical research, advances in science and technology, and pressures arising from socioeconomic forces.

Admission

To enter the Medical Scholars Program (MSP), applicants must meet the admission requirements of, and be accepted by, both the Carle Illinois College of Medicine (CI MED) and the Graduate College. Prospective students must demonstrate a potential for creativity and original research, a sense of social awareness and service, academic excellence, competence in leadership and interpersonal relationships, and an appropriate rationale for their interest in combined study. Students apply to CI MED via the American Medical College Application Service (https://students-residents.aamc.org/applying-medical-school/applying-medical-school-process/applying-medical-school-amcas/)® (AMCAS®) (See https://medicine.illinois.edu/admissions/). Only U.S. citizens and permanent residents are eligible to apply. State residency is not a factor. Applicants will NOT need to designate themselves as MD/PhD applicants in the AMCAS application. Over the first year of medical school, students will receive advising from the MSP and be able to explore different PhD programs and potential advisors. Near the end of the first year, interested students will complete an MD/PhD application to be reviewed by an MSP Admissions Sub-Committee. Upon conditional acceptance to the MSP track, students must apply for admission to a graduate program and the Graduate College. The Medical College Admissions Test (MCAT)

is required for admission to medical school; most graduate programs accept the MCAT in lieu of the GRE.

Approved Areas of Specialization

The University offers graduate study in more than 100 fields in which MSP applicants may propose combined degree study. Indeed, MSP students can pursue graduate study leading to a PhD in any discipline offered on campus. In addition to the traditional biomedical sciences, students may pursue graduate study in engineering, the physical sciences, humanities and social sciences.

Requirements

Students in the Medical Scholars Program are expected to fulfill all the degree requirements of both the Carle Illinois College of Medicine and the graduate PhD program. At their discretion, graduate programs allow medical school classes to count toward completion of a portion of the graduate degree. Faculty advisors from the medical school and from the graduate unit help students set realistic long-term study plans that integrate the two curricula.

Financial Aid

All medical students are responsible for their tuition during the first phase of medical school. Students accepted into the MSP will be funded by their respective graduate program during their PhD studies. This includes a tuition waiver and stipend in the form of a research assistantship, teaching assistantship, or fellowship. Upon completion of the PhD and return to the medical school curriculum, MSP students will receive a CI MED tuition scholarship to complete Phase 2 and Phase 3. Students are highly encouraged to apply for fellowship support from the National Institutes of Health that could fund a portion of the graduate work and last two years of medical school.

The PhD program can count up to 12 credit hours of medical school coursework toward completion of the PhD course requirements. The individual graduate programs will decide how much credit can be used to fulfill their requirements.

Upon completion of the PhD and depending on the nature of the thesis work, the CI MED may waive the MD requirement for the capstone project or the data science project. Alternatively, on a case-by-case basis, the required number of weeks of electives could be reduced for MD/PhD students.

Students must be enrolled in the term that they defend their PhD. MSP students can be enrolled in either graduate school or medical school the semester they defend. The individual degrees will be awarded upon completion of the respective requirements.

COLLEGES, SCHOOLS & ACADEMIC UNITS

Carle Illinois College of Medicine (p. 1172) **(CIMED)**

College of Agricultural, Consumer & Environmental Sciences (p. 1186) **(ACES)**

College of Applied Health Sciences (p. 1187) **(AHS)**

College of Education (p. 1189) **(EDUC)**

College of Fine & Applied Arts (p. 1190) **(FAA)**

College of Law (p. 1193) **(LAW)**

College of Liberal Arts & Sciences (p. 1194) **(LAS)**

College of Media (p. 1198) **(COM)**

College of Veterinary Medicine (p. 1201) **(VetMed)**

Division of General Studies (p. 1202)

Gies College of Business (p. 1202) **(BUS)**

Grainger College of Engineering (p. 1205) **(ENG)**

Informatics Programs (http://catalog.illinois.edu/schools/informatics-programs/)

School of Social Work (p. 1207) **(SSW)**

School of Information Sciences (p. 1217) **(iSchool)**

School of Labor and Employment Relations (p. 1233) **(LER)**

Carle Illinois College of Medicine

college website: https://medicine.illinois.edu/
college faculty: https://medicine.illinois.edu/faculty/

The University of Illinois at Urbana-Champaign Doctor of Medicine (MD) program is conducted on the Urbana Campus in the Carle Illinois College of Medicine. The college offers a professional, four-year MD degree program that integrates engineering concepts with the traditional pillars of medicine, namely the basic health sciences and clinical training, and prepares students for postgraduate medical education programs. This curriculum produces students who are trained and equipped to incorporate analytical and quantitative techniques, modeling and computation, innovation, and human systems approaches to advancing and delivering high quality healthcare. The curriculum emphasizes professional, compassionate, and ethical care and the utilization of team-based approaches to transform healthcare delivery and improve healthcare outcomes through the continuum of care: preventive medicine through acute care. In addition to required courses, elective rotations provide opportunities for students to explore specialized areas of interest. The educational program spans four (4) years. Students are exposed to extensive clinical training, professional development and scientific and engineering education through a case-driven active learning curriculum.

The college selects applicants with the best combination of academic and extracurricular achievement, maturity, integrity, and motivation. Selection of students is based on an assessment of all available data and an evaluation of skills and aptitude. The quality of work in all subject areas is considered, with an emphasis on quantitative methods, breath of education, and experiences that demonstrate initiative, creativity and interest in compassionate patient care.

For more information about the University of Illinois at Urbana-Champaign MD program, including Admissions, Financial Aid, and the Curriculum, please consult https://medicine.illinois.edu/.

BSE Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/BSE/)

Biomedical Sciences Engr Courses

BSE 600 Global One Health credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BSE/600/)
Same as VCM 547. See VCM 547.

BSE 612 Foundations: Molecules to Populations credit: 13 Hours. (https://courses.illinois.edu/schedule/terms/BSE/612/)
This course, which covers the fundamental elements of medical science, serves as a baseline for the rest of the medical school curriculum. Topics to be covered include foundational anatomy, cell biology, histology, physiology, integration of engineering science, systems, microbiology, pharmacology, genetics, and behavioral science, concepts of populations, social behavior, chronic disease, health care team, patient safety, statistics, big data, Patient-Centered Medical Home, palliative care, quality, compensation, and mobile health technologies. No graduate credit. 13 professional hours. Approved for S/U grading only. May be repeated up to 13 hours in the same terms, to a maximum of 39 credit hours in separate terms, with approval from the Student Progress and Promotions Committee. Prerequisite: Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

BSE 631 Cardiovascular credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BSE/631/)
Topics include ischemic heart Dx, cardiomyopathy/CHF, aortic stenosis, atrial fibrillation, peripheral vascular disease, pediatric ASD. No graduate credit. 4 professional hours. Approved for S/U grading only. May be repeated in separate semesters for a total of 12 credit hours with approval from the Student Progress and Promotions Committee. Prerequisite: Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

BSE 632 Respiratory credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BSE/632/)
Topics include asthma -- peds, COPD, Pulmonary Fibrosis, Respiratory failure, pulmonary vasculitis. No graduate credit. 3 professional hours. Approved for S/U grading only. May be repeated in separate semesters for a total of 9 credit hours with approval from the Student Progress and Promotions Committee. Prerequisite: Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

BSE 633 Renal credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BSE/633/)
Topics include UTI with pyelonephritis, urinary obstruction-BPH, acute renal failure-toxic, chronic renal failure-DM, polycystic renal disease-peds. No graduate credit. 3 professional hours. Approved for S/U grading only. May be repeated in separate semesters for a total of 9 credit hours with approval from the Student Progress and Promotions Committee. Prerequisite: Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

BSE 634 Clinical Neuroscience credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/BSE/634/)
Topics include neurovascular disorders, seizures, brain injury, dementia, tumors of the brain, disorders involving neuroinflammation, psychotic disorders, affective disorders, anxiety disorders, as well as disorders of the peripheral nervous system and neuromuscular junction. No graduate credit. 5 professional hours. Approved for S/U grading only. May be repeated in separate semesters, for a total of 15 credit hours with approval from the Student Progress and Promotions Committee. Prerequisite: Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

BSE 635 Musculoskeletal credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BSE/635/)
Topics include primary inflammatory diseases such as rheumatoid arthritis, lupus, polymyalgia rheumatica and associated disorders, degenerative diseases of the joints such as osteoarthritis, primary diseases of muscle, primary diseases of bone such as osteoporosis and osteogenesis imperfecta as well as mechanical trauma to bone leading to fracture. No graduate credit. 4 professional hours. Approved for S/U grading only. May be repeated in separate semesters for a total of 12 credit hours with approval from the Student Progress and Promotions Committee. Prerequisite: Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

BSE 636 Digestion, Nutrition, & Metabolism credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/BSE/636/)
Topics include malabsorption syndrome, vitamin D deficiency, G6PD deficiency, TPN, obesity, GERD with stricture/Barretts, Crohn's disease, peptic ulcer disease with hemorrhage, chronic diarrhea, pyloric stenosis – peds hepatitis C, and colonic polyposis. No graduate credit. 1 to 5 professional hours. Approved for S/U grading only. May be repeated in separate semesters for a total of 15 credit hours with approval from the Student Progress and Promotions Committee. Available for honors grade. Prerequisite: Participation in ongoing study of the digestive system. Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

BSE 638 Endocrine, Genitourinary, & Women's Health credit: 1 to 10 Hours. (https://courses.illinois.edu/schedule/terms/BSE/638/)
Topics include diabetes – type II, ketoacidosis, hypothyroidism, hyperthyroidism, adrenal insufficiency, Cushing's syndrome, diabetes insipidus, hypogonadism, erectile dysfunction, testicular torsion, infertility, sexual orientation, BPH, dysmenorrhea, menorrhagia, polycystic ovarian disease, cervical dysplasia, menopause – vasomotor, pelvic pain, normal delivery, breach, multiple gestation, medical illness of pregnancy – diabetes, and placenta previa. No graduate credit. 1 to 10 professional hours. Approved for S/U grading only. May be repeated in separate semesters for a total of 30 credit hours with approval from the Student Progress and Promotions Committee. Available for honors grade. Prerequisite: Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

BSE 642 Hematology, Oncology, Infection, and Immunity credit: 1 to 6 Hours. (https://courses.illinois.edu/schedule/terms/BSE/642/)
Topics include lung cancer, colon cancer, breast cancer, renal cancer, prostate cancer, pancreatic cancer, iron deficiency anemia, sickle cell anemia, lymphoma- non-Hodgkin, acute myelocytic leukemia, chronic lymphocytic leukemia, idiopathic thrombocytopenia, pneumonia, sepsis UTI – pyelonephritis, cellulitis, HIV anaphylaxis, allergic dermatitis, and myocarditis encephalitis. No graduate credit. 1 to 6 professional hours. Approved for S/U grading only. May be repeated in separate semesters for a total of 24 credit hours with approval from the Student Progress and Promotions Committee. Available for honors grade. Prerequisite: Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

BSE 644 Multisystem Conditions credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BSE/644/)
The Multisystem Conditions course is a required course for students in Phase 1 of the Carle Illinois College of Medicine Curriculum. In this course, students work in small groups to approach complex diseases and conditions they may see in the clinical environment. No graduate credit. 4 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 12 hours. Prerequisite: Restricted to students enrolled in Phase 1 of the Carle Illinois College of Medicine curriculum.

BSE 645 Synthesis & Summary credit: 6 Hours. (https://courses.illinois.edu/schedule/terms/BSE/645/)
This course will review critical concepts in the areas of Behavioral Science, Biochemistry, Cells and Tissues, Human Development and Genetics, Microbiology, Immunology, Pathology, and Pharmacology, Population Health. The course will be organized around the major organ systems: Blood and Lymphoreticular System, Cardiovascular, Endocrine, Gastrointestinal, Hematology and Oncology, Musculoskeletal, Neurology, Psychiatry, Renal, Reproductive, Respiratory, Skin and Subcutaneous Tissue. No graduate credit. 6 professional hours. Approved for S/U grading only. Prerequisite: This course is restricted to Carle Illinois College of Medicine Students.

BSE 646 Synthesis & Summary - Phase 2 credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/BSE/646/)
An optional elective for students who are at the end of Phase 2 in the Carle Illinois College of Medicine curriculum. Designed to be student-centered. During the course, you will review how the basic science disciplines fit together, identify personal content weaknesses and work to deepen your understanding, create a Step 2 study strategy, and prepare for Step 2 in a manner that values wellness as well as growth. No graduate credit. 0 to 4 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 8 hours. Prerequisite: Restricted to students enrolled in Phase 2 or 3 of the Carle Illinois College of Medicine curriculum.

BSE 650 Global Studies/Service Learning Elective credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/BSE/650/)
This course will engage the student in interdisciplinary studies or projects and demonstrate understanding of complex global events and processes of globalization. Students will learn about issues and problems in health care from a global perspective. No graduate credit. 1 to 4 professional hours. Approved for S/U grading only. May be repeated to a maximum of 28 hours. Prerequisite: This course is restricted to Carle Illinois College of Medicine students.

BSE 655 Research Elective credit: 1 to 16 Hours. (https://courses.illinois.edu/schedule/terms/BSE/655/)
The goal of this course is to introduce the students to the foundations of selected multi-disciplinary research in medical/engineering field. Students will learn about the purpose for research; identifying researchable issues; finding, evaluating, and using sources effectively; recognizing methods associated with different types of data and disciplines; and writing a literature review. No graduate credit. 1 to 16 professional hours. Approved for S/U grading only. May be repeated up to 16 hours in the same semester, to a maximum of 64 hours in separate semesters. Prerequisite: This course is restricted to Carle Illinois College of Medicine students.

BSE 660 Self-Designed Study credit: 1 to 16 Hours. (https://courses.illinois.edu/schedule/terms/BSE/660/)
Students will develop skills and gain experience working collaboratively with other professional through a self-designed study. Develop a self-guided study when students have an interest in an intellectual issue that is best studied through an integrative approach based in multiple academic disciplines. This course will introduce the student to a selected multi-disciplinary study or project in the medical/engineering field, addresses appropriate methodology, provides opportunities for advanced level research or other creative projects, and culminates in an integrative experience. It must be arranged between the student and an individual faculty member or external collaborator, and subsequently approved by the dean of Academic Affairs. No graduate credit. 1 to 16 professional hours. Approved for S/U grading only. May be repeated up to 16 hours in the same semester to a maximum of 32 hours over separate semesters. Prerequisite: This course is restricted to Carle Illinois College of Medicine students.

BSE 665 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/BSE/665/)
Subject offerings of new and developing areas of knowledge in medicine intended to augment the existing curriculum. No graduate credit. 1 to 4 professional hours. Approved for S/U grading only. May be repeated to a maximum of 16 hours in the same or subsequent semesters. Prerequisite: This course is restricted to Carle Illinois College of Medicine students.

BSE 666 Academic Progress I (Longitudinal) credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/BSE/666/)
Provides students with an opportunity to demonstrate core medical skills. The course includes assessment of students' understanding of clinical skills, professionalism, anatomy, and medical knowledge. Areas covered in the course include: cardiovascular, respiratory, renal, neurology, musculoskeletal, digestive, nutrition, metabolism, endocrine, genitourinary, oncology, hematology, infection, and immunity. No graduate credit. 0 professional hours. Approved for S/U grading only. May be repeated in separate semesters. Prerequisite: Restricted to Carle Illinois College of Medicine students.

BSE 680 Innovation, Design, Engineering and Analysis Projects (Longitudinal) credit: 0 to 6 Hours. (https://courses.illinois.edu/schedule/terms/BSE/680/)
Innovation, Design, Engineering and Analysis Projects (IDEA) is a required course for students in Phase 2 of the Carle Illinois College of Medicine curriculum. In this course, students work independently and in small groups to solve challenges they are presented with in the clinical environment. No graduate credit. 0 to 6 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 15 hours. Available for honor grades. Prerequisite: Restricted to students enrolled in Phase 2 of the Carle Illinois College of Medicine curriculum.

BSE 685 Medicine - Capstone Project (Longitudinal) credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/BSE/685/)
Selecting one of the clinical challenges investigated during the Innovation, Design, Engineering and Analysis Projects (Longitudinal), students will work to potentially translate new approaches, technologies, and treatments in healthcare. No graduate credit. 2 to 4 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 12 professional hours. Prerequisite: Restricted to students enrolled in Phase 3 of the Carle Illinois College of Medicine curriculum.

BSE 686 Medicine - Data Science Project (Longitudinal) credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/BSE/686/)
Develop skills in data science for health care through the Data Science Project. Identify an exciting data-driven question, find data sources to address the question, and access and utilize those data to improve clinical care. Students will interact with databases, utilize tools for analyzing clinical or molecular data, and learn about the immense potential of medical data science while familiarizing themselves with the issues of human subject's protection and privacy regulations around data. No graduate credit. 2 to 4 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 12 hours. Prerequisite: Restricted to students enrolled in Phase 3 of the Carle Illinois College of Medicine curriculum.

BSE 690 Research credit: 1 to 8 Hours. (https://courses.illinois.edu/schedule/terms/BSE/690/)
Carle Illinois students are encouraged to participate in research in order to enhance their scientific reasoning, and fulfill the college's mission of developing "Physician Innovators". This course will allow students to engage in a broad spectrum of research experiences. Students will work closely with a research mentor at the University of Illinois at Urbana-Champaign to develop their ideas and generate a list of research outcomes. No graduate credit. 1 to 8 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 16 hours. Prerequisite: Students must be in Phase 2 or Phase 3 of the curriculum. This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

BSE 700 Innovations in Problem Based Learning credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BSE/700/)
This elective will provide students multiple opportunities to identify compassionate innovation through problem-based learning facilitation. The students will learn how to facilitate a PBL session and how to identify moments in cases where compassionate innovation can be furthered. This will be done through creating additional probes or tasks in the cases to be used by future facilitators. Students will also have the opportunity to create notes and evaluations on first year students. These notes/evaluation will be reviewed by CIMED facilitators. The overall goal of this is not only to improve cases for current PBL students, but to assist students participating in the elective in ideation and entrepreneurship. This will help students as they create IDEA projects in the clerkships as well as preparing them for Capstone and potentially Data Science projects. Based on student interest, certain areas of this elective may be emphasized to achieve student goals. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: Students must be in Phase 2 or Phase 3 of the curriculum. This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

BSE 701 Introduction to Telemedicine credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/BSE/701/**)**
This introduction to telemedicine will help students understand the role of telemedicine in various contexts such as in primary care, for underserved or rural patients, during times of crisis (disasters, pandemics) and more. Considerations include benefits & limitations, tools & technology, patient interactions & follow-up, insurance considerations, legal and regulatory issues, and research. Students will have an opportunity to research an area of telemedicine and present what they have learned. This could be new uses of telemedicine, new tools, policy/legal considerations, expanding the reach of telemedicine, or any other issue related to telemedicine. Outputs could include a literature review, program plan, roadmap, white paper or other presentation medium. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Restricted to students enrolled in the Carle Illinois College of Medicine.

BSE 702 Medical Spanish credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/BSE/702/**)**
Carle Illinois College of Medicine strives to support physicians who want to serve diverse populations. To that end, students may enroll in a 2-week medical Spanish course. This hybrid online course allows students to increase their proficiency in Spanish, while also practicing with a standardized patient. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Restricted to students enrolled in the Carle Illinois College of Medicine.

BSE 703 Medical Informatics credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/BSE/703/**)**
A detailed overview of biomedical and health informatics for medical students. The course provides up-to-date details on the informatics field, which includes: electronic health records, data standards and interoperability, clinical decision support, healthcare data analytics, population health, patient engagement, and telemedicine. It also describes and sets the context for new technologies, such as SMART on FHIR, machine learning, artificial intelligence, and wearables. No graduate credit. 2 professional hours. Approved for S/U grading only. Available for honors grades. Prerequisite: Restricted to students enrolled in the Carle Illinois College of Medicine.

BSE 704 Medicine in Literature credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/BSE/704/**)**
The medical encounter between patients and physicians has been represented in literary texts such as poems, short stories and novels for centuries. In this elective, students will be given the opportunity to reflect on the medical experience through an analysis of literary texts from various time periods and cultural contexts. Particular attention will be paid to the difference in perspective by patients, physicians and other actors in the healthcare setting. Our reading of literature will be complemented by texts from the field of narrative medicine, which uses the tools of literary analysis and close reading to understand patients' histories and fine-tunes awareness of the cultural and social determinants of health. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Restricted to students enrolled in the Carle Illinois College of Medicine.

BSE 705 Race in Medicine credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BSE/705/**)**
This elective provides an opportunity to explore the topics of unconscious bias, history of race in medicine and effects on systemic racism in medicine. The goal is to give time to grow in personal insight and development in this area to progress to become a compassionate and unbiased health care provider. Progress towards this goal will be made through the personal journey of completing a 21 day equity challenge and reflection paper, participation in online discussion boards, and group projects looking at the history and current state of racism and social determinants of health in medicine. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: Restricted to students enrolled in the Carle Illinois college of Medicine curriculum. The course is only available during the Discovery Learning timeframe.

BSE 706 Literature Review in Pathology credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BSE/706/**)**
Pathology is a multidisciplinary science that connects theory (basic sciences) with practice (clinical sciences). This elective provides students with opportunities to explore the role of pathology in medical education. This course might be of particular interest to those who are generally interested in medical education and/or pathology as a future specialty. No graduate credit. 4 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 8 hours. Prerequisite: Restricted to students enrolled at the Carle Illinois College of Medicine.

BSE 710 Computational Genomics credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/BSE/710/**)**
The first week of this elective is an intensive course for scientists and clinicians covers the basics of computational genomics, while integrating the latest technologies and computational methodologies. University of Illinois faculty and Mayo Clinic scientists teach lectures and lead hands-on lab exercises in a variety of subject areas including genome sequencing and assembly, polymorphism and variant analysis, epigenomics, and systems biology. The second week is an in-depth independent study that focuses on a project using the skills from the first week. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: This course is restricted to students enrolled in the Carle Illinois College of Medicine.

BSE 711 Climate Aware Physicians credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/BSE/711/**)**
Medical students should learn how to practice medicine in the context of the current health impacts of climate change. Throughout the U.S. and globally, climate change contributes to increasing morbidity and mortality, including heat illness, respiratory and cardiovascular disease from air pollution, vector and water borne diseases, food and water insecurity, mental stress, and injuries. We highlight health threats, policies, and actions for physicians, engineering/medical researchers, and medical students. No graduate credit. 2 professional hours. Approved for S/U grading only. Available for honor grades. Prerequisite: Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

BSE 720 Advanced Anatomy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BSE/720/)
Provides a focused concentration on gross anatomy via literature review and intensive cadaver dissection related to the student's specific clinical interest. Topics will emphasize clinical conditions that have clear anatomic correlates. Key topics will include the 3D relationships of gross anatomical structures, foundational anatomical knowledge required to interpret results of different imaging modalities, and the application of anatomical knowledge in carrying out surgical, diagnostic, or therapeutic clinical procedures. No graduate credit. 4 professional hours. Approved for S/U grading only. Available for honors grades. Prerequisite: Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

BSE 730 Introduction to Deep Learning on Healthcare Data credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/BSE/730/)
Covers deep learning methods, healthcare data and applications using deep learning methods. Includes activities such as online lectures or video lectures, programming labs, literature review, and individual or group presentations. The overall goal is to understand basic data science workflow for healthcare data such as electronic health records, clinical notes, and medical images, to learn basic deep learning models, and to learn the structure of data science projects. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Experience with Python programming, basic machine learning, and Jupyter notebooks. Restricted to students enrolled in the Carle Illinois College of Medicine curriculum.

BSE 790 Understanding the Response to the COVID-19 Pandemic credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/BSE/790/)
This course is designed to help students apply the principles of virology, immunology, public health, data science and population Medicine in evaluating the current public health policy responses to the COVID-19 pandemic. Since the learning activities will focus on current events and daily topics, they will be altered and refined to align with unfolding circumstances and policy decisions.The learning activities will provide students with a model foundation of competency and confidence which they would need to serve on a local, community health advisory board and provide expertise in support of the design of a coordinated response to mitigate the impact of a Covid-19 outbreak on patient health, societal well-being, business continuity and economic durability. The competency foundation will include: 1. an understanding of viral biology, host defense and infectious disease dynamics. 2. the ability to gather, understand and intelligently apply biostatistical and epidemiological data in designing practical solutions. 3. an appreciation of the different: a. political, demographic, educational, attitudinal, behavioral, socioeconomic, and cultural factors, along with the inherent disparities and preferences that impact health risk and community compliance to public health recommendations b. needs and constraints of local business owners c. barriers to public participation and communication. No graduate credit. 1 professional hour. Approved for S/U grading only. Prerequisite: Restricted to Carle Illinois professional students only.

CLE Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/CLE/)

Clinical Sciences Engr Courses

CLE 610 Faith, Medicine, and End-of-Life Care credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/610/)
Helps students to develop their skills in taking a spiritual history and addressing issues relating to faith; skills in end-of-life care; and understanding of whole person care. No graduate credit. 2 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 4 hours. Prerequisite: Restricted to students enrolled in the Carle Illinois Doctor of Medicine (MD) program.

CLE 613 Introduction to Clinical Practice (Longitudinal) credit: 0 to 6 Hours. (https://courses.illinois.edu/schedule/terms/CLE/613/)
Examines and exposes to the fundamentals of clinical work including office support with basic history, vitals, understanding the team, communicating with patients, observing health care roles and processes. Additionally, this course addresses concepts of history and physical assessment, includes H&P, preoperative assessment, routine physicals. No graduate credit. 0 to 6 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 12 hours. Available for honors grade. Prerequisite: Restricted to students enrolled in the Carle Illinois College of Medicine.

CLE 631 Clinical Elective credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CLE/631/)
This course will expose the students to a clinical specialty to learn more about treatment of disorders, lifestyle of the physicians and the experiences of the patients. Students will learn about interpersonal communication skills, gain a deeper understanding of the environment in which medical devices are used, observe therapeutic treatment in real time, and strengthen the clinical skills. No graduate credit. 1 to 4 professional hours. Approved for S/U grading only. May be repeated up to 16 hours in the same semester to a maximum of 40 hours over separate semesters. Prerequisite: This course is restricted to Carle Illinois College of Medicine students.

CLE 635 COVID Clinical Clerkship Make-Up credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/635/)
The clinical clerkship make-ups are a two-week rotation. This course allows students whose clerkships were disrupted by COVID-19 to further explore a specialty. No graduate credit. 2 professional hours. Approved for S/U grading only. May be repeated in same semester to a maximum of 4 hours. Prerequisite: Restricted to students enrolled in the Carle Illinois College of Medicine.

CLE 640 Family Medicine Clerkship credit: 1 to 10 Hours. (https://courses.illinois.edu/schedule/terms/CLE/640/)
This longitudinal clerkship provides an exciting opportunity for students to have clinical experiences within their own student clinic, as well as ambulatory practices in disciplines such as psychiatry, pediatrics, and family medicine. Students will learn the core skills and knowledge essential to the practice of primary care: diagnosis and treatment of common outpatient complaints, management of chronic medical conditions, and strategies for health promotion and disease prevention. No graduate credit. 1 to 10 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 10 hours. Available for honors grade. Prerequisite: This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 645 Internal Medicine Clerkship credit: 10 Hours. (https://courses.illinois.edu/schedule/terms/CLE/645/)
The medicine clerkship is a ten-week rotation. This clerkship emphasizes the integration and application of pathophysiology to the diagnosis and management of patients in addition to the skills of history-taking, physical examination, and case presentation. The course is an apprenticeship focusing on the bedside care of patients. Students work closely with house staff members and ward attendings making daily rounds, admitting new patients, and caring for them with the team. No graduate credit. 10 professional hours. Approved for S/U grading only. Available for honor grades. Prerequisite: This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 650 Neurology Clerkship credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/CLE/650/)
The neurology clerkship is a four-week introduction to clinical neurology, the specialty of medicine devoted to patients with diseases of the nervous system. The clerkship emphasizes the basic clinical methods of bedside neurology: Based on the history and examination, students develop skills at neuroanatomical localization and clinical reasoning. Students learn to interpret clinical findings, develop a differential diagnosis, and formulate a plan of evaluation. No graduate credit. 5 professional hours. Approved for S/U grading only. Available for honor grades. Prerequisite: This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 655 Psychiatry Clerkship credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/CLE/655/)
The Psychiatry Clerkship is a four week rotation. All students evaluate and follow patients on inpatient and outpatient services, participating in their patients' care with close attending and resident supervision. The acquisition of clinical skills is emphasized: conducting an interview to obtain a psychiatric history and mental status examination; organizing, recording, and presenting the findings to generate a differential diagnosis; and formulating a treatment plan in accordance with the biopsychosocial model. No graduate credit. 5 professional hours. Approved for S/U grading only. Available for honor grades. Prerequisite: This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 660 Obstetrics & Gynecology Clerkship credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/CLE/660/)
The obstetrics and gynecology clerkship is a five-week rotation. The main objective is to familiarize students with the signs and symptoms of normal and abnormal reproductive function and to teach the basic examinations in obstetrics and gynecology. The course will emphasize and reinforce skills for taking an appropriate history, performing a physical and pelvic examination, formulating a differential diagnosis as well as a treatment plan, and properly managing patients. No graduate credit. 5 professional hours. Approved for S/U grading only. Available for honor grades. Prerequisite: This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 665 Pediatrics Clerkship credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/CLE/665/)
The Pediatrics Clerkship is a five week rotation. The rotation is divided between inpatient and outpatient experiences. The emphasis is on learning to care for children and families in a variety of patient care settings and developing the clinical skills, diagnostic reasoning, and basic management strategies core to the practice of pediatrics. Attending physicians emphasize normal child development as well as the role illness plays in the lives of children and families. No graduate credit. 5 professional hours. Approved for S/U grading only. Available for honor grades. Prerequisite: This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 667 Academic Progress II credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/CLE/667/)
Students will be given an opportunity to demonstrate core medical skills through objective structured clinical examinations. This will include history taking, physical examinations, interpreting common test results, entering orders and prescriptions, giving oral presentations and collaborating as part of an interprofessional team. No graduate credit. 0 professional hours. Approved for S/U grading only. May be repeated, students may repeat this course, with approval from Carle Illinois Academic & Student Affairs. Prerequisite: Restricted to Carle Illinois College of Medicine Phase II or III students.

CLE 670 Surgery Clerkship credit: 10 Hours. (https://courses.illinois.edu/schedule/terms/CLE/670/)
The Surgery Clerkship is a ten-week rotation. The clerkship is designed to provide clinical experience that improves skills in overall patient care as students apply their knowledge of the basic sciences and expand their knowledge base through exposure to the wide variety of patients and procedures that fall into the realm of general surgery. Students become a valued member of the team as they assume responsibility for the overall care of their patients preoperatively and postoperatively and assist in the operating room. No graduate credit. 10 professional hours. Approved for S/U grading only. Available for honor grades. Prerequisite: This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 675 Adult Reconstruction - Hip and Knee credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CLE/675/)
The student will be involved in the daily activities of caring for patients with hip and knee degenerative conditions, as well as potential hip or knee injuries such as hip fractures or periprosthetic fracture. The student will work 1:1 with primary faculty in both clinic and the OR. In clinic, the student will have increasing autonomy to perform history and physical exams on this adult population as appropriate. This begins with shadowing and builds to independent H&P taking with evaluation of pertinent studies. The OR experience begins with scrubbing and shadowing, but will go on to include patient positioning, assisting with draping, application of dressings, and other activities the faculty feels appropriate based on the student knowledge and performance. No graduate credit. 4 professional hours. Approved for S/U grading only. May be repeated in separate terms up to a maximum 8 hours. Prerequisite: Completion of Phase 1 and OR Orientation class. Restricted to students enrolled in Phase 2 or Phase 3 of the Carle Illinois College of Medicine curriculum.

CLE 680 Family Medicine Continuity Clinic credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/CLE/680/)
The Family Medicine Clinic is a required course for students in Phase 2 of the Carle Illinois College of Medicine curriculum. The Family Medicine Clinic is structured to prioritize longitudinal relationships for continuous management of chronic disease. With graduated responsibility, medical students perform the functions of a primary care physician for their patient panel. Students are assigned to the clinic one evening per week. No graduate credit. 1 to 3 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 8 hours. Prerequisite: Family Medicine Clerkship. Restricted to students enrolled in Phase 2 of the Carle Illinois College of Medicine curriculum.

CLE 681 General Surgery Sub-Internship credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CLE/681/)
Carle Illinois students are required to complete at least one Sub-Internship rotation during their fourth year. In the General Surgery Sub-Internship, students will work with faculty in advanced clinical application of their medical knowledge gained from their core surgery clerkship. No graduate credit. 4 professional hours. Approved for S/U grading only. May be repeated to a maximum of 8 hours. Prerequisite: Successful completion of the Carle Illinois core clinical clerkships. Restricted to students enrolled in Phase 3 of the Carle Illinois College of Medicine curriculum.

CLE 683 Pediatrics Sub-Internship credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CLE/683/)
The four-week sub-internship in Pediatrics provides Phase 3 students supervised responsibility for patient care in general pediatric inpatient, pediatric intensive care, and neonatal intensive care. Each sub-intern will gain an awareness of the advanced knowledge, skills, values and attitudes the hospitalists/intensivists and ER physicians strive to acquire and maintain throughout their professional lives. No graduate credit. 4 professional hours. Approved for S/U grading only. May be repeated for a maximum of 8 hours. Prerequisite: Completion of Carle Illinois core clerkships. Restricted to students enrolled in Phase 2 or 3 of the Carle Illinois College of Medicine curriculum.

CLE 684 Internal Medicine Sub-Internship credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CLE/684/)
Carle Illinois students are required to complete at least one Sub-Internship rotation during their fourth year. In the Internal Medicine Sub-Internship, students will work with faculty in advanced clinical application of their medical knowledge gained from their core Medicine clerkship. No graduate credit. 4 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 8 hours. Prerequisite: Restricted to students enrolled in Phase 3 of the Carle Illinois College of Medicine curriculum.

CLE 685 Anesthesiology Sub-Internship credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CLE/685/)
Provides a more in-depth experience and preparation for the knowledge and procedures performed when working with patients who require sedation anesthesia and pain management for various reasons. Anesthesia fellowships typically encompass experiences in perioperative/periprocedural locations. This experience will thus aim to provide the student with exposure to these areas where anesthesiologists typically work. It will be an opportunity to build trust with providers over the four weeks so that they may possibly recommend the student for future work in this field. The experience will teach the student how to interact with patients undergoing anesthesia, allowing practice in communicating treatment plans, and discussing concerns with the patients undergoing such procedures. Additionally, it will be a chance for the student to gain more experience in some of the more advanced skill sets required for work in these fields. No graduate credit. 4 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 8 hours. Prerequisite: Successful complete of all Carle Illinois Core Clerkships. Restricted to students enrolled in Phase 2 or Phase 3 of the Carle Illinois College of Medicine.

CLE 686 Neurology Sub-Internship credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CLE/686/)
Illustrates the advanced responsibilities and activities that students are expected to demonstrate and participate as an integral member of a neurology team during this advanced clinical rotation. The overall goal for the Neurology Sub-Internship is to give further depth exposure to neurology, with the goal of treating the student on this rotation as more like a resident. Students will conduct further, in depth on EEGs, imaging interpretation, and differential diagnosis. This experience is to provide students with advanced clinical skills necessary for their future role as a resident and be exposed to activities that continue their development according to the Core Entrustable Professional Activities (EPAs) for entering Residency related to Neurology. No graduate credit. 4 professional hours. Approved for S/U grading only. May be repeated in separate terms to a maximum of 8 hours. Prerequisite: Restricted to students enrolled in Phase 2 or Phase 3 of the Carle Illinois College of Medicine curriculum.

CLE 687 Obstetrics and Gynecology Sub-Internship credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CLE/687/)
Illustrates the advanced responsibilities and activities that students are expected to demonstrate and participate as an integral member of an Obstetrics and Gynecology team during this advanced clinical rotation. The overall goal for the Obstetrics and Gynecology Sub-Internship is to give further depth exposure to obstetrics, with the goal of treating the student on this rotation as more of a resident, carrying more patients. Further in depth on differential diagnosis, treatment options, and fetal heart monitor interpretation. This experience is to provide students with advanced clinical skills necessary for their future role as a resident and be exposed to activities that continue their development according to the Core Entrustable Professional Activities (EPAs) for entering Residency related to Obstetrics and Gynecology. No graduate credit. 4 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 8 hours. Prerequisite: Restricted to students enrolled in Phase 2 or Phase 3 of the Carle Illinois College of Medicine curriculum.

CLE 690 Clinical Research credit: 1 to 8 Hours. (https://courses.illinois.edu/schedule/terms/CLE/690/)
Carle Illinois students are encouraged to participate in research in order to enhance their scientific reasoning, and fulfill the college's mission of developing "Physician Innovators". This course will allow students to engage in a broad spectrum of research experiences. Students will work closely with a research mentor at the University of Illinois at Urbana-Champaign to develop their ideas and generate a list of research outcomes. No graduate credit. 1 to 8 professional hours. Approved for S/U grading only. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Restricted to students enrolled in the Carle Illinois College of Medicine.

CLE 691 Translational Research credit: 1 to 8 Hours. (https://courses.illinois.edu/schedule/terms/CLE/691/)
Carle Illinois students are encouraged to participate in research in order to enhance their scientific reasoning, and fulfill the college's mission of developing "Physician Innovators". This course will allow students to engage in a broad spectrum of research experiences. The research will be translational in nature. Students will work closely with a research mentor at the University of Illinois at Urbana-Champaign to develop their ideas and generate a list of research outcomes. No graduate credit. 1 to 8 professional hours. Approved for S/U grading only. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Restricted to students enrolled in the Carle Illinois College of Medicine.

CLE 692 Immersion in Clinical Practice - Phase 2 credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/692/)
Provide students and clinicians a chance to meet, in a non-classroom environment, to discuss in topics that impact clinical practice. Examples of these topics include: Domestic Violence, Burnout, Cultural Competence, and Legal Issues in Medicine. Students will be given readings, websites, and videos prior to each session. In addition,students will write brief essays on these topics based on their experience during their clerkships and other electives. Each session, over a dinner, will last approximately two hours. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Students must be in Phase 2 of the curriculum. This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 693 Self-designed Clinical Elective credit: 1 to 16 Hours. (https://courses.illinois.edu/schedule/terms/CLE/693/)
This elective will allow students to develop clinical skills and gain clinical experience under close supervision of clinical faculty through modifying a standing clinical elective to better match their interests or customize a clinical experience. It must be arranged between the student and an individual faculty member or external collaborator, and subsequently approved by the Assistant Dean for Curriculum. No graduate credit. 1 to 16 professional hours. Approved for S/U grading only. May be repeated up to 16 hours in the same semester to a maximum of 32 hours over separate semesters. Prerequisite: This course is restricted to Carle Illinois College of Medicine students.

CLE 702 Anesthesiology credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/702/)
The student will be introduced to various anesthesia techniques, including management of the patient's airway. The student will gain experience in administration of anesthetic drugs, management of critical life functions such as hemodynamics monitoring, blood and fluid therapy and acute pain management (both postoperatively and in Obstetrics). A pre-test will be given to assess student's existing knowledge of anesthesia and other clinical material. This will help the student understand the scope of study during the rotation. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Surgery Clerkship. Restricted to students enrolled in the MD program at Carle Illinois College of Medicine. Students must be in Phase 2 or Phase 3 of the curriculum.

CLE 704 Dermatology credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/704/)
The student is exposed to the private and clinical practice of general dermatology and is instructed in diagnosis and treatment. Emphasis is placed on the care of the patient and the student is expected to function as a member of the office team. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Students must be in Phase 2 or Phase 3 of the curriculum. Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 706 Emergency Medicine credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CLE/706/)
This elective is to provide exposure to the specialty of emergency medicine. The student will gain experience through the process of assessing a patient by history taking, physical exam and diagnostics. By the end of the 4 week elective the student should be able to obtain a complaint based history with review of system, complete a physical exam and start to formulate a differential diagnosis based upon the chief complaint. Stress will be placed on the development of the differential diagnosis. The experience will include learning appropriate laboratory and radiographic testing as well as treatment options for illnesses/disease that most commonly present to the emergency department. The student will commonly get exposure to patients with chest pain, abdominal pain, neurological disorders, undifferentiated malaise, early pregnancy complaints, STI, sepsis and trauma. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: Internal Medicine or Surgery Clerkship. Restricted to students enrolled in Phase 2 or Phase 3 of the Carle Illinois Curriculum.

CLE 713 Palliative Care – Introduction credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/713/)
Healthcare providers must be able to provide compassionate patient-centered care that optimizes well-being and alleviates suffering. Students will gain experiences caring for patients with advanced, chronic, and progressive illness that may be facing high symptom burden, complex treatment decisions, or may be near the end of life. The student will gain experience in the sub-specialty of Palliative Care through seeing patients on the inpatient consult services, outpatient primary palliative care clinic, embedded sub-specialty clinics, nursing home visits, and home visits. Student will participate in interdisciplinary rounds and work in a multidisciplinary team to optimize patient care. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Internal Medicine Clerkship. Restricted to students enrolled in Phase 2 or Phase 3 of the Carle Illinois curriculum.

CLE 714 Ambulatory Cardiology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CLE/714/)
The student will be exposed to the outpatient management of common cardiovascular disorders including coronary artery disease, valvular heart disease, vascular disease, heart failure, and atrial fibrillation as well as to the work-up of common referrals in an ambulatory setting such as chest pain, shortness of breath, edema, palpitations, dizziness, syncope, abnormal ECG, and preoperative risk assessment. The student will also learn basic ECG interpretation and have the opportunity to observe stress testing, nuclear imaging, and echocardiography. The goal is that the student develops his or her history taking and physical exam skills as it relates to the cardiovascular system by integrating the basic sciences with the art of medicine. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: Restricted Carle Illinois students in Phase 2 or Phase 3 of the curriculum.

CLE 715 Adult Intensive Care credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CLE/715/)
The goal of this elective is to expand the student's knowledge and understanding of intensive care issues affecting hospitalized patients, primarily focusing on appropriate diagnostic and therapeutic interventions and to provide the opportunity for the student to assume a more primary role in the responsibility of directing care of a patient in a team setting. Inherent in this experience is an opportunity for in-depth learning in the areas of professionalism and systems-based practice. The elective will encompass the learning of integrative skills, procedures and how to handle basic clinical scenarios including codes. The student will partner with their attending to develop the diagnostic and therapeutic plans for his or her patients, the student will engage in a formative experience designed to prepare him/her for the future care of patients in critical care. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: Internal Medicine Clerkship, General Surgery Clerkship, or Neurology Clerkship. Restricted to students enrolled in Carle Illinois College of Medicine. Students must be in Phase 2 or Phase 3 of the curriculum.

CLE 716 Hematology/Oncology credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/716/)
The goal of this elective to serve as an introduction to the internal medicine subspecialty of hematology and oncology. In the outpatient setting, the students will be exposed to various hematological and oncological conditions which are managed primarily as an outpatient and exposure to infusion center etc. where chemotherapy is administered. They will be asked to attend tumor board conferences whenever possible to understand the multidisciplinary management of an oncological problem. They will also get some inpatient experience where they will be introduced to management of oncological complications when patients present to the hospital. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Restricted to students enrolled in Phase 2 or 3 of the Carle Illinois College of Medicine curriculum.

CLE 717 Infectious Disease credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/717/)
The goal of this elective is to give students exposure to the field of infectious disease, including differential diagnosis, treatment options, and management strategies. Students should be able to manage 1-2 patients and independently devise plans for new consults. No graduate credit. 2 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 12 hours. Prerequisite: Carle Illinois Internal Medicine core clerkship. Restricted to students enrolled in Phase 2 or Phase 3 of the Carle Illinois College of Medicine.

CLE 730 Clinical Genetics credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/730/)
This elective course introduces medical students to the diverse practice of clinical genetics. The focus is on basic and applied genetics, genetic risk assessment, and genetic counseling as they relate to prevention, diagnosis, treatment, and management of disease. The course will serve as the basis for the healthcare professional to holistically integrate genetic/genomics, epigenetics, and scientific concepts into personalized health care. No graduate credit. 2 professional hours. Approved for S/U grading only. May be repeated for a maximum of 4 hours. Prerequisite: Completion of Internal Medicine Clerkship, Pediatric Clerkship, or Family Medicine Clerkship. Restricted to students enrolled in Phase 2 or Phase 3 of the Carle Illinois College of Medicine curriculum.

CLE 732 Neurosurgery I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/732/)
Designed to provide an introduction into different subspecialties of neurosurgery. It forms the basis for a strong foundation of knowledge of neurological diseases and how they are managed both surgically and non-surgically. Students will be immersed in day-to-day service, functioning essentially as a supervised intern, while working closely with our cohesive group of mid-level providers and attendings in the inpatient, outpatient and operating room settings. The goal of this neurosurgery elective is designed to familiarize students with the essential elements of neurosurgical evaluation and care so that they are able to provide exceptional frontline management. No graduate credit. 2 professional hours. Approved for S/U grading only. Available for honors grades. Prerequisite: Restricted to students enrolled in the MD program at Carle Illinois College of Medicine who are in Phase 2 or 3 of the curriculum.

CLE 733 Neurosurgery II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CLE/733/)
Designed to provide an in-depth experience into different subspecialties of neurosurgery. It builds on the the foundation of knowledge of neurological diseases and how they are managed both surgically and non-surgically from CLE 732. Students will be immersed in day-to-day service, functioning essentially as a supervised intern, while working closely with our cohesive group of mid-level providers and attendings in the inpatient, outpatient and operating room settings. Students will be responsible for composing an oral presentation on a patient encountered during their elective and research assignment assigned by faculty of neurosurgery. No graduate credit. 4 professional hours. Approved for S/U grading only. Available for honors grades. Prerequisite: CLE 732: Neurosurgery I. Restricted to students enrolled in the MD program at Carle Illinois College of Medicine who are in Phase 2 or 3 of the curriculum.

CLE 736 Urogynecology credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/736/)
This elective is for students interested in pursuing the field of obstetrics and gynecology who seek deeper knowledge and responsibility in the field of urogynecology. This will provide students a more complete experience in the clinical practice of urogynecology, surgery, urodynamics and clinical assessment of pelvic floor disorders. No graduate credit. 2 professional hours. Approved for S/U grading only. May be repeated to a maximum of 12 hours.

CLE 737 Gynecologic Oncology credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/737/)
This elective is for students interested in the field of Obstetrics and Gynecology and/or medical surgical oncology. The experience is for students who seek deeper knowledge and responsibility in the field of gynecologic oncology. The rotation will provide the student with a complete exposure to the clinical practice of gynecologic oncology. Students will perform initial workup and evaluation and staging of patients presenting with malignancy. Working with a provider, they will determine candidacy for surgery and assist with surgical procedures. Students will also follow patients during recovery and surveillance. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Successful completion of CLE 660. Restricted to students enrolled in Phase 2 or Phase 3 of the Carle Illinois College of Medicine curriculum.

CLE 738 Reproductive Medicine credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/738/)
This rotation is designed for the Phase 3 medical student who is well versed in Obstetrics and Gynecology and is possibly interested in pursuing a residency in OB/GYN. Activities will revolve around the workup of the infertile couple and the monitoring and management and treatment of reproductive problems. Time will be spent in the office setting, with office ultrasounds, consultations as well as management of ovulation induction cycles and monitoring of ovarian hyperstimulation for IVF. Observation of IVF procedures and assisting in other surgeries would be expected. Additional time in the andrology and IVF labs observing may be available. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Successful completion of Phase 2 clerkships. Restricted to students enrolled in Phase 2 or 3 of the Carle Illinois College of Medicine.

CLE 739 Advanced Obstetrics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CLE/739/)
This rotation is designed for the Phase 3 medical student who is well versed in Obstetrics and Gynecology and is possibly interested in pursuing a residency in OB/GYN. Activities will revolve around the work up of pregnancy and pregnancy-related complications. Time will be spent on Labor and Delivery, Antepartum, the Outpatient Maternal Fetal Medicine clinic, and the Outpatient Midwifery Clinic. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: Successful completion of all Phase 2 clerkships. Restricted to students enrolled in Phase 3 of the Carle Illinois College of Medicine curriculum.

CLE 740 Introduction to Ophthalmology credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/740/)
This 2-week course will serve as an introduction to Ophthalmology. During this rotation, students will gain a better understanding of the structure and function of the human eye, including an introduction to tools and testing for proper diagnosis and treatments. Students will also start learning about various ocular diseases including co-management of ocular and systemic diseases. This will also include understanding when and why to refer to other specialties. This course will be split between Optometry 25% and Ophthalmology 75%. This elective will culminate with a brief oral presentation to the preceptor on one idea to improve the field or one case that stuck with them. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Family Medicine Clerkship. Restricted to students enrolled in Phase 3 of the Carle Illinois College of Medicine.

CLE 741 Advanced Ophthalmology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CLE/741/)
This 4-week course give students a deep dive into the field of Ophthalmology. This includes a deeper understanding of the structure and function of the human eye including both common and uncommon disease states. Students will be given instruction on how to use tools for diagnosing common diseases. After diagnosis, students will create and propose a treatment plan, including possible referrals, to their preceptor. This course will be split between optometry 25 % and ophthalmology 75%. This elective differs from the introduction to Ophthalmology as it provides more autonomy in examining patients and in assisting with procedures such as cataract retain or lid surgery. In addition, this course will culminate in a brief (15 minute) research presentation on an area of interest in Ophthalmology or a current case. No graduate credit. 4 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 8 hours.

CLE 742 Plastic and Reconstructive Surgery credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CLE/742/)
Each four-week rotation will consist of familiarization with general plastic and reconstructive surgery. Emphasis will depend upon the current office and surgical case load. The student will assist in all facets of the practice and have an opportunity to view a wide range of cosmetic plastic surgery. The clinical and surgical experience will provide a solid foundation for innovative ideas in plastic and reconstructive surgery. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: Surgery Clerkship. Restricted to students in Phase 2 or Phase 3 of the Carle Illinois College of Medicine curriculum.

CLE 743 Orthopedic Trauma credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CLE/743/)
An advanced clinical elective focusing on the management of patients sustaining major orthopedic injuries and their sequelae. Students will be involved in all aspects of the continuum of care, including initial emergency management, non-operative and surgical treatment of injuries, inpatient care, and the outpatient management of patients sustaining fractures and dislocations of the extremities and pelvis. Students will work with faculty daily and are expected to have direct participation in all activities. The application of basic science foundations in anatomy, cell biology/systems physiology, and fundamental biomechanical principles will be emphasized as they relate to the treatment of fractures and optimizing fracture healing. Students may, with approval of faculty director, create a proposed innovated solution to an orthopedic trauma situation. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: Surgery Core Clerkship. Restricted to students enrolled in Phase 2 or 3 of the Carle Illinois College of Medicine.

CLE 744 Oral & Maxillofacial Surgery I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/744/)
Provides exposure to the field of Oral & Maxillofacial surgery. Students will gain experience in the full scope of this surgical specialty including traditional outpatient ambulatory surgery, craniomaxillofacial trauma, orthognathic/reconstructive surgery, cleft lip and palate surgery, and maxillofacial oncology. The student will gain experience in head and neck surgical anatomy, imaging, and principles of management of these subspecialty areas. Additionally, students will gain exposure in the application of technology to these clinical problems such as the role virtual surgical planning. No graduate credit. 2 professional hours. Approved for S/U grading only. Available for honors grading. Prerequisite: CLE 670: Surgery Clerkship. Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 745 Oral & Maxillofacial Surgery II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CLE/745/)
Provides exposure to the field of Oral & Maxillofacial surgery. Students will gain experience in the full scope of this surgical specialty including traditional outpatient ambulatory surgery, craniomaxillofacial trauma, orthognathic/reconstructive surgery, cleft lip and palate surgery, and maxillofacial oncology. The student will gain experience in head and neck surgical anatomy, imaging, and principles of management of these subspecialty areas. This advanced course will allow for increased involvement in the day to day management of patients in the clinic, emergency room, in-patient setting, and the operating room. No graduate credit. 4 professional hours. Approved for S/U grading only. Available for honors grading. Prerequisite: CLE 670: Surgery Clerkship. Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 746 Otolaryngology - ENT credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/746/)
This elective is designed for the student seriously considering a career in otolaryngology or seeking a deeper knowledge of ENT. Emphasis on diagnosis and treatment of common head and neck disorders. Students will experience ENT patients in ambulatory, surgery, and in-patient settings. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Family Med and OR Orientation. Restricted to students enrolled in the MD program at Carle Illinois College of Medicine in Phase 2 or Phase 3 of the curriculum.

CLE 748 Surgical Pathophysiology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CLE/748/)
Underlying modern diagnosis and treatment of complex surgical disease is a fascinating and complex pathophysiology. In the context of current practitioner training, it has become challenging to address these fundamental concepts in detail that is sufficient to initiate long-term interest in the scientific underpinnings of surgical science. This rotation allows student a 'deep dive' into the underlying physiology and medical history of modern diagnosis and treatment. Students will meet surgical patients, whose disease will initiate investigations of the historical and basic science underpinnings of modern surgical care. Potential areas of investigation may include classic medical physiology such as the treatment of hyperkalemia in a surgical patient with particular attention to the associated cellular processes and electrophysiology, the mechanisms of non-cytotoxic systemic cancer therapy such as immunotherapy and gene or protein directed therapy or the physiology of systemic inflammatory response and the (largely failed) attempts to intervene in that pathologic process on the cellular level. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: Students must be in Phase 2 or Phase 3 of the curriculum. This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 750 Developmental Pediatrics credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/750/)
This clinical rotation is designed to provide a student with a comprehensive preview of the commonplace developmental and behavioral problems experienced by up to 15% of children in our community. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Restricted to students in Phase 2 or Phase 3 of the Carle Illinois College of Medicine curriculum.

CLE 751 Neonatal Intensive Care credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/751/)
The student enrolled in this elective will be exposed to caring for neonates in the Carle Neonatal Intensive Care Unit (NICU). Students will participate and present in daily rounds, attend deliveries, and assist with procedures. Students will learn basic principles of neonatal care, as well as the diagnosis and management of common neonatal pathology. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Restricted to students in Phase 2 or Phase 3 of the Carle Illinois College of Medicine curriculum.

CLE 752 Pediatric Pulmonology & Sleep Medicine credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CLE/752/)
The goals of the Pediatric Pulmonology & Pediatric Sleep Medicine elective rotation are to delve into common pediatric pulmonary and sleep diagnoses (asthma, cystic fibrosis, insomnia, snoring) and become familiar with less common conditions. Students will learn to further develop the differential diagnosis and use it to generate a plan of care. In addition, pharmacology, physiology, radiographic imaging, pulmonary function testing, and polysomnography will be discussed as they relate to the various pulmonary and sleep diagnoses. No graduate credit. 4 professional hours. Approved for S/U grading only. May be repeated in separate terms up to a maximum 8 hours. Prerequisite: Restricted to students enrolled in Phase 2 or 3 or the Carle Illinois Curriculum.

CLE 764 Physical Medicine and Rehabilitation credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/764/)
Provide students with an introduction to in-patient physical medicine and rehabilitation. Students will consult with patients in the hospital for possible admission, admit the patient, perform a history and physical, and round daily with attending physicians. Student will learn about different types of care provided through the physical medicine and rehabilitation service including: Rehabilitation, electrodiagnosis, general outpatient and musculoskeletal rehabilitation, and non-healing wound care rehab. Students will have an opportunity to work with a physician, to determine the goals and objectives of patient rehabilitation. Students will have the opportunity to observe and interact with other rehabilitation team members including physical and occupational therapists, speech-language pathologists, rehabilitation social work, case management, nutrition, and psychology. Outpatients are seen for musculoskeletal problems. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Family Medicine. This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 771 Addiction Medicine credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/771/)
This unique elective offers students direct access to the rapidly developing field of addiction medicine. Students will take part in direct patient care at an outpatient addiction specialty clinic with a multidisciplinary team of providers. They will also have the opportunity to attend a drug court in Champaign County and participate in a needle exchange program through the Champaign County Public Health Department. On satisfactory completion, students will have gained a better understanding of the evidence-based treatment options of individuals living with substance use disorders. They will also have firsthand experience combating one of the greatest challenges facing modern medicine - the opioid epidemic. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 773 Radiation Oncology credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/CLE/773/**)**
Radiotherapy is an integral part modern multidisciplinary cancer care. This clinical elective is designed to introduce students to the field of Radiation Oncology and use of radiotherapy. We will provide direct experience with evaluation and management of patients with malignant disease, as well as occasional benign conditions regarding radiotherapy. Students will learn epidemiology, pathophysiology, and staging of cancer patients, and then utilize evidence-based approaches for their treatment. This will include opportunities to learn basic information about radiobiology and physics to inform their understanding of radiotherapy planning and treatment delivery. Students will augment direct patient care interactions with attendance of multidisciplinary tumor conferences with other oncologic specialties, as well as departmental quality assurance rounds. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Medicine Core Clerkship. Restricted to students enrolled in Phase 2 or 3 of Carle Illinois College of Medicine.

CLE 774 Simulated Clinical Ultrasound credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/CLE/774/**)**
The Simulated Ultrasound elective enables students to develop skills related to clinical ultrasound. Utilizing a SonoSim and the associated online modules, students will have the opportunity to enhance their understanding of this imaging tool, and prepare for clinical environments that could benefit from point-of-care ultrasound. Students will learn ultrasound principles and acquisition skills through an online self-paced module. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Restricted to students enrolled in the Carle Illinois College of Medicine.

CLE 775 Point of Care Ultrasound credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CLE/775/**)**
The Clinical Ultrasound elective enables students to explore specialties where point-of-care ultrasound can be utilized. Students will learn ultrasound principles and acquisition skills through an online self-paced module. Students will further learn through observing sonographers, providing students with opportunity to refine their skills through observation and questions. Students will work with attending providers (up to four) in different inpatient specialties to assess and care for patients, identifying cases where ultrasound imaging may be useful. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: Restricted to students in Phase 2 or Phase 3 of the Carle Illinois curriculum.

CLE 776 Diagnostic Radiology and Non-Cardiac Nuclear Medicine credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/CLE/776/**)**
Students will observe both acquisition and interpretation of diagnostic exams.These will include, but are not limited to, plain film, fluoroscopy, computerized axial tomography and magnetic resonance imaging. In addition, the student will observe both ultrasonography and nuclear medicine procedures including ultrasound of thyroid and abdominal structures. Nuclear Medicine interpretations will include bone scans, thyroid scans, PET/CT. Students will review films correlated to their clinical experiences and future residency plans, read assigned material dealing with basic diagnostic and fundamental radiology, and attend conferences related to the imaging service. Students will observe invasive diagnostic procedures occurring in the Imaging Department. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Student must be in Phase 2 or Phase 3 of the curriculum. This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 777 Vascular and Interventional Radiology credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/CLE/777/**)**
Students will observe and work with the Vascular and Interventional radiology team at Carle foundation Hospital. Students will observe and participate in clinical management of patient with a disease and pathophysiology involving the entire human body and all organ systems. Student will learn basic imaging principles and how they are applied to the management and treatment of disease with special attention to minimally invasive, imaging guided techniques. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Students must be in Phase 2 or Phase 3 of the curriculum. This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 778 Imaging in Critical Care credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/CLE/778/**)**
This elective focuses on remote learning of imaging in the ICU. The primary focus will be interpretation of chest x-ray and chest CT. This starting point will allow students to pursue individual learning goals regarding critical care such as infectious disease, pulmonology, cardiology, and physics. Students will be given a chance to “follow” the patients through their time in the ICU by viewing their images and all other records. This will allow students to become facile with the electronic medical record system. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Family Medicine Clerkship. Restricted to students in Phase 2 or Phase 3 of the Carle Illinois College of Medicine curriculum.

CLE 779 Bariatric Surgery credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CLE/779/**)**
The goal of this rotation is to recognize the importance of obesity as a disease and the strong impact it has in patients’health, also to describe the management of obesity and understand the pathophysiology of obesity. It will mainly focus on the pre-op assessment of bariatric patients by a multidisciplinary team, surgical procedures to treat obesity as well as the postoperative care of bariatric patients. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: Students must be in Phase 2 or Phase 3 of the curriculum. This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 780 Hand Surgery credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/CLE/780/**)**
The student participating in this elective will gain initial exposure to Orthopedic Hand Surgery both in the clinic setting and in the operating room. The student will work 1:1 with the faculty in the operating room and clinic in the care of Hand Surgery patients. This elective can be tailored to the individual student’s needs, interest, and educational level. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Surgery Clerkship. Student must be in Phase 2 or Phase 3 of the curriculum. This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 781 Vascular Surgery credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CLE/781/**)**
This rotation seeks to expose the medical student to the specifics of evaluation and diagnosis of surgical vascular disease, and surgical interventions for vascular disease. Students will be involved and evaluate patients in both the inpatient and outpatient settings. Emphasis will be placed on history, physical and diagnostic results, a rich discussion of noninvasive vascular studies including venous duplex, arterial doppler, and arterial duplex, as well as advanced imaging results. The student will participate in the operating room and scrub into cases to assist with the surgical team. This rotation is designed to expose and educate medical students about the breath of vascular surgery interventions and develop an understanding of a global assessment of a patient with vascular disease. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: General Surgery Clerkship. Students must be in Phase 2 or Phase 3 of the curriculum. This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 782 Rural Surgery credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CLE/782/**)**
The rotation in Rural surgery is designed to provide the student with exposure to the practice of general surgery in a rural setting at a smaller community hospital. The practice includes the evaluation and management of common general surgical conditions as well as significant exposure to flexible endoscopy – both EGD and colonoscopy. The students will be responsible for seeing new consults, writing a history and physical note, and presenting them to the preceptor. They will round on our patients daily. They will assist in all procedures. Additionally, the student will be exposed to the unique environment of a small community hospital, including the decision-making process regarding types of procedures which can be effectively completed versus those which require transfer. During this rotation, student will work one-on-one with the faculty preceptor and be provided with graded responsibility. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: Surgery Clerkship. Restricted to students in Phase 2 or Phase 3 in the Carle Illinois curriculum.

CLE 783 Colon and Rectal Surgery credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CLE/783/**)**
This is an advanced surgical elective focused on surgical disorders of the lower gastrointestinal tract. Students will become part of our team as we care for inpatients and outpatients with colon, rectal, and anal disorders. The student will have the opportunity to evaluate patients in the hospital, office, endoscopy suite, operating theater, and participate in several multidisciplinary conferences. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: Surgery Clerkship. Restricted to students in Phase 2 or Phase 3 in the Carle Illinois curriculum.

CLE 784 Pediatric Surgery credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/CLE/784/**)**
Pediatric surgeons care for children (birth to age 18) with surgical concerns. These can be either congenital problems (birth defects such as anorectal malformations, Hirschprungs disease, intestinal atresias, etc) or acquired conditions that present during childhood (pyloric stenosis, hernias, appendicitis). Care is provided in both the inpatient and outpatient settings and involves both planned and emergent procedures. The student will participate in the operating room, scrubbing into cases to assist with the surgical team. Students will be active participants in both inpatient and outpatient care and will also have 1 on 1 lectures to learn about surgical care and common pediatric surgical conditions. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Surgery Clerkship. Restricted to Carle Illinois College of Medicine students. Students must be in Phase 2 or Phase 3 of the curriculum.

CLE 786 Introduction to Urology credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/CLE/786/**)**
Participation in the outpatient and inpatient management of urological problems. These include urological neoplasms (prostate, bladder, renal, and testicular), urinary calculi, and management of urinary incontinence. The student will actively examine patients in the office and assist with surgery. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Students must be in Phase 2 or Phase 3 of the curriculum. This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 793 Quality Improvement & Patient Safety credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/CLE/793/**)**
In this elective, students will gain experience with the various aspects of health care quality and patient safety. This could include participation in continuous quality improvement plans (CQI), literature reviews to inform hospital practice, policy and protocol development, and collaborating with health care administrators to respond to community health issues. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Restricted to students enrolled in the Carle Illinois College of Medicine.

CLE 794 Values in the Physician-Patient Relationship credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/CLE/794/**)**
Constant changes in healthcare settings, coupled with rapid advancements in technology, lead to increasingly complicated ethical dilemmas: Who decides what—patients, doctors, or family members—and on what basis? Should patients' autonomy always be respected, or can physicians act paternalistically towards their patients? What are the ends and norms of the medical profession and how are they determined? Can physicians deviate from these ends and norms and refuse to provide treatment, for example, for conscientious reasons? In this course, we will attempt to answer these (and other) pressing normative questions. In doing so, we will attain an understanding of the complicated network of values at play in the physician-patient relationship. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Restricted to students enrolled in Phase 2 or 3 of the Carle Illinois College of Medicine.

CLE 799 Advanced Clinical Electives credit: 0 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CLE/799/**)**
Phase 2 and Phase 3 students are eligible to participate in short-term elective opportunities that can enhance their medical education. These electives include clinical opportunities, away rotations, away electives, clinical rotations, and visiting opportunities. Each elective is offered by participating host institutions in the U.S. and around the world. Elective opportunities are available in teaching hospitals, community clinics, and urban or rural sites and are open to clinical or final-year students, as determined by the host institution. No graduate credit. 0 to 4 professional hours. Approved for S/U grading only. May be repeated up to 20 hours in the same semester if topics vary, and separate semesters to a maximum of 32 hours. Prerequisite: Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

Learning Outcomes: Medicine, MD

Learning Outcomes for the Doctor of Medicine degree in Medicine

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The Education Program Objectives (EPO) are the principle guiding document for the development of the curriculum. The curriculum structure was designed as a logical sequence to allow students to achieve the education program objectives as each phase progressively builds on the previous content. The development of each individual course and clerkship is guided primarily by the education program objectives. The initial development of the course and clerkship learning objectives was completed after the education program objectives were finalized.

CI MED's EPOs are guided by the AAMC (American Association of Medical Colleges) and GME (Graduate Medical Education) requirements for competencies of medical students and residents. We have 6 outcomes, each with several sub-outcomes that are more measurable.

1. **Outcome 1:** Altruism - the practice of selfless concern for the well-being of others.
   a. Describe the theories and principles that govern ethical decision making in medicine, particularly those decisions that arise at the beginning and end of life.
   b. Demonstrate compassionate treatment of patients, and respect for their privacy and dignity.
   c. Demonstrate honesty and integrity in all interactions with patients, their families, colleagues, and others with whom physicians must interact in their professional lives.
   d. Demonstrate an understanding of, and respect for, the roles of other health care professionals, and of the need to work in collaborative healthcare teams in caring for individual patients and in promoting the health of defined populations.
   e. Advocate for the interests of one's patients over one's own interests, at all times.
   f. Exhibit an understanding of the threats to medical professionalism posed by the conflicts of interest inherent in the practice of medicine.
   g. Recognize and accept limitations in one's knowledge, skills, attitudes, and behaviors, and continuously improve these attributes.
2. **Outcome 2:** Medical Knowledge - the knowledge necessary for medical practice and skills to expand understanding.
   a. Describe the normal structure and function of the body (as a whole) and of each of its major organ systems.
   b. Describe the molecular, biochemical, and cellular mechanisms that are important in maintaining the body's homeostasis.
   c. Describe the various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of disease conditions and the ways in which they operate on the body.
   d. Describe the altered structure and function (pathology and pathophysiology) of the body and its major organ systems that are seen in various diseases and conditions.
   e. Demonstrate an understanding of the power of the scientific method in basic, translational, clinical, and engineering research.
   f. Demonstrate an interest in and commitment to lifelong learning to stay abreast of relevant scientific advances.
3. **Outcome 3:** Skill - the ability to perform skills needed for medical practice, analyze results of tests, solve clinical problems, and communicate solutions to multiple audiences.
   a. Obtain an accurate and complete medical history.
   b. Perform complete and organ-system specific examinations, including a mental status examination.
   c. Perform routine clinical procedures.
   d. Recommend and interpret the results of commonly used diagnostic procedures and tests.
   e. Describe the most frequent clinical, laboratory, imaging, and pathologic manifestations of common disease states.
   f. Reason deductively in solving clinical problems.
   g. Design and explain the basis for appropriate management strategies (preventive, diagnostic and therapeutic) for common acute and chronic conditions.
   h. Recognize patients with immediately life-threatening or serious conditions requiring critical care and institute appropriate initial therapy.
   i. Demonstrate knowledge of pain management.
   j. Communicate effectively, orally and in writing, with patients, their families, and professionals in health and other fields with whom physicians must exchange information in carrying out their responsibilities.
4. **Outcome 4:** Duty - a holistic view of healthcare system and understanding of population health.
   a. Demonstrate knowledge of the important non-biological determinants of poor health and of the socioeconomic, behavioral, psychological, and cultural factors that contribute to the development and/or continuation of health and disease.
   b. Demonstrate knowledge of the epidemiology of health and disease within a defined population, and the systematic approaches useful in reducing the incidence and prevalence of those diseases.
   c. Identify risk factors for disease or injury, select appropriate tests for detecting patients at risk for or in the early stage of specific diseases, and determine strategies for responding appropriately including prevention strategies.
   d. Retrieve biomedical information from appropriate resources and manage and utilize it within a quantitative and statistical framework to solve clinical problems and make decisions.
   e. Demonstrate knowledge of the organization, financing, and delivery of health care.
   f. Demonstrate cultural competency and a commitment to overcome health disparities by providing care to all patients and advocating for access to health care for underserved populations.

5. **Outcome 5:** Innovation - the ability to identify opportunities in societal and technical spaces, create solutions, and have a positive impact on health care delivery.
   a. Identify unexpected opportunities to provide extraordinary value for patients, populations, and health systems.
   b. Apply systems-based and creative thinking to complex, uncertain diagnoses or other healthcare problems.
   c. Evaluate the feasibility of innovative healthcare solutions to address patient, societal, population, and global health needs.
6. **Outcome 6:** Engineering - Skills necessary to create technical solutions and make technology-related decisions to improve healthcare.
   a. Integrate information from many sources to gain insight into patient care.
   b. Identify, formulate, and solve healthcare problems by applying principles of engineering, science, medicine, and mathematics.
   c. Apply analysis and synthesis to the engineering design process, resulting in designs that address identified healthcare challenges.
   d. Conduct relevant healthcare and engineering research and apply quantitative skills and medical judgment to implement solutions.
   e. Communicate data-based costs, risks, and benefits of engineering solutions to healthcare teams, health systems, medical device manufacturers, and other health industry stakeholders.

College of Agricultural, Consumer & Environmental Sciences

website: https://aces.illinois.edu

The College of Agricultural, Consumer & Environmental Sciences plays a key role in national and international research initiatives in biological, physical, social, and economic sciences. The scope of the College has broadened dramatically since its founding in 1867, while its purpose remains focused on advancing scientific knowledge that makes life better, healthier, safer, and more profitable for people in Illinois and around the globe.

The ACES College enrolls more than 2,700 students in its seven departments, leading to a Bachelor of Science degree. Students can select from majors and concentrations that direct the focus of study to their specific interests.

Teaching, research, and outreach opportunities are supported by excellent resources. The College of ACES Library and Information Center houses the college's collection of educational resources, computing facility and the College of ACES career development and placement office, which assists students in personal and career development through internships and placement after graduation. The Family Resiliency Center, Institute for Genomic Biology, Child Development Laboratory and extensive research centers in Champaign-Urbana and across the state are other examples of unique and excellent college resources. For instance, the Morrow Plots, a national historic landmark established in 1876, are the oldest agronomic research plots in the United States. The Morrow Plots are located on campus next to the undergraduate library.

The ACES James Scholar Honors Program and the Jonathan Baldwin Turner Undergraduate Research Program offer excellent opportunities for students to be involved in cutting edge research and solving contemporary challenges. Research is conducted in the broad areas of consumer behavior, biotechnology, environmental quality and protection, financial planning, food science, human nutrition, natural resource systems, and individual and family well-being.

Increasing the international knowledge and experience of students and faculty helps meet the growing demand for graduates who are internationally literate and able to work effectively in different countries, in different languages and with people of different cultures. The academic programs office provides initiative and focus to College international study abroad programs as well as integrating an international dimension to the educational experience.

The distinguished faculty, innovative programs, and pioneering achievements in teaching, research, and outreach activities, together with an enthusiastic and competitive student body, place the College of ACES among the top institutions in the country in a survey of peers.

Departments and Curricula

The Department of Agricultural and Biological Engineering offers two majors: Agricultural & Biological Engineering/Agricultural Engineering Sciences and Technical Systems Management. Students in the Agricultural and Biological Engineering major earn that degree from the College of Engineering and have the option of a second degree in Agricultural Engineering Sciences. This major is designed to produce graduates who have a basic engineering education for careers of engineering service to the agricultural, environmental, and biofuels industries. The intent of the program is to provide a combination of engineering theory and applications courses to permit students to pursue goals in academia, government or industry. The graduates are expected to provide engineering solutions in agricultural production, bioprocesses and product utilization, natural resources conservation, and are exposed to current social and cultural concepts and ideas. The Technical Systems Management major is designed to prepare students for careers requiring the application, management, and marketing of engineering technologies. Students study technological systems, business and economics (including organization, operations, management, marketing, and sales), and oral and written communications. Graduates of the TSM program accept positions of employment at highly competitive salaries.

The Department of Agricultural and Consumer Economics offers programs designed to prepare students for business- or policy-related fields with special emphasis on agriculture, consumers, and environmental protection. Students' study is concentrated in one of the following areas: agri-accounting; finance in agribusiness; agribusiness markets and management; consumer economics and finance; environmental economics and policy; farm management; financial planning; policy, international trade and development; and public policy and law.

The Department of Animal Sciences offers undergraduate students unique opportunities to conduct research projects with faculty. In addition, many students gain animal experience by working part-time at the U of I Farms. Internships and field study trips are additional avenues of gaining knowledge and experience. Study Abroad experiences are also strongly encouraged. Areas of concentration are companion animal and equine science; science, pre-veterinary and medical; and food animal production and management.

The Department of Crop Sciences offers a major in Computer Science and Crop Sciences and a major in Crop Sciences with concentrations of study in plant biotechnology and molecular biology, crop agribusiness, biological sciences, agroecology, plant protection, horticultural food systems, and crops. In each of these concentrations, students receive

a strong grounding in science and can apply that knowledge through internship experiences with a wide range of agricultural employers. Each area of study can lead to employment immediately after completion of the B.S. degree, or to graduate or professional study.

The Department of Food Science and Human Nutrition offers concentrations of study in dietetics, food science, hospitality management, and human nutrition. Courses in the department include the applications of biology, engineering, chemistry, physics, and microbiology to the processing, formulation, packaging, and distribution of food.

The Department of Human Development and Family Studies' major allows students to choose to concentrate their study in either child and adolescent development or family studies. The program prepares students for graduate education or employment in areas such as child care services, family life education, social work, human services, marriage and family counseling, pediatric services in hospitals, cooperative extension work or business activities related to children and families. Students select course work according to their interests in human development, such as infancy, early childhood or adolescence, or family studies, such as the marital relationship, parent-child interaction, family change or conflict and conflict management in the family. Basic courses in these areas are linked to practical experiences in educational and community settings, and most courses emphasize issues related to cultural diversity and gender.

The Department of Natural Resources and Environmental Sciences provides students the opportunity to study ecosystem stewardship & restoration ecology, environmental science & management, fish, wildlife & conservation biology, and human dimensions of the environment. NRES is an interdisciplinary program that brings biological, physical, and social scientists together to teach and discover techniques to improve the health and integrity of urban and natural ecosystems.

Bachelor's of Science in Agricultural Leadership, Education, and Communications which can be tailored to fit each student's individual interests by selecting one of our degree concentrations in either Agricultural Communications, Agricultural Education or Organizational and Community Leadership.

Metropolitan Food & Environmental Systems major is focused on feeding the world's future population in a fashion that sustainably promotes environmental and human health is the most pressing problem facing the planet and its inhabitants. In response to this challenge, local food systems have become a fast emerging sector of agricultural and food science in major metropolitan areas with entrepreneurship, investment, and an increasing job market following the movement.

The College also offers a program for undeclared students which allows them to explore the many areas of ACES, working with a college advisor to find the right major for their specific interests.

Admission Requirements

Freshman applicants must meet general course pattern admission requirements of the University. Detailed information on the admission process may be obtained from the Office of Undergraduate Admissions.

Transfer applicants are evaluated on the basis of their transfer grade point averages and completion of core course requisites. Transfer applicants to the Dietetics and Human Nutrition major must have a grade point average of at least 3.0 (A = 4.0); applicants to Agricultural and Consumer Economics and Agricultural Science Education need a minimum GPA of 2.75, and all other curricula require at least a grade point average of 2.5. Applicants are encouraged to consult the Office of Undergraduate Admissions for specific course requirements.

Graduation Requirements

The minimum number of hours required for graduation varies between 126 and 130 for all curricula within the college. Included in the total must be all courses prescribed in the given curriculum and a sufficient number of electives to obtain the total number.

Each candidate for graduation must have a grade point average of not less than 2.0 (A = 4.0), including grades in courses transferred from other institutions, and a grade point average of not less than 2.0 in all courses taken at the University of Illinois at Urbana-Champaign. Candidates for graduation from Dietetics, Human Nutrition, and Agricultural Science Education must have institutional and overall grade point averages of at least 2.5 (A = 4.0).

Scholarship Information

A number of scholarships for undergraduate students enrolled in the College of ACES are made available through the generous support of alumni and friends of the College. Incoming and currently enrolled ACES students are eligible for consideration for merit-based awards that are awarded annually by the College. Additional information on scholarships for ACES students can be found at https://aces.illinois.edu/academics/current-students/scholarships.

Departments

- Agricultural & Biological Engineering (https://abe.illinois.edu)
- Agricultural & Consumer Economics (https://ace.illinois.edu)
- Animal Sciences (https://ansc.illinois.edu)
- Crop Sciences (https://cropsciences.illinois.edu)
- Food Science & Human Nutrition (https://fshn.illinois.edu)
- Human Development & Family Studies (https://hdfs.illinois.edu)
- Natural Resources & Environmental Sciences (https://nres.illinois.edu)

Division

- Nutritional Sciences (https://nutrsci.illinois.edu/)

Programs

- Agricultural Communications Program (https://agcomm.illinois.edu)
- Agricultural Education Program (https://aged.illinois.edu)
- Metropolitan Food and Environmental Systems (https://mfst.illinois.edu/programs/bachelors-degree/)

College of Applied Health Sciences

Cheryl Hanley-Maxwell, Dean
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undergraduate admissions: https://admissions.illinois.edu/myillini-apply (https://admissions.illinois.edu/myillini-apply/)

The programs in the College of Applied Health Sciences provide students with a holistic understanding of health and human behavior. Drawing on the expertise of our faculty and industry partners, we equip students to design, develop and implement initiatives that enhance health and well-being. **Students with an interest in health professions, administration, environmental stewardship, social and economic development of communities, education and advocacy or public policy can find a program of study that will match their interest in the College of Applied Health Sciences.**

As America's approach to health and wellness changes, health care is no longer limited to the traditional practice of doctors and nurses. As a result, the growth market lies in areas related to prevention, quality of life, changing leisure needs, health planning, and therapeutic intervention. As society struggles with these issues, the College and its graduates will continue to play an important role in shaping the future. A degree from the College of Applied Health Studies allows graduates to pursue a wide array of scientific and professional careers.

Students in the College of Applied Health Sciences enjoy many advantages: high quality degree programs, small classes, an emphasis on student-faculty interaction, active research programs, the opportunity to participate in professional student organizations, the availability of internships, and the largest separate college library in our field.

Along with the relationships they establish with faculty, students work closely with an academic adviser. The College of Applied Health Sciences requires students to meet with advisers to develop a relationship that will guide their studies and experiences while on campus. A solid network of student services available at the University of Illinois enhances the advising experience.

We offer degree programs in five academic areas: Community Health, Interdisciplinary Health Sciences, Kinesiology, Recreation, Sport and Tourism, and Speech and Hearing Science.

- Advising services are available to assist with career information and the development of appropriate courses of study.
- Honors programs are available for outstanding students at the college and campus level.
- Internship experiences are required with most departmental curricula. Quality placements are available throughout the United States and around the world in specific degree programs.
- Study abroad programs are available around the world.
- Students have access to the nation's third largest academic library, including an excellent college library, reference service, inter library loan system, and term-paper counseling system.
- Students engage with College of Applied Health Sciences faculty as early as their freshman year including the opportunity to participate in world-class research.

Honors at Graduation

Graduation from the College of Applied Health Sciences with any honors designation requires that a student must have attained at the University of Illinois at Urbana-Champaign a specific minimum cumulative grade point average based on a minimum of 55 semester hours in residence.

- Bronze Tablet (see Honors section (http://ahs.illinois.edu/honors-programs/))
- Dean's List (see Honors section (http://ahs.illinois.edu/honors-programs/))
- Highest Honors: 3.75 to 4.0
- High Honors: 3.5 to 3.74
- Honors: 3.25 to 3.49

Edmund James Scholars

The James Scholar Program is a University-wide honors program established to encourage undergraduate research and independent study and to foster scholarly endeavors (see James Scholar Honors Program (http://ahs.illinois.edu/james-scholar/)).

Departments

- Kinesiology & Community Health (http://www.kch.illinois.edu/)
- Recreation, Sport & Tourism (https://ahs.illinois.edu/recreation-sport-%26-tourism/)
- Speech & Hearing Science (https://ahs.illinois.edu/speech-%26-hearing-science/)

Programs

- Interdisciplinary Health Sciences Program (https://ahs.illinois.edu/interdisciplinary-health-sciences/)

Undergraduate Programs offered by the College of Applied Health Sciences

- Community Health (http://catalog.illinois.edu/undergraduate/ahs/departments/ch-kines/ch/#majorstext)
- Interdisciplinary Health Sciences (p. 243)
- Interdisciplinary Minor in Aging (http://catalog.illinois.edu/undergraduate/ahs/aging/)
- Kinesiology (http://catalog.illinois.edu/undergraduate/ahs/departments/ch-kines/kines/#majortext)
- Recreation, Sport and Tourism (http://catalog.illinois.edu/undergraduate/ahs/departments/recreation-sport-tourism/#majorstext)
- Recreation, Sport and Tourism Minor (p. 519)
- Speech and Hearing Science (p. 383)
- Speech and Hearing Science Minor (p. 525)

Graduate Majors

- Audiology, AUD (http://catalog.illinois.edu/graduate/aud_audiology/)
- Community Health, PhD (http://catalog.illinois.edu/graduate/graduate-majors/community-health/#doctoratetext)
- Health Administration, MS (p. 799)
- Kinesiology, MS (http://catalog.illinois.edu/graduate/ms_kines/)
- Kinesiology, PhD (http://catalog.illinois.edu/graduate/graduate-majors/kinesiology/#doctoratestext)
- Community Health, MS (http://catalog.illinois.edu/graduate/graduate-majors/community-health/ms-comm-health/)
- Rehabilitation, MS (http://catalog.illinois.edu/graduate/graduate-majors/community-health/ms-rehab/)
- Public Health, MPH (http://catalog.illinois.edu/graduate/graduate-majors/community-health/master-pub-health/)

- Recreation, Sport and Tourism, MS (http://catalog.illinois.edu/graduate/graduate-majors/rec-sport-tourism/ms-rec-sport-tour/)
- Recreation, Sport and Tourism, MS — Online (http://catalog.illinois.edu/graduate/graduate-majors/rec-sport-tourism/ms-rec-sport-tour-onl/)
- Recreation, Sport and Tourism, PhD (http://catalog.illinois.edu/graduate/graduate-majors/rec-sport-tourism/#doctoraltext)
- Speech and Hearing Science, MA (p. 1023)

College of Education

Education Building
1310 South Sixth
Champaign, IL 61820

college website: https://education.illinois.edu/ (http://education.illinois.edu/)
faculty: https://education.illinois.edu/faculty-finder (https://education.illinois.edu/faculty-finder/)

Departments

- Curriculum & Instruction (https://education.illinois.edu/ci/)
- Education Policy, Organization & Leadership (https://education.illinois.edu/epol/)
- Educational Psychology (https://education.illinois.edu/edpsy/)
- Special Education (https://education.illinois.edu/sped/)

undergraduate admissions: https://admissions.illinois.edu/myillini-apply (https://admissions.illinois.edu/myillini-apply/)

on-campus admission: U of I student application (http://education.illinois.edu/programs/information-for/ui-students-applying-to-the-major/)

undergraduate advising: Student Academic Resources (https://education.illinois.edu/programs/undergrad/undergraduate-advising-support/), 110 Education Building

The College of Education at the University of Illinois at Urbana-Champaign offers undergraduate degree programs in the following areas:

Majors with teaching licensure

- Early Childhood Education, BS (http://catalog.illinois.edu/undergraduate/education/early-childhood-education-bs/)
- Elementary Education, BS (http://catalog.illinois.edu/undergraduate/education/elementary-education-bs/)
- Middle Grades Education, BS (http://catalog.illinois.edu/undergraduate/education/middle-grades-education-bs/)
- Special Education, BS (http://catalog.illinois.edu/undergraduate/education/special-education-bs/)

Major without teaching licensure

- Learning & Education Studies, BS (http://catalog.illinois.edu/undergraduate/education/learning-education-studies-bs/)

Minor

- Teacher Education Minor in Secondary School Teaching (http://catalog.illinois.edu/undergraduate/education/minors/teacher-education-secondary-school/)

A distinguishing hallmark of the College of Education is the commitment to diversity. Faculty members engage in research, teaching, and service activities developed to ensure that all children, including those who are racially, ethnically, linguistically, and economically different as well as people with different abilities and disabilities, are provided with educational opportunities.

Requirements

Admission

Admission to the College of Education at any level (freshmen, off campus and on-campus applicants) is competitive.

General Education

In order to meet the University's current requirements in general education, each candidate for a degree from the College of Education must complete the campus general education requirements and the Language other than English through the third level. In most teacher education curricula, specific coursework within the general education areas must be taken. Also, in some teacher education curricula, additional credit in the general education areas is required. For more information on required general education coursework, contact a College of Education academic adviser. Students must select their courses for general education from the campus general education course list (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/).

Graduation

Undergraduate students in the College of Education must meet the University requirements for graduation. For those in a major leading to licensure, the requirements of the Council on Teacher Education (http://cote.illinois.edu/) for licensure must also be met. Students in all curricula must meet the course and academic credit requirements of their curricula with satisfactory scholastic averages. Student teaching is required of all undergraduates in a licensure major and must be completed through the University of Illinois at Urbana-Champaign.

Students in need of additional information concerning regulations and degree requirements of the College of Education should consult their academic advisers or the Assistant Dean for Academic Affairs in the College of Education, University of Illinois at Urbana-Champaign, 110 Education Building, 1310 South Sixth Street, Champaign, IL 61820.

Special Programs

Honors at Graduation

Eligibility for graduation with honors is established after all grades are recorded following a student's final semester. A student who achieves the required scholastic average in all work presented for graduation (excluding credit for courses not included in the computation of the grade point average) may be recommended for honors as follows: honors, minimum cumulative grade point average of 3.75; high honors, minimum cumulative grade point average of 3.85; highest honors, minimum cumulative grade point average of 3.90.

Edmund J. James Scholars

The James Scholar program is a University-wide honors program established to encourage undergraduate research and independent study and to foster scholarly endeavors. As a James Scholar, students are

entitled to certain academic privileges, including priority assignment of registration time, access to the "stacks" in the library, and official recognition on the University of Illinois transcript.

Entering freshmen are invited to participate for the upcoming fall semester based on the Office of Undergraduate Admissions standard that combines factors such as standardized test scores and high school GPA. Transfer and continuing students must have achieved at least a 3.5 cumulative and University of Illinois grade point average to participate.

Students are certified as James Scholars by the college on a yearly basis. To qualify for this certification, the student must successfully complete a James Scholar project/requirement in the fall and spring semester and maintain a 3.5 University of Illinois and cumulative grade point average. Details are available on the college website (http://education.illinois.edu/current-students/undergraduate/james-scholars/).

graduate admissions: College of Education (https://education.illinois.edu/programs/grad/how-to-apply/?url=/programs/grad)

graduate student services: (217) 244-3542, 142 Education Building, gradservices@education.illinois.edu

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The College of Education at the University of Illinois at Urbana-Champaign offers the following graduate degree programs:

Graduate Majors

- Curriculum and Instruction, CAS (p. 689)
- Curriculum and Instruction, EDD (p. 691)
- Curriculum and Instruction, EDM (p. 693)
- Curriculum and Instruction, MA (p. 695)
- Curriculum and Instruction, MS (p. 697)
- Curriculum and Instruction, PhD (p. 699)
- Early Childhood Education, EDM (p. 703) with teaching licensure
- Education Policy, Organization and Leadership, CAS (p. 716)
- Education Policy, Organization and Leadership, EDD (p. 722)
- Education Policy, Organization and Leadership, EDM (p. 718)
- Education Policy, Organization and Leadership, MA (p. 720)
- Education Policy, Organization and Leadership, PhD (p. 723)
- Educational Psychology, EDM (p. 725)
- Educational Psychology, MA (p. 728)
- Educational Psychology, MS (p. 731)
- Educational Psychology, PhD (p. 734)
- Elementary Education, EDM (p. 742) with teaching licensure
- Mental Health Counseling, MS (p. 875)
- Secondary Education, EDM (p. 994) with teaching licensure
- Special Education, EDM (p. 1018) with and without teaching licensure
- Special Education, MS (p. 1020)
- Special Education, PhD (p. 1022)

Graduate Concentrations

- Bilingual-Bicultural Education (p. 1076)
- Digital Learning (p. 1093)
- Diversity & Equity in Education (p. 1094)
- Educational Administration and Leadership (p. 1095)
- English (p. 996) with teaching licensure
- Global Studies in Education (p. 1098)
- Higher Education (p. 1098)
- History of Education (p. 1099)
- Human Resources Development (p. 1099)
- Learning Design and Leadership (p. 1101)
- Mathematics (p. 997) with teaching licensure
- Philosophy of Education (p. 1104)
- Sciences (p. 997) with teaching licensure
- Social Sciences & Education Policy (p. 1108)
- Social Science: History (p. 999) with teaching licensure

Graduate Minors

- College Teaching – Minor (p. 1129)

College of Fine & Applied Arts

Kevin Hamilton, Dean
110 Architecture Building
608 East Lorado Taft Drive
Champaign, IL 61820
PH: (217) 333-1661

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website: College of Fine & Applied Arts (https://faa.illinois.edu)
admission: Undergraduate Admissions (https://admissions.illinois.edu/myillini-apply/)
undergraduate advising: https://faa.illinois.edu/we-are-faa/directory#advisors (https://faa.illinois.edu/we-are-faa/directory/#advisors)

The College of Fine and Applied Arts prepares students for professional work in architecture, art and design, dance, landscape architecture, music, sustainable design, theatre, and urban and regional planning. Freshmen and transfer students may apply for admission. In each curriculum specific basic courses, professional courses, and general education requirements must be completed in order to qualify for the specific baccalaureate degree offered.

Graduate degrees are offered in many areas of study through the Graduate College.

The College of Fine and Applied Arts offers introductory courses designed to increase aesthetic appreciation and development, and to portray the role of the arts in civilization for all students who are attending the University of Illinois at Urbana-Champaign. Participation in the many bands, choruses, and orchestras on campus, as well as private instruction on most instruments and in voice, is available to students in all colleges by audition.

To serve the total academic community and all citizens in the state of Illinois, the college features the arts in exhibitions, concerts, lectures, performances, demonstrations, and conferences. Many outstanding professionals and works in these fields are brought to the University campus. All departments in the College of Fine and Applied Arts reserve the right to retain, exhibit, and reproduce the works submitted by students for credit in any course.

In addition to the teaching divisions, the College of Fine and Applied Arts includes the Krannert Center for the Performing Arts, the Krannert Art Museum, Japan House, and the Smart Energy Design Assistance Center.

Departments, Schools, and Curricula

The College of Fine and Applied Arts consists of the Departments of Dance, Landscape Architecture, Theatre, and Urban and Regional Planning; the Schools of Architecture, Art and Design, and Music. Additionally, the College hosts an interdisciplinary, undergraduate major in Sustainable Design. The specific functions of each department or school and the undergraduate curricula are described on the following pages. Consult the Undergraduate Handbook available on the college website for specific academic policies and procedures for students and faculty in the college.

Special Programs

Study Abroad

International study can be a life transforming experience. The college provides the opportunity for students to obtain campus credit for foreign study and/or travel for a summer session, one semester, or an academic year. Students in FAA have a range of opportunities for study abroad. They can pick from programs developed specifically for students in their major (e.g., year abroad in Barcelona for Architecture students) or from the many programs available through the Study Abroad Office (http://www.studyabroad.illinois.edu/) which serves the entire university population.

Prior to departure students are required to submit a study plan for review by their advisor and the college. Students with approved study plans retain their status as UI students and may continue their student health insurance while abroad. Participation in an approved UI program also counts as time in residence at the University.

Graduation Honors

The College honors superior students honors at graduation. To be eligible, students must have completed a minimum of four semesters of work and 65 hours of credit in residence at the Urbana-Champaign campus. More information on specifics may be found on the College website.

Dean's List

Each semester students are recognized by the College for academic excellence through the Dean's List. Eligible students must successfully complete at least 12 academic hours, taken for a letter grade (A through F), and earn a grade-point average that places them in the top 20 percent (approximately) of the College. Students who are registered with the Center for Wounded Veterans (CWV) or with Disability Resources and Educational Services (DRES) who are enrolled in less than 12 but a minimum of nine graded semester hours who are in the approximate top 20 percent are also eligible. Such students must sign a release with CWV or DRES indicating their consent for consideration for Dean's List eligibility and have submitted that consent to their home unit's academic affairs office no later than Reading Day in the semester in which they wish to be considered for Dean's List. These consent forms are valid only for the semester in which they are issued, and students must submit by the deadline updated consent forms for each semester in which they wish to be considered for Dean's List.

Students with grades that are incomplete or deferred are not considered for the Dean's List until letter grades have been submitted for those courses. The GPA level necessary to be placed on the Dean's List is revised annually and is posted on the College Web site.

James Scholar Honors Program

The College of Fine and Applied Arts James Scholar Honors Program (https://faa.illinois.edu/current-students/special-programs-honors/) creates an opportunity for FAA students to develop knowledge independently under the guidance of their instructors and advisors. Students entering the program in 2016 and later will complete a set of requirements designed to provide challenging, engaging, and diverse experiences. These requirements emphasize the value of research, community engagement, professional development, leadership, and collaboration and will prepare our James Scholars for a successful academic or professional future.

Requirements

Admission

All incoming students hoping to enroll in the College of Fine and Applied Arts as undergraduates must first complete the application for admission available from the university's Office of Undergraduate Admissions. Several programs within the college (majors in Art & Design, Dance, Music and Theatre) require a portfolio, audition and/or interview as part of the admissions process All application materials must be received before an admission decision can be made.

Graduation

Students who meet the general University requirements with reference to registration, residence, scholarship, fees, and general education requirements, and who maintain the minimum grade-point average required in their degree program, receive degrees appropriate to the curriculum completed. Refer to the specific unit and curricular requirements listed in the following sections. In addition, students must complete the required senior courses in their major field of study in residence at the Urbana-Champaign campus.

General Education

The Campus Senate, the faculty General Education Board, and the colleges have developed campus wide common general education requirements. Students are advised that some general education requirements may be fulfilled by courses required in the major. All FAA curricula require students to meet the minimum campus general education requirements for graduation. Some programs require additional general education courses. See the individual programs of study for each curriculum.

The College of Fine & Applied Arts consists of

The Departments of:

- Dance (http://dance.illinois.edu/)
- Landscape Architecture (https://landarch.illinois.edu/)
- Theatre (https://theatre.illinois.edu)
- Urban & Regional Planning (http://www.urban.illinois.edu)

and The Schools of:

- Architecture (https://arch.illinois.edu/)
- Art and Design (https://art.illinois.edu/)
- Music (https://music.illinois.edu/)

The specific functions of each department or school and the undergraduate curricula are described on the following pages. Consult

the college website for specific academic policies and procedures for students and faculty in the college.

Majors

Architectural Studies, BS (p. 61)
Art & Art History, BFA (p. 63)
Art Education, BFA (p. 66)
Computer Science & Music, BS (p. 321)
Crafts, BFA (p. 145)
    Metals (p. 145)
Dance, BA (p. 156)
Dance, BFA (p. 158)
Graphic Design, BFA (p. 222)
Industrial Design, BFA (p. 232)
Instrumental Music, BMUS (p. 322)
Jazz Performance, BMUS (p. 323)
Landscape Architecture, BLA (p. 253)
Lyric Theatre, BMA (p. 269)
    Creative (p. 270) | Performance (p. 271)
Music Composition, BMUS (p. 310)
Music Education, BME (p. 312)
    Choral Music (p. 312) | General Music (p. 314) | Instrumental Music (p. 316) | Technology (p. 318)
Music, BA (p. 320)
Musicology, BMUS (p. 325)
Music-Open Studies, BMUS (p. 326)
Photography, BFA (p. 342)
Studio Art, BASA (p. 393)
    General Studio Art (p. 395) | New Media (p. 396) | Painting (p. 397) | Printmaking (p. 398) | Sculpture (p. 399)
Studio Art, BFASA (p. 401)
    General Studio Art (p. 403) | New Media (p. 404) | Painting (p. 405) | Printmaking (p. 408) | Sculpture (p. 410)
Sustainable Design, BS (p. 413)
Theatre, BFA (p. 423)
    Acting (p. 424) | Arts & Entertainment Technology (p. 425) | Costume Design & Technology (p. 427) | Lighting Design & Technology (p. 428) | Scenic Design (p. 429) | Scenic Technology (p. 431) | Sound Design & Technology (p. 432) | Stage Management (p. 433) | Theatre Studies (p. 434)
Urban Studies & Planning, BA (p. 436)
    Global Cities (p. 436) | Policy & Planning (p. 437) | Social Justice (p. 439) | Sustainability (p. 440)
Voice, BMUS (p. 327)

Minors

Architectural Studies (p. 479)
Art + Design (p. 480)
Art History (p. 480)
Community-Based Art Education (p. 486)
Landscape Studies (p. 508)
Music (p. 514)
Musical Theatre for Performing Artists (p. 515)
Theatre (p. 530)
Urban Studies & Planning (p. 531)

Graduate Degree Programs

Architectural Studies, MS (post professional) (p. 577)
Architecture, MArch (p. 579)
Architecture, PhD (p. 583)
Art and Design, MFA (p. 585)
Art Education, EDM (p. 597)
Art Education, MA (p. 598)
Art Education, PhD (p. 599)
Art History, MA (p. 601)

specialized resources to cultivate skills needed for professional success. The office provides career events, workshops, and individual appointments to support students as they explore career options and become career-ready.

Krannert Art Museum

Krannert Art Museum (http://www.kam.uiuc.edu/) is an accredited art museum with a global collection of over 10,000 objects, ranging from antiquity to the present day. Its outstanding permanent collection and exhibition program places it among the top tier of university art museums in the nation. But the space is used as more than an art museum by students at the University of Illinois. Here they can gather to hear improvised music played by international artists, witness the work of performance artists, and participate in an open mic hip-hop cafe. Come and experience a space that allows for simultaneous interplay among artistic forms.

Krannert Center for the Performing Arts

The Krannert Center for the Performing Arts (http://www.krannertcenter.illinois.edu) is a remarkable four-theatre performing arts complex with spaces for instruction, rehearsal, and performance in theatre, opera, dance, and music. The Foellinger Great Hall, seating 2,200, is designed for large-scale musical events. The Tryon Festival Theatre, with 1,000 seats, is for opera, dance, and other musical stage productions. The Colwell Playhouse seats 700 and is the home of the Department of Theatre. The Studio Theatre, seating 150, is for experimental productions. An outdoor amphitheater, rehearsal rooms, offices, dressing rooms, technical shops, and underground parking on two levels for 650 cars complete this monumental facility.

Japan House

The study of Japanese culture began at the University of Illinois in 1900, with the arrival of the first Japanese student. Throughout the last century, the University's role as a leader in Japanese studies began to take form. Major themes of Japan House (http://japanhouse.art.illinois.edu/en/) are the four principles of the Way of Tea — harmony, respect, purity and tranquility. The heart of Japan House is sharing the Japanese Way of tea in its three authentic tea rooms to the community and through academic classes. The grounds feature a Japanese tea garden, strolling garden, and Zen-style rock garden.

SEDAC – Smart Energy Design Assistance Center

The Smart Energy Design Assistance Center (https://smartenergy.illinois.edu/) provides advice and analyses enabling private and public facilities in the State of Illinois to increase their economic viability through the efficient use of energy resources.

University Music Performance Organizations

The School of Music offers credit for all students enrolled in its many performance organizations. You do not need to be a music major to participate in our ensembles. Performance opportunities in the Bands area include five concert bands, two athletic pep bands (basketball and volleyball), clarinet choir, and the world-famous Marching Illini. The Choral area offers singers the opportunity to perform in Chamber Singers, Black Chorus, Men's and Women's Glee Clubs, University Chorus, and Oratorio Society. Our orchestras include the University Symphony, Philharmonia, and Illini Strings. In addition, we invite students to perform in one of our many jazz bands and/or jazz combos, gamelan ensemble, or one of our other groups specializing in contemporary music, world music, chamber music, improvisation, and early music.

To learn more about ensemble opportunities, visit our website at music.illinois/edu/join-ensembles (https://music.illinois.edu/join-ensemble/)

Libraries

Students in the college have at their disposal outstanding library resources. In addition to the University Library, one of this country's great university collections, there are specialized libraries serving the needs of specific fields. The Ricker Library of Architecture and Art contains more than 49,000 books (with almost 50,000 additional publications in the same fields located in the main University Library), 33,000 photographs, and 9,400 clippings.

The City Planning and Landscape Architecture collection comprises about 25,000 volumes of current interest housed in the Funk ACES library, along with more than 120,000 additional volumes covering closely related disciplines.

The Music and Performing Arts Library, located in the Music Building, contains over 400,000 items. These include introductory, instructive, research, and reference materials including books, editions of music, recordings, manuscripts, microfilm, and other materials.

Illinois Library digital collections are also available, such as ARTstor which provides access to images and other visual formats.

library.illinois.edu (http://library.illinois.edu)

College of Law

Dean of the College: Vikram David Amar
Associate Dean for Graduate and International Programs: Margareth Etienne
Correspondence and Admission Information: Christine Renshaw, Office of Graduate and International Legal Studies

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college website: https://law.illinois.edu
college faculty: Law Faculty (https://law.illinois.edu/faculty-research/faculty-profiles/)
college address: 244 Law Building
504 East Pennsylvania Avenue
Champaign, IL 61820
phone: (217) 333-6066
email: law-gradprograms@illinois.edu (law-llm@illinois.edu)

Major: Law
Degrees offered: LL.M., J.S.D., J.D. (https://law.illinois.edu/academics/degree-programs/jd-program/), M.S.L.

Graduate Concentrations: Criminal Law (LL.M. only); Intellectual Property and Technology Law (LL.M. only); International and Comparative Law (LL.M. only); Corporate Law, Commercial Law, and Trade (LL.M. only); Justice, Democracy, and Legal Rights (LL.M. only); Regulation, Sustainability, and Compliance (LL.M. only)

Joint Degree Program: the J.D. in Law can be earned jointly with the following
Graduate Degrees Offered:
Accountancy, M.A.S. (http://catalog.illinois.edu/graduate/graduate-majors/accountancy/accounting-mas/)
Business Administration, M.B.A. (http://catalog.illinois.edu/graduate/graduate-majors/bus-admin-mba/#jointdegreetext)

Chemistry, M.S. (http://catalog.illinois.edu/graduate/graduate-majors/chemistry/ms-chem-law/)
Computer Science, M.C.S. (http://catalog.illinois.edu/graduate/graduate-majors/computer-science/#jointdegreestext)
Human Resources and Industrial Relations, M.H.R.I.R. (p. 809)
Journalism, M.S. (http://catalog.illinois.edu/graduate/graduate-majors/journalism/journalism-jd/)
Natural Resources and Environmental Sciences, M.S. (http://catalog.illinois.edu/graduate/graduate-majors/nres/#jointdegreestext)
Political Science, Ph.D. (http://catalog.illinois.edu/graduate/graduate-majors/poli-sci/)
Urban Planning, M.U.P. (http://catalog.illinois.edu/graduate/graduate-majors/urban-reg-plan/)

Graduate Degree Programs

The LL.M. and J.S.D. programs of graduate study in law are designed for foreign law graduates who wish to pursue advanced study and conduct independent research under the direction of the College of Law faculty. Two advanced degrees are conferred by the College of Law: the Master of Laws (LL.M.) degree and the Doctor of Science of Law (J.S.D.). Overall coordination of the graduate program is the responsibility of the Office of Graduate and International Programs, and individual inquiries should be addressed to this office. The Master of Studies in Law (M.S.L.) is a one-year, nonprofessional, terminal degree program designed for those who have had no legal training and who do not desire a professional law degree.

Admission

The Graduate College admission requirements (http://www.grad.illinois.edu/admissions/apply/) and English language proficiency requirements (http://www.grad.illinois.edu/admissions/instructions/04c/) apply. In addition for the LL.M. program, the Test of English as a Foreign Language (TOEFL) requirement is 80 internet-based. Students are not required to take the general Graduate Record Examination (GRE). Students are admitted on an individual basis according to a review of their prior accomplishments with an emphasis on academic achievement. Admission is generally made for the fall semester only.

Financial Aid

Applicants to the College of Law graduate programs are welcome to apply for scholarship assistance. Scholarships typically are awarded to applicants with a combination of excellent academic and professional credentials and proven financial need. Awards usually provide part of tuition and do not cover living expenses. There are always more qualified applicants than there are funds available. Therefore, applicants are strongly encouraged to explore alternative sources of funding.

Graduate Programs:

degree: Master of Laws, LLM (http://catalog.illinois.edu/graduate/graduate-majors/law/master-laws/)

concentrations (available for LLM only):

Corporate Law, Commercial Law, & Trade (http://catalog.illinois.edu/graduate/graduate-majors/law/corp-commercial-law-concentration/)

Criminal Law (http://catalog.illinois.edu/graduate/llm_law/criminal-law/)

Intellectual Property & Technology Law (http://catalog.illinois.edu/graduate/graduate-majors/law/intel-prop-tech-concentration/)

International & Comparative Law (p. 844)

Justice, Democracy, & Legal Rights (http://catalog.illinois.edu/graduate/graduate-majors/law/justice-democracy-legal-rights-concentration/)

Regulation, Sustainability, & Compliance (http://catalog.illinois.edu/graduate/graduate-majors/law/regulation-sustainability-compliance-concentration/)

US Legal Practice Skills (p. 848)

degree: Master of Studies in Law (http://catalog.illinois.edu/graduate/graduate-majors/english/#masterstext)
degree: Doctor of the Science of Law (http://catalog.illinois.edu/graduate/graduate-majors/english/#doctoratetext)

Juris Doctor Program

The 3-year JD program at Illinois Law provides students with a first-rate legal education. The curriculum is both timely and robust, exposing students to a healthy blend of doctrinal law, theoretical perspectives, and real-world skills.

JD Program (http://catalog.illinois.edu//law.illinois.edu/academics/degree-programs/jd-program/)

The professional J.D. in Law can be earned jointly with the following graduate degrees:
Business Administration, M.B.A. (http://catalog.illinois.edu/graduate/graduate-majors/bus-admin-mba/#jointdegreetext)
Chemistry, M.S. (http://catalog.illinois.edu/graduate/graduate-majors/chemistry/ms-chem-law/)
Computer Science, M.C.S. (http://catalog.illinois.edu/graduate/graduate-majors/computer-science/#jointdegreestext)
Human Resources & Industrial Relations, MHRIR (http://catalog.illinois.edu/graduate/joint-degree-programs/mhrir-jd/)
Journalism, M.S. (http://catalog.illinois.edu/graduate/graduate-majors/journalism/journalism-jd/)
Natural Resources and Environmental Sciences, M.S. (http://catalog.illinois.edu/graduate/graduate-majors/nres/#jointdegreestext)
Political Science, M.A. with Civic Leadership Concentration (http://catalog.illinois.edu/graduate/graduate-majors/poli-sci/#jointprogramtext)
Political Science, Ph.D. (http://catalog.illinois.edu/graduate/graduate-majors/poli-sci/#jointprogramtext)
Urban Planning, M.U.P. (http://catalog.illinois.edu/graduate/graduate-majors/urban-reg-plan/#jointdegreestext)

College of Liberal Arts & Sciences

2002 Lincoln Hall
702 South Wright Street
Urbana, IL 61801
PH: (217) 333-1705

website: College of Liberal Arts & Sciences (https://las.illinois.edu)
current students: LAS academics information (https://www.las.illinois.edu/students/)
newly admitted students: FAQs (https://las.illinois.edu/admissions/admittedfaq/)
prospective students: LAS admissions information (https://www.las.illinois.edu/prospective/)

The College of Liberal Arts and Sciences (LAS) has four missions: scholarly inquiry and the generation of knowledge, preparation of individuals for an array of careers and professions, service to the public, and the provision of the intellectual core of the University. The college shares the first three missions with professional schools and other colleges on this campus, but the last mission is uniquely the responsibility of the College of Liberal Arts and Sciences. By fulfilling this responsibility, the college helps develop broadly educated individuals who are committed to or characterized by open inquiry, critical thinking, effective communication, and responsiveness to the needs of individuals and society.

Students in the college are expected to understand the content of and to develop skills in areas that reflect the overall purpose of the college: fluency and facility in English; literacy in at least one additional language; broad exposure to a number of different disciplines; and intensive study in one discipline (or an interdisciplinary program). The student has a wide choice of courses to satisfy these requirements; however, ultimately he or she must plan a diverse and intensive program of study, prepare for an occupational, professional and intellectual future, and develop that clarity and range of mind that is the goal of educated people.

The following is a list of undergraduate degree-granting academic units in the College of Liberal Arts and Sciences. A full listing of all LAS departments, units, and programs is available here (http://www.las.illinois.edu/units/).

- African American Studies (https://afro.illinois.edu/)
- African Studies, Center for (http://www.afrst.illinois.edu/)
- American Indian Studies, Program in (https://ais.illinois.edu/)
- Anthropology (https://anthro.illinois.edu/)
- Asian American Studies (http://www.asianam.illinois.edu/)
- Astronomy (https://astro.illinois.edu/)
- Atmospheric Sciences (https://atmos.illinois.edu/)
- Biochemistry (http://mcb.illinois.edu/departments/biochemistry/)
- Chemical and Biomolecular Engineering (https://chbe.illinois.edu/)
- Chemistry (https://chemistry.illinois.edu/)
- Classics (https://classics.illinois.edu/)
- Communication (https://communication.illinois.edu/)
- Comparative and World Literature, Program in (https://complit.illinois.edu/)
- Earth, Society, & Environment, School of (https://earth.illinois.edu/)
- East Asian Languages & Cultures (https://ealc.illinois.edu/)
- Economics (https://economics.illinois.edu/)
- English (https://english.illinois.edu/)
- French & Italian (https://frit.illinois.edu/)
- Gender & Women's Studies (https://gws.illinois.edu/)
- Geography & Geographic Information Science (https://www.geog.illinois.edu/)
- Geology (https://geology.illinois.edu)
- Germanic Languages and Literatures (https://germanic.illinois.edu/)
- Global Studies, LAS (https://globalstudies.illinois.edu/)
- History (https://history.illinois.edu/)
- Integrative Biology, School of (http://sib.illinois.edu/alumni/)
- Jewish Culture and Society, Program in (https://jewishculture.illinois.edu/)
- Latin American and Caribbean Studies, Center for (http://www.clacs.illinois.edu/)
- Latina/Latino Studies (https://lls.illinois.edu/)
- Linguistics (https://linguistics.illinois.edu/)
- Mathematics (https://math.illinois.edu/)
- Medieval Studies, Program in (http://www.medieval.illinois.edu/)
- Molecular and Cellular Biology, School of (http://mcb.illinois.edu/)
- Philosophy (https://philosophy.illinois.edu/)
- Political Science (https://pol.illinois.edu/)
- Psychology (https://psychology.illinois.edu/)
- Religion (https://religion.illinois.edu/)
- Russian, East European, and Eurasian Center (https://reeec.illinois.edu/)
- Slavic Languages and Literatures (https://slavic.illinois.edu/)
- Sociology (https://sociology.illinois.edu/)
- South Asian and Middle Eastern Studies, Center for (http://www.csames.illinois.edu/)
- Spanish and Portuguese (https://spanport.illinois.edu/)
- Statistics (https://stat.illinois.edu/)

Majors

- Actuarial Science, BSLAS (p. 13)
- African American Studies, BALAS (http://catalog.illinois.edu/undergraduate/las/academic-units/afro-am/#majortext)
- Anthropology, BALAS (p. 56)
  - major in Anthropology (p. 57)
  - Archaeology Concentration (p. 57)
  - Human Evolutionary Biology Concentration (p. 59)
  - Sociocultural and Linguistic Anthropology Concentration (p. 60)
- Art History/History of Art, BALAS (p. 223)
- Asian American Studies, BALAS (http://catalog.illinois.edu/undergraduate/las/academic-units/asian-am/#majortext)
- Astronomy, BSLAS (http://catalog.illinois.edu/undergraduate/las/academic-units/astronomy/#majortext)
- Atmospheric Sciences, BSLAS (http://catalog.illinois.edu/undergraduate/bslas_atms/)
- Biology- see Integrative Biology (p. 240) and Molecular & Cellular Biology (p. 308)
- Biochemistry, BS -Specialized Curriculum (p. 71)
- Brain & Cognitive Science, BSLAS (p. 76)
- Chemical Engineering, BS -Specialized Curriculum (p. 78)
  - major in Chemical Engineering (p. 78)
  - Biomolecular Engineering Concentration (http://catalog.illinois.edu/undergraduate/eng_las/minors/biomolecular-engineering/)
- Chemistry, BSLAS -Sciences and Letters (p. 87)
  - major in Chemistry - sciences and letters (p. 87)
  - Chemistry Teaching Concentration (p. 88)
- Chemistry, BS -Specialized Curriculum (p. 86)

- major in Chemistry - specialized (p. 86)
- Environmental Chemistry Concentration (p. 90)
- Classics, BALAS (p. 101)
  - Classical Civilizations Concentration
  - Classical Languages Concentration
- Communication, BALAS (http://catalog.illinois.edu/undergraduate/las/academic-units/communication/#majortext)
- Comparative & World Literature, BALAS (p. 119)
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  - World Literature Concentration (p. 120)
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- Computer Science & Astronomy, BSLAS (p. 133)
- Computer Science & Chemistry, BSLAS (p. 134)
- Computer Science & Economics, BSLAS (p. 136)
- Computer Science & Geography & Geographic Information Science, BSLAS (p. 137)
- Computer Science & Linguistics, BSLAS (p. 138)
- Computer Science & Philosophy, BSLAS (http://catalog.illinois.edu/undergraduate/eng_las/computer-science-philosophy-balas/)
- Creative Writing, BALAS (http://catalog.illinois.edu/undergraduate/las/academic-units/english/creative-writing/)
- Earth, Society, and Environmental Sustainability, BSLAS (http://catalog.illinois.edu/undergraduate/las/academic-units/earth-system-environ/#majorstext)
  - Science of the Earth System Concentration (p. 161)
  - Society and the Environment Concentration (p. 162)
- East Asian Languages & Cultures, BALAS (p. 163)
- Econometrics & Quantitative Economics, BSLAS (http://catalog.illinois.edu/undergraduate/las/academic-units/economics/econometrics/)
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- English, BALAS (p. 188)
  - English Concentration (p. 188)
  - English Teaching Concentration (p. 189)
  - Topics in English Concentration (p. 190)
- Foreign Language Teaching (p. 201)
- French, BALAS (http://catalog.illinois.edu/undergraduate/las/academic-units/french-italian/#majorstext)
  - French Commercial Studies Concentration (p. 201)
  - French Studies Concentration (p. 202)
- French, Teaching of, BA (p. 421)
- Gender and Women's Studies, BALAS (http://catalog.illinois.edu/undergraduate/las/academic-units/gender-womens-studies/#majortext)
- Geography & Geographic Information Science, BALAS (p. 204)
  - General Geography Concentration (p. 205)
  - Human Geography Concentration (p. 207)
- Geography & Geographic Information Science, BSLAS (p. 205)
  - Geographic Information Science Concentration (p. 206)
  - Physical Geography Concentration (p. 208)
- Geology, BSLAS -Sciences and Letters (p. 214)
  - Earth & Environmental Sciences Concentration (p. 215)
  - Earth Science Teaching Concentration (p. 215)
  - major in Geology -sciences and letters (p. 214)
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  - major in Geology - specialized (p. 210)
  - Geophysics Concentration (p. 211)
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  - German Studies Concentration
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  - Scandinavian Studies Concentration
- Global Studies, BALAS (http://catalog.illinois.edu/undergraduate/las/academic-units/global-studies/#majortext)
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  - major in History (p. 225)
  - Social Science: History Teaching Concentration (p. 225)
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  - major in Integrative Biology (p. 240)
  - Integrative Biology Honors Concentration (p. 242)
- Interdisciplinary Studies. BALAS (http://catalog.illinois.edu/undergraduate/las/academic-units/interdisc-studies/#majorstext)
  - Jewish Studies Concentration (p. 247)
  - Medieval Studies Concentration (p. 247)
- Italian, BALAS (p. 249)
- Latin American Studies, BALAS (http://catalog.illinois.edu/undergraduate/las/academic-units/latin-am-studies/#majortext)
- Latina/Latino Studies, BALAS (http://catalog.illinois.edu/undergraduate/las/academic-units/latina/#majortext)
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- Mathematics, BSLAS (p. 289)
  - major in Mathematics (p. 289)
  - Applied Mathematics Concentration (p. 290)
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  - Mathematics Teaching Concentration (p. 292)
  - Operations Research Concentration (p. 293)
- Mathematics & Computer Science, BSLAS (p. 287)
- Molecular and Cellular Biology, BSLAS (p. 308)
  - major in Molecular and Cellular Biology (p. 308)
  - Molecular and Cellular Biology Honors Concentration (p. 309)
- Philosophy, BALAS (p. 341)
- Physics, BALAS -Sciences and Letters (p. 348)
  - major in Physics - sciences and letters (p. 348)
  - Physics Teaching Concentration (p. 349)
- Physics, BS -Specialized Curriculum (p. 347)
- Political Science, BALAS (p. 351)
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- Organizational Psychology Concentration (p. 366)
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- Religion, BALAS (http://catalog.illinois.edu/undergraduate/las/academic-units/religious-studies/#majortext)
- Russian & East European Studies, BALAS (http://catalog.illinois.edu/undergraduate/las/academic-units/russian-e-european/#majortext)
- Slavic Studies, BALAS (p. 374)
  - Czech Studies Concentration (p. 375)
  - Polish Studies Concentration (p. 375)
  - Russian Language & Literature Concentration (p. 376)
  - South Slavic Studies Concentration (p. 377)
  - Ukrainian Studies Concentration (p. 378)
- Sociology, BALAS (http://catalog.illinois.edu/undergraduate/las/academic-units/sociology/#majortext)
- Spanish, BALAS (http://catalog.illinois.edu/undergraduate/las/academic-units/spanish-portuguese/#majorstext)
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- Statistics, BSLAS (p. 391)
- Statistics & Computer Science, BSLAS (http://catalog.illinois.edu/undergraduate/eng_las/computer-science-statistics-bslas/)

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- English (http://catalog.illinois.edu/undergraduate/las/academic-units/english/english-minor/)
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- English as a Second Language, Teacher Education Minor in (p. 527)
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- Jewish Culture and Society (p. 502)
- Latin American Studies (p. 509)
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    Computational Science & Engineering (p. 1089)
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Anthropology, PhD (p. 572)
    Second Language Acquisition & Teacher Education (p. 1106)
Applied Mathematics, MS (p. 575)
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College of Media

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website: https://media.illinois.edu/

admission: https://admissions.illinois.edu/myillini-apply (https://admissions.illinois.edu/myillini-apply/)
on-campus admission: https://media.illinois.edu/student-resources/admissions/ict (https://media.illinois.edu/student-resources/admissions/ict/)

undergraduate advising: https://media.illinois.edu/index.php/student-resources/academic-advising (https://media.illinois.edu/index.php/student-resources/academic-advising/)
email: media-ssc@illinois.edu

The College of Media strives to give students a solid background in social sciences and humanities and to provide them broad career competence in advertising, journalism or media studies. The College's premise is that students need to understand the world and its people if they are to communicate effectively and enjoy fulfilling and meaningful lives.

The College offers Bachelor of Science degrees in Advertising, Computer Science & Advertising, Journalism, and Media & Cinema Studies. Students have opportunities to become leaders in cutting-edge media, study with leading professionals and scholars, and learn using the latest equipment and facilities. Included are laboratories for reporting, editing, design, and multimedia-journalism; editing suites for radio and television production; and a television studio.

The College includes Illinois Public Media, which operates the local PBS and NPR stations WILL-AM, FM, TV and online.

The College also houses the Institute of Communications Research.

The College of Media has a rich past and a bright future. It traces its history to 1902, when instruction in journalism began. A school of journalism was established in 1927. In 1950 it became the School of Journalism and Communications. In 1957 the school was elevated to college status and the name College of Communications was adopted in 1968. To better reflect the College's emphasis on mediated communication, the name College of Media was adopted in 2008 becoming one of the first Colleges of Media in the country.

The College also offers minors in CINEMA STUDIES, CRITICAL FILM PRODUCTION, JOURNALISM, MEDIA, and PUBLIC RELATIONS.

The Department of Advertising offers the Master of Science degree in Advertising and Strategic Brand Communication. The Department of Journalism has graduate programs leading to the Master of Journalism (MJ) and the Master of Science (MS) in Journalism. The Department of Media and Cinema Studies offers an undergraduate and graduate minor in Cinema Studies. The College also offers an interdisciplinary program leading to a Doctor of Philosophy degree in communications and media.

Admission Requirements

High school seniors and transfer students from another institution should contact the Office of Undergraduate Admissions for admission requirements and applications for a specific term.

Current University of Illinois students who will have completed at least one year on the Urbana-Champaign campus should apply during the a designated Intercollegiate Transfer (ICT) period. Successful applicants will be admitted for the following semester. Applications also will be accepted from more advanced students provided that by the end of the semester in which they apply, they will have completed no more than 90 hours. Application materials are available on the College website (https://media.illinois.edu/student-resources/admissions/ict/) and specific deadlines are cited on the website.

Students currently enrolled in other colleges on campus are accepted on the condition that by the time they join the College at the start of the semester after they apply, they must:

- Have completed at least two semesters in the University of Illinois at Urbana-Champaign academic unit to which they were admitted, if admitted as freshmen.
- Be classified by the university as sophomores (at least 30 credit hours) or as juniors (fewer than 90 credit hours).
- Be in good academic standing.
- Have completed approximately one-fourth (if sophomores) or one-half (if juniors) or more of the total credit hours required to satisfy the university's General Education requirements.
- Have made substantial progress toward completing any departmental requirements for courses outside the College of Media.

Students seeking to transfer from another university may apply early in the spring semester provided they will have completed at least 30 transferable hours by the end of the spring semester. Hours planned during upcoming summer semesters are not considered. Applications are available from the Office of Undergraduate Admissions.

Students may apply to any major in the College: Advertising, Computer Science & Advertising, Journalism, or Media & Cinema Studies. College of Media students may not complete double majors within the College. Students majoring in Journalism may not pursue a Journalism Minor. College of Media students are not eligible to pursue the general Media minor.

Students who would require more than nine total semesters of overall college or university enrollment to complete their degree will be denied admission. Students must complete their College of Media degrees within seven semesters of joining the College as sophomores or within five semesters of joining the College as juniors. A minimum of three semesters within the College is required for students admitted as juniors. A minimum of five semesters within the College is required for students admitted as sophomores.

Minors in areas outside the College are strongly encouraged. However, because considerable coursework in other colleges is implicit within the requirements for all College of Media degrees, students are not admitted to the College of Media for the purpose of pursuing second majors or second undergraduate degrees.

Most required courses in Advertising, Computer Science and Advertising, Journalism, and Media and Cinema Studies must be completed at the University of Illinois at Urbana-Champaign. Students completing freshman and sophomore studies at institutions other than the University of Illinois at Urbana-Champaign may test their interest in the Media field. However, a maximum of nine hours of transferable Media courses are allowed toward the student's major requirements.

Graduation Requirements

To graduate, students must satisfy all University requirements as to residency, scholarship, and fees and must complete the University's general education requirements. All students also must fulfill these general requirements of the College of Media:

- Complete a total of 124 semester hours of course credit of which no more than 12 hours total may be in basic physical education activity courses, vocational and technical education courses, basic courses in military science (AFAS, MILS and NS courses numbered below 300), Institute of Aviation courses, Undergraduate Open Seminar (199) courses, and independent study courses and other experimental or special topics courses outside the College of Media. Independent study courses additionally must be approved by the College to ensure that credit is given only for academic work directly supervised by a faculty member. The College encourages its students to have appropriate professional internships and to participate in professional activities. While it does not allow academic credit for such experience, one credit hour is possible through an academic course or independent study supervised by a College of Media faculty member and taken in conjunction with an internship.
- Complete not less than 72 hours of credit outside the College of Media.
- No course of any number that is offered by or cross-listed with Advertising, Journalism or Media and Cinema Studies or is substantially similar to courses offered by Advertising, Journalism or Media and Cinema Studies may count toward the total hours outside the College of Media, regardless of the rubric under which it is taken. For each hour of credit beyond 44 in College of Media courses, the number of hours required for graduation increases by one additional hour to ensure that the requirement of 72 hours outside the College is met.
- Complete not less than 20 hours in courses numbered 200 or above outside the College of Media and not cross-listed in the College of Media, regardless of the rubric under which they are taken. At least 9 of the 20 hours must be in courses numbered 300 and above.
- Complete the specific requirements of one of the four curricula offered by the College.
- Earn a cumulative grade point average of 2.00 (A = 4.00) in all courses presented for the degree and a cumulative 2.00 grade point average for all courses taken in the College.

Credit/No Credit Grading Option

The College follows credit-no credit provisions described in Article 3-105 (https://studentcode.illinois.edu/article3/part1/3-105/) of the *Student Code*.

All courses listed or cross-listed with departments in the College, or specifically required by one of those departments for its majors or used to fulfill University General Education requirements, must be taken for a traditional letter grade. For Advertising majors, this means these courses outside the College must be taken for a grade: STAT 100 (or any of the allowed substitutes), ECON 102, ECON 103, and two out of the three courses SOC 100, PSYC 100 and ANTH 103. Journalism majors must take CS 105, ECON 102, ECON 103, PSYC 100, SOC 100 and STAT 100 (or any of the allowed substitutes) for a letter grade. For all majors, courses

taken to fulfill the College's advanced hour requirement (20 hours outside the College in courses numbered 200 and above) also must be taken for traditional letter grades.

Special Programs

Dean's List

To be eligible for Dean's List recognition for any semester, students must rank in the top 20 percent of the College in grade point average and must complete at least 12 hours taken for a letter grade (A through F) on the Urbana-Champaign campus. Transfer, study abroad and guided individual study coursework is excluded.

Students who are registered with the Chez Veterans Center or with Disability Resources and Educational Services (DRES) who are enrolled in less than 12 but at least nine graded semester hours who are in the top 20 percent of the College are also eligible. Such students must sign a release with the Chez Veteran Center or DRES indicating their consent for consideration for Dean's List eligibility and have submitted that consent to their home unit's academic affairs office no later than Reading Day in the semester in which they wish to be considered for Dean's List. These consent forms are valid only for the semester in which they are issued, and students must submit by the deadline updated consent forms for each semester in which they wish to be considered for the Dean's List.

The specific grade point average necessary to achieve Dean's List recognition may vary. College of Media standards are high.

Dean's List recognition is determined before the start of the ensuing semester. Students who are not initially selected but who believe they might qualify because of the late resolution of incomplete, deferred or missing grades may petition before the end of the next semester for retroactive addition to the list.

Honors at Graduation

For graduation with honors, a student must rank in the upper 20 percent of their graduating class in overall grade point average. For graduation with high honors, a student must additionally rank in the upper 10 percent. For graduation with highest honors, a student must additionally rank in the upper 5 percent.

For purposes of this award, "graduating class" means all students listed as receiving or as being candidates for receiving bachelor's degrees in all College majors at the College's annual convocation each May. This includes students who graduated in the previous December and those who are candidates for graduation in May and August. Grade point averages are computed through the fall semester immediately preceding the annual convocation and include all transfer courses and other grades posted as of that date.

Transfer students, in addition to meeting the general requirement, must have cumulative University of Illinois at Urbana-Champaign grade-point averages as high as the lowest ones listed for students who qualify on the basis of having completed all of their work at the University of Illinois at Urbana-Champaign and must have earned 40 or more semester hours at the University of Illinois at Urbana-Champaign through the fall semester immediately preceding the annual convocation.

Kappa Tau Alpha

Each year, scholastically high-ranking graduating juniors and seniors in the College of Media are considered for membership in Kappa Tau Alpha, the seventh oldest national honorary society, founded to recognize and promote academic excellence and scholarship in journalism and mass communication.

Students must rank in the upper 10 percent of their class, must have completed at least five semesters of degree work and must have completed at least nine semester hours in professional skills courses, as defined by the national society.

Edmund J. James Scholars

The James Scholar Program, named for the University of Illinois' fourth president, Edmund J. James, focuses on giving high-achieving students the opportunity to gain additional knowledge by working closely with instructors.

To remain in good standing as a James Scholar in the College of Media, students must maintain semester and cumulative GPAs of 3.5 and higher, complete at least 14 credit hours for traditional letter grades each semester and complete at least one honors course or project each academic year. Students may choose from taking a Campus Honors Program course, completing an Honors Credit Learning Agreement with a professor in any course, working on an honors project with a College of Media professor as an independent study, or from the pre-approved honors activity list as provided by the honors dean to complete the honors requirement. Students who study abroad will be exempt of the GPA and credit hour requirements during the semester(s) they are abroad. The honors requirement should be completed the semester the student is on campus.

James Scholars' academic records are reviewed each summer. If a student has met the stated requirements for each of the two past semesters at the time of the review, they will be certified as a James Scholar for the next academic year and the James Scholar designation will be added to their transcripts for that academic year. Any student who does not fulfill the requirements will be removed from the James Scholars program. Because James Scholar review takes place once a year, a student who does not meet the requirements in the fall semester will remain in the program for the spring. However, they will be dropped during the summer review period and the James Scholar notation will not appear on the transcript for the previous academic year. In order to graduate with the James Scholar designation, all students must have completed a minimum of four honors activities, with at least one being completed each year the student is in the program.

Students entering the College of Media as freshmen are invited to join the James Scholars program at the time of admission if they rank in the top 20 percent of the College's incoming class, as determined by an Office of Admissions and Records standard that combines factors such as standardized test scores and high school GPA.

Students already in the College of Media are invited to become James Scholars for the upcoming fall semester if they have completed fewer than 75 hours, have at least a 3.5 overall GPA and were included on the Dean's List for the spring semester. If a student loses the James Scholar status, he or she must sit out of the program for at least one academic year before becoming eligible for reinstatement. A student may only be reinstated by making the College's spring Dean's List.

Students who transfer into the College of Media from another college on the Urbana-Champaign campus are invited to participate in the James Scholar program immediately if they were a James Scholar in their previous college. Students who transfer to the College from another institution may request to participate if they have a transfer GPA of at least 3.7.

A qualifying student may enter the program for his or her sophomore or junior year, but not for his or her senior year alone. Students who join the James Scholar program during the sophomore or junior year will need to pick up additional honors activities in order to graduate with the minimum four required to graduate with the honor.

For complete policies and procedures, please see: https://media.illinois.edu/index.php/student-resources/honors-awards (https://media.illinois.edu/index.php/student-resources/honors-awards/)

Departments

Advertising (https://media.illinois.edu/advertising/)

Journalism (https://media.illinois.edu/journalism/)

Media & Cinema Studies (https://media.illinois.edu/media-cinema-studies/)

Institute of Communications Research (https://media.illinois.edu/icr/)

Curricula:

ADVERTISING (ADV), offers students the opportunity to learn and think about advertising as a way of modeling the mind, as a material reflection of social structure, as a fundamentally modern phenomenon, as an art form and even as a basis for community, by drawing on insights from psychology, sociology, history, literature, and anthropology. This program will thoroughly infuse the understanding of consumer behavior and message knowledge base and, therefore, provide a better and longer-lasting education for students.

COMPUTER SCIENCE AND ADVERTISING, sponsored jointly by the Departments of Computer Science and Advertising. This is a program for students who plan to pursue careers in the advertising field that have a technology focus. Cloud computing, the availability and ubiquity of data, and the rapid and pervasive adoption of mobile technology have created a paradigm shift in the advertising industry. Projected areas of growth in advertising and communications will be in Search Engine Optimization, web analytics, Computational Advertising, and other emerging areas of technology/media. The degree will prepare students for advanced study at the graduate level as well as immediate entry into the workforce at advertising agencies, businesses with in-house advertising and marketing divisions, and technology companies.

JOURNALISM (JOUR), prepares students for exciting and fulfilling careers in traditional broadcast journalism, news-editorial journalism, and emerging media. The primary professional aim is to train students as public affairs and enterprise journalists. The Journalism Department seeks to prepare broadly educated professionals who will assume decision-making and leadership roles in a variety of media organizations.

MEDIA AND CINEMA STUDIES (MACS), prepares students with dynamic skills for careers in media, information, creative, and visual industries, as well as informed interaction with everyday media technologies. Majors have the opportunity to participate in original research, mixed media production, internships, study abroad, and public engagement through a transformative learning environment. MACS offers an undergraduate and graduate minor in CINEMA STUDIES.

The College also houses the INSTITUTE OF COMMUNICATIONS RESEARCH, an internationally recognized center for interdisciplinary education, scholarship and public engagement in communications and culture in a global economy. Drawing broadly on the social sciences and humanities, the Institute develops new directions in research and has been home to some of the most famous scholars in media and communications.

Undergraduate Programs offered by the College of Media

-
- Advertising (p. 14)
- Computer Science & Advertising (p. 129)
- Journalism (p. 250)
- Media & Cinema Studies (p. 301)

Undergraduate Minors

-
- Cinema Studies (p. 484)
- Critical Film Production (p. 489)
- Journalism (p. 506)
- Media (p. 513)
- Public Relations (p. 519)

Graduate Degree Programs offered by the College of Media

- Advertising (p. 549)
- Communications & Media (p. 672)
- Journalism (p. 828)
- Strategic Brand Communication (p. 1030)

Graduate Minors

- Cinema Studies (p. 1128)

College of Veterinary Medicine

dean of the college: Peter D. Constable
head of department: Dennis D. French
director of graduate studies: Timothy M. Fan
overview of admissions & requirements: https://vetmed.illinois.edu/education/doctor-veterinary-medicine-degree/admissions/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
college website: College of Veterinary Medicine (http://www.vetmed.illinois.edu/)
college faculty: https://vetmed.illinois.edu/directory/
college office: 3505 Veterinary Medicine Basic Sciences Building, 2001 South Lincoln Avenue, Urbana, Illinois 61802
phone: 217-333-2760
email:

Departments in the College of Veterinary Medicine

Department of Comparative Biosciences (https://vetmed.illinois.edu/college-organization/comparative-biosciences/)

Department of Pathobiology (https://vetmed.illinois.edu/college-organization/pathobiology/)

Department of Veterinary Clinical Medicine (https://vetmed.illinois.edu/college-organization/veterinary-clinical-medicine/)

Graduate Degree Programs in the College of Veterinary Medicine

Livestock Systems Health, MVS (p. 857)
VMS - Comparative Biosciences, MS (p. 1062)
VMS - Comparative Biosciences, PhD (p. 1063)
VMS - Pathobiology, MS (p. 1065)
VMS - Pathobiology, PhD (p. 1066)
VMS – Veterinary Clinical Medicine, MS (p. 1068)
VMS-Veterinary Clinical Medicine, PhD (p. 1062)
Joint Degree Programs: Veterinary Medical Scholars Program
DVM and VMS - Comparative Biosciences, PhD (p. 1169)
DVM and VMS - Pathobiology, PhD (p. 1169)

Learning Outcomes: Veterinary Medicine, DVM

Learning Outcomes for the Doctor of Veterinary Medicine in Veterinary Medicine

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Graduates of the College of Veterinary Medicine professional program shall:

1. Demonstrate knowledge of the basic sciences that form the foundation of veterinary practice.
2. Understand the principles of scientific inquiry and shall be able to apply those principles to solve problems by posing questions, forming hypotheses, and obtaining and evaluating data relevant to the practice of veterinary medicine.
3. Demonstrate knowledge of the clinical conditions that form the foundation of veterinary practice.
4. Be able to apply their knowledge, skills, and the principles of scientific inquiry to analyze, evaluate, and solve veterinary problems and synthesize diagnostic, therapeutic, and preventative plans.
5. Possess technical skills essential for success in the practice of veterinary medicine and surgery(i.e., they shall be “practice ready” with Day 1 clinical skills).

Division of General Studies

Division of General Studies Website: https://dgs.illinois.edu
Email: genstudies@illinois.edu
Director: Sarah Watson
Associate Provost: Kristi Kuntz
Address: Division of General Studies
Illini Union Bookstore Building, Fifth Floor
807 S. Wright Street, M/C 317
Champaign, IL 61820
Phone: (217) 333-4710

The Division of General Studies (DGS) assists students with the process of exploring and declaring majors at the University of Illinois by providing holistic, developmental academic advising. DGS offers students the ability to connect with academic advisors who are committed to their success.

The Division of General Studies helps students:

- Clarify their academic, personal, and career goals;
- Identify their strengths, skills, interests, and values;
- Understand the process of exploring majors at Illinois;
- Identify the programs of study available at Illinois;
- Understand specific programmatic and degree requirements;
- Understand the Intercollegiate Transfer (ICT) process at Illinois;
- Recognize the significance of and their responsibility in the academic advising relationship;
- Learn about and connect with appropriate campus resources and services;
- Learn about the educational opportunities available at the University of Illinois including undergraduate research, study abroad, tutoring, leadership development, involvement in student organizations, volunteer experiences, and connections with faculty.

Students may be enrolled in the Division of General Studies for up to four semesters before being required to declare a major in one of the undergraduate colleges at the University of Illinois.

Please see the Division of General Studies Website (https://dgs.illinois.edu/) for more specific information about our services and support for students.

Gies College of Business

undergrads@business.illinois.edu

The purpose of the Gies College of Business is to provide an educational experience that will help students develop their potential for leadership and service in business, government, teaching, and research. The undergraduate curricula provide a study of the basic aspects of business and preparation for careers in fields such as accounting, business management, banking, insurance, and marketing.

The curricula, leading to the Bachelor of Science degrees in the various degree programs in business, are based on 124 hours of college work. Students are required to elect courses in other colleges of the University, including mathematics, rhetoric, humanities and the arts, speech, and natural and behavioral sciences, and to secure as liberal an education as possible to avoid the narrowing effects of overspecialization.

The Gies College of Business offers graduate and professional programs in business areas. Detailed information on graduate programs may be obtained from the Graduate College or visit our web site (https://giesbusiness.illinois.edu/).

Requirements

Admission

Applicants must meet general University requirements as well as those specified by the Gies College of Business.

Students transferring from other institutions must have met the requirements specified by the college. See our web site (https://giesbusiness.illinois.edu/) and the Illinois Office of Undergraduate Admissions (http://admissions.illinois.edu/) for further information.

Mathematics Placement Test

The ALEKS Math Placement Exam is used to place the students in the appropriate math course. The results of the test are used to place students in or to exempt them from algebra and allow them to enroll in a mathematics course required for graduation (see below).

Graduation

Students in the Gies College of Business who meet the University's requirements with reference to registration, residence, and fees and who maintain satisfactory scholastic records in the college are awarded degrees appropriate to their curricula.

Each candidate for a degree must have a 2.0 (A = 4.0) grade point average or above for all courses counted toward graduation, a 2.0 grade point average or above for all courses taken at this University, a 2.0 grade point average or above for all courses taken in the major or field of concentration, and a 2.0 grade point average or above for courses taken in the major or field of concentration at this University.

Students are responsible for meeting the requirements for graduation. Therefore, students should familiarize themselves with the requirements listed in this catalog and other information in the Office of Undergraduate Affairs, 1055 Business Instructional Facility, and should refer to them each time they plan their programs. The Gies College of Business requires that undergraduate degrees be completed in nine semesters or less. If you need assistance with course planning, consult the Office of Undergraduate Affairs.

Mathematics Requirement

Any one of the MATH courses described below meets the Gies College of Business requirement. The most appropriate mathematics course depends on the student's background, interest, motivation, and objectives. Background can be evaluated in terms of mathematics courses already completed and the student's score on the ALEKS Math Placement Exam. Interest, motivation, and objectives must be determined by the student. Courses include MATH 115, MATH 220, MATH 221, MATH 231, MATH 234 (recommended for all students with an ALEKS score of 65 or higher), and STAT 100.

Language Other Than English

Completion of the third semester or equivalent of a language other than English is required. Completion of three years of a single language in high school satisfies this requirement.

Residency

Students must earn no fewer than 60 semester hours of University of Illinois Urbana-Champaign coursework applicable to their degree, including at least 21 credit hours of advanced coursework.

Special Programs

Honors at Graduation

Honors, designated on diplomas, are awarded to superior students as follows: for graduation with honors, a minimum grade point average of 3.5 (A = 4.0) in all courses accepted toward the student's degree; for graduation with high honors, a minimum grade point average of 3.75 in all courses accepted toward the degree; and for graduation with highest honors, a minimum grade point average of 3.90 in all courses accepted toward the degree. To qualify for graduation honors, transfer students' University of Illinois at Urbana-Champaign and total cumulative grade point averages both must qualify.

Curricula

Core Curriculum

Normally, students must register for no fewer than 12 hours or more than 18 hours in each semester. Students should take mathematics, economics, and accountancy courses in the semesters indicated in the sample schedule of courses. The computer science course should be taken during the first year. The computer science requirement no longer allows ACE 161 as an equivalent course.

Up to 4 hours of Kinesiology activity courses, numbered 100-110 may be counted toward the 124 hours for the degree. The same section of a course may not be repeated for credit. Credit is limited to a maximum of 12 credit hours for 199 courses. Students may receive foreign language credit for courses only 2 levels below highest level taken in high school. For example: 4 years of high school French, no credit is awarded below FR 102.

Once the math requirement is completed, lower level math courses cannot be taken for credit.

Any course used to fill a specific degree requirement may not be taken on the credit-no credit grade option. Only free electives may be taken on the credit-no credit option. All finance and accountancy courses must be taken for a grade. It is recommended that all courses taken in the business administration area be taken for a grade.

Departments

Undergraduate instruction in the Gies College of Business is organized under the Departments of Accountancy, Business Administration, and Finance. Each of these departments offers courses that provide one or more curricula that a student may elect. These curricula lead to Bachelor of Science degrees in the various fields of study in the college and are designed to encourage each student to fully realize his or her intellectual promise. There can be changes to curricular requirements and new course offerings.

For the most current information, visit our advisors in 1055 Business Instructional Facility and our web site (http://www.business.uiuc.edu/undergrad/) and department pages:

- Accountancy (https://giesbusiness.illinois.edu/accountancy/programs/msa/)
- Business Administration (https://giesbusiness.illinois.edu/business-administration/)
- Finance (https://giesbusiness.illinois.edu/finance/)

Majors

- Accountancy (p. 12)
- Finance (p. 191)
- Information Systems (p. 238)
- Management (p. 272)
- Marketing (p. 276)
- Operations Management (p. 339)
- Strategic Business Development & Entrepreneurship (p. 392)
- Supply Chain Management (p. 411)

Minors

- Business for Non-Business Majors (p. 483)
- Technology & Management (p. 529)

Graduate Degree Programs in Accountancy

Graduate Majors:

Accountancy, MAS (p. 542)
with optional concentrations: Business & Public Policy (p. 1087), Corporate Governance & International Business (p. 1090), Data Analytics in Accountancy (p. 1091), Finance (p. 763), Information Technology & Control (p. 1100), Real Estate (p. 1105), Supply Chain Management (p. 1109), Taxation (p. 1149)

Accountancy, MS (p. 544) **(on campus & online)**
with optional concentrations: Business & Public Policy (p. 1087), Corporate Governance & International Business (p. 1090), Data Analytics in Accountancy (p. 1091), Information Technology & Control (p. 1100), Supply Chain Management (p. 1109)

Accountancy, PhD (p. 547)

Graduate Minors:

Accountancy (p. 1122)

Graduate Concentrations:

Accountancy (p. 1073)
Data Analytics in Accountancy (p. 1091)

Graduate Degree Programs in Business Administration

Majors:

Business Administration, MBA (p. 646) **(Full-Time)**
with optional concentrations: Accountancy (p. 1073), Business Data Analytics (p. 1086), Corporate Governance & International Business (p. 1090), Information Technology & Control (p. 1100), Real Estate (p. 1105), Supply Chain Management (p. 1109)

Business Administration, MBA (p. 644) **(Professional - part-time)**
with optional concentrations: Business Data Analytics (p. 1086), Information Technology & Control (p. 1100), Supply Chain Management (p. 1109)

Business Administration, MBA (p. 642) **(online-iMBA)**

Business Administration, MS (p. 646)
with optional concentrations: Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Corporate Governance & International Business (p. 1090), Supply Chain Management (p. 1109)

Management, MS (p. 858)

Technology Management, MS (p. 1048)
with optional concentrations: Accountancy (p. 1073), Business Data Analytics (p. 1086), Business & Public Policy (p. 1087), Information Technology & Control (p. 1100), Supply Chain Management (p. 1109)

Business Administration, PhD (p. 647)

Minors:

Information Technology & Control (p. 1136)
Corporate Governance & International Business (p. 1130)
Supply Chain Management (p. 1144)

Concentrations:

Business Data Analytics (p. 1086)
Corporate Governance & International Business (p. 1090)
Information Technology & Control (p. 1100)
Supply Chain Management (p. 1109)

Joint Degree Programs:

MBA Joint Degree Program: (p. 1158) **the M.B.A. can be earned jointly with any master's or Ph.D. program offered on campus as well as the** Law, JD (http://catalog.illinois.edu/professional-programs/jd_law/)**.**

Graduate Degree Programs in Finance

Majors

Financial Engineering, MS (p. 765) **(administered by** Finance and Industrial & Enterprise Systems Engineering (https://msfe.illinois.edu/))

Finance, MS (p. 763)

optional concentrations for the Finance, MS:

Accountancy (p. 1087)**,** Business & Public Policy (p. 1087)**,** Corporate Governance & International Business (p. 1090)**,** Information Technology & Control (p. 1100)

Finance, PhD (p. 764)

Minors

Finance (p. 1133)

Concentrations

Finance (p. 1096)

Business & Public Policy (p. 1087)

Real Estate (p. 1105)

Grainger College of Engineering

Dean: Rashid Bashir
Associate Dean of Undergraduate Programs: Jonathan J Makela
Associate Dean for Graduate, Professional and Online Programs: Daniel J Bodony
address: 306 Engineering Hall, 1308 W Green St, Urbana, IL 61801
phone: (217) 333-2151
college website: https://grainger.illinois.edu/
Undergraduate Programs: https://grainger.illinois.edu/academics/undergraduate (https://grainger.illinois.edu/academics/undergraduate/)
Graduate Programs: https://grainger.illinois.edu/academics/graduate (https://grainger.illinois.edu/academics/graduate/)

Departments:

Aerospace Engineering (https://aerospace.illinois.edu/)
Agricultural & Biological Engineering (https://abe.illinois.edu/)
Bioengineering (https://bioengineering.illinois.edu/)
Chemical & Biomolecular Engineering (https://chbe.illinois.edu/)
Civil & Environmental Engineering (https://cee.illinois.edu/)
Computer Science (https://cs.illinois.edu/)
Electrical & Computer Engineering (https://ece.illinois.edu/)
Industrial & Enterprise Systems Engineering (https://ise.illinois.edu/)
Materials Science & Engineering (https://matse.illinois.edu/)
Mechanical Science & Engineering (https://mechanical.illinois.edu/)
Nuclear, Plasma & Radiological Engineering (https://npre.illinois.edu/)
Physics (https://physics.illinois.edu/)

Centers:

Technology Entrepreneur Center (https://tec.illinois.edu/)
Computational Science and Engineering (https://cse.illinois.edu/)

Undergraduate Majors and Minors

Majors

Aerospace Engineering, BS (p. 15)
Agricultural & Biological Engineering, BS (p. 19)
Agricultural Engineering Concentration (p. 21)|Biological Engineering Concentration (p. 25)
Agricultural & Biological Engineering, BS and Agricultural & Biological Engineering, BSAG (p. 20) **(Dual Degree Program)**
Bioengineering, BS (p. 72)
Civil Engineering, BS (p. 92)
Computer Engineering, BS (p. 121)
Computer Science, BS (p. 141)
Electrical Engineering, BS (p. 166)
Engineering Mechanics, BS (p. 174)
Industrial Engineering, BS (p. 233)
Innovation, Leadership & Engineering Entrepreneurship, BS (p. 239) **(ILEE)**
Materials Science Engineering, BS (p. 278)
Mechanical Engineering, BS (p. 294)
Nuclear, Plasma, & Radiological Engineering, BS (p. 335)
Physics (Engineering), BS (p. 343)
Systems Engineering & Design, BS (p. 414)

Minors

Bioengineering Minor (p. 482)
Computational Science & Engineering Minor (p. 487)
Computer Science Minor (http://catalog.illinois.edu/undergraduate/minors/cs/)
Electrical & Computer Engineering Minor (p. 492)
International Minor in Engineering (p. 505)
Materials Science & Engineering Minor (p. 512)
Physics (Engineering) Minor (p. 517)
Polymer Science & Engineering Minor (p. 518)
Technology & Management Minor (p. 529)

Graduate Majors and Concentrations

- #
- A (p. 1206)
- B (p. 1206)
- C (p. 1206)
- D
- E (p. 1206)
- F (p. 1206)
- G
- H
- I (p. 1206)
- J
- K
- L
- M (p. 1206)
- N (p. 1207)
- O
- P (p. 1207)
- Q
- R (p. 1207)
- S (p. 1207)
- T (p. 1207)
- U

- V
- W
- X
- Y
- Z

A

Aerospace Engineering, MS (p. 550)
Computational Science & Engineering (p. 1089)
Aerospace Engineering, PhD (p. 553)
Computational Science & Engineering (p. 1089)
Aerospace Systems Engineering, MENG, see Engineering, MENG
Agricultural & Biological Engineering, MS (p. 562)
Computational Science & Engineering (p. 1089)
Agricultural & Biological Engineering, PhD (p. 564)
Computational Science & Engineering (p. 1089)

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B

Bioengineering, MENG (p. 616)
Bioinstrumentation (p. 617)|Computational Genomics (p. 618)|General Bioengineering (p. 620)
Bioengineering, MS (p. 621)
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)
Bioengineering, PhD (p. 623)
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)|Computational Science & Engineering (p. 1089)
Bioinformatics, MS (http://catalog.illinois.edu/graduate/provost/ms_bioinfo/)
Computer Science (p. 629)

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C

Chemical Engineering, MS (p. 653)
Chemical Engineering, PhD (p. 654)
Computational Science & Engineering (p. 1089)
Civil Engineering, MS (p. 660)
Computational Science & Engineering (p. 1089)
Civil Engineering, PhD (p. 662)
Computational Science & Engineering (p. 1089)
Computer Science, MCS (p. 679)
Computational Science & Engineering (p. 1089)
Computer Science, MS (p. 681)
Computational Science & Engineering (p. 1089)
Computer Science, PhD (p. 682)
Computational Science & Engineering (p. 1089)

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E

Electrical & Computer Engineering, MEng (p. 737)
Electrical & Computer Engineering, MS (p. 738)
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)|Computational Science & Engineering (p. 1089)
Electrical & Computer Engineering, PhD (p. 740)
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)|Computational Science & Engineering (p. 1089)
Energy Systems, MENG, see Engineering, MENG
Engineering, MENG (http://catalog.illinois.edu/graduate/meng-engineering/)
Aerospace Systems Engineering (p. 745)|Energy Systems (p. 749)|Plasma Engineering (p. 748)|Railway Engineering (p. 750)
Environmental Engineering in Civil Engineering, MS (p. 757)
Computational Science & Engineering (p. 1089)
Environmental Engineering in Civil Engineering, PhD (p. 759)
Computational Science & Engineering (p. 1089)

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F

Financial Engineering, MS (p. 765)
Computational Science & Engineering (p. 1089)

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I

Industrial Engineering, MS (p. 814)
Advanced Analytics (p. 1074)|Computational Science & Engineering (p. 1089)
Industrial Engineering, PhD (p. 816)

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M

Materials Science & Engineering, MS (p. 861)
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)|Computational Science & Engineering (p. 1089)
Materials Science & Engineering, PhD (p. 863)
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)|Computational Science & Engineering (p. 1089)
Mechanical Engineering, MENG (p. 869)
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)
Mechanical Engineering, MS (p. 870)
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)|Computational Science & Engineering (p. 1089)
Mechanical Engineering, PhD (p. 872)
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)|Computational Science & Engineering (p. 1089)

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N

Nuclear, Plasma & Radiological Engineering, MS (p. 949)
Computational Science & Engineering (p. 1089)
Nuclear, Plasma & Radiological Engineering, PhD (p. 951)
Computational Science & Engineering (p. 1089)
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P

Physics, MS (p. 961)
Physics, PhD (p. 961)
Computational Science & Engineering (p. 1089)
Plasma Engineering, MENG, see Engineering, MENG
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R

Railway Engineering, MENG, see Engineering, MENG
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S

Systems & Entrepreneurial Engineering, MS (p. 1034)
Computational Science & Engineering (p. 1089)
Systems & Entrepreneurial Engineering, PhD (p. 1035)
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T

Teaching of Physics, MS (p. 1044)
Theoretical and Applied Mechanics, MS (p. 1054)
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)|Computational Science & Engineering (p. 1089)
Theoretical & Applied Mechanics, PhD (p. 1057)
Biomechanics (p. 1085)|Cancer Nanotechnology (p. 1088)|Computational Science & Engineering (p. 1089)
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Combination Programs

Aerospace Engineering, BS-MS (p. 444)
Aerospace Engineering, BS and Energy Systems, MEng (p. 443)
Agricultural & Biological Engineering, BS and Energy Systems, MEng (p. 445)
Computer Science, BS-MCS (p. 450)
Computer Science, BS-MS (p. 451)
Industrial Engineering, BS and Energy Systems, MEng (p. 457)
Materials Science & Engineering, BS and Energy Systems, MEng (p. 466)
Nuclear, Plasma & Radiological Engineering, BS and Energy Systems, MEng (p. 467)
Engineering Physics, BS and Energy Systems, MEng (p. 457)
Systems Engineering & Design, BS and Energy Systems, MEng (p. 471)

School of Social Work

Steven Anderson, Dean
1010 W. Nevada St.
Urbana, IL 61801

email: socialwork@illinois.edu (socialwork@illinois.edu)
phone: (217) 244-5246
school website: https://socialwork.illinois.edu/
school faculty: School of Social Work Faculty (http://socialwork.illinois.edu/about-ssw/faculty-and-staff-directory/?doing_wp_cron=1546290133.2576510906219482421875)

school office: 1010 W. Nevada St., Urbana, IL 61801
director of BSW Program: Brenda Lindsey
email: undergradsocialwork@illinois.edu (undergradsocialwork@illinois.edu)
phone: (217) 244-5246
school website: https://socialwork.illinois.edu/
school faculty: School of Social Work Faculty (http://socialwork.illinois.edu/about-ssw/faculty-and-staff-directory/?doing_wp_cron=1546290133.2576510906219482421875)
overview of school admissions & requirements: School of Social Work (http://catalog.illinois.edu/academics/master-of-social-work/admissions-information/)

Undergraduate Programs:
major: Social Work, BSW (http://catalog.illinois.edu/undergraduate/bs_socw/)
minor: Social Work (p. 522)

Overview of Curriculum and Requirements

The purpose of undergraduate social work education at the School of Social Work is to provide a comprehensive educational experience for students that is grounded in a liberal arts tradition and prepares graduates for excellence in the areas of social work practice, policy, social engagement and leadership.

Upon degree completion, graduates will be prepared for entry into generalist social work practice, advanced standing in graduate social work education, and a multitude of career opportunities. These can include careers in communications, corrections, education, government, healthcare, human resources, law, non-profit organizations, religious studies, and public service. Obtaining an undergraduate degree in Social Work gives students the opportunity to pursue a License of Social Work (LSW). A BSW degree also makes students eligible to pursue Advanced Standing status in many masters of Social Work (MSW) programs. The advanced standing status enables BSW graduates to receive an MSW in only one year.

The focus of undergraduate curriculum delivery is through a student-centered strengths-based educational model that fosters student understanding by providing a challenging, yet supportive environment of high expectations that encourage the development of well-informed and engaged citizens.

Experiential Learning Fee

The University of Illinois Board of Trustees approved an experiential learning fee in 2010 that is assessed to all Bachelor of Social Work majors to help cover part of the extensive faculty resources required to provide enriched social work learning opportunities. **A one-time fee**

of $750 will be charged to BSW students once the student has earned 60-89.9 progress hours; including transfer hours.

Admission Requirements for Freshman

The following requirements must be met for consideration for admission as a freshman into the BSW Program:

director of graduate studies: Associate Dean Min Zhan
school website: https://socialwork.illinois.edu/
school faculty: School of Social Work Faculty (http://socialwork.illinois.edu/about-ssw/faculty-and-staff-directory/?doing_wp_cron=1546290133.2576510906219482421875)

Graduate Programs:

degree: Social Work, MSW (p. 1003)
concentration: Advanced Clinical Concentration (p. 1004)
concentration: Leadership & Social Change Concentration (http://catalog.illinois.edu/graduate/msw_social-work/leadership/)
degree: Social Work, PhD (http://catalog.illinois.edu/graduate/phd_social-work/)
minor: Gender Relations in International Development (http://catalog.illinois.edu/graduate/graduate-minors/gender-relations/)
joint degree: Social Work, MSW and Social Work, PhD (p. 1167)
joint degree: Public Health, MPH and Social Work, PhD (p. 1166)

Graduate Degree Programs

The School of Social Work offers programs leading to the Master of Social Work (MSW) and the Doctor of Philosophy (Ph.D.) degrees. The MSW program is accredited by the Council on Social Work Education (CSWE). The MSW program offers courses on the Urbana campus and off-campus through its MSW Outreach program.

Admission

MSW program applicants must meet the following minimum requirements:

1. a baccalaureate degree from an accredited college or university in the United States or from a recognized institution of higher learning abroad;
2. a grade point average of 3.0 (A = 4.0) or greater for the last 60 semester hours of undergraduate work;
3. 20 hours of completed coursework in a liberal arts core consisting of social and behavioral sciences, the humanities, and biological sciences
4. evidence of personal attributes that are suitable for the profession of social work;
5. a score of 103 or above on the TOEFL test;
6. provision of a written supplementary statement.

Advanced Standing MSW applicants who meet all above requirements who have earned a Bachelor of Social Work (BSW) degree from a CSWE-accredited program in the past seven years are considered for admission into the Advanced Standing MSW program.

Ph.D. program applicants must meet the following minimum requirements:

1. a master degree in social work or in related disciplines;
2. a GRE score within the last 5 years;
3. demonstrating a potential for research and other scholarly work;
4. aptitude for leadership in the field of social work.

Advanced Standing MSW

Students with a Bachelors degree in Social Work (BSW) within the past seven years from a social work program accredited by the Council on Social Work Education (CSWE) and a GPA of 3.0 (A = 4.0) or greater for the last 60 semester hours of undergraduate work are eligible for the advanced standing program. This is a three semester/44 hour program that may be completed in 12 months by most students.

iMSW Program

Designed for the working professional who cannot attend a graduate program on the University of Illinois campus, the iMSW Program allows students to remain in their home community while pursuing a graduate degree. The School offers a three-year part-time program of study through its iMSW Outreach. This program is offered across the state and for students in adjoining states. Classes are offered in on-line and hybrid/blended learning formats. Face to face class sessions are offered on weekends. In their third year students complete complete two concentration courses on campus. After completing their coursework students do an internship/field placement back in their home communities. Students complete the same course requirements as students in the on-campus MSW program (see above). iMSW students who qualify for the Advanced Standing program may complete a shorter two-year course of study (see above).

Post-MSW Certification Program

The School offers the Illinois Professional Educator License (PEL) with Endorsement in School Social Work. Individuals with an MSW from an accredited School of Social Work are eligible to apply for the endorsement program. Individuals enrolled in the PEL program take two School Social Work courses and complete a one semester internship in a public school. Students whose MSW did not have sufficient clinical coursework may be required to complete additional coursework to meet ISBE criteria. Upon completion of the program students are eligible for the School Social Worker on an Illinois Professional Educator License from the Illinois State Board of Education (ISBE).

SOCW Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/SOCW/)

Social Work Courses

SOCW 101 SOCW Orientation Seminar credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/101/)
Informational orientation seminar for Social Work majors to enhance their understanding of college life and social work as a profession.

SOCW 199 Undergraduate Open Seminar credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/199/)
Approved for letter and S/U grading. May be repeated.

SOCW 200 Introduction to Social Work credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/200/)
Broad survey of the field of social work; introduction to social services, social welfare organizations, major social problems and target population groups, and the methods used in working with individuals, groups, and communities; includes the range of personnel and skills in social work agencies, and the means of education and training for social work professionals.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

SOCW 210 Queer Visibility credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/210/)
Examines a broad scope of key LGBTQ topics from a social science perspective, and addresses such themes as identity development, critical social movements, community characteristics, sub-cultures, public policy, resilience, and health disparities within queer communities. Applies a social justice, sex-positive, and health promotion lens to the topics addressed. Also explores issues related to intersectional identities (i.e., the overlap of multiple [often marginalized] group membership, such as race/ethnicity, gender identity, age, ability, sexual orientation, etc.) within this population. Students will learn the ways in which the helping professions (e.g. social work, public health, etc.) engage with the LGBTQ community using both research and practice, in order to promote the health and wellbeing of LGBTQ persons.

SOCW 225 Social Work Statistics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/225/)
Introduction of basic concepts in statistics with emphasis on the application of statistical methods in social work research. Topics include: descriptive statistics, probability theory and distributions, point and interval estimation, hypothesis testing, central tendency, variability, independence, contrasts, correlation and regression, non-parametrics, concepts of levels of measurements, and statistical vs. practical significance. Priority will be given to Social Work majors. Credit is not given for SOCW 225 if credit for a college level introductory statistics course has already been earned.
This course satisfies the General Education Criteria for:
Quantitative Reasoning I

SOCW 240 Death & Dying credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/240/)
This course will focus on various aspects of death and dying. Content will examine different types of death, impact of death throughout the lifespan, cultural beliefs and practices regarding death and dying, grief, healing after loss, legal and ethical issues related to death, and the roll of social workers at the end of life. Students will be encouraged to examine their own thoughts, values, feeling, and beliefs about death and dying.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

SOCW 245 Doing Good through the Nonprofit Sector credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/245/)
Study of the nonprofit sector theory, activity and structures in the US and abroad. Challenges students to think critically about the role and value of the nonprofit/voluntary sector in society, to understand ethical principles and values that guide nonprofit work, and to assess research evidence about effectiveness and impact. Helps inform students' thinking about future career choices and/or volunteer activities in the "third sector".
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

SOCW 297 Asian Families in America credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/297/)
Offers a comparative analysis of Asian families as they cope and adapt to American society. Examines: 1) how families from four major Asian-American groups (Chinese, Indian, Japanese and Korean) function in American society; 2) how these families compare to families in their country of origin; and 3) how these families are similar to or different from the 'typical American' family. Includes visits to Asian cultural institutions and with Asian families. Same as AAS 297 and HDFS 221.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - US Minority

SOCW 298 Social Work Experiential Learning Fees credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/298/)
This is a shell course to assess fees to support the cost of providing student learning experiences in social work practice settings. Additional fees may apply. See Class Schedule. Approved for S/U grading only. Prerequisite: The SOCW Admissions and Records Officer will manually add this course to student schedules.

SOCW 299 Study Abroad credit: 0 to 18 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/299/)
Lectures, seminars, and practical work in an approved study-abroad program in Social Work appropriate to the student's course of study. Approved for Letter and S/U grading.

SOCW 300 Diversity: Identities & Issues credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/300/)
This introductory course explores multiple dimensions of diversity in a pluralistic and increasingly globalized society. Using a social work strengths perspective as well as historical, constructivist, and critical conceptual frameworks; the course examines issues of identity, culture, privilege stigma, prejudice, and discrimination. The social construction and implications of race, class, gender, sexual orientation, and other dimensions of difference is examined at individual, interpersonal, and systems levels. Students are expected to use the course material to explore their personal values, biases, family backgrounds, culture, and formative experiences in order to deepen their self-awareness and develop interpersonal skills in bridging differences. Finally, students apply learning from the course to identify characteristics of effective social work and other health and human service provision among people culturally different themselves; and to identify opportunities for change contributing to prejudice reduction and cross-cultural acceptance at home, work and in society.
This course satisfies the General Education Criteria for:
Advanced Composition
Cultural Studies - US Minority

SOCW 310 UG Research Assistance credit: 0 to 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/310/)
Assist departmental faculty in on-going research. Topics and nature of assistance vary. Capstone paper required. Approved for Letter and S/U grading. May be repeated in separate terms up to 6 hours. Prerequisite: Evidence of adequate preparation for such study; consent of faculty member supervising the work; and approval of the department head. Restricted to Majors and Minors.

SOCW 315 Social Work Services for Older Adults credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/315/)
Focus on the aging process, special needs of older adults, and the role of social work in addressing these needs. All levels of social work intervention are considered, direct practice with older persons and their families, service delivery systems in local communities, and state and national policies. Special attention is given to the needs of caregivers, person-centered care, diverse vulnerable populations and resources for older adults to age in place.

SOCW 321 Social Entre & Social Change credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/321/)
Intended for undergraduates who have an interest in creating programs and products that have social values for communities. Features social entrepreneurship as an approach to social development and will consider its application and related change strategies to a wide array of social problems. Social entrepreneurship has emerged as a change approach that features the application of entrepreneurial practices to social ventures. Social entrepreneurship is similar to business entrepreneurship in its emphasis on selected program development and management principles and processes, but social entrepreneurs have the primary goal of creating social value in communities rather than personal or shareholder wealth. The initial part of the class will emphasize instructing students in broad concepts and principles related to entrepreneurship, while the latter portion of the course will feature students working on teams to design social projects.

SOCW 325 International Development with Grassroots Organizations credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/325/)
This course engages students to think critically about international aid and development by cultivating an awareness of moral and ethical dilemmas that often go unconsidered by young professionals. It intends to help students develop greater cultural awareness and humility by recognizing differences in equity and global social, economic, and political structures. The course is a second eight-week offering and uses a blended learning approach with asynchronous online content combined with in-person classroom educational activities. Students apply the knowledge learned through the course by working directly with an international grassroots social organization during a 4-8 week immersion experience abroad. Course is an 8 week pre-departure training is required. Students complete a service learning placement in summer with an international grassroots organization.

SOCW 330 International Perspectives credit: 3 to 6 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/330/)
This course provides cross-cultural learning experiences within the context of international community-based service learning. Students will explore human service delivery through direct involvement with international social service institutions. This cultural immersion course is a collaborative partnership between the University of Illinois School of Social Work and selected international universities. Countries visited, varies by semester. May be repeated in separate terms up to 12 undergrad hours if topics vary.

SOCW 335 Cities and Immigrants credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/335/)
Same as UP 335. See UP 335.

SOCW 350 Health Promotion Practicum credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/350/)
Same as CHLH 340. See CHLH 340.

SOCW 360 Social Work and the Military credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/360/)
This course provides an overview of military social work practice including: military culture, issues and needs of soldiers and their families, ethical considerations, and the roll of social workers. Prerequisite: For majors only.

SOCW 370 Social Work and Disability Studies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/370/)
This course provides a foundation for generalist practice and promotes social justice, inclusion, and ability when working with all people. Skills and knowledge will be gained to help empower individuals with disabilities and to intervene in various systems to ameliorate bias. The course examines key policies, historic legislation, service delivery, education, and social issues that impact individuals with disabilities. Through projects and assignments completed in-class and in the community, students will learn about the varying abilities and strengths of people with a variety of different needs. Applications of social work values and ethics are stressed in relation to working with people with disabilities.

SOCW 375 Social Enterprise Lab credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/375/)
Enables students to launch and scale social enterprises spanning a wide range of organizations focused on technological innovations, human services, and the performing and visual arts. It couples structured lectures with interactive modules, field trips, guest speakers, and workgroup labs to discuss and troubleshoot startup challenges and opportunities. Modular topics include strategic plans, business models, mapping the external environment, market segmentation, partnership and the value chain, organizational governance, incorporation, the operating plan, human resources, financing, marketing and outreach, branding and identity, legal and liability issues, and monitoring and evaluation. The course develops entrepreneurial and management skillsets through deep engagement with entrepreneurial action.

SOCW 380 Current Topics in Social Work credit: 3 to 6 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/380/)
Presents and analyzes special topics related to current social work practice, policy and research. Topics vary; see Class Schedule for current offering. May be repeated in the same or separate terms.

SOCW 400 Generalist SW Practice Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/400/)
Foundation methods course that is a prerequisite for all advanced methods courses. Overview of generalist social work practice and intervention with individuals, groups, organizations and communities; introduction to core concepts, value base and ethical principles of the profession. Emphasis is given to the bio-ecological framework, person-in-environment and systems theory. Skills in developing beginning professional relationships are addressed via a skills lab component. Students begin the process of professional self-awareness to begin to identify how the personal values and beliefs they hold impact upon their interactions. 4 undergraduate hours. 4 graduate hours. Prerequisite: Admission to MSW program.

SOCW 401 Practice I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/401/)
Overview of generalist social work practice with individuals, families, groups, organizations, and communities. Designed to introduce core concepts, values, and ethical principles of the profession as well as to provide basic skills, and knowledge related to generalist social work practice with a broad array of client systems. Emphasis is give to the biological-psychological-social-spiritual framework, person-in-environment, strengths perspective, and system theory. Skills in developing beginning professional relationships, which are characterized by mutuality, collaboration, empowerment, and client self determination within the problem-solving process are addressed. 3 undergraduate hours. No graduate credit. Prerequisite: SOCW 200.

SOCW 402 Practice II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/402/)
Provides students with culturally responsive, micro-level skills development for working with and on behalf of individuals, families, and groups. Builds on the basic helping skills learned in SOCW 401 and offers further practice on interviewing skills, more emphasis on ethical decision-making, assessment, and intervention, evaluation applied to individuals, families, and groups. 3 undergraduate hours. No graduate credit. Prerequisite: SOCW 401.

SOCW 403 Practice III credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/403/)
Provides knowledge and skills about the theory and practice of planned change in communities and organizations using a generalist model of social work practice. Builds on the foundation knowledge and skills gained in SOCW 401 with emphasis on assessment, planning, intervention, and evaluation skills for macro-level practice. 3 undergraduate hours. No graduate credit. Prerequisite: SOCW 401.

SOCW 404 Social Work Case Management Practice credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/404/)
This course builds upon and extends generalist social work theories, knowledge and clinical skills required for case management practice. Content focuses on inter-professional collaborative team-based approaches for patient/client assessment, care planning, service delivery coordination, and evaluating outcomes. Emphasis is on organizational context, theoretical models, social work roles, culturally sensitive approaches, biopsychosocial assessments, triage, advocacy, interdisciplinary and inter-organizational collaboration and record keeping. 3 undergraduate hours. No graduate credit. Prerequisite: SOCW 401. Restricted to Social Work majors only.

SOCW 410 Social Welfare Pol and Svcs credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/410/)
Examination of social welfare within a historical context, addressing the economic, political, social and ideological influences that have shaped the social welfare system and programs. Critical study of the income maintenance system in the United States as a response to the problems of inequality of opportunity and income, poverty, and income security; consideration of alternative approaches with discussion of the social worker's role in the system. 3 undergraduate hours. 4 graduate hours.

SOCW 412 Hispanics in the U.S. credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/412/)
Hispanics constitute a growing population in the United States. The size and heterogeneity of Hispanics raises complex issues in crafting public policy and in designing and delivering social services. This course offers an extensive portrait of Hispanics in the United States. Students will explore questions and demographic characteristics, language and religious practices, education, criminal justice, neighborhood and economic restructuring, immigration, social service systems, and community action in the context of creating an effective public policy agenda. Same as LLS 412. 3 or 4 undergraduate hours. 3 or 4 graduate hours.

SOCW 416 Child Welfare Issues & Trends credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/416/)
This course examines theoretical and programmatic aspects for child welfare practice. Emphasis is placed on the roles and functions of child welfare workers, including engagement, assessment, intervention and permanency planning. 4 undergraduate hours. 4 graduate hours. Prerequisite: SOCW major. For majors only.

SOCW 417 Dementia Care for Older Adults credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/417/)
This course will equip students with a body of knowledge to supervise, participate in, and facilitate care for persons with dementia throughout the lifespan. Upon completion of the course, students will be eligible for certification as approved dementia trained practitioners. The course will introduce and develop social work practice skills on all levels and choices of dementia care interventions and assessments. Special attention is given to practice skills for working with vulnerable populations and their caregivers through service learning site opportunities and assignments. The course uses an integrated health and person-center care approach with special attention to multi-cultural backgrounds and new family lifestyles related to dementia care. 3 undergraduate hours. 4 graduate hours. Prerequisite: Prior completion of SOCW 315 or other Introduction to Aging course is strongly recommended. BSW majors and MSW students only.

SOCW 418 Independent Study credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/418/)
Independent study of a topic of special interest in the field of social work. 1 to 3 undergraduate hours. 4 graduate hours. Prerequisite: Consent of instructor.

SOCW 420 Subst Use in Social Context credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/420/)
Introduces students to the problem of substance abuse and its impact on society. Examines the physiological, psychological, social, and cultural aspects of substance abuse. At the individual and familial levels, the course examines the causes, development, prevention, and treatment of substance abuse. At the societal level, the course examines public policy efforts to regular and control substance use from both historical and contemporary perspective. Implications for social and economic justice are also examined. 3 undergraduate hours. No graduate credit.

SOCW 427 Social Work Research Methods credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/427/)
Basic principles of social science research and importance for social work practice: overview of research principles including the stages of a research project, design of research; quantitative and qualitative methodologies, design of questionnaires, methods of data collection and preparation of reports. Introduction to various research designs such as the survey, program evaluation, single subject design, quasi-experiments, and experimental design. Enrollment preference given to students in the MSW program. 3 undergraduate hours. 4 graduate hours.

SOCW 436 Intl SW & Development credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/436/)
This online course introduces students to policy and practice issues associated with international social work. It emphasizes ethical dilemmas, with the goal of sensitizing students to the importance of culturally sensitive practice for marginalized populations in global contexts. Weekly online discussion sessions use the Blackboard Online Platform. Students must have high speed internet connection and headset with microphone for course interaction. 3 undergraduate hours. 4 graduate hours.

SOCW 451 HBSE I: Human Development credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/451/)
Examination of the major theories that inform social work's understanding of human behavior in a variety of social contexts. A bio-ecological systems framework, together with a developmental approach in understanding the ways in which individuals, families, groups, organizations, institutions, and communities interact, is presented. Issues of gender, race, ethnicity, socioeconomic status, disability and sexual orientation are introduced so students can gain understanding of how these components affect and influence development across the lifespan. 3 undergraduate hours. 4 graduate hours.

SOCW 455 Social Work with Women credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/455/)
Focuses on women and now cultural belief systems related to gender are instantiated through the differential treatment of females and males in our education, mental health, social welfare and health care systems; and the consequences of such practices through the lifespan. Includes consideration of policies and practices that support women emphasizing issues of special concern to women of color, lesbians, older women, impoverished women and disabled women. Same as GWS 454. 3 undergraduate hours. 4 graduate hours.

SOCW 457 Health Planning credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/457/)
Same as CHLH 457. See CHLH 457.

SOCW 461 Professional Practice Seminar I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/461/)
The goal of this course is to begin the process of integrating all the foundation knowledge of generalist social work that students have learned and begin applying it to real life situations. Students will complete a portfolio and a service learning experience that will help them being to make the connection between the core competencies, theories and applications to real life experiences. During this course students will begin the process of being matched with the agency where they will serve their internship during the last semester of their senior year. 4 undergraduate hours. No graduate credit. Prerequisite: SOCW 401.

SOCW 470 Field Practicum & Professional Seminar II credit: 15 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/470/)
This course is a supervised field practice experience and seminar where students apply knowledge and skills in social work engagement, assessment, planning and interventions to individuals, groups, families, organizations, and communities. Students are expected to promote sustainable social change through planned problem solving and empowerment to enhance the well-being of others. The practicum consists of 32 hours/week for 16 weeks. 15 undergraduate hours. No graduate credit. May be repeated; instructor approval required. Prerequisite: SOCW 461. SOCW majors only.

SOCW 473 Immigration, Health & Society credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/473/)
Same as CHLH 473, LLS 473, and SOC 473. See LLS 473.

SOCW 475 Undergraduate Research Abroad credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/475/)
Students assist in research under faculty supervision at a location outside of the United States. Topics and type of assistance vary. 1 to 4 undergraduate hours. No graduate credit. May be repeated in separate terms up to 6 hours. Prerequisite: Evidence of adequate preparation for such study; consent of faculty member supervising the work (who will have examined the proposed research plan); and approval of department. Not available to freshman.

SOCW 480 UG Research Project credit: 0 to 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/480/)
Conduct research study under the supervision of a departmental faculty member. Topics and nature of assistance vary. Capstone paper required. 0 to 3 undergraduate hours. No graduate credit. Approved for letter and S/U grading. May be repeated in separate terms up to 6 hours. Prerequisite: Evidence of adequate preparation for such study; consent of faculty member supervising the work; and approval of the department head. Majors only. Not available to freshman and sophomores.

SOCW 500 SW Practice with Indiv and Fam credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/500/)
Systematically and critically examines the theory, procedures, and techniques of selected practice models within four main approaches to social work: cognitive-behavioral, systemic (family and ecological systems; crisis intervention), task-centered, and radical-structural (structural; feminist). Uses selected criteria to analyze and assess those models, examines outcome research, and identifies current practice issues. Prerequisite: SOCW 400.

SOCW 501 SW Practice with Groups credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/501/)
Social work practice theory in social group work through comparative study of various practice approaches and research about those approaches, including the use of group work method in contemporary social work practice, practice principles, and the use of group process as applied in the student's area of specialization. Looks at group work for children, adolescents, and adults considering developmental and environmental issues; also includes investigation of practice strategies and models of group therapy and task group leadership across diverse populations. Prerequisite: SOCW 400.

SOCW 502 Brief Motivational Interventions for Substance Use credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/502/)
This course prepares social workers to deliver brief interventions that build motivation for change among individuals that use substances. Students participate in hands-on skill development activities for two empirically supported treatments, Screening Brief Intervention and Referral to Treatment (SBIRT) and Motivational Interviewing. Students are expected to reach beginning competency in delivering these two clinical models. 4 graduate hours. No professional credit. Prerequisite: SOCW 400. MSW: Social Work - UIUC.

SOCW 503 Trauma Informed Social Work with Children and Adolescents credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/503/)
This course uses a case study and inquiry based approach to foster student learning of the core concepts of trauma (theory and foundational knowledge) and evidence-based practice interventions effective in treating children, youth, and families that experience trauma. Cases discussed include children, youth, and families exposed to traumatic events (i.e. abuse, neglect, domestic violence, community violence and natural disasters). Strength-based practice interventions that build on existing child and family strengths that enhance growth and resiliency after trauma are studied. Prerequisite: SOCW 400.

SOCW 504 SUD Treatment in S W credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/SOCW/504/**)**
Introduces selected counseling approaches for substance use disorders. Begins with an overview of the causes of substance use disorders, assessment, diagnosis, and treatment planning. Focuses on treatment theories and techniques applied to counseling substance abusers. Selected theories include 12 Step approaches, cognitive and behavioral theories, family systems theory, harm reduction, and motivational interviewing. Special attention is devoted to apply substance abuse treatment models with diverse populations. Prerequisite: SOCW 400.

SOCW 505 Behav and Cogn Methods for SW credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/SOCW/505/**)**
Students are introduced to brief behavioral and cognitive methods for treating a wide range of human problems, crises, and mental disorders. Content includes: (1) conceptualizing and assessing client problems; (2) identifying appropriate treatment goals; (3) developing comprehensive and differential treatment plans; (4) conducting brief interventions; and (5) evaluating client outcomes using research, consultation, and supervision. Prerequisite: SOCW 400.

SOCW 506 SW Practice with Child/Adol credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/SOCW/506/**)**
Examination and critical evaluation of selected methods/approaches of intervention; research on their effectiveness and application to specific problems of children and adolescents that come to the attention of social workers and other helping professionals; attention given to remediation and prevention. The course provides opportunities for students to develop skills through participation in a service learning project. Prerequisite: SOCW 400.

SOCW 507 School Social Work Practice credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/SOCW/507/**)**
Examination of the design and delivery of school social work interventions with special emphasis given to students with physical/mental disabilities and vulnerable populations. Course content provides a foundation for the development of a comprehensive and in-depth understanding of an ecological systems approach to social work practice based upon a foundation of professional values and ethics. Prerequisite: SOCW 400.

SOCW 508 Family Therapy Seminar credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/SOCW/508/**)**
Advanced seminar providing in-depth exposure to the principles, values, ethics, issues and practice of family therapy in social work. Focuses on family therapy process, the practitioner role, issues in assessment, intervention and evaluation; how discrimination and oppression impact intervention strategies; skills that advance social and economic justice; presentation of cases; use of supervision and consultation, and family therapy with diverse populations. Combines lecture/discussion with taped observations of noted family therapists and participation in a family therapy practicum. Prerequisite: SOCW 400.

SOCW 509 Adv Clin Assess & Interviewing credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/SOCW/509/**)**
Advanced practice class designed to enhance students' understanding of clinical assessment and interviewing methods. Includes methods for therapeutically intervening with clients who are highly distressed, angry or agitated, resistant or involuntarily mandated for treatment, experiencing severe symptoms, or who have unique and complex problems. Clinical interviewing skills taught in this class will build upon knowledge and skills acquired in previous direct practice classes. Prerequisite: SOCW 400 and SOCW 552.

SOCW 510 Theories of Diversity, Inequality, and Social Change credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/SOCW/510/**)**
Explores important dimensions of social justice and social change relevant to social work leadership. The first phase of the course focuses on theories of diversity, social identity and social justice. The second phase focuses on theories of social change and stasis. Students will develop their own working models of these theories. They will also understand how issues of diversity and social justice should inform social work practice at micro, meso and macro-social work levels. Implications for social work leadership will also be explored. 4 graduate hours. No professional credit. Prerequisite: Restricted to Social Work MSW students.

SOCW 513 Delivery of Health Care credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/SOCW/513/**)**
Delivery of health care in the United States is examined from a multidisciplinary perspective including social, cultural, political, economic, ethical and legal issues. Health care services are described in relation to various definitions of health, health status and access to care. Current problems and issues in health care including government responsibility and source of authority, policy development and analysis, proposals for reforms, and financing and cost containment are discussed and analyzed. Prerequisite: Admission to MSW program or consent of instructor.

SOCW 514 Mental Health Pol and Svcs credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/SOCW/514/**)**
Examination of comprehensive community mental health services as they evolve from definitions of the problems and changes in federal and state social policy; the concept of normalization and its criteria for program evaluation; and changing roles of mental health professionals, paraprofessionals, and consumers in policy making and service delivery. Presents the history of mental health policy and services in the U.S.; current policies and activities of the mental health delivery system are critically analyzed. Prerequisite: SOCW 410.

SOCW 515 Integrated Health Care Policy and Services credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/SOCW/515/**)**
Integrated Health Care Policy and Services is examined from a multidisciplinary perspective including social, cultural, political, economic, ethical and legal issues. Integrated health care services are described in relation to various definitions of health and mental health conditions and access to care. Current problems and issues in integrated health care including government responsibility and source of authority, policy development and analysis, proposals for reforms, and financing and cost containment are discussed and analyzed. 4 graduate hours. No professional credit. Prerequisite: Admission to MSW program or consent of instructor. Restricted to those in the MSW and iMSW program.

SOCW 516 Child, Youth and Family Svcs credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/SOCW/516/**)**
Examines a range of direct service and public policy issues that social workers encounter when working with vulnerable children, adolescents, and families. Focuses particular attention on the families involved with child protection. Addresses the following questions: What factors help explain the etiology of violence and neglect in the family home? Once vulnerable families are identified and become involved with social service agencies, what interventions are most effective with regard to decreasing risks and strengthening protective factors? How can social service systems best prepare vulnerable adolescent for the transition to adulthood? Prerequisite: SOCW 410.

SOCW 519 Public School Policy/Services credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/519/)
Presents content on children with physical and mental disabilities, educational policies related to vulnerable populations, and federal and state legislation, with particular emphasis given to the Individuals with Disabilities Act (IDEA). The following topics are highlighted: eligibility requirements, general characteristics of the disabling conditions, education as a continuum from early childhood to adulthood, school finance, and current educational issues. Content is presented pertaining to meeting the needs of exceptional children, students with other special needs, and their families in public schools and the community. Prerequisite: SOCW 410.

SOCW 520 Social Welfare Planning credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/520/)
Introduces students to the theory and practice of social welfare planning. The course is designed to help students apply concepts and methods to their specific social work fields of interest. Content includes a review of policy analysis, needs assessment, establishing goals and objectives, program design, budgeting, management information systems, and program evaluation. Prerequisite: Admission to MSW program or consent of instructor.

SOCW 521 Leadership and Social Change credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/521/)
Introduces MSW students to a broad range of strategies for creating social change. Several overarching concepts that are useful in undertaking a wide range of social change efforts are introduced. These concepts are applied to different change strategies. This includes attention to the role of leadership in social change, as the quality of leadership is critical to the success of most social change efforts. The importance of policy or social entrepreneurs in creating social change will also be examined. These entrepreneurs play critical roles by both identifying and implementing new ideas and by diffusing them on a wider scale after initial experimentation. Finally, social workers often tend to be uninformed about sound business practices as they engage in social change efforts, yet knowledge of basic business concepts can be critical to the success or failure of a social venture. Therefore, the course addresses issues such as opportunity recognition and risk assessment, sustainability and scalability of projects, and attention to both fiscal management and outcome accountability. Prerequisite: SOCW 400 or by consent of instructor for non Social Work majors.

SOCW 522 SW Practice with Communities credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/522/)
Examines principles and methods that characterize identifiable approaches used in community organization practice at neighborhood, community, state, and other levels. This course is an in-depth study of how citizens can organize. Questions discussed include: What institutions aid communities in their organizing and self-improvement efforts? What circumstances encourage the erosion of civil society, civic involvement, and community institutions? What role should the social worker and the human service or social service agency play in organizing communities? Prerequisite: SOCW 400.

SOCW 525 Supervision/Staff Development credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/525/)
Course focuses on the acquisition of the essential knowledge and skills needed to work with people to achieve desired client outcomes. Includes management and organizational theories, and research and theory regarding the practice of supervision. Addresses understanding of the agency context and purposes, interpersonal insights and skills, the importance of procedural and technical expertise, communication skills, mastery of the functions of management and leadership ability. Examines supervisory process in terms of interpersonal sensitivity and interaction skills including influence techniques. Prerequisite: Admission to MSW program or consent of instructor.

SOCW 526 Managing Human Service Orgs credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/526/)
Focus on the design, administration and management of social programs from a social work perspective. Content includes: principles and process of administration and management, history of social welfare administration and how this relates to the design of current programs, review of administration Organizational and leadership theories, policy formulation, agency structure, staff organization, budgeting and evaluation of management practice. Prerequisite: SOCW 400 or by consent of instructor for non Social Work majors.

SOCW 531 Field Practicum and Integrative Seminar I credit: 8 to 12 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/531/)
This course is comprised of a field practicum and integrative seminar. The field practicum is educationally directed and supervised by an approved field instructor. The seminar component assists students with the integration of knowledge, skills, values and attitudes of social work practice acquired in the classroom with the hands-on practice experience in the field practicum setting. Learning experiences emphasize the application of knowledge and practice in the areas of ethical and professional behavior, diversity and difference, human rights and social, economic and environmental justice, research informed practice, policy practice, and engagement, assessment, intervention and evaluation with individuals, families, groups, organizations and communities. 8 to 12 graduate hours. No professional credit. May be repeated in separate terms.

SOCW 532 Field Practicum and Integrative Seminar II credit: 8 to 12 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/532/)
This course builds on the learning of SOCW 531 and is comprised of a field practicum and integrative seminar. Learning is directed at the development and demonstration of advanced competency skills. The field practicum is educationally directed and supervised by an approved field instructor. The seminar component assists students with the integration of advanced knowledge, skills, values and attitudes of social work practice acquired in the classroom with the hands-on practice experience in the field practicum setting. The advanced learning experiences emphasize the application of knowledge and practice in the areas of ethical and professional behavior, diversity and difference, human rights and social, economic and environmental justice, research informed practice, policy practice, and engagement, assessment, intervention and evaluation with individuals, families, groups, organizations and communities. 8 to 12 graduate hours. No professional credit. May be repeated in separate terms. Prerequisite: Successful Completion of SOCW 531.

SOCW 533 Field Practicum III credit: 4 to 6 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/533/)
This course is for students completing a part-time field practicum and is the final semester of the practicum experience. Learning is directed at the development and demonstration of advanced competency skills. The field practicum is educationally directed and supervised by an approved field instructor. The advanced learning experiences emphasize the application of knowledge and practice in the areas of ethical and professional behavior, diversity and difference, human rights and social, economic and environmental justice, research informed practice, policy practice, and engagement, assessment, intervention and evaluation with individuals, families, groups, organizations and communities. 4 to 6 graduate hours. No professional credit. Approved for S/U grading only. May be repeated in separate terms. Prerequisite: Successful completion of SOCW 532. Restricted to Master of Social Work students.

SOCW 535 Local Policy & Immigration credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/535/)
Same as LA 535 and UP 535. See UP 535.

SOCW 541 Clinical Research Seminar credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/541/)
Develops skills for assessing effectiveness of social work interventions using research methods. The course assumes students have had prior courses in research methods and statistical analysis. Building on these courses, this course will focus on the use of research methods in examining important aspects of social work interventions. Students will also develop skills necessary to evaluate social work research practice and practice evidence, as well as skills in grant writing and data analysis. Prerequisite: SOCW 427 or equivalent.

SOCW 542 Program Evaluation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/542/)
An advanced research course that develops skills for evaluating social service programs. The course assumes students have had prior courses in research methods and statistical analysis. This course provides an understanding of theoretical concepts, techniques, and research findings for evaluating a specific program, its implementation, and its effectiveness. It systematically analyzes program evaluation models and critically examines application of these models in the context of social work practice and social welfare policy. Prerequisite: SOCW 427 and a college level statistics course.

SOCW 552 HBSE II: Mental Disorders credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/552/)
Interrelationship of biological, emotional, learning and social aspects of mental disorders, and implications for the patient/client, family, and community. Focus on diagnostic assessment and biopsychosocial treatment methods including psychosocial treatment methods, medications, and social work interventions. Students also learn to recognize the potential for bias that can result when assessments are applied across cultural, ethnic, racial, socioeconomic, gender and other groups. Prerequisite: SOCW 451.

SOCW 553 Integrated Behavorial Health & Health Care credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/553/)
Students will learn therapeutic approaches, brief interventions and bioethical frameworks to help patients/family navigate illness, disability, and healthcare systems and promote health and wellness. Students will learn roles and functions of clinical social workers in healthcare settings with special attention to Integrated Care models and roles of the behavioral health consultant/provider and medical social worker on healthcare teams. Holistic biopsychosocial models that are patient/family centered, team-based, collaborative, and that integrate physical and behavioral health care to address social determinants of health and health equity will be emphasized. Common chronic and acute health conditions and medical terminology are discussed as well as evidence-based psychosocial interventions in hospital, primary care, and other outpatient settings. 4 graduate hours. No professional credit. Prerequisite: Admission to MSW program.

SOCW 554 Inequalities In A Diverse Society credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/554/)
In contemporary American society, not all inequality leads to inequity. In this course, we will explore structural and cultural disparities that proceed from race, ethnicity, and class. Such critical inquiry enables students to understand the factors that contribute to the creation and implementation of public policy and guide the delivery of social goods such as adequate housing, safe communities, efficient transportation, affordable health care, quality education, and other public services. Therefore, we emphasize processes of analysis and the application of social entrepreneurial principles as important tools to generate policies and interventions that lead to a more equitable society. Same as HDFS 541 and LLS 554. 4 graduate hours. No professional credit. Prerequisite: SOCW 451 or consent of instructor for non Social Work majors.

SOCW 561 Special Studies in Soc Work I credit: 1 to 8 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/561/)
Independent or group study in areas of special interest; application of social work principles to special problems or settings. May be repeated in the same or subsequent terms as topics vary. Prerequisite: Consent of instructor.

SOCW 562 Special Studies in Soc Work II credit: 2 to 8 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/562/)
Independent or group study in areas of special interest; application of social work principles to special problems or settings. Prerequisite: Consent of instructor.

SOCW 570 Childhood Obesity I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/570/)
Same as CHLH 530, FSHN 530, HDFS 551, KIN 530, NUTR 530. See NUTR 530.

SOCW 571 Childhood Obesity II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/571/)
Same as CHLH 531, FSHN 531, HDFS 552, KIN 531, NUTR 531. See NUTR 531.

SOCW 575 Social Work Teaching Seminar credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/575/)
Doctoral seminar on social work education and the pedagogy of college teaching. Topics include history of social work education, competencies for social work education, course development, principles of active learning, use of diverse instructional methods for teaching and assessing learning, and the scholarship of teaching and learning. The course has a required practicum component where students receive structured mentoring in some aspect of teaching in a social work class.

SOCW 576 Teaching Practicum credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/SOCW/576/**)**
This course is designed to provide doctoral students with supervised, hands-on teaching training and experience with a faculty member after they complete the required Social Work Teaching Seminar. The primary objective of the teaching practicum is to strengthen the students' teaching ability and experiences for their entry into the job market. The purpose is for students to be involved in as many aspects of the teaching process as possible (e.g. syllabus development, class preparation, classroom time, office hours, assignment review/grading, meetings with faculty supervisor and any other relevant activities). Approved for S/U grading only.Prerequisite: SOCW 575.

SOCW 579 Social Work Practice Theories credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/SOCW/579/**)**
Presents theories for social work interventions with individuals, families, groups, and communities and organizations; critically analyzes different theoretical frameworks for such interventions; and examines the conceptual links between theory, process, outcome, and evaluations. This course is intended for students in the Ph.D. program in Social Work.

SOCW 580 Advanced Child Welfare credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/SOCW/580/**)**
Examines laws, scientific concepts, ethical dilemmas, and new practice directions with respect to protecting children, preserving families, regulating foster care, achieving family permanency, and assisting foster youth in transitioning to independence. Review of legislative, court, and administrative frameworks for promoting these outcomes at the city, state, and federal levels. The course analyzes and critiques historical and contemporary social science, public policy, community organization, and legal advocacy perspectives on child protection and child welfare. Contemporary topics and issues are discussed and debated. Prerequisite: SOCW 516 or consent of instructor.

SOCW 581 Gender Relations & Intl Dev credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/SOCW/581/**)**
Same as GWS 512 and WGGP 581. See WGGP 581.

SOCW 584 Policy Practice and Advocacy credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/SOCW/584/**)**
Examines approaches for analyzing social policy development, implementation and advocacy in the United States; and development of skills to become effective policy practitioners. Involves ability to formulate viable policy options as well as skills in advocating for adoption of desired policies. Content includes knowledge about the political processes associated with policy development, the technologies needed to develop policies, communication skills need for policy advocacy, and knowledge in a specialized area. Course builds on policy material presented in SOCW 410. Prerequisite: SOCW 410 or consent of MSW Program Director.

SOCW 585 National Social Welfare Policy credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/SOCW/585/**)**
This seminar focuses on social policy development, implementation, evaluation, and research. The class will analyze theories of governmental policy intervention, both from substantive and procedural standpoints. Because the social policy arena is heavily politicized, political factors affecting policy development and implementation will be stressed. In addition, policy implementation discussions will attend both to program administration and intergovernmental relations issues. The growing importance of globalization in social policy development also will receive attention, as will selected issues in the evaluation of social policy interventions. 4 graduate hours. No professional hours.

SOCW 589 Social Work and the Law credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/SOCW/589/**)**
Legal procedures and issues of special relevance to social work practice; includes legal provisions related to poverty, family development and crises, racial and ethnic minorities, institutionalized persons, crime and delinquency, legal authority of social agencies, and regulation of the profession. Prerequisite: Admission to the MSW program or consent of instructor.

SOCW 593 Applied Qualitative Research credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/SOCW/593/**)**
Provides a doctoral level overview of contemporary qualitative research with an emphasis on applications. Through readings, discussions, and assignments students will be introduced to: the history and philosophical underpinnings of qualitative research; research designs, methods and analysis used in qualitative research; criteria for rigor in qualitative research; the application of qualitative research to addressing contemporary social issues; technical and professional issues including the use of computer programs in qualitative research and grant writing. Students will begin to elaborate their own research interests through critical reading, discussion and various applied and written assignments. Prerequisite: Admission to Ph.D. program.

SOCW 594 Individual Research credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/SOCW/594/**)**
Course is designed to enhance the research skills of Doctoral students in social work through research collaboration with a faculty member. May be repeated to a maximum of 8 hours. Prerequisite: SOCW 593.

SOCW 595 Quantitative Research Designs credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/SOCW/595/**)**
Provides a doctoral level overview of quantitative designs and conceptual issues in social work research. It presents a framework for structuring the statistical analysis and systematic evaluation of the efficacy and effectiveness of social interventions in achieving desired outcomes for diverse populations. Although the purpose is not to emphasize statistical training, the course will reinforce the learning of basic concepts, mathematical foundations, and assumptions underlying advanced applications of statistical description and causal inference. Prerequisite: Admission to the Ph.D. program.

SOCW 599 Dissertation Research credit: 0 to 16 Hours. **(**https://courses.illinois.edu/schedule/terms/SOCW/599/**)**
Research and writing of doctoral thesis in social work. Approved for S/U grading only. May be repeated.

WGGP Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/WGGP/)

Women Gender Global Perspect Courses

WGGP 581 Gender Relations & Intl Dev credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/WGGP/581/**)**
Interdisciplinary seminar examining theoretical and empirical research on gender and the transformation of social and economic structures. Students will develop a comparative perspective on issues of women and public policy by contrasting and comparing such policies in North and South America, Eastern and Western Europe, Asia, and Africa. Same as GWS 512 and SOCW 581.

School of Information Sciences

dean: Eunice Santos
overview of MS/LIS admissions & requirements: https://ischool.illinois.edu/degrees-programs/ms-library-and-information-science/apply (https://ischool.illinois.edu/degrees-programs/ms-library-and-information-science/apply/)
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/)
school website: School of Information Sciences (https://ischool.illinois.edu/)
school faculty: https://ischool.illinois.edu/people/faculty (https://ischool.illinois.edu/people/faculty/)
office: 501 East Daniel Street, Champaign, IL 61820-6211
phone: (217) 333-7197, (800) 982-0914 (within the US)
email: ischool-apply@illinois.edu

Initial Admission Term: Fall 2020

director of undergraduate studies: Melissa Newell
undergraduate office (current students): ischool-is@illinois.edu
undergraduate website: https://ischool.illinois.edu/degrees-programs/bs-information-sciences (https://ischool.illinois.edu/degrees-programs/bs-information-sciences/)

Undergraduate Programs:
major: Information Science, BS (http://catalog.illinois.edu/undergraduate/bs_info_sci/)

Undergraduate Admissions

Admission Requirements for New Freshmen and New Transfer Students

High school seniors and transfer students from another institution should visit the Office of Undergraduate Admissions website (https://admissions.illinois.edu/) for admission requirements and applications for a specific term.

Admission Requirements for Inter-College Transfer Students (ICT)

Students currently enrolled in other colleges on campus may apply for an intercollegiate transfer (ICT) into the B.S. Information Sciences program.

Prospective iSchool ICTs should be aware that applying and meeting the stated requirements does not guarantee transfer. Admission to the BSIS program is competitive and may be limited due to enrollment maximums.

To meet the requirements to apply, students must meet the following conditions:

- Have completed at least two semesters in the University of Illinois at Urbana-Champaign academic unit to which they were admitted, if admitted as freshmen.
- Be in good academic standing.
- Current University students should demonstrate interest in the major by completing at least two introductory IS courses with competitive grades.
- Competitive GPA
- Successful completion of the application process for entry.

See our website (http://go.ischool.illinois.edu/BSISict (http://go.ischool.illinois.edu/BSISict/)) for additional details on the ICT process and application.

Graduate Degree Programs in the School of Information Science

Information Management, MS (p. 819) **(on campus & online)**
Library & Information Science, MS (http://catalog.illinois.edu/graduate/is/information-science-ms/) **(on campus & online)**
concentration:
Bioinformatics (p. 633)
Library & Information Science, CAS (p. 850) **(on campus & online)**
Information Sciences, PhD (p. 821)
concentration:
Writing Studies (p. 1111)

Joint Degree Programs:
Library & Information Science, MS and African Studies, MA (p. 1149)
Library & Information Science, MS and History, MA (p. 1153)
Library & Information Science, MS and Russian, East European, & Eurasian Studies, MA (p. 1149)

School Librarian Licensure: available in conjunction with both the MS in LIS and CAS in LIS

The School of Information Sciences (iSchool) offers programs of study leading to the Master of Science (M.S.), the Certificate of Advanced Study (C.A.S), and the Doctor of Philosophy degrees. Three Master of Science (M.S.) degrees are available. The M.S. in Library and Information Science (L.I.S.) prepares students for professional careers in all types of information organizations, including libraries. The M.S. in Information Management (I.M.) will prepare the students for information-intensive professional roles in a broad range of sectors. The Library and Information Science concentration of the campus-wide M.S. in bioinformatics program emphasizes multidisciplinary skills that are required for a career developing and managing information systems for the biological sciences community. The C.A.S. program provides the opportunity

1. to study an aspect of information sciences in greater depth than is possible in the M.S. program,
2. to refresh and upgrade one's professional training several years after completing a M.S. program, or
3. to redirect one's career into a different area of library and information science.

School Librarian Licensure is available in conjunction with both the M.S. in L.I.S. and C.A.S. The Ph.D. is a research degree program.

Admission

The general admission requirements of the Graduate College apply. Consideration is also given to language study and computer skills, relevant work experience, letters of reference, and evidence of leadership. International students must score at least 620 on the paper-based Test of English as a Foreign Language (TOEFL) (260 on the computer-based test; 104 on the iBT version); or 7 on each section of the IELTS. The M.S. in bioinformatics requires a strong background in information science including undergraduate-level computing and mathematics. The C.A.S. requires a master's degree in library and information science and a grade point average of at least 3.0 (A = 4.0) in the master's program.

School Librarian Licensure

Candidates interested in the School Librarian Licensure program must first be admitted and enrolled as a degree-seeking student within the School of Information Sciences before their application to the School Librarian Licensure program is reviewed. Accepted students must successfully pass two Illinois State Board of Education testing requirements prior to registration for the final fieldwork experience.

Graduate Teaching Experience

Although teaching is not a general Graduate College requirement, experience in teaching is considered an important part of the graduate experience in the Ph.D. program for those interested in faculty careers.

Facilities and Resources

Among the major areas of faculty research are:

- **community informatics**
- **data analytics**
- **data curation**
- **digital humanities**
- **digital libraries**
- **history of information**
- **information retrieval**
- **organization of knowledge and information**
- **privacy, security, and trust**
- **ethics and values for information**
- **youth literature, culture, and services**

The iSchool's Center for Informatics Research in Science and Scholarship (CIRSS) conducts research on information problems that impact scientific and scholarly inquiry. The Center for Children's Books (CCB) provides a review and research collection of the newest literature for children and young adults. The Communications Office produces two high-quality publications, Library Trends and The Bulletin of the Center for Children's Books. The staff of each of these units is available to students and faculty for consultation and guidance. A computer network with Internet connectivity is integral to teaching and learning activities. The University Library provides a vast reservoir of resources for all types of study and research in library and information science.

The School maintains an ongoing commitment to continuing education through conferences, institutes, workshops, and course offerings.

Financial Aid

Financial aid may be available from the iSchool, the University Library, and elsewhere in the University in the form of graduate assistantships, teaching assistantships, research assistantships, and hourly paid work. Area libraries may provide pre-professional or hourly positions. Also, the iSchool offers a limited number of fellowships for which doctoral students tend to be favored over C.A.S. and master's degree students. Students in the joint program that do not hold a FLAS fellowship are eligible for, but not guaranteed, fellowship or assistantship support in the semesters in which they are enrolled in the iSchool. Any assistantship awarded to these students provides a waiver of the base in-state tuition and service fee as well as a stipend. Non-Illinois residents must pay the difference between in- and out-of-state tuition.

IS Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/IS/)

Courses

IS 100 Exploring the iSchool with a Human-Centered Lens credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/IS/100/**)**
This course introduces students to the School of Information Sciences (iSchool). Students will explore career and professional development within information sciences, building their leadership and collaborative skills, and building a network within and beyond the iSchool. Through a human centered design project focused on an information science problem, students will gain experience and a better understanding of the process to develop an innovative solution addressing a societal need. Prerequisite: Restricted to Majors Only; First Semester Freshman, Intercollegiate and Off-Campus Transfer Students Only.

IS 101 Introduction to Information Sciences credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/101/**)**
This course provides an introduction to the field of information science and the major. It offers both historical and contemporary context for understanding the role of information in society. Focus is placed upon critical analysis of information problems as well as understanding the creation, use, and distribution of information in business, policy, education, government, health, and other sectors.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

IS 107 Data Science Discovery credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/107/**)**
Same as CS 107 and STAT 107. See STAT 107.
This course satisfies the General Education Criteria for:
Quantitative Reasoning I

IS 145 Mapping Inequalities credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/145/**)**
Immerses students in the history of Inequality in the United States through mapping the geographic, historical, and/or social movement of minority cultures using quantitative and social science methods. Topics vary by section, but each section emphasizes experiential learning through community-engaged scholarship, field-trips, or computer programming projects. No previous computer programming experience is required. No previous computer programming experience is required. Prerequisite: This course is intended for first and second year students.
This course satisfies the General Education Criteria for:
Quantitative Reasoning II
Social Beh Sci - Soc Sci
Cultural Studies - US Minority

IS 189 Independent Study credit: 0 to 3 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/189/**)**
Individual study in a subject related to information sciences not covered in normal course offerings. Approved for Letter and S/U grading. May be repeated in separate terms to a maximum of 6 hours. Prerequisite: Consent of instructor. Submission of "Request to Enroll in IS Independent Study".

IS 199 Undergraduate Open Seminar credit: 1 to 5 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/199/**)**
Undergraduate Open Seminar. Additional fees may apply. See Class Schedule. May be repeated.

IS 202 Social Aspects Info Tech credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/202/)
Explores the way in which information technologies have and are transforming society and how these affect a range of social, political and economic issues from the individual to societal levels. Same as INFO 202 and MACS 202.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

IS 203 Analytical Foundations for Information Problems credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/203/)
A survey of mathematical topics for students in information sciences. Provides an introduction to sets, relations, graphs, grammars, probability, and propositional and predicate logic. These topics relate to applications in information modeling, representation and expression. Prerequisite: MATH 112 or Required ALEKS Score.
This course satisfies the General Education Criteria for:
Quantitative Reasoning II

IS 204 Research Design for Information Sciences credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/204/)
This course provides an introduction to different approaches to research in the information sciences, including social science methods, data and text mining, digital humanities, historical approaches, and others. Topics include methods for evaluating research, developing research questions, selecting research methods, conducting research ethically, and communicating findings clearly and effectively through words, graphics, and other visualizations.

IS 205 Programming for Information Problems credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/205/)
Covers common data processing methods and computing concepts used in the information sciences. Evaluates strengths and weaknesses of the techniques in the context of our discipline. No prior programming background is assumed. Course will use the Python programming language. Prerequisite: IS 203.

IS 206 Introduction to Database Concepts & Applications credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/206/)
Introduction to database technology concepts and architecture. Explore data types and reading/writing database layout descriptions. Discussion of database ethics and privacy concerns. Comparison of different database systems a user might encounter including RDBMS, XML/RDF/JSON, NOSQL, and Graph database systems. Labs involving common database tools and exercises in SQL. Prerequisite: IS 205, or CS 101, or CS 105, or CS 125, or ECE 120, or permission of instructor.

IS 226 Introduction to HCI credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/226/)
This course introduces students to fundamental theories and techniques in Human-Computer Interaction (HCI). This course presents basic tools and methods for creating, designing, prototyping, and evaluating user interfaces to computing applications and web sites. Students will explore course content by conducting individual and group hands-on projects. Assignments involving prototyping can be implemented by self-selected solutions, e.g. Axure, JavaScript. Students from all backgrounds are welcomed.

IS 229 Web Design Fundamentals credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/229/)
This course will teach students about building inclusive interactive systems. They will learn to gather and understand user requirements and needs for a wide range of user populations, especially those that are under-served (e.g., children, older adults, people with disabilities), apply inclusive design frameworks and principles, and design, develop, evaluate and improve interactive prototypes in an iterative manner. Prerequisite: IS 205, or IS 226, or equivalent course.
This course satisfies the General Education Criteria for:
Quantitative Reasoning I

IS 236 User Research & Evaluation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/236/)
This course will teach students about user research and evaluation. They will learn to apply various user research methods, gather and understand user requirements and needs for a wide range of user populations, especially those that are under-served (e.g., children, older adults, people with disabilities), conduct user evaluations of prototypes and interactive systems, and communicate effectively about the research insights and make actionable design suggestions. Prerequisite: IS 204, or IS 226, or equivalent course.

IS 249 BSIS Practicum credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/249/)
A professional field experience program designed to provide the student with the opportunity to work in a professional environment under the supervision of an experienced information professional with the guidance of a faculty advisor. This opportunity allows students to integrate the theory and knowledge of course content with the application of principles and practices in a work environment, including these specific objectives Approved for S/U grading only. Prerequisite: IS 101 or IS 202. Restricted to BSIS students only.

IS 265 Innovation Illinois: From Accessible Design to Supercomputing Cultures credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/265/)
Same as CS 265 and MACS 265. See MACS 265.

IS 266 Community Innovation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/266/)
How do communities contribute to transformative, world-changing innovations? Why is their participation indispensable for fostering change? And what makes change ultimately transformative across diverse spaces and time? Community Innovation explores how engagement with interdisciplinary communities and collaborations, as well as histories of globally-changing local innovations from the Illinois were critical to fostering and sustaining new social and technical practices across space and time. Same as MACS 266.

IS 269 BSIS Internship credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/IS/269/)
Designed to provide students an opportunity to apply the skills and concepts learned in Information Sciences classes to a work environment. Students will complete internships of their choosing under supervision and will be expected to complete activities online including a reflective paper and presentation. The goal of this course is to provide an experience that will form a connection between a student's academic career and career goals for the future. Approved for S/U grading only. May be repeated. Prerequisite: IS 101 or IS 202. Restricted to BSIS students only.

IS 304 Advanced Research Design credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/304/)
This course is a practical, hands-on class in social science research methods in the field of information sciences. Students will learn both qualitative and quantitative methods, including survey design, interview techniques, and observation strategies. Examples and practical exercises will be geared towards future work as information professionals and will enable students to design and apply research strategies that help them understand the intersections between people, information, and technologies. Prerequisite: IS 204, or IS 236, or similar research course.

IS 305 Programming for Information Problems II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/305/)
Continuing coverage of common data processing and computing methods in the information sciences. Building on programming skills from IS 205, additional programming patterns will be explored, and additional tools like the command line and version control will be explored in the context of information problems. Course will be in Python. Some Python review will be provided, but students without prior experience in Python should contact the school or instructor for review material. Prerequisite: IS 205, or CS 101, or CS 105, or CS 125, or ECE 120, or equivalent. Basic programming (Python) proficiency required.
This course satisfies the General Education Criteria for:
Quantitative Reasoning I

IS 308 Race, Gender, and Information Technology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/308/)
In this course we will critically examine the ways in which information and communication technologies (ICTs) are shaped by – and help to shape – social relations of race and gender; and we will extend our review to other categories of identity and exclusion as well, such as age, ability, geography and ethnicity. We will also explore the various benefits and burdens of the information society and how these are socially distributed, and conduct case-studies of policies, practices, and programs designed to enhance opportunities and/or mitigate disadvantages through the creative or disruptive use of ICTs. Directed and supervised investigation of selected topics in information studies that may include among others computers and culture; information policy; community information systems; production, retrieval and evaluation of scientific or social science knowledge; computer-mediated communication; and computer-supported cooperative work. Prerequisite: IS 202 Highly recommended. Sophomore standing.

IS 309 Computers and Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/309/)
This course explores cultural ideas about computers, including hopes and fears about the effects of computers on our lives. We will analyze images of computers in fiction and movies. The course will also discuss hackers, online subcultures, and other computer-related subcultures, and the integration of computers into various cultural practices. The course will also explore the different uses of digital media. Prerequisite: IS 202 Highly recommended.

IS 310 Computing in the Humanities credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/310/)
Explores use and application of technology to scholarly activity in the humanities, including projects that put classic texts on the web or create multimedia application on humanities topics. Same as INFO 310. Prerequisite: Sophomore standing.

IS 311 History and Foundations of the Information Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/311/)
Today's information society bespeaks a long history, exhibiting marked continuities with the past as well as some sharply defined new features. Yet the historical foundations of the information society remain poorly understood. This course develops such a framework, by examining emergent information institutions and practices from early modern Europe to the later 20th century. It examines the historical development of the information society through a number of important conceptual lenses, including: modernity and post-modernity; Fordist and post-Fordist capitalism; social class and information poverty; social and technological determinism; utopianism and dystopianism; and empire and globalization. Prerequisite: IS 202 Highly recommended.

IS 316 The Design of Usable Information Interfaces credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/316/)
Examines issues of Human Computer Interaction and the design of better computer interfaces. Prerequisite: Sophomore standing.

IS 324 Social Network Analysis credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/324/)
Introduces theories of social networks (how they form, and how they influence thoughts, feelings, and behaviors), while also providing hands-on experience with some powerful tools and methods for analyzing networks on various scales, ranging from small groups, to communities, to populations. It will also explore the use of network analysis to reveal patterns in large-scale data from the humanities such as periods of literary narrative, or character development across vast narratives with multiple interweaving plot lines. Same as SOC 324.

IS 334 Usable Privacy and Security credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/334/)
From passwords to email encryption to privacy settings on social media services, it is widely recognized that human factors, usability or user experience play a crucial role in effective privacy and security solutions. Designers of privacy and security solutions need to understand how people might use, interact or appropriate the mechanisms they develop. This course introduces various aspects of user experience (e.g., usability problems, user interface designs, conflicting needs) related to privacy and security systems. It is also designed to provide students with knowledge and opportunities to analyze and evaluate user experience of privacy and security systems. This course is suitable for students who are interested in privacy and security, or user experience, or both!.

IS 340 Project Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/340/)
Focuses on project management methodology that will allow you to initiate and manage projects efficiently and effectively. You will learn key project management skills and strategies, and you will have the opportunity to apply this knowledge through assignments.

IS 357 Introduction to Data Storytelling credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/357/)
Communicating with the right audience in the right way connotes creation of ways and approaches that can serve diverse populations within and beyond a particular or specific culture. In the context of our school, the iSchool at the University of Illinois, we propose to approach strategic communication from the perspective of storytelling thinking. The goal is to introduce students to the philosophical, social, and relational dynamics of "story" among people as all human storyteller as well as organizations of all sizes across a wide spectrum of fields including library as storytelling organizations. It also aims to draw students to explore how a story foregrounds bridge-building dialog, affects the power of information, and thus maximize human potential. Students will be exposed to a range of opportunities to apply storytelling thinking as a tool to identify the audience, design means to communicate with them, and develop dynamic triangle of people sharing stories, engaging in constructive dialogs and reinterpreting etc.

IS 368 Youth Community Engagement credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/368/)
This course examines youth services by surveying how youth serving organizations meet young people's developmental, informational, social, personal, and cultural needs through programs and services. The course will provide both practical experience and theoretical knowledge for understanding the value and impact of youth services programs; strategies, techniques, and resources for developing these programs; approaches for ensuring programs are relevant to service communities; and methods for assessment and evaluation of program success. Prerequisite: IS 358 Highly recommended.

IS 370 Concepts of Information Behavior Theory credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/370/)
This course will introduce students to the relationships between users and the information they encounter. Students will become familiar with the concepts of understanding the information needs and information behavior of users, as well as the methods of accessing and assimilating information employed by users. The course will also introduce a range of the major models and theories employed in exploring information needs and behavior. Prerequisite: IS 204, or equivalent course.

IS 378 Information Technology Services for Youth credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/378/)
This course examines the intersections between youth, information, and technology from a socio-technical perspective. This course will provide both practical experience and theoretical knowledge for understanding the ways youth engage with information via technology, as well as various developmental, social, personal, and cultural contexts that inform those interactions. Students will evaluate examples of youth information and communication technology use and analyze factors including identities, educational and social structures, opportunities and risks, learning and literacy, and potential futures in these areas. Prerequisite: IS 358 Highly recommended.

IS 381 Introduction to Literacies for Youth credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/381/)
An overview of youth literacies covering: popular literacy myths, censorship, cognitive processes behind reading, visual and digital literacies, contemporary youth practices, government policies, and literacy education in schools. Course readings include fictional works and scholarship from the fields of education, library science, history, media studies, critical race studies, and literary and cultural studies. Students learn the history of marginalized youth in America in order to understand how literacies are defined, promoted, or stigmatized today.

IS 389 Independent Study credit: 0 to 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/389/)
Advanced individual study in a subject related to Information Sciences not covered in normal course offerings. Approved for Letter and S/U grading. May be repeated in separate terms to a maximum of 6 hours. Prerequisite: Consent of instructor. "Request to Enroll in IS Independent Study". Restricted to students with Junior level standing or above.

IS 390 Special Topics in Information Studies credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/390/)
Directed and supervised investigation of selected topics in information studies that may include among others computers and culture; information policy; community information systems; production, retrieval and evaluation of scientific or social science knowledge; computer-mediated communication; and computer-supported cooperative work. May be repeated. Prerequisite: Sophomore standing.

IS 400 Colloquium credit: 0 or 1 Hours. (https://courses.illinois.edu/schedule/terms/IS/400/)
Venue for presentation and discussion of research and professional activities by faculty, students, staff, and guest speakers. 0 or 1 undergraduate hours. 0 or 1 graduate hours. Approved for Letter and S/U grading. May be repeated in separate semesters.

IS 401 Introduction to Network Information Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/401/)
This course provides a deep hands-on sociotechnical dive into technology including electronics, software, and networks culminating in a holistic understanding of networked information systems. The course also explores the methodological landscape of networked information systems including theoretical assumptions, research methods, and research techniques. Throughout, students will be introduced to, and make active use of, skillsets, frameworks, and standards employed by a wide range of information professionals in selecting, co-designing, appropriating, and innovating-in-use networked information systems. Additional fees may apply. See Class Schedule. 4 undergraduate hours. 4 graduate hours.

IS 403 Children's Materials credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/403/)
Evaluation, selection and use of books and other resources for children (ages 0-14) in public libraries and school media centers; explores standard selection criteria for print and nonprint materials in all formats and develops the ability to evaluate and promote materials according to their various uses (personal and curricular) and according to children's various needs (intellectual, emotional, social and physical). 3 undergraduate hours. 2 or 4 graduate hours. Prerequisite: For undergraduates, junior or senior standing and consent of instructor.

IS 406 Cognition in the Wild credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/406/)
Designed as a foundation for students who are interested in learning how to design human-centered information technologies. Students will learn basic principles in human cognition and behavior, and how these principles influence how we interact with information technologies. The course will prepare students to translate theories in human cognition and behavior to analyze, evaluate and rethink everyday design examples. 3 undergraduate hours. 4 graduate hours.

IS 407 Introduction to Data Science credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/407/)
This course introduces students to data science approaches that have emerged from recent advances in programming and computing technology. They will learn to collect and use data from a variety of sources, including the web, in a modern statistical inference and visualization paradigm. The course will be based in the programming language R, but will also use HTML, regular expressions, basic unix tools, XML, and SQL. Supervised and unsupervised statistical learning techniques made possible by recent advances in computing power will also be covered. 4 undergraduate hours. 4 graduate hours.

IS 409 Web Technologies & Techniques credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/409/)
This course provides an introduction to the technologies behind the Web. Topics covered include: hypertext, hypermedia, the history of the Web, the role of Web standards and their impact on the development of Web resources. The course introduces principles of Web design and usability. Students will gain an understanding how the Web works and how to design, construct, evaluate, and maintain Web-based materials. 3 undergraduate hours. 4 graduate hours. Priority is given to students pursuing a transfer into the BS/IS degree (http://go.ischool.illinois.edu/BSIS).

IS 410 Storytelling credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/410/)
Fundamental principles of the art of storytelling including techniques of adaptation and presentation; content and sources of materials; methods of learning; practice in storytelling; planning the story hour for school and public libraries and other public information settings; and audio, video, and digital media. 3 undergraduate hours. 2 or 4 graduate hours. Prerequisite: For undergraduates, junior or senior standing and consent of instructor.

IS 411 Information Systems Analysis credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/411/)
This is an introductory course to Information Systems Analysis. Information Systems Analysts are typically involved in an entire information systems development life cycle from initial planning to final assessment. Several different approaches have been used. Students will gain experience in several aspects of Information Systems Analysis, including business process modeling, requirements gathering, data flow diagramming, and database design. This is a hands-on course with in-class exercises and group practical assignments. 3 undergraduate hours. 4 graduate hours.

IS 413 Teen Materials credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/413/)
Evaluation, selection and use of books and other resources for young adults (ages 12-18) in public libraries and school media centers; explores standard selection criteria for print and nonprint materials in all formats and develops the ability to evaluate and promote materials according to their various uses (personal and curricular) and according to young adults' various needs (intellectual, emotional, social and physical). 3 undergraduate hours. 2 or 4 graduate hours. Prerequisite: For undergraduates, junior or senior standing and consent of instructor.

IS 416 Adaptive Minds and Computers credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/416/)
Given the rapid changes in information environments, emerging research has shown how human adapts to the complex information environments through different self-regulated processes. This course will discuss the evolving theories of human performance in the contemporary information environments, including how people select, search, make sense and make decisions among a huge amount of information; how information environments shape individual and collective human performance; and how people adapt to information environments for forming coupling cognitive systems. 3 undergraduate hours. 4 graduate hours. Prerequisite: IS 406.

IS 417 Data Science in the Humanities credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/417/)
Human culture provides an ideal testbed for students exploring data science, because the interpretive challenges that lurk beneath the surface in other domains become starkly visible here. For instance, cultural materials usually come to analysts as unstructured texts, images, or sound files, forcing explicit decisions about data modeling and feature extraction. Cultural questions also highlight the importance of interpreting statistical models in relation to a social context. Last but not least: songs, poems, and stories confront us with vivid problems that are inherently fun to explore. This course will start by reviewing descriptive and inferential statistics, and build up to applications of supervised and unsupervised machine learning. We will apply those methods to a range of cultural materials using them to model the pace of stylistic change in popular music, for instance, and the representation of gender in fiction. 3 undergraduate hours. 4 graduate hours. Prerequisite: One semester of experience programming, for example, STAT 107 or IS 430 - or any analogous course.

IS 418 Community Engagement credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/418/)
Community engagement refers to the multiple ways that information professionals in libraries and other settings learn about, collaborate with, and provide service and outreach to community members. Provides an introduction to, and overview of, community engagement theory and practice. A significant portion of coursework will take the form of service learning or community-based research via approved projects that match students' interests. 3 undergraduate hours. 4 graduate hours.

IS 419 Entrepreneurial Information Technology Design credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/419/**)**
Introduces students to a range of rapid prototyping techniques and methods to analyze needs, opportunities and design spaces. Students will work in teams to develop ideas for novel computational devices or applications to meet identified needs. Covers the interlinked entrepreneurial skills of identifying an unmet need, exploiting technological opportunities, exploring a design space to refine an idea, and communicating a design vision through demonstrations with prototypes and proofs of concept. This enables developers to show how their envisaged working interactive technology will be used productively in a particular real-life context. Communicating the vision of computational devices is a challenge because dynamic use in context is hard for people other than the device's developers to imagine. The ability to produce convincing, clear, powerful demonstrations even at the early stages of a project is a highly valuable entrepreneurial skill, and also highly applicable within an organization. Directed and supervised investigation of selected topics in information studies that may include among others the social, political, and historical contexts of information creation and dissemination; computers and culture; information policy; community information systems; production, retrieval and evaluation of knowledge; computer-mediated communication. 3 undergraduate hours. 4 graduate hours. Prerequisite: Undergraduate students: Priority is given to students pursuing a transfer into the BS/IS degree (http://go.ischool.illinois.edu/BSIS).

IS 420 Community Informatics credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/420/**)**
Surveys an emerging field that studies how local, historical communities are using information and communications technologies. Key principles and hands-on experience equip students for contributing to the non-profit/public sector as people harness new technologies and media—be they individuals, students, families, community organizations, or other. Prepares future professionals and researchers to understand and master this environment, whatever their technology background. Especially useful for those interested in public or community libraries, youth services, social work, education, and anyone interested in working with or studying underserved communities. 3 undergraduate hours. 4 graduate hours.

IS 423 Early Literacy credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/423/**)**
Librarians fill a key role in the literacy development of young children with opportunities for interaction both in the library and through outreach programs. Key skills center on developing literacy-rich library environments, classroom instructional support, intentional embedding of essentials skills and practices within daily activities and lessons, resources about early literacy strategies to share with families and caregivers. Practitioners will understand the importance of integration of technology to meet the diverse developmental, cultural, social and linguistic needs of children to ensure they are able to create meaning from text. No undergraduate credit. 2 graduate hours.

IS 424 Social Computing credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/424/**)**
This interdisciplinary course introduces students to fundamental theories, methods, technologies and applications of social computing. Students learn about this emerging discipline from two perspectives: First, basic principles of collective information production and processing, and methods for studying these principles. Topics include prediction markets, games with a purpose, open source software development, social media, social networks, information visualization, and online games. Second, socio-technical aspects of the design and usage of respective technologies. This includes participation, privacy and security. Students learn how to solve problems in social computing in a systematic and rigorous fashion. At the end of the course, students will be able to design, manage and execute social computing projects for scholarly and commercial use, and to critically assess work in this area. 3 undergraduate hours. 4 graduate hours.

IS 426 Museum Informatics credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/426/**)**
The course examines various ways that information technologies are and might be used in museums and other cultural heritage settings. Museum websites, visitor apps, interactive exhibits, and uses of digitized and federated collections are explored. Students gain an introduction to Design Thinking by working on a final project that involves the development of a novel computational resource. Students are encouraged to approach class topics from their individual backgrounds in the humanities, sciences, or social sciences. 4 undergraduate hours. 4 graduate hours. Prerequisite: Junior or senior standing and consent of instructor for undergraduates; consent of instructor for non-iSchool graduate students for on-campus sections.

IS 427 Mathematical Foundations for Data Analytics credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/427/**)**
An introduction to topics and techniques in transformational geometry, linear algebra, and calculus most relevant for the study of multivariate analysis, and demonstrates their roles as bases for solving data analytic problems in the information sciences. 3 undergraduate hours. 4 graduate hours. Prerequisite: Recommended IS 203; or IS 205; or IS 206; or equivalent course.

IS 429 Web Content Strategy and Management credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/429/**)**
Focuses on the basics of web site design, content development, constructing web pages with standard HTML and CSS. We will also cover usability and accessibility, content management system options, multi-media and interactivity in the context of standard HTML and CSS, procedures and policies for organizations, with a concentration on public, academic and special libraries. Students will investigate, design, and draft a representative site. Students may work with non-profit and library clients in constructing and redesigning their web sites or design and construct their own personal professional pages. In this course we will learn how to design and deploy flexible websites that serve dynamically changing content, focusing in particular on the needs of public-service organizations such as libraries, associations, and other not-for-profit entities. 4 undergraduate hours. 4 graduate hours. Prerequisite: Laptop Required.

IS 430 Foundations of Information Processing credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/430/)
Covers common data, document processing, and programming constructs and concepts. Focuses on problem solving and abstraction with a programming language. By the end of the course students will be able to design, develop and test a moderately complex computer program to manage full text, bibliographic records or multimedia. The course prepares students for working with applications in data analytics, data science, digital libraries, text mining and knowledge management. No prior programming background is assumed. 4 undergraduate hours. 2 or 4 graduate hours.

IS 436 Playful Design Methods credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/436/)
In this immersive and experiential course, students consider "playfulness" as a key aspect of design methodologies and practices. Looking closely at the philosophical, social, and relational dynamics of play, we will explore how playful approaches to design thinking, game design, and other gameful methodologies can encourage collaboration, engagement, and emergent, transformative solutions to a range of challenges that face us in our rapidly-changing, information-based culture. The course aims to build student competency in design methods through a sequence of game design experiences arising from a broad consideration of play. 3 undergraduate hours. 4 graduate hours.

IS 439 Web Development Using Application Framework credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/439/)
A course in the use and evaluation of Web application frameworks for system architects, designers, and developers. Experience in creating static Web sites using HTML and CSS. 3 undergraduate hours. 4 graduate hours. Prerequisite: Experience in Python programming (IS 430 or equivalent). Experience in creating static Web sites using HTML and CSS. Experience in creating dynamic Web sites using tools like PHP is helpful but not required. Experience in using relational databases is helpful but not required.

IS 440 Community Informatics Studio credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/440/)
Studio-based learning methods, which are common in art and architectural education, are used to help students address a real-world problem or 'case'. Working in teams and mentored by the instructor and experts, students will learn how to 'be a professional' in an environment in which process is as important as project. During the term, students will participate in a cyclical process of design creation, presentation and critique culminating in a final presentation during the final day(s) of class of the finished proposal/design of how to address the case. Assumes experience in community engagement within a social justice framework. 3 undergraduate hours. 4 graduate hours.

IS 441 Strategic Communication credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/441/)
This course introduces students to collaborative approaches to strategic communication designed to persuade, influence and cause action through free and informed choices. There are many methods and tools at the disposal of the strategic communicator. This course will focus on the ethics, forms, techniques and practices of data storytelling as the centerpiece of strategic communications that are appropriate and effective for the information professional. Students learn to coordinate multiple aspects of human-centered information solutions such as information visualizations. Serving diverse information needs and ensuring those needs are met, future information professionals are expected to understand, support, and innovate dynamism of the relationships between people, information and technology. 3 undergraduate hours. 4 graduate hours.

IS 444 Legal Aspects of Information Systems credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/444/)
This course is intended to introduce students to principles, fundamental ideas, and cases in the Legal Aspects of Information Systems, with an emphasis on Intellectual Property Law and using scholarship as an exemplar information system, which is considered broadly. This course will be conducted in a seminar format and survey the literature and case law including copyright and open licensing, patents, and trademark law. We will discuss recent policy changes and their impact on the Intellectual Property rights. Where appropriate we will compare American jurisprudence to international Intellectual Property Law. 3 undergraduate hours. 4 graduate hours.

IS 445 Data Visualization credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/445/)
Data visualization is crucial to conveying information drawn from models, observations or investigations. This course will provide an overview of historical and modern techniques for visualizing data, drawing on quantitative, statistical, and network-focused datasets. Topics will include construction of communicative visualizations, the modern software ecosystem of visualization, and techniques for aggregation and interpretation of data through visualization. Particular attention will be paid to the Python ecosystem and multi-dimensional quantitative datasets. 3 undergraduate hours. 4 graduate hours.

IS 446 Systems Analysis and Design credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/446/)
Covers how to evaluate, select and manage information systems that will be used in the daily operation of libraries and information centers. Includes the systems used by technical staff and the information consumers. Course will focus on information as a product. Attention is given to the operation of an organization as a whole and the impact of change on the integration of resources, work flow and usability. Formal methods for modeling systems, and industry practice techniques of analysis are used to address these problems and opportunities. 3 undergraduate hours. 4 graduate hours.

IS 449 Web Application Development credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/449/)
This course focuses on concepts and skills needed to build full stack web applications. Topics include Model-View-Controller architecture, database access, business logic implementation, advanced client-side scripting, authentication, and application security. Students will use popular client-side and server-side web application frameworks, such as React.js and Django, to study how these concepts are implemented in practice and to apply design/development principles to build realistic web applications. 3 undergraduate hours. 4 graduate hours. Prerequisite: IS 205, IS 206, and IS 229.

IS 451 Bibliography of Africa credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/451/)
We will focus on the identification and evaluation of African studies reference sources and library techniques as a foundation for in-depth research. Sources covered will be in all formats, including print, microform and electronic resources. 3 undergraduate hours. 4 graduate hours.

IS 453 Information Books and Resources for Youth credit: 2 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/453/**)**
Evaluation, selection and use of information books and other resources for young people (ages 0-18) in public libraries and school media centers; explores standard selection criteria for factual print and nonprint materials in all formats and develops the ability to evaluate and promote nonfiction books and resources according to their various uses (personal and curricular) and according to young people's various needs (intellectual, emotional, social and physical). 3 undergraduate hours. 2 or 4 graduate hours.

IS 455 Database Design and Prototyping credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/455/**)**
The course provides students with both theoretical and practical training in good database design. By the end of the course students will create a conceptual data model using entity-relationship diagrams, understand the importance of referential integrity and how to enforce data integrity constraints when creating a database. Students will be proficient in writing basic queries in the structured query language (SQL) and have a general understanding of relational database theory including normalization. 4 undergraduate hours. 4 graduate hours. Prerequisite: Junior Standing required.

IS 456 Information Storage and Retrieval credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/456/**)**
Introduces problems of document representation, information need specification, and query processing. Describes the theories, models, and current research aimed at solving those problems. Primary focus is on bibliographic, text, and multimedia records. 3 undergraduate hours. 4 graduate hours.

IS 457 Data Storytelling credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/457/**)**
An introduction to understanding data as a source for storytelling and to telling stories based on data. This process will include understanding and analyzing data sets to find informative aspects, changes, or contrasts that will provide the basic information for developing stories. Course participants will learn storytelling concepts, narrative theories, and performance techniques and develop stories in a collaborative workshop style. Students will work with data visualization toolkits, which will involve variable levels of coding and skill. By using storytelling techniques with data, students can develop, and tell well-evidenced stories, organizations can make better data-driven decisions. 3 undergraduate hours. 4 graduate hours.

IS 459 Mobile Applications credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/459/**)**
This course introduces students to the fundamental concepts, cutting edge technologies and state-of-the-art research in Human Computer Interaction areas of mobile computing and ubiquitous computing. The course presents major mobile application domains systems design challenges, and design opportunities. Students' understanding will be reinforced through practical work in mobile system design, e.g., applying a video prototyping tool to design and evaluate a mobile system. 3 undergraduate hours. 4 graduate hours.

IS 461 Russian, East European, and Eurasian Bibliography & Research Methods credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/461/**)**
With a focus on Russia, Eastern Europe, and Eurasia, students will investigate this fascinating part of the world, how it has been studied and represented by generations of scholars, scientists, writers, artists, government officials, and others, and how the many fruits of their labors are (or are not) accessible to us today. 3 undergraduate hours. 4 graduate hours.

IS 464 Information Assurance credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/464/**)**
The course provides an introduction to the concepts, technologies, practices and challenges of Information Assurance. It takes a broad view of Information Security and Privacy and covers the essential principles for the protection of information systems; the relevant technologies; organizational concerns; policies, human aspects; legal approaches; criminology; and ethical issues. Students will gain an appreciation for the difficulty of designing, developing, deploying and maintaining information systems, services and software products that are secure and comply with expectations of security and privacy. 3 undergraduate hours. 4 graduate hours.

IS 466 Accessible and Inclusive Technologies credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/466/**)**
This course introduces students to various technology challenges and needs of under-served populations (e.g., people with disabilities). We will examine various accessible and inclusive technologies to understand how they were built to serve specific under-served user groups but can also benefit a wider range of users. This course will also cover various design frameworks, guidelines and processes to create more inclusive designs and technologies. 3 undergraduate hours. 4 graduate hours.

IS 467 Ethics and Policy for Data Science credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/467/**)**
The course will address common ethical challenges related to data including privacy, bias, and data access. These challenges will be explored through real-world cases of corporate settings, non-profits, governments, academic research, and healthcare. The course emphasizes the complexity of ethical decision-making and that trade-offs between priorities are often necessary. The course also considers how the burdens of addressing ethical concerns should be distributed among stakeholders. Students will be introduced to a range of relevant policy responses at the organizational, institutional, governmental,and supranational levels. 3 undergraduate hours. 4 graduate hours.

IS 471 Instructional Strategies and Techniques for Information Professionals credit: 2 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/471/**)**
Provides an introduction to learning theories and instructional methods used in a variety of information settings, including libraries, archives, museums, online, and educational environments. Includes an overview of theoretical and applied research and discusses relevant issues and concepts. Students will have an opportunity to design and present an instructional program. 3 undergraduate hours. 2 or 4 graduate hours.

IS 477 Data Management, Curation & Reproducibility credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/477/**)**
This course addresses issues in Data Management, Curation & Reproducibility from a Data Science perspective. We discuss definitions of data science, and then introduce and use the Data Science Life Cycle as an intellectual foundation. Topics include Research Artifact Identification and Management, Metadata, Repositories, Economics of Artifact Preservation and Sustainability, and Data Management Plans. We use the case study to ground our discussions in both data sets and in specific data science research. This course requires a final project that applies course knowledge to a data science experiment and creates a data management plan for that experiment. 3 undergraduate hours. 4 graduate hours. Prerequisite: STAT 107/CS 107/IS 107; STAT 207/CS 207/IS 207; CS 227/STAT 227.

IS 490 Topics in Info Foundations credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/490/)
Directed and supervised investigation of selected topics in information studies that may include among others the social, political, and historical contexts of information creation and dissemination; computers and culture; information policy; community information systems; production, retrieval and evaluation of knowledge; computer-mediated communication. Additional fees may apply. See Class Schedule. 2 to 4 undergraduate hours. 2 to 4 graduate hours. Approved for Letter and S/U grading. May be repeated. Prerequisite: For undergraduates, junior standing and IS 202, or consent of instructor.

IS 491 Topics in Information Services credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/491/)
Variety of newly developed and current topics courses within the field of information services, intended to augment the existing Information Sciences curricula. 3 undergraduate hours. 2 to 4 graduate hours. May be repeated if topics vary.

IS 492 Topics in Information Organizations & Social Contexts credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/492/)
Variety of newly developed and current topics courses within the field of information organizations and social contexts, intended to augment the existing Information Sciences curricula. 3 undergraduate hours. 2 to 4 graduate hours. May be repeated if topics vary.

IS 493 Topics in Cultural Heritage, Collection Management & Preservation credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/493/)
Variety of newly developed and current topics courses within the field of information cultural heritage, collection management and preservation, intended to augment the existing Information Sciences curricula. 3 undergraduate hours. 2 to 4 graduate hours. May be repeated if topics vary.

IS 494 Topics in Management, Ethics & Policy credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/494/)
Variety of newly developed and current topics courses within the field of management ethics and policy, intended to augment the existing Information Sciences curricula. 3 undergraduate hours. 2 to 4 graduate hours. May be repeated if topics vary.

IS 495 Topics in Organization & Representation credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/495/)
Variety of newly developed and current topics courses within the field of information organizations and representation, intended to augment the existing Information Sciences curricula. 3 undergraduate hours. 2 to 4 graduate hours. May be repeated if topics vary.

IS 496 Topics in Human-Centered Design & Systems credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/496/)
Variety of newly developed and current topics courses within the field of human-centered design and systems, intended to augment the existing Information Sciences curricula. 3 undergraduate hours. 2 to 4 graduate hours. May be repeated if topics vary.

IS 497 Topics in Data Analytics & Data Science credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/497/)
Variety of newly developed and topics courses within Data Analytics & Data Science, intended to augment the existing Information Sciences curricula. Additional fees may apply. See Class Schedule. 2 to 4 undergraduate hours. 2 to 4 graduate hours. May be repeated if topics vary.

IS 499 Topics in Web Design & Development credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/499/)
Variety of newly developed and current topics courses within Web Design & Development, intended to augment the existing Information Sciences curricula. 3 undergraduate hours. 2 to 4 graduate hours. May be repeated if topics vary.

IS 500 Introduction to the iSchool credit: 0 to 2 Hours. (https://courses.illinois.edu/schedule/terms/IS/500/)
Introduces graduate students to the School of Information Sciences (the iSchool). Students will learn best practices for success in their program. They will also learn about resources and support provided by the School and the University while building community among their peers, faculty, staff and alumni. Various sections address different graduate student audiences and needs. 0 to 2 graduate hours. No professional credit. Approved for Letter and S/U grading.

IS 501 Reference and Information Services credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/501/)
Explores reference and information services in a variety of settings, introduces widely used print and online sources, and develops question negotiation skills and search strategies. 4 graduate hours. No professional credit.

IS 503 History of Children's Lit credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/503/)
Interpretation of children's literature from the earliest times, including the impact of changing social and cultural patterns on books for children; attention to early printers and publishers of children's books and to magazines for children. 2 or 4 graduate hours. No professional credit.

IS 504 Sociotechnical Information Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/504/)
The character, success, and costs/benefits of information technologies are socio-technical matters. Because of this, best practice for IT design and integration relies on participants' ability to understand and create for the totality of those settings, including social and technical dimensions. This course provides students with analytic tools for examining socio-technical settings and experience in applying that knowledge in IT modeling, design and management. 4 graduate hours. No professional credit.

IS 505 Information Organization and Access credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/505/)
Emphasizes information organization and access in settings and systems of different kinds. Traces the information transfer process from the generation of knowledge through its storage and use in both print and non-print formats. Consideration will be given to the creation of information systems: the principles and practice of selection and preservation, methods of organizing information for retrieval and display, the operation of organizations that provide information services, and the information service needs of various user communities. 4 graduate hours. No professional credit.

IS 506 Human-Centered Information Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/506/)
This course provides students the fundamental theory and skills necessary to design, develop, and evaluate human centered information systems. By the end of the course students will be able to gather user needs in light of existing sociotechnical systems, design effective human centered interfaces, implement interactive prototypes, and conduct unit testing and user studies of software. The course will employ lectures, mini projects and in-class hands-on activities to reinforce the ideas presented. 4 graduate hours. No professional credit.

IS 507 Data, Statistical Models and Information credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/507/)
An introduction to statistical and probabilistic models as they pertain to quantifying information, assessing information quality, and principled application of information to decision making, with focus on model selection and gauging model quality. The course reviews relevant results from probability theory, parametric and non-parametric predictive models, as well as extensions of these models for unsupervised learning. Applications of statistical and probabilistic models to tasks in information management (e.g. prediction, ranking, and data reduction) are emphasized. 4 graduate hours. No professional credit. Prerequisite: Graduate standing.

IS 508 Seminar in Information Foundations credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/508/)
This seminar course will offer an advanced graduate survey of research in areas related to information foundations, across a wide range of topics. This course is designed to incorporate multiple guest lectures. Weekly class meetings will be composed of both lectures and discussions. 4 graduate hours. No professional credit. May be repeated in the same or separate semesters to a maximum of 16 hours, if topics vary.

IS 509 History and Foundations of Information Science credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/509/)
Provides an introduction to the historical foundations of IS. Examinations of the interactions of socio-cultural, technological and professional factors underlying the emergence of IS provide a basis for exploring more recent developments in theory and practice. Required IS Ph.D. course. 4 graduate hours. No professional credit.

IS 510 Libraries, Information and Society credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/510/)
Explores major issues in the library and information science professions as they involve their communities of users and sponsors. Analyzes specific situations that reflect the professional agenda of these fields, including intellectual freedom, community service, professional ethics, social responsibilities, intellectual property, literacy, historical and international models, the socio-cultural role of libraries and information agencies and professionalism in general, focusing in particular on the interrelationships among these issues. 4 graduate hours. No professional credit. Prerequisite: Required M.S. in library and information science degree core course.

IS 511 Scholarly Communications credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/511/)
A basic level of scholarly communication literacy and sophistication is an increasing requirement of academic librarians, both to inform their work and to make those librarians effective partners in the scholarly enterprise. This course is designed to cultivate and develop that literacy. It will address topics such as: the established modes of scholarly communication and the emergence of alternatives influenced by the growth of social media and other forms of networked communication; the divide between formal and informal modes of scholarly communication and the current state of flux as that divide begins to collapse; the varying economies of scholarship (the reputation and prestige economy, the financial economy both in the market and in the mission-driven research academy, and the economic impact of scholarly communication decisions upon library budgets); modes of credentialing scholarship and their impact upon professional advancement, with special attention to peer review and its (current?) discontents; scholarship as intellectual property and the most effective ways to manage that property and achieve scholarly goals; and issues in access and preservation as they relate to ensuring the future of the scholarly conversation. 4 graduate hours. No professional credit.

IS 512 History of Libraries credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/512/)
The origins, development, and evolution of libraries and related institutions, from antiquity to the twentieth century, as a reflection of literacy, recognition of archival responsibility, humanistic achievement, scientific information needs, and service to society. Same as MDIA 512. 2 or 4 graduate hours. No professional credit.

IS 514 Applied Business Research credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/514/)
As an experiential learning class, this course covers advanced techniques of business research with an emphasis on managing real-world client projects. Students will be assigned to teams and work with clients to identify research requirements and construct recommendations. Students will acquire critical skills in creating professional deliverables through client engagements. Students will build professional research portfolios at the conclusion of their projects. 4 graduate hours. No professional credit. May be repeated in separate terms up to 8 hours if topics vary. Prerequisite: Instructor approval required.

IS 515 Information Modeling credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/515/)
Information modeling is critical to all information systems and analysis. This course introduces students to foundational frameworks (set theory and logics) and basic underlying objects (entities, attributes, and relations) of information modeling. A variety of modeling approaches (use case modeling, relational database design, first-order predicate logic, and semantic web technologies) are considered, and recent developments (non-relational databases and knowledge graphs) are reviewed. Modeling strategies are assessed by their expressiveness and reasoning capabilities. 4 graduate hours. No professional credit.

IS 516 Scalable Information Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/516/)
Focuses on large-scale information systems and analyzes the design and development principles and infrastructures that make them scalable and reliable. Topics include issues in scalability and availability, distributed system design, virtualization, scalability testing, and popular frameworks and platforms, such as Hadoop/MapReduce, Apache Spark, Amazon Web Services. Real-world, large-scale information systems, such as those developed by Google, Amazon, and Facebook, etc., are discussed and analyzed as use cases. 4 graduate hours. No professional credit.

IS 517 Methods of Data Science credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/517/)
A dramatic increase in computing power has enabled new areas of data science to develop in statistical modeling and analysis. These areas cover predictive and descriptive learning and bridge between ideas and theory in statistics, computer science, and artificial intelligence. We will cover methods including predictive learning: estimating models from data to predict future outcomes. Regression topics include linear regression with recent advances using large numbers of variables, smoothing techniques, additive models, and local regression. Classification topics include linear regression, regularization, logistic regression, discriminant analysis, splines, support vector machines, generalized additive models, naive Bayes, mixture models and nearest neighbor methods as time permits. Lastly we develop neural networks and deep learning techniques, bridging the theory introduced in the earlier parts of the class to purely empirical methods. We situate the course components in the "data science lifecycle" as part of the larger set of practices in the discovery and communication of scientific findings. 4 graduate hours. No professional credit. Prerequisite: IS 507 or equivalent (e.g. intro probability/stats STAT 100, CS 361, or ECON 202); and IS 490 IDS/CS 398 ID/STAT 490 or CS101 or equivalent; or consent of the instructor. Linear Algebra recommended at the level of MATH 125; Calculus recommended at the level of MATH 220.

IS 518 Seminar in Information Services credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/518/)
This seminar course will offer an advanced graduate survey of research in areas related to information services, across a wide range of topics. This course is designed to benefit from guest lectures. This seminar course will be composed of both lectures and discussions. 4 graduate hours. No professional credit.

IS 519 Research Design in Information Science credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/519/)
Provides an introduction to the design of IS research, beginning with an in-depth consideration of the philosophical and logical underpinnings of research. A brief survey of different methods used in IS research is followed by an exploration of research design issues through comparative hands-on exercises. Throughout the course, the emphasis will be on research design choices, especially the connections between research questions and research methods. Required IS Ph.D. course. 4 graduate hours. No professional credit.

IS 521 Digital Libraries credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/521/)
A comprehensive examination of the history and state-of-the-art in digital library research and practice. Focuses upon the theoretical, technological, human factors and evaluative components of digital library research and practice. Course includes an intensive reading of the literature, review of existing technologies and proof-of-concepts implementation projects. Students should have access to a personal computer on which they can experiment on their own with downloaded software tools. Students must be competent in basic computing including the installation and configuration of software packages. 4 graduate hours. No professional credit. Prerequisite: IS 505 (formerly IS 501, SP 20 and before) or consent of instructor; previous or concurrent enrollment in IS 430 (formerly IS 452, SU 20 and before) (either the 2 credit hours or the 4 credit hours of Foundations Info Processing are acceptable), or proof of competency in programming.

IS 522 Library Buildings credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/522/)
Studies the library's physical plant in the light of changing concepts and patterns of library service; analyzes present-day library buildings (both new and remodeled), and their comparison with each other as well as with buildings of the past; examines the interrelationship of staff, collections, users, and physical plant; discussion supplemented by visits to new libraries and conference with their staffs. A two-day field trip is required. Additional fees may apply. See Class Schedule. 2 or 4 graduate hours. No professional credit.

IS 523 Preserving Info Resources credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/523/)
Covers the broad range of library preservation and conservation for book and nonbook materials relating these efforts to the total library environment; emphasizes how the preservation of collections affects collection management and development, technical services, access to materials and service to users. 4 graduate hours. No professional credit.

IS 524 Data Governance credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/524/)
The course will address issues of data governance, including data ethics, and design and implementation of policy responses and best practices. Topics include privacy, discrimination, data sharing, data quality, and building a diverse workforce. These topics will be explored through real-world cases in corporate settings, libraries, non-profits, healthcare, governments, and academe. The course will also cover principles and frameworks for analyzing and responding to issues. The course is suitable for anyone planning to work in a professional setting that will involve handling data or building information systems, or seeking a grounding for future study of data and information ethics. 2 or 4 graduate hours. No professional credit.

IS 525 Data Warehousing and Business Intelligence credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/525/)
This course examines the construction of a data warehouse and business intelligence system. It will review the roles and requirements of building the system, including data modelling and business intelligence product design. This course will explore real-world case studies of data warehouse and business intelligence projects through hands-on experience with data modelling, Business Objects, Power BI and Tableau. The course culminates with a final project to design a solution for a business case. 4 graduate hours. No professional credit.

IS 526 Building Advanced Interactive Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/526/)
This course will teach students about building inclusive interactive systems. They will learn to gather and understand user requirements and needs for a wide range of user populations, especially those that are under-served (e.g., children, older adults, people with disabilities), apply inclusive design frameworks and principles, and design, develop, evaluate and improve interactive prototypes in an iterative manner. 4 graduate hours. No professional credit.

IS 527 Network Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/527/)
Network Analysis has become a widely adopted method for studying the interactions between social agents, information and infrastructures. The strong demand for expertise in network analysis has been fueled by the widespread acknowledgement that everything is connected and the popularity of social networking services. This interdisciplinary course introduces students to fundamental theories, concepts, methods and applications of network analysis in a practical manner. Students learn and practice hands-on skills in collecting, analyzing and visualizing network data. 4 graduate hours. No professional credit.

IS 528 Seminar in Information Organizations & Social Contexts credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/528/**)**
This seminar course will offer an advanced graduate survey of research in areas related to information in Information Organizations & Social Contexts, across a wide range of topics. This course is designed to incorporate multiple guest lectures. Weekly class meetings will be composed of both lectures and discussions. 4 graduate hours. No professional credit.

IS 529 Doctoral ProSeminar credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/IS/529/**)**
A core course for all first year Information Science PhD students. The seminar serves as a venue for the development of a variety of skills and capacities to succeed as a scholar. Throughout the term, students will engage in a series of tasks designed as an initiation to the academic profession. The seminar offers a mix of sessions on progression through the Ph.D. degree program, the research process, guidance on the academic profession, and written and oral presentation of scholarly research. While students will receive feedback from the instructor, this is a seminar, meaning that active student participation and peer feedback is crucial. 1 graduate hour. No professional credit. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 4 hours. Prerequisite: PhD Students in Information Sciences.

IS 530 Collection Development credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/530/**)**
Examines issues affecting the development and management of collections for academic, public, special, and school libraries: collection development policies, collection assessment, the marketplace, publishing, legal issues, and budget allocation; document delivery; collaboration and cooperation. 4 graduate hours. No professional credit. Prerequisite: IS 505 - Information, Organization and Access (formerly IS 501 prior to FA 20), or concurrent enrollment in IS 505 and IS 530.

IS 532 School Library Management credit: 2 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/532/**)**
School Library Information Specialists serve children and young adults (ages 5-18) in K-12 school library media centers. Students will acquire specific knowledge, skills and competencies needed to design, develop, integrate and assess curriculum and instruction with an emphasis on the information needs of K-12 students. Readings and projects provide students with opportunities to apply the practical knowledge and skills they have learned about building reading literacy, teaching information literacy skills, collaborating with teachers and integrating resources into teaching and learning. 2 or 4 graduate hours. No professional credit.

IS 533 Oral History Methods credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/533/**)**
This methods seminar engages with the theory and practice of oral history through reading, discussion, and practice. Students will: gain hands-on experience with interviewing and transcription, be prepared to work with Institutional Review Boards, understand how to design consent and legal release forms, and will engage with relevant ethical and theoretical issues. 4 graduate hours. No professional credit.

IS 534 Information Consulting credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/534/**)**
This course is designed to provide fundamental knowledge in providing research services and also introduce the latest trends and innovative approaches in research services. Information professionals are increasingly being challenged to provide not just data but insights and recommendations that are critical for strategic decision making. Using methodologies widely adopted by professional firms and researchers, this course will cover basics of research consulting including framing research problems, developing deliverables, and presenting professionally. 4 graduate hours. No professional credit.

IS 537 Theory & Practice of Data Cleaning credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/537/**)**
Data cleaning (also: cleansing) is the process of assessing and improving data quality for later analysis and use, and is a crucial part of data curation and analysis. This course identifies data quality issues throughout the data lifecycle, and reviews specific techniques and approaches for checking and improving data quality. Techniques are drawn primarily from the database community, using schema-level and instance-level information, and from different scientific communities, which are developing practical tools for data pre-processing and cleaning. Same as CS 513. 4 graduate hours. No professional credit.

IS 538 Seminar in Cultural Heritage, Collection Management, & Preservation credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/538/**)**
This seminar course will offer an advanced graduate survey of research in areas related to research in Cultural Heritage, Collection Management, & Preservation, across a wide range of topics. This course is designed to incorporate multiple guest lectures. Weekly class meetings will be composed of both lectures and discussions. 4 graduate hours. No professional credit.

IS 540 Social Justice in the Information Professions credit: 2 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/540/**)**
Intended to provide a historic and contemporary overview of social justice and advocacy work in librarianship. The course will be primarily focused on activities in the United States, though international movements and perspectives will be addressed. Topics include: desegregation of libraries and professional associations; recruitment and retention of library workers from traditionally underrepresented populations; library outreach; intellectual freedom; and emerging critical theories and issues in the field. 2 or 4 graduate hours. No professional credit. Prerequisite: Graduate student.

IS 541 Copyright for Information Professions credit: 2 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/541/**)**
Copyright is a complicated legal concept that affects all information institutions, including corporations, libraries, archives, and museums whether they are online or off. This course will explore copyright from both a legal and information management perspective to demystify the concept and provide practical tools for working with copyrighted material. Topics discussed include the Constitutional underpinnings of copyright, copyright basics, copyright exceptions, fair use, the open access movement, licensing, data and copyright, and educational issues relating to copyright including issues related to K-12 teaching. This course is designed for students with a variety of backgrounds and interests. 2 or 4 graduate hours. No professional credit.

IS 542 Research and Inquiry for Youth credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/542/)
This course is designed to prepare school librarians to serve as instructional leaders in their learning communities, positioned to transform teaching and learning in order to ensure students are college, career, and community ready. Participants will develop strategies and practices to support the school's curriculum through the roles of instructional partner, information specialist, and teacher. The school librarian has a leadership role in designing authentic learning activities in research and guided inquiry to prepare students in both the process and attitudes necessary to identify and meet their own lifelong information needs. 4 graduate hours. No professional credit.

IS 543 Digital Preservation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/543/)
Examines current problems with and approaches to digital preservation that are fundamental to the long-term accessibility of digital materials. Examines the range of current research problems, along with emerging methods and tools, and assesses a variety of organizational scenarios to plan and implement a preservation plan. Topics include basic information theory, preservation of complex digital objects; standards and specifications; sustainability and risk assessment; authenticity, integrity, quality control, and certification; and management of preservation activities. 4 graduate hours. No professional credit.

IS 544 Administration & Management of Libraries and Information Centers credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/544/)
Designed to explore the principles that govern how organizations and institutions work, this course provides a foundation for and introduction to the theories, practices and procedures involved in the management and administration of libraries and information centers. 4 graduate hours. No professional credit.

IS 545 Advanced Data Visualization credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/545/)
This seminar-style course will cover advanced topics in visualization techniques. This will cover topics such as the history of visualization techniques, the perception and understanding of visual information, and new frontiers in displaying quantitative information. We will explore the modern technical stack for creating and sharing visualizations, including topics in javascript, python, and reactive frameworks. 4 graduate hours. No professional credit.

IS 547 Foundations of Data Curation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/547/)
Data curation is the active and on-going management of data through its lifecycle of interest and usefulness to scholarship, science, and education; curation activities and policies enable data discovery and retrieval, maintain data quality and add value, and provide for re-use over time. This course provides an overview of a broad range of theoretical and practical problems in the emerging field, examining issues related to appraisal and selection, long-lived data collections, research lifecycles, workflows, metadata, and legal and intellectual property issues. 4 graduate hours. No professional credit.

IS 548 Seminar in Management, Ethics, & Policy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/548/)
This seminar course will offer an advanced graduate survey of research in areas related to research in management, ethics, & policy, across a wide range of topics. This course is designed to incorporate multiple guest lectures. Weekly class meetings will be composed of both lectures and discussions. 4 graduate hours. No professional credit.

IS 549 Practicum credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/IS/549/)
Supervised field experience of professional-level duties in an approved library or information center. 2 graduate hours. No professional credit. Approved for S/U grading only. A maximum of 2 hours may be applied toward a degree program. Prerequisite: Completion of 12 graduate hours of information sciences courses; submission of Practicum forms.

IS 550 Theories of Information credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/550/)
A theory of information attempts to articulate clearly and precisely what information is, and what it means to become informed. Theories of information can contribute to the scientific foundations for many important research and practice activities in IS, including data curation, information modeling, information access, digital preservation, and informatics support for science and scholarship. This course, Theories of Information -- A, takes a logic-based approach to investigating the nature of information. Methodologically we draw from a family of methods that might be called formal methods, in contrast to the empirical methods of social and nature science. Formal methods typically make use of concepts from logic, set theory, and discrete mathematics to construct and explore formal systems. Formal methods are widely used in linguistics, mathematics, philosophy, and computer science. Within the general area of formal methods our approach in this course might be more specifically referred to as conceptual analysis, as it takes the form of a systematic analysis of a concept, namely information. Most of the prior work that is relevant to our analysis is from analytic philosophy, linguistics (especially formal semantics), and computer science (especially knowledge representation and AI). 4 graduate hours. No professional credit. Prerequisite: Some familiarity with formal logic would be useful, but is not required. Some familiarity with conceptual modeling (ER or UML diagrams, or RDF/S for instance) would also be useful, but not required.

IS 551 Youth Services Librarianship credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/551/)
Theory and techniques in planning, implementing and evaluating library programs/services for youth (age 0-18) in public and school libraries/media centers; the knowledge base, skills, and competencies needed by the library media professional in the development of all aspects of young people's reading/viewing/listening and information literacy skills. 4 graduate hours. No professional credit.

IS 555 Naming and Power credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/555/)
An advanced topics seminar in subject description and access that focuses upon representation in race, gender, sexuality and other contested categories. Critical intersections of bias, exclusion, and marginalization will be explored through a variety of case studies. Implications for how we construct search and discovery systems (e.g databases, archival and museum finding aids, taxonomies and catalogues), and other tools, are crucial considerations for those engaging in cultural heritage work. Open to masters and doctoral students. 2 or 4 graduate hours. No professional credit.

IS 556 Internet of Things credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/556/)
Relying primarily on case studies, this course will help develop the students' understanding of how the IoT enables Business Data Analytics. Lectures and readings will be focused on the impact to a company's business model created by IoT data and analytics. Because of the disruptive nature of IoT sensors or data, IT Innovation will also be discussed. While the course will reflect a practitioner's view, the material will be presented on a solid academic under-pinning. 4 graduate hours. No professional credit.

IS 557 Applied Machine Learning: Team Projects credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/557/)
A comprehensive exploration of the applied machine learning workflow from inspiration to delivery of a machine learning solution broadly defined (i.e., from analytic finding to embedded machine learning application). This course is firmly grounded in a "learning-by-doing" teaching philosophy with pedagogical priority clearly placed on the application of machine learning to real-world data and problems. Ongoing and intense practical experiences in team-based project management and work are another cornerstone of this course. This course includes student-led reviews of existing data sources and machine learning technologies along with several team-based fact-finding and proof-of-concept implementation projects. This course is designed for students wishing to engage seriously in the practical world of machine learning implementation. 4 graduate hours. No professional credit. Prerequisite: Students should have demonstrated ability, and must have taken one of the following courses, IS 577 (formerly IS 590 DT), IS 517 (formerly IS 590 MD), CS 412, CS 446 or a course demonstrably equivalent.

IS 558 Seminar in Organization & Representation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/558/)
Offers an advanced graduate survey of research in areas related to research in Organization and Representation, across a wide range of topics. Designed to incorporate multiple guest lectures. Weekly class meetings will be composed of both lectures and discussions. 4 graduate hours. No professional credit. May be repeated in the same or separate terms, to a maximum of 16 hours, if topics vary.

IS 559 CAS Project credit: 0 to 8 Hours. (https://courses.illinois.edu/schedule/terms/IS/559/)
Individual study of a problem in library and information science; forms the culmination of the Certificate of Advanced Study program. 0 to 8 graduate hours. No professional credit. Approved for S/U grading only. May be repeated. Only eight hours will apply to the Certificate of Advanced Study. Prerequisite: Admission to Certificate of Advanced Study program in library and information science; submission of "Request to Enroll in IS 559 - CAS Project" form.

IS 560 Social Science Research in Library and Information Science credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/560/)
Introduces students to the fundamentals of doing social science research in LIS. Students will learn how to frame a research problem, choose an appropriate research method, apply it, and write up the research for presentation and publication. 4 graduate hours. No professional credit.

IS 561 Use and Users of Information credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/561/)
Explores information needs and uses at a general level, addressing formal and informal information channels, barriers to information, issues of value, and impacts of technology. Examines information seeking practices of particular communities and within various environments, introducing recent approaches to user-centered system design and digital library development. Provides an overview of methods that can be used to study information needs, information seeking behavior, and related phenomena. 4 graduate hours. No professional credit. Prerequisite: IS 505.

IS 562 Administration and Use of Archival Materials credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/562/)
Administration of archives and manuscript collections in various types of institutions. Theoretical principles and archival practices of appraisal, acquisition, accessioning, arrangement, description, preservation, and reference services. Topics will include: records management programs, collecting archives programs/special collections, legal and ethical issues, public programming and advocacy, and the impact of new information technologies for preservation and access. Lectures, discussion, internet demonstration, and field trips to the Special Collections Department and University Archives. 4 graduate hours. No professional credit.

IS 563 Advanced Topics in Literature, Media and Materials credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/563/)
Variety of newly developed and advanced topics courses within Literature, Media and Materials, intended to augment the existing Information Sciences curricula. 2 to 4 graduate hours. No professional credit. May be repeated in the same or separate terms, to a maximum of 16 hours, if topics vary.

IS 565 Cataloging for School Libraries credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/IS/565/)
This course will introduce the student to the principles, practices and standards for information representation and organization in school media centers. Course content will include an introduction to original cataloging of non-standard materials (such as realia and audiovisual materials), evaluation of bibliographic records, exposure to authority control and subject access systems with a special focus on the Dewey Decimal System and Sears Subject Headings. The course will also provide an overview and exploration of different library systems/OPACS. 2 graduate hours. No professional credit.

IS 567 Text Mining credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/567/)
The goal of this project-based course is to provide students with first-hand experience with how to create a well-formed text mining problem and how to select, transform, and mine a collection of text. Prior programming knowledge (in any language) is required. As students work on their own project, they will draw from key concepts in text mining using perspectives from both the knowledge discovery and natural language processing research communities. 4 graduate hours. No professional credit.

IS 568 Seminar in Human-Centered Design & Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/568/)
This seminar course will offer an advanced graduate survey of research in areas related to research in human-centered design and systems, across a wide range of topics. This course is designed to incorporate multiple guest lectures. Weekly class meetings will be composed of both lectures and discussions. 4 graduate hours. No professional credit.

IS 569 Internship credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/IS/569/)
Supervised field experience designed for learning professional-level duties in an approved information-related organization or institution. 0 graduate hours. No professional credit. Approved for S/U grading only. May be repeated in separate terms.

IS 571 Advanced Topics in Use and Users of Information credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/571/)
Variety of newly developed and advanced topics courses within the field of Use and Users of Information, intended to augment the existing Information Sciences curricula. 2 to 4 graduate hours. No professional credit.

IS 573 Advanced Topics in Collections credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/573/)
Variety of newly developed and advanced topics courses within the field of Collections, intended to augment the existing Information Sciences curricula. Additional fees may apply. See Class Schedule. 2 or 4 graduate hours. No professional credit.

IS 575 Metadata in Theory & Practice credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/575/)
Combines theoretical examination of the design of metadata schema with their practical application in a variety of settings. Hands-on experience in the creation of descriptive, administrative, and structural metadata, along with their application in systems such as OAI harvesting, OpenURL resolution systems, metasearch systems and digital repositories, will help students develop a thorough understanding of current metadata standards as well as such issues as crosswalking, metadata schema, metadata's use in information retrieval and data management applications, and the role of standards bodies in metadata schema development. 4 graduate hours. No professional credit. Prerequisite: IS 505 - Information, Organization and Access (formerly IS 501 prior to FA 20) or consent of the instructor.

IS 577 Data Mining credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/577/)
Data mining refers to the process of exploring large datasets with the goal of uncovering interesting patterns. This process usually involves a number of tasks such as data collection, pre-processing, & characterization; model fitting, selection, & evaluation; classification, clustering, & prediction. Although data mining has its roots in database management, it has grown into a discipline that focuses on algorithm design (to ensure computational feasibility) & statistical modeling (to separate the signal from the noise). It draws heavily upon a variety of other disciplines including statistics, machine learning, operations research, & information retrieval. Will cover the major data mining concepts, principles, & techniques that every information scientist should know about. Lectures will introduce & discuss the major approaches to data mining; computer lab sessions coupled w/assignments will provide hands-on experience with these approaches; term projects offer the opportunity to use data mining in a novel way. Mathematical detail will be left to the students who are so inclined. 2 or 4 graduate hours. No professional credit.

IS 578 Seminar in Research Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/578/)
This seminar course will offer an advanced graduate survey of research in areas related to research in research methods, across a wide range of topics. This course is designed to incorporate multiple guest lectures. 4 graduate hours. No professional credit.

IS 580 Information History credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/580/)
Drawing on research in varied historical specializations, information history has become a vibrant area of study, one that improves our understanding, moreover, of today's information universe. Information history covers diverse institutions and practices -- from libraries and the book to the telegraph and postal systems, from surveillance to cartography, from documentary culture to statistical surveys -- seeking to connect them with the major developmental processes of human history. Framed in a succession of major historical epochs, topics and trends, from Antiquity to the twentieth century, this course revises our sense of the historical record by situating information explicitly within it. 4 graduate hours. No professional credit.

IS 581 Advanced Topics in Youth Services credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/581/)
Variety of newly developed and advanced topics courses within the field of Youth Services, intended to augment the existing Information Sciences curricula. 2 to 4 graduate hours. No professional credit. May be repeated in the same or separate semesters to a maximum of 16 hours, if topics vary.

IS 582 Advanced Topics in Librarianship credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/582/)
Variety of newly developed and advanced topics courses within the field of Librarianship, intended to augment the existing Information Sciences curricula. Additional fees may apply. See Class Schedule. 2 to 4 graduate hours. No professional credit. May be repeated in the same or separate semesters to a maximum of 16 hours, if topics vary.

IS 583 Advanced Topics in Book History credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/583/)
Variety of newly developed and advanced topics courses within the field of Book History, intended to augment the existing Information Sciences curricula. Additional fees may apply. See Class Schedule. 2 to 4 graduate hours. No professional credit. May be repeated in the same or separate semesters to a maximum of 16 hours, if topics vary.

IS 584 Advanced Topics in Ethics and Privacy credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/584/)
Variety of newly developed and advanced topics courses within the field of ethics and privacy, intended to augment the existing Information Sciences curricula. 2 to 4 graduate hours. No professional credit. May be repeated in the same or separate semesters to a maximum of 16 hours, if topics vary.

IS 585 Bibliographic Metadata credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/585/)
Introduction to basic principles and concepts of descriptive and subject cataloging in the context of information service needs for various user communities. Explores principles, structures, standards, technologies and practices relating to organizing and creating access to print and non-print media. Includes coverage of subject analysis and descriptive practices. Introduces controlled vocabularies. 4 graduate hours. No professional credit. Prerequisite: Information Organization and Access; IS 505 for Fall 2020 (previously IS 501).

IS 586 Usability Engineering credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/586/)
The course provides an introduction to: issues in Human Computer Interaction; analysis of interfaces and their use; the interface design process as an engineering activity; designing usable interfaces under constraints; and the rapid prototyping and evaluation cycle. The course covers interface design in multiple contexts including websites, web-based applications, smartphone apps, regular computer apps and new contexts of interacting with computers. Elective course for the CAS in Digital Libraries concentration. 4 graduate hours. No professional credit.

IS 587 Seminar in Data Analytics and Data Science credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/587/)
This seminar course will offer an advanced graduate survey of data analytics and data science in the information fields, across a wide range of topics. This course is designed to incorporate multiple guest lectures. 4 graduate hours. No professional credit.

IS 588 Data Consulting Capstone credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/588/)
This course will help to prepare students for a competitive job market in data consulting. They will build a portfolio including evidence of effective consulting abilities, database design, and knowledge of applying data to solve real world problems. Portfolios will demonstrate theoretical and practical understandings of areas such as entity-relationship modeling, creating tables, writing queries in SQL, and data analysis for decision making. 4 graduate hours. No professional credit.

IS 589 Independent Study credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/589/)
Permits the intermediate or advanced student opportunity to undertake the study of a topic not otherwise offered in the curriculum or to pursue a topic beyond or in greater depth than is possible within the context of a regular course. 2 to 4 graduate hours. No professional credit. May be repeated by MS students to a maximum of 4 graduate hours. May be repeated by CAS students to a maximum of 8 graduate hours. May be repeated by PhD students to a maximum of 16 graduate hours. Prerequisite: Submission of "Request to Enroll in IS 592" form.

IS 590 Advanced Topics in Information Foundations credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/590/)
Variety of newly developed and advanced topics courses within the field of information foundations, intended to augment the existing Information Sciences curricula. Additional fees may apply. See Class Schedule. 1 to 4 graduate hours. No professional credit. May be repeated.

IS 591 Advanced Topics in Information Services credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/591/)
Variety of newly developed and advanced topics courses within the fields of Information Services, intended to augment the existing Information Sciences curricula. 0 to 4 graduate hours. No professional credit. May be repeated in the same or separate semesters to a maximum of 16 hours, if topics vary.

IS 592 Advanced Topics In Information Organizations credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/592/)
Variety of newly developed and advanced topics courses within the fields of Information Organization, intended to augment the existing Information Sciences curricula. 2 to 4 graduate hours. No professional credit. May be repeated in the same or separate semesters to a maximum of 16 hours, if topics vary.

IS 593 Advanced Topics in Preservation & Tech Services credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/593/)
Variety of newly developed and advanced topics courses within the fields of Preservation & Tech Services, intended to augment the existing Information Sciences curricula. 2 to 4 graduate hours. No professional credit. May be repeated in the same or separate semesters to a maximum of 16 hours, if topics vary.

IS 594 Advanced Topics in Management and Policy credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/594/)
Variety of newly developed and advanced topics courses within the fields of Management and Policy, intended to augment the existing Information Sciences curricula. 2 to 4 graduate hours. No professional credit. May be repeated in the same or separate semesters to a maximum of 16 hours, if topics vary.

IS 595 Advanced Topics in Organization & Representation credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/595/)
Variety of newly developed and advanced topics courses within the fields of Organization & Representation, intended to augment the existing Information Sciences curricula. 2 to 4 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated in the same or separate semesters to a maximum of 16 hours, if topics vary.

IS 596 Advanced Topics in Human-Centered Design & Systems credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/596/)
Variety of newly developed and advanced topics courses within the field of Human-Centered Design & Systems, intended to augment the existing Information Sciences curricula. 2 to 4 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated in the same or separate semesters to a maximum of 16 hours, if topics vary.

IS 597 Advanced Topics in Data Analytics & Data Science credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/597/)
Variety of newly developed and advanced topics courses within the fields of Data Analytics & Data Science, intended to augment the existing Information Sciences curricula. 2 to 4 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated in the same or separate semesters to a maximum of 16 hours, if topics vary.

IS 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/IS/599/)
Individual study and research. 0 to 16 graduate hours. No professional credit. Approved for S/U grading only. May be repeated. M.S. candidates, 0 to 8 hours. Doctoral candidates, 0 to 16 hours. Prerequisite: MS students must submit a "Request to Enroll in IS 599 - Master's Thesis" form.

School of Labor & Employment Relations

Dean: Fritz Drasgow
504 East Armory Avenue
Champaign, IL 61820
(217) 333-1482

school website: https://ler.illinois.edu/
school faculty: Labor & Employment Relations Faculty (https://ler.illinois.edu/about/faculty-staff/)
overview of school admissions & requirements: https://ler.illinois.edu/
on-campus program contact: Becky Barker
email: ebarker@illinois.edu
online program contact: Eden Haycraft
email: ehaycra@illinois.edu

Graduate Degree Programs

The School of Labor and Employment Relations offers graduate work leading to both a master's and a doctoral degree. Graduate study in Human Resources and Industrial Relations (HRIR) is based on a multidisciplinary approach to human resources/industrial relations problems and a flexible curriculum. To achieve this, the School has joint faculty appointments or course cross-listings with economics, psychology, law, business administration, history, and finance.

Admission

Students must meet the general admission requirements of the Graduate College, as well as the specific requirements of the School. Admission to the master's program in either the fall or spring semester is based on an applicant's undergraduate record, letters of reference, Graduate Record Examination (GRE) or Graduate Management Aptitude Test (GMAT) scores, a resume and a statement of interest and career goals. The minimum requirements for admission are a course in statistics and an average grade of B in the last two years of a four year undergraduate program. A deficiency in statistics may be made up by taking the required course without graduate credit during the first semester of graduate study. International applicants must provide Test of English as Foreign Language (TOEFL) test results with a recommended minimum score of 96 on the internet-based IBT (590 on the written test) or IELTS with minimum overall score of 6.5.

Students applying to the online program will have the same admissions criteria as the on-campus MHRIR program. However, a waiver of the GRE or GMAT requirement may be available to applicants with 3 or more years of direct HR/IR experience or 5 years of related managerial experience. Eligibility of this waiver will be assessed by the Associate Dean and the Associate Director, Online Programs. Admission decisions for the online program are made in all semesters (Fall, Spring, and Summer).

Students with outstanding academic credentials, with or without a master's degree, are encouraged to apply to the Ph.D. program. Applicants to the doctoral program must submit evidence of research ability, such as a master's thesis, an undergraduate thesis, special reports, or published articles. This is in addition to the other required application materials as indicated for the on-campus master's program. Admission to the doctoral program is made for the fall semester only. An exception is made for current HRIR master's degree students at Illinois, who may submit an internal application in the spring.

Graduate Teaching Experience

Although the School has no teaching requirement, doctoral students are encouraged to gain teaching experience in this program.

Financial Aid

The School offers research assistantships, scholarships, and fellowships to graduate students with superior academic credentials in the on-campus MHRIR and Ph.D. programs. A School research/teaching assistant receives a stipend plus waiver of resident or non-resident tuition and some fees (http://www.grad.illinois.edu/gradhandbook/). The Graduate College also awards minority fellowships that carry stipends plus tuition and service fee waivers. The School seeks reimbursement from appointing units of the value of the tuition waivers associated with assistantship appointments made to HRIR master's students in other campus units. However, this restriction does not apply to students in the doctoral program.

The online program is self-supporting and DOES NOT accept the following tuition and fee waivers (TFWs): Non-Academic waivers (including UIUC employees and employees of other state institutions), Academic waivers from UIUC, UIC and UIS employees, Related Agency waivers, waivers granted through fellowships/assistantships as governed by the Graduate College at UIUC, or Retiree waivers. This program DOES accept statutory waivers (veteran grants, etc.)

Undergraduate Programs:

minor: Global Labor Studies (http://catalog.illinois.edu/undergraduate/minors/global-labor/)

graduate office: 504 East Armory Avenue
Champaign, IL 61820
on-campus program contact: Becky Barker
email: ebarker@illinois.edu
online program contact: Eden Haycraft
email: ehaycra@illinois.edu (http://catalog.illinois.edu/schools/ler/ehaycra@illinois.edu)
phone:(217) 333-1482

Graduate Programs:

degree: Human Resources & Industrial Relations, MHRIR (http://catalog.illinois.edu/graduate/ms-mhrir/)
online degree: Human Resources & Industrial Relations, MHRIR - Online (p. 809)
degree: Human Resources & Industrial Relations, PhD (http://catalog.illinois.edu/graduate/phd-mhrir/)
joint degree: Human Resources & Industrial Relations, MHRIR and Law, JD (http://catalog.illinois.edu/graduate/joint-degree-programs/mhrir-jd/)
joint degree: Human Resources & Industrial Relations, MHRIR and Business Administration, MBA (http://catalog.illinois.edu/graduate/joint-degree-programs/mhrir-mba/)

LER Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/LER/)

Courses

LER 100 Introduction to Labor Studies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LER/100/)
Provides an overview of workers and unions in American society. Looks at economic, political, and workplace issues facing working people, why and how workers join unions, how unions are structured and function, and how unions and management bargain a contract. Provides a historical overview of the American labor movement, and discusses the contemporary struggles workers and unions face in a rapidly changing global economy.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

LER 110 Labor and Social Movements credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LER/110/)
Explores the role of labor unions in American society. Discusses the role of labor unions in initiating actions on social issues that impact the U.S. working class, the economy, public policy, and politics. Analyzes the labor movement's interaction with the civil rights, women's, student, global justice, and living wage movements.

LER 120 Contemporary Labor Problems credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LER/120/)
Focuses on problems and challenges facing American workers and the U.S. labor movement. Topics include the deterioration of the labor-management "social contract" in recent decades; a review of labor and employment law; the health care crisis; globalization and cross-border union alliances; and union democracy.

LER 130 Intro Labr Wrkng Class History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LER/130/)
Do working people have a history worth studying? What does the history of the U.S. look like when viewed from the point of view of those who built the country? Introduces U.S. labor and working class history. Examines the conditions of life and work of the various groups of working people: enslaved, indentured, small farmers, but especially wage workers and their families from the civil War to the present. Studies the main collective actions workers have taken to protect and improve their lives and the organizations and social movements they created to do this. Students who complete LER 130 and want a more in-depth look at the subject should enroll in HIST 480.

LER 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/LER/199/)
May be repeated.

LER 200 Globalization and Workers credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LER/200/)
Is globalization good for working people in the United States and around the world? Globalization is the driving force in the world economy but it is also provoking tremendous debate and popular resistance. Students will learn the basics about globalization and its institutions from the perspective of workers' right in the U.S. and the Third World. Analyzes the debate over free trade and sweatshops, trade agreements such as the North American Free Trade Agreement, and institutions such as the World Trade Organization and the International Monetary Fund. Closely examines working conditions in several Third World countries, and explores the role of the global justice movement.

LER 210 Images of Labor in Film credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LER/210/)
Uses feature-length film to take an in-depth look at key labor strikes and organizing drives from the 1910s through the 1980s. Students will view some of the most powerful films on worker and labor themes ever produced. Studies the work lives and labor unions of miners; railroad porters; packinghouse workers; textile workers; and farm workers. Discusses the meaning of the events depicted in the films by situating them in historical context with detailed readings; engage the debates raised in the films about labor organizing methods and strike strategies that are relevant to today's labor movement; reflect on issues of race, gender, class consciousness, working conditions, union goals, anti-communism, and labor-management relations raised in the films and readings; analyze how effectively the films, and Hollywood in general, portray workers and unions; and compare and contrast the films.

LER 220 The Media, Workers, and Unions credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LER/220/)
Workers, unions, and how the news media tells their stories. Looks at the past, the present and future. Analyzes how these stories are told in the mainstream and independent news media in the U.S., and examines the Internet's explosion and impact on these stories. Looks at how blogs, online videos, citizen journalism, and the fast changing world of Internet communication has given voice to workers and their issues. Compares the print and online media with the work done in documentaries and the cinema. Looks at the global telling of these stories. Lastly, examines the ways that unions can better tell their stories.

LER 225 Labor Issues in Sports credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LER/225/)
Introduces students to critical historical and contemporary labor issues in the sports industry. Despite popular notions of athletics as "only a game," the world of sports is an expansive global industry with a complex architecture of labor relations systems. Thanks to spectator sports' status as a pervasive form of mass entertainment, the industry also serves as an influential source of cultural meaning in the wider world of work. Day after day, the sports world is home to mass-mediated conversations about key labor issues ranging from unionization to workplace safety to sexual harassment.

LER 240 China's Labor Relations credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LER/240/)
This course analyzes how China is reshaping the world economy, labor markets, unions, forms of worker resistance, and the lives of workers around the globe. We will examine China's transition from socialism to state capitalism; working conditions facing Chinese workers; evolving labor and employment relations; the role and function of the All-China Federation of Trade Unions; and worker protests and strikes demanding improved conditions.

LER 290 Introduction to Employment Law credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LER/290/)
Addresses and critiques the content, interpretation, and applications of the laws that govern employer-employee relations in the American workplace. Explores the historical sources, underlying ideology, and current content of anti-discrimination and civil rights laws, of laws that seek to guarantee a safe and healthy workplace for all Americans, of laws that guarantee minimum wages and overtime pay, of legal protections of privacy on the job, of unemployment insurance and workers' compensation laws, and of laws that guarantee workers the right to collective action and collective bargaining.

LER 300 Workers, Unions, and Politics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LER/300/)
What is the meaning and impact of politics seen from the perspective of those at the bottom of the pyramid of political power rather than from the usual focus on the actions and perceptions of political elites? In what ways do workers become involved in politics? Under what circumstances are they likely to be successful in bringing about change? This course addresses these questions by exploring political power, political participation, and political change from a broad historical and cross-cultural perspective, but always focusing on a view of politics from the bottom up. The course analyzes the political economy of labor, and the labor movement's political influence in politics.

LER 320 Gender, Race, Class and Work credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LER/320/)
Provides a historical and contemporary overview of the impact and interplay of gender, race, class and other issues of identity in the workplace. Topics include: pay gap, occupational segregation, workplace harassment, low wage work, and employment discrimination laws. The response of labor unions to identity issues will also be examined. Prerequisite: LER 100, LER 110 or one course that covers race or gender issues is required.

LER 330 Comparative Labor Relations credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LER/330/)
Designed as an overview of comparative labor movements and labor relation systems. Develops a framework for understanding union formation and the development of industrial relations system in a variety of countries around the world. An emphasis will be placed on each country's interaction between unions and political organizations, national labor policies, the machinery for the resolution of workplace problems, the level of shop floor disturbances, bargaining coverage of employees, and the issues of workers' control. Also addresses how globalization has transformed the capacity of any nation's labor relations' system to respond to economic challenge and workplace conflicts. Examines the possibility of developing transnational union.

LER 410 Labor and the European Union credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/410/)
Addresses the formation of European Union (EU) labor policy; the role of trade unions in EU member nations; worker immigration in the EU; diversity issues in the EU labor market and a comparative analysis of industrial relations in Europe. Same as EURO 410. 4 undergraduate hours. 4 graduate hours. Prerequisite: Consent of the instructor.

LER 440 Economics of Labor Markets credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/440/)
Same as ECON 440. See ECON 440.

LER 450 European Working Class History credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/450/)
Same as HIST 450 and SOC 422. See HIST 450.

LER 480 US Work Class Hist Since 1780 credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/480/)
Same as HIST 480. See HIST 480.

LER 522 Government Regulation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/522/)
Focuses on federal and state legislation, court and agency rulings, and executive orders that regulate a wide range of private and public employment practices including: Title VII and Affirmative Action Compliance; American with Disabilities Act; drug-, HIV-, and genetic testing; Fair Labor Standards Act; Civil Service procedures; Equal Pay Act, Family and Medical Leave Act, and employment-at-will; constitutional protection for employees, job-applicants, and others. Prerequisite: LER 547 or LER 591, or consent of instructor.

LER 523 Org Fundamentals for HR credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/523/)
Increases students' effectiveness in analyzing and understanding organizations and the organizational context. It relies on the case method and focuses a number of important themes such as organization design; strategy; decision-making; and culture. In order to prepare students for the various transformations that they will experience in their careers, it examines many of these topics in the context of organizational change. Exposes students to basic ideas about key organizational topic - as well as a number of applications of these ideas - in order to give them a framework for organizing past experience. The topics covered do not offer a recipe for what to do in all situations, but rather give students a set of skills and different ways of thinking that can help them address novel problems they will face throughout their lives.

LER 530 Found of Ind Org Psych credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/530/)
Same as PSYC 530. See PSYC 530.

LER 540 Labor Economics I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/540/)
Same as ECON 540. See ECON 540.

LER 541 Labor Economics II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/541/)
Same as ECON 541. See ECON 541.

LER 542 Collective Bargaining credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/542/)
Examination of: social values and social science concepts to develop a framework for explaining the basis and shape of collective bargaining as it has been practiced in the United States; government and law, unions, and employers as part of the development of this framework; the environment of collective bargaining with respect to the role of economics and bargaining structure; the negotiating process as the interactive basis for union-management relations; conflict and conflict resolution as part of the negotiating process; wage and other effects of collective bargaining as bargaining outcomes; contemporary changes in union management relations. Case materials and exercises may be used to supplement course materials. Same as ECON 542. Prerequisite: Consent of instructor.

LER 543 Workplace Dispute Resolution credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/543/)
Examination of the use of procedures to resolve employment disputes in both union and nonunion workplaces; comparative analysis of grievance arbitration, interest arbitration, mediation, fact-finding, and combinations of these procedures; special emphasis given to the role of third party intervention. Same as ECON 543 and LAW 665. 3 professional hours. 4 graduate hours.

LER 545 Economics of Human Resources credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/545/)
Study of the economics of personnel with the modern corporation. Topics include hiring, promotion, evaluation, discrimination, raiding, job definition, pay schemes, benefits, and design of work. Same as EPOL 575 and HRD 534. 4 graduate hours. No professional credit. Prerequisite: LER 593 or equivalent, or consent of instructor.

LER 547 Labor Law I credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/547/)
Same as LAW 662. See LAW 662.

LER 556 Industrial Relations Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/556/)
Integrated analysis of the principles of industrial relations through the study of the works of the major theorists and their critics. Prerequisite: Consent of instructor.

LER 557 Human Resources Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/557/)
Continuation of LER 556. Focuses on contemporary research in human resource management and related fields.

LER 558 Faculty-Student Workshop credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/558/)
Training and experience for Ph.D. students in the application of social science and industrial relations theory and research methodology to contemporary industrial relations problems through presentation and discussion of faculty and student research. Ph.D. students are required to make presentations and to participate in workshop discussions during the entire period of their campus residency. Approved for letter and S/U grading.

LER 559 Micro Research Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/559/)
Provides doctoral students a foundation for conducting independent, scholarly micro research (i.e., individuals or small groups as the primary unit of analysis) by addressing the components of the research process. This foundation for conducting independent research is based on the research process as an open system of interconnected choices that unfold sequentially: (1) Choosing and framing a research question, (2) Choosing an hypothesis to address the research question, (3) Choosing a Strategy and Design, (4) Choosing modes for treating constructs, (5) Choosing Forms for Converting Data into Observations, (6) Choosing procedures to analyze data, and (7) Choosing conclusions for interpreting results. Prerequisite: Doctoral degree student in LER, Department of Psychology, Economics, College of Business, College of Education. Master's degree students who are considering a doctoral degree program subject to instructor approval.

LER 561 Compensation Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/561/)
Compensation theory and practice. Course addresses the theoretical and practical issues associated with the design of effective compensation systems. The design phases include establishing internal equity, external equity, and individual equity. Budgeting and administration are also addressed. Case analyses and computer simulations may be used to supplement course materials.

LER 562 HR Planning and Staffing credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/562/)
Examines conceptual issues, policies, and practices relating to the attraction, selection, development, and planning for the most effective utilization of human resources.

LER 564 HR Training and Development credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/LER/564/)
Provides students a firm understanding of human resource training and development systems in today's business environment. A constant theme setting the back drop for this course will be on the various kinds of change facing organizations and how these changes relate to human resource training and development. Aspiring HR professionals will gain essential knowledge to effectively manage employee training and development systems in a variety of companies.

LER 565 HR Management and Strategy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/565/)
Designed to provide integration across the specific functional areas of the human resources management (HRM) field, while at the same time demonstrating the linkages horizontally within HRM and vertically with strategic management of the firm. This case-focused course places emphasis on human resources issues of strategic importance to the organization. Same as BADM 512. Prerequisite: One prior course from the Organizational Behavior and Personnel Management distribution subject area list (in the MHRIR degree requirements for the graduate degree in Labor and Employment Relations).

LER 566 International HR Management credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/566/)
Human resource management issues examined from the perspective of the multinational firm. Topics include globalization and human resource strategy, management and the structure of multinational firms, dealing with intercultural differences, selecting employees for foreign assignments, training and developing expatriate employees, evaluation and compensation of employees in international assignments. Individual and group projects. Prerequisite: Graduate standing.

LER 567 Negotiation in HR Decisions credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/LER/567/)
General survey course concerning the strategies and tactics of bargaining and negotiation, with special emphasis on applications in human resource management contexts. Topics covered include: the structure of negotiated outcomes; integrative bargaining tactics; distributive bargaining tactics; negotiation planning; power, persuasion and influence; communication; negotiating in teams and groups; negotiating using 3rd parties (arbitrators, mediators, agents); cross-cultural negotiations. Students will discuss negotiation issues and build negotiation skills through a series of experiential exercises and cases. Credit is not given for both LER 567 and MBA 505 (Sections W1 and W2: Managerial Negotiations). Prerequisite: Graduate standing. An introductory course in social psychology or organizational behavior is preferred but not required.

LER 568 Firm Performance and HR credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/568/)
The purpose of this course is to enable students to understand some basic ideas about and measures of firm performance with heavy emphasis on the role of human resource managers. Students will gain an understanding of how human resource professionals fit into the organization, structure, and function of business firms. Many basic ideas from the field of finance will be studied. The course covers theoretical ideas and has many empirical, policy, and practitioner-relevant applications, all with the goal of providing human resource managers fundamental financial analysis tools to enable them to function effectively in their post-graduate corporate workplaces.

LER 569 Power & Influence in HRM credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/LER/569/)
Designed to help prospective human resource managers learn how to use power and influence as effective tools for understanding the surroundings in which they will be working with and managing people, and achieving the goals that they set for themselves. It provides frameworks and practical tools that allow students to make sense of on-the-job learning experiences and equip them with basic diagnostic and action-planning skills that they can use at different points in their careers - and to consider difficult ethical questions in the process. Prepares students to get things done in the real world, where personalities and office politics sometimes hinder rather than help them.

LER 570 Leadership for HR Managers credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/LER/570/)
In contemporary organizations, the HR function is often called on to serve a variety of leadership roles. Thus, HR managers will not only need to learn how to utilize and improve their leadership skills in different and changing contexts, but also how to help other employees become effective leaders. The goals of this course are (1) to analyze and discuss a number of key frameworks that will provide students with knowledge of leadership in different types of organizations, and (2) to provide students with practical tools to help them make sense of their own on-the-job experiences and equip them with basic action-planning skills that they can use on the job.

LER 580 Internship credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/LER/580/)
Full or part-time practice of human resources or employment relations in an off-campus government, corporate or not-for-profit environment. Approved for S/U grading only. May be repeated in separate terms. Prerequisite: Must be a student in the LER program.

LER 590 Individual Topics credit: 0 to 8 Hours. (https://courses.illinois.edu/schedule/terms/LER/590/)
Students in labor and industrial relations may register for this unit with the consent of the curriculum adviser and the adviser under whom the student will perform individual study or research. Such individual work may include special study in a subject matter for which no course is available or an individual research project, including on-the-job research in industry, which is not being undertaken for a thesis. 0 to 8 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated if topics vary; unlimited credit hours for graduate and professional students.

LER 591 Employment Relations Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/591/)
General framework for the analysis of employment relationships. Topics include industrial relations theory, the American system of collective bargaining, intercountry system differences, and human resource management strategies and practices. Prerequisite: Graduate standing.

LER 593 Quantitative Methods in LER credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/593/)
Application of statistical methods to problems in human resources and industrial relations. Analysis and presentation of results using computer software. Covers statistical techniques through analysis of variance and multiple regression. Prerequisite: Any elementary statistics course.

LER 594 Tutorial Seminar credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/594/)
Research experience for Master's students in carrying out a problem solving project from formulation to written report in a chosen area of labor and industrial relations. Each student selects an individual topic with the approval and guidance of a faculty member and participates in a Tutorial Workshop. Approved for both letter and S/U grading. Prerequisite: Completion of no fewer than 24 graduate hours of LER course work.

LER 595 Managing Diversity Globally credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/595/)
In a global economy workplace diversity is not a trend; it is a reality faced by corporate leaders, human resource professionals and management consultants. Within the US, immigration, migration, and gender and racial differences have been major trends shaping workplace composition. Globalization places additional pressures on managing workplace diversity effectively. In this setting, training managers and human resource professionals to manage differences and adapt to multiple national and cultural contexts is an imperative. Course provides an in-depth understanding of how managers and HR professionals can be effective in not only managing diversity in a global context, but also in leveraging global diversity as a competitive advantage. By the end of this course students will have a holistic appreciation of the tools necessary to implement effective diversity management practices for a globally inclusive workplace.

LER 597 Employee Motivation & Perfmnce credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/597/)
Managing and motivating employees effectively is one of the most complex and challenging issues facing companies today. While business leaders acknowledge the need for implementing effective performance management systems, recent studies indicate that an overwhelming majority of performance management systems are unsuccessful. Takes a strategic approach to employee motivation and performance starting with a firm level view to reviewing current approaches to employee motivation and performance management. Aims at providing students with practical and conceptual tools that will aid them in future endeavors to design and implement employee development and performance management systems. Format includes in-class discussions, case studies and individual assignments and papers.

LER 598 Impl High Perf Work Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/598/)
Intensive analysis of all aspects of high performance work systems, including work design, reward systems, training, team operations, lean/six sigma systems, and labor-management partnership. Special focus on skills and principles for effective implementation, in ways that advance employee well-being and to organizational effectiveness.

LER 599 Thesis Seminar credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/LER/599/)
For all students writing theses in LER at the MHRIR and Ph.D. levels. May be repeated. Approved for S/U grading only.

COURSES OF INSTRUCTION

ACCY - ACCOUNTANCY

ACCY Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/ACCY/)

Courses

ACCY 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/199/)
May be repeated.

ACCY 200 Fundamentals of Accounting credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/200/)
Survey course in the principles of accounting for students registered in schools and colleges other than the College of Business. Credit is not given for both ACCY 200 and either ACCY 201 or ACCY 202. Prerequisite: Sophomore standing.

ACCY 201 Accounting and Accountancy I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/201/)
Develops a foundation for understanding and analyzing how accounting information is generated and interpreted by both external and internal decision makers. Students will begin by identifying the information conveyed in each of the basic financial statements and understand the way that this information is used by different external decision makers. Students will then focus on information used by management, with an emphasis on analysis to facilitate and guide management decision making, planning and control. Credit is not given for both ACCY 201 and ACCY 200. Prerequisite: Prior to enrollment in ACCY 201, students must: 1) have completed either ECON 102 or ECON 103; AND 2) have completed or be concurrently enrolled in the remaining ECON 102 or ECON 103 course.

ACCY 202 Accounting and Accountancy II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/202/)
Further develops the student's understanding of accrual accounting, the goals and objectives of financial reporting, the information needs of end users, the qualities of useful information, as well as the financial statements and financial statement elements. Students will analyze and record progressively more complex transactions, continuing to take the economic event from inception to reporting. Recurring themes and foundational concepts are emphasized such that students can develop intuition for accounting measurement and reporting. Credit is not given for both ACCY 202 and ACCY 200. Prerequisite: ACCY 201 or equivalent.

ACCY 211 Understanding Financial Statements credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/211/)
Provides a basic understanding of financial statements. Topics include financial statement components and their meaning, the broader purpose of financial statements, and the role of accounting in producing financial statements. Emphasizes the ability to read and, to some extent, interpret real-world financial statements. Credit is not given for ACCY 211 if credit has been given for ACCY 200, ACCY 201, and/or ACCY 202. ACCY 211 does not count toward undergraduate degree requirements for degrees offered through the College of Business or toward the Business Minor. Prerequisite: Intended for non-business majors.

ACCY 212 Understanding Accounting for Business Decisions credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/212/)
This course provides a fundamental understanding of how accounting facilitates and influences decisions made by owners, managers, and employees within an organization. Accounting provides information for all types of decisions, ranging from everyday operational and procedural decisions to decisions about the long-term strategy and direction of the firm. Course topics include pricing, product selection, resource planning and allocation, and operational and strategic performance measurement. Credit is not given for ACCY 212 if credit has been given for ACCY 200, ACCY 201, and/or ACCY 202. ACCY 212 does not count toward undergraduate degree requirements for degrees offered through the College of Business or toward the Business Minor. Prerequisite: Intended for non-business majors.

ACCY 290 Prof Internship in Accountancy credit: 0 to 3 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/290/)
Formalized learning experience in combination with practice of accounting while engaged in an internship with a public accounting firm, business, or other off-campus organization; prior approval of learning plan and a summary report of learning experience are required. Approved for Letter and S/U grading. May be repeated in subsequent terms to a maximum of 3 hours. Prerequisite: Open to Department of Accountancy students; completion of ACCY 201 and ACCY 202 (or equivalent); and consent of department.

ACCY 301 Atg Measurement & Disclosure credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/301/)
Introduction to measurement and reporting of organizational performance for strategic and operational purposes with a focus on a variety of financial and non-financial performance measures suitable for both internal and external decision-making. Projects, together with a series of practical workshops, facilitate self-discovery of knowledge and development of a variety of professional skills and attitudes. Prerequisite: ACCY 202 or equivalent and recommend concurrent enrollment in ACCY 302 for Accountancy majors.

ACCY 302 Decision Making for Atg credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/302/)
We will develop and apply a framework to better understand the specific types of accounting information managers need to make key operational and strategic decisions. Utilizing business case studies and real-world projects, the course will also develop skills in gathering, visualizing, and statistically analyzing this accounting information to inform these important decisions. Prerequisite: ACCY 202 or equivalent; BADM 210 or concurrent enrollment; and recommend concurrent enrollment in ACCY 301 for Accountancy majors.

ACCY 303 Accounting Institutions and Regulation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/303/)
Measurement and reporting of firm's liabilities and shareholders' equity. Topics include current liabilities, contingencies, subsequent events, bonds, leases, pensions, equity issuance and repurchase, dividends, and equity-based compensation. Prerequisite: ACCY 301 and FIN 221.

ACCY 304 Accounting Control Systems credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/304/)
Explores an important framework that highlights the vital roles accounting control systems play in shaping and implementing organizational strategy. Components of this framework include internal controls, organizational missions and values, codes of ethics, performance measurement, evaluation, and reward systems. Case studies, class discussions, group exercises, and field research projects emphasize critical reasoning, data analytics, teamwork, and written and oral communication. Prerequisite: ACCY 301 and ACCY 302.

ACCY 312 Principles of Taxation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/312/)
Introduction to the United States federal income tax system with an emphasis on income tax determination and the taxation of property transactions. Topics include the tax environment, tax provisions relevant to businesses, employees and business owners. Projects facilitate self-discovery of knowledge and development of a variety of professional skills and attitudes. Prerequisite: ACCY 202 or equivalent.

ACCY 321 Principles of Public Policy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/321/)
Same as ACE 321, BADM 303, and PS 321. See PS 321.

ACCY 398 Practical Problems in Atg credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/398/)
Course covers the professional standards relating to corporate financial reporting, taxation, auditing and public sector reporting. Serves as a review course for the Uniform Certified Public Accountant (CPA) Examination. Approved for Letter and S/U grading. May be repeated up to 16 hours in separate terms, if topics vary. Credit is not given towards degree requirements. Prerequisite: Consent of the Department. Intended for students enrolled in the BS in Accountancy, MAS, and MSA programs. Students from other UIUC programs must demonstrate that they have taken courses in financial accounting (beyond introductory level), cost/managerial accounting (beyond introductory level), auditing, and taxation.

ACCY 405 Assurance and Attestation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/405/)
Conceptual introduction to diverse means by which assurers improve the quality of information used by third parties for contracting purposes, with emphases on the credibility- and relevance-enhancement properties of assurers' services. Topics include the economics of assurance and attestation, and concepts including independence, risk, evidence, and control. Projects facilitate self-discovery of knowledge and development of professional skills and attitudes. 3 undergraduate hours. 3 graduate hours. Prerequisite: ACCY 304 or consent of department.

ACCY 410 Advanced Financial Reporting credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/410/)
Current authoritative accounting standards and applications to accounting practice. Topics do not represent the full range of financial reporting issues, but are selected based on relevance of the underlying business transaction, complexity of the topic, consistency of applicable standard with underlying reporting concepts, and transferability of the standard to other accounting issues. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: ACCY 303 or consent of department.

ACCY 415 Auditing Stds and Practice credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/415/)
Framework for understanding and evaluating the professional auditing standards for assurance services. Model of financial reporting provides an overview of the types of information disseminated by companies to external users, and provides the basis for identifying professional standards areas for future standards' development. 3 undergraduate hours. No graduate credit. Credit is not given for both ACCY 415 and ACCY 515. Prerequisite: ACCY 304 or consent of department.

ACCY 451 Advanced Income Tax Problems credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/451/)
An introduction to U.S. federal taxation of business entities including taxable corporations and flow through entities (partnerships, Subchapter S corporations, and limited liability companies). Practical problems facilitate self-discovery of technical tax knowledge and the development of data analysis skills. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: Senior standing and ACCY 312.

ACCY 499 Senior Research credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/499/)
Research and readings course for students majoring in accountancy. May be taken by students in the college honors program in partial fulfillment of the honors requirements. 2 to 4 undergraduate hours. No graduate credit. May be repeated to a maximum of 6 hours. Prerequisite: Cumulative grade-point average of 3.0., honors in the junior year, or consent of department; senior standing.

ACCY 500 Accounting Measurement, Reporting, and Control credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/500/)
Will examine state and local tax laws prevalent in the United States today. The course will consider the historical progression of state and local taxation, the power of states to tax (and the limitations on that power), and planning strategies for minimizing the impact of state and local taxation. Income taxes are emphasized; however, other taxes such as sales and use taxes and property taxes will be discussed. 2 graduate hours. No professional credit. Prerequisite: Credit or concurrent enrollment in ACCY 451, ACCY 507, or equivalent or consent of the department. Restricted to students enrolled in a graduate accounting degree program.

ACCY 501 Accounting Analysis I credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/501/)
Addresses the conceptual framework and financial statements--balance sheet, income statement and the statement of cash flows. It also provides in-depth analysis of accounting issues related to the measurement, recognition and disclosure of current and non-current assets, and revenue recognition. 2 or 4 graduate hours. No professional credit. May be repeated up to 4 hours for iMSA and online students that complete the first part of the course content in a 2-hour section (part A) and then complete the remainder of the class in a second 2-hour section (part B). Prerequisite: Enrollment in graduate degree program or consent of department.

ACCY 502 Accounting Analysis II credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/502/)
Measurement and reporting of firm's liabilities and shareholders' equity. Topics include contingencies, subsequent events, bonds, leases, deferred taxes, pensions, equity transactions, and earning per share. 2 or 4 graduate hours. No professional credit. May be repeated up to 4 hours for iMSA and online students that complete the first part of the course content in a 2-hour section (part A) and then complete the remainder of the class in a second 2-hour section (part B). Prerequisite: ACCY 501 or equivalent; enrollment in graduate degree program or consent of department.

ACCY 503 Managerial Accounting credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/503/)
Introduction to management accounting principles, as used to facilitate and align internal decisions made by managers and employees. Topics include analytical tools and techniques to address common business problems, cost information systems, budgeting, and strategic performance measurement systems. 2 or 4 graduate hours. No professional credit. May be repeated up to 4 hours for iMSA and online students that complete the first part of the course content in a 2-hour section (part A) and then complete the remainder of the class in a second 2-hour section (part B). Prerequisite: Credit or concurrent registration in ACCY 501 or equivalent; enrollment in graduate degree program or consent of department.

ACCY 504 Auditing credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/504/)
Introduction to conceptual and applied material in the field of auditing. Emphasizes the audit process, reporting, and professional responsibilities. 2 or 4 graduate hours. No professional credit. May be repeated up to 4 hours for iMSA and online students that complete the first part of the course content in a 2-hour section (part A) and then complete the remainder of the class in a second 2-hour section (part B). Prerequisite: Credit or concurrent registration in ACCY 502, or equivalent; enrollment in graduate degree program or consent of department.

ACCY 505 Federal Taxation credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/505/)
Introduction to historical and conceptual as well as applied material in the accounting area of federal taxation; emphasizes the provisions of the tax law relevant to accounting measurement methods. 2 or 4 graduate hours. No professional credit. May be repeated up to 4 hours for iMSA and online students that complete the first part of the course content in a 2-hour section (part A) and then complete the remainder of the class in a second 2-hour section (part B). Credit is not given for both ACCY 505 and ACCY 312. Prerequisite: Enrollment in graduate degree program or consent of department.

ACCY 506 Advanced Topics in Accounting credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/506/)
Covers current authoritative accounting standards and applications to accounting practice. Topics include accounting for business combinations, the preparation of consolidated financial statements, and other advanced financial reporting topics. 4 graduate hours. No professional credit. Credit is not given for both ACCY 506 and ACCY 532. Prerequisite: ACCY 501, and credit or concurrent enrollment in ACCY 502.

ACCY 507 Taxation of Business Entities credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/507/)
This course provides an introduction to the U.S. federal income tax treatment of corporations and pass-through entities, including Subchapter S corporations, partnerships, and limited liability companies. 2 or 4 graduate hours. No professional credit. May be repeated up to 4 hours for iMSA and online students that complete the first part of the course content in a 2-hour section (part A) and then complete the remainder of the class in a second 2-hour section (part B). Credit is not given for both ACCY 507 and ACCY 451. Prerequisite: ACCY 505 or equivalent.

ACCY 510 Financial Reporting Standards credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/510/)
Stakeholders' needs for reliable and relevant information about the performance of firms, as well as managers; economic self-interests, influence managers' selection of accounting policies and financial reporting methods. This course selectively surveys both academic research and professional standards to focus on the measurement, classification and disclosure of financial transactions. Cases, class discussion and research projects emphasize independent thinking, group processes, and communication. 4 graduate hours. No professional credit. Prerequisite: ACCY 410 and enrollment in the BS/MAS in Accountancy program or consent of department.

ACCY 511 External Risk Measurement and Reporting credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/511/)
Application of the concepts of risk and uncertainty to the financial management of organizations in achieving business objectives and strategies, with an emphasis on the role of accounting measurement and reporting in the management of such risks. Focuses on integrating knowledge acquired from behavioral, economic, finance, and accounting perspectives. 4 graduate hours. No professional credit. Prerequisite: ACCY 410 and FIN 300, or equivalent, and enrollment in graduate accounting degree program; or consent of department.

ACCY 512 Data Analytics for Management Accounting credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/512/)
Data analytics incorporated into management decision making, including planning, cost management, and management control system design. Focuses on developing your skills of gathering and analyzing data for internal decision making purposes. 4 graduate hours. No professional credit. Prerequisite: Enrollment in graduate accounting degree program or consent of department.

ACCY 515 Auditing & Assurance Standards credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/515/)
Role of professional and ethical standards in the conduct of auditing and assurance services and the role of auditing and assurance services in corporate governance and capital markets. This course selectively surveys both academic and professional literature to focus on the conduct of auditing and assurance services. Cases, class discussion, group projects, and data analytics using Tableau emphasize the importance of critical thinking, group processes, and communication for professional accounting practice. Real-world scenarios assist in implementing auditing standards. 4 graduate hours. No professional credit. Prerequisite: ACCY 405 and enrollment in the BS/MS in Accountancy program or consent of department.

ACCY 516 Professional Responsibility and Ethics for Accountants credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/516/)
Covers key principles of accountants' professional responsibility in their jobs, organizations, and careers, and adopts both theoretical and practical perspectives of the role of ethics and morals within the accounting discipline. The course begins with a general overview of these key constructs and principles, including various philosophies from a variety of disciplines and cultures. Next, the course provides a historical perspective of major instances of accounting-related "failures" and "successes" in the area of professional responsibility and ethics. This historical perspective provides the underlying reasoning for many contemporary codes of conduct, ethics, and professional guidelines. A variety of experiential learning opportunities will help students explore and develop their own perspective on ethics and morals, and how these principles affect their professional roles, responsibilities, and choices. 3 or 4 graduate hours. No professional credit.

ACCY 517 Financial Statement Analysis and Valuation credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/517/)
Examines the tools and techniques of financial statement analysis and company valuation from the perspective of investors and creditors; emphasizes theoretical and empirical properties of financial ratios as well as valuation methods used in practice. 2 or 4 graduate hours. No professional credit. May be repeated up to 4 hours, if topics vary for iMSA and online students that complete the first part of the course content in a 2-hour section (part A) and then complete the remainder of the class in a second 2-hour section (part B). Prerequisite: ACCY 410 or concurrent enrollment; or ACCY 500 or equivalent; or ACCY 502 or equivalent; and enrollment in graduate degree program or consent of department.

ACCY 518 Financial Statement Fraud credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/518/)
Introduction to fraud examination with an emphasis on financial statement fraud. The course provides a comprehensive introduction to fraud examination. The topics addressed in the course include the unique characteristics of fraud examinations and a comparison to financial statement audits, the characteristics that should be possessed by fraud examiners, an overview of the fraud examination process, the nature and extent of fraud, an introduction to the taxonomy of financial statement frauds, techniques for evidence collection including interview techniques, Benford's law, and the development of fraud reports. 4 graduate hours. No professional credit. Prerequisite: Enrollment in graduate accounting degree program or consent of the department. This class is restricted to MAS and MSA students: Accountancy-UIUC.

ACCY 532 Accounting for Mergers & Acquisitions and Other Complex Transactions credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/532/)
Focuses on the financial accounting behind the deal structures and transactions that shape the design of complex organizations. To this end, this course will examine the accounting, economic, and regulatory aspects of a variety of different transaction types, including but not limited to M&A transactions. 4 graduate hours. No professional credit. Credit is not given for both ACCY 532 and ACCY 506. Prerequisite: Requires that students have a grasp of core accounting principles and have a basic knowledge of concepts in finance (time value of money, etc.).

ACCY 550 Multistate Taxation credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/550/)
Will examine state and local tax laws prevalent in the United States today. The course will consider the historical progression of state and local taxation, the power of states to tax (and the limitations on that power), and planning strategies for minimizing the impact of state and local taxation. Income taxes are emphasized; however, other taxes such as sales and use taxes and property taxes will be discussed. 2 graduate hours. No professional credit. Prerequisite: Credit or concurrent enrollment in ACCY 451, ACCY 507, or equivalent or consent of the department. Restricted to students enrolled in a graduate accounting degree program.

ACCY 551 Corporate Income Taxation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/551/)
Analyzes the tax treatment, problems, planning techniques, and underlying governmental policies involving corporations and their shareholders; coverage includes formations, operations, distributions, liquidations, reorganizations, and affiliations. 4 graduate hours. No professional credit. Prerequisite: ACCY 451, credit or concurrent enrollment in ACCY 556, or equivalent or consent of department.

ACCY 552 Partnership Income Taxation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/552/)
Analyzes the tax treatment, problems, planning techniques, and underlying governmental policies involving partnerships and their partners, including Subchapter S corporations and their shareholders. 4 graduate hours. No professional credit. Prerequisite: ACCY 451, credit or concurrent enrollment in ACCY 556, or equivalent or consent of department.

ACCY 553 Selected Topics in Fed Tax credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/553/)
Seminar on federal tax topics of current interest in specialized areas; topics include international taxation, deferred compensation, problems of closely-held businesses, estate planning, taxation of trusts, and new developments. May be repeated with the consent of the department. Prerequisite: ACCY 451 or consent of department.

ACCY 554 International Taxation credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/554/)
Analyzes the tax treatment, issues, planning techniques and underlying government policies involved in doing business internationally. The course incorporates concepts learned in all of the tax courses as they relate to the impact on cross border outbound transactions (i.e., the taxation of US taxpayers doing business abroad). Topics include the source of income, transfer pricing, controlled foreign corporations (CFCs), Subpart F income, foreign tax credits, Global Intangible Low-Taxed Income (GILTI), Base Erosion and Anti-Abuse Tax (BEAT), and Foreign Derived Intangible Income (FDII). While this course focuses heavily on outbound transactions, some inbound rules (i.e., non-US taxpayers doing business in the United States) will be discussed. 2 or 4 graduate hours. No professional credit. Prerequisite: Credit or concurrent enrollment in ACCY 451 or equivalent or consent of the department. Restricted to students enrolled in a graduate accounting degree program.

ACCY 555 Income Tax Accounting credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/555/)
This course analyzes the underlying concepts for Accounting for Income Taxes. The course covers all aspects of financial statement income tax accounting including ASC 740, contingency reserves, purchase accounting; IFRS, footnote disclosures, and interim reporting. 2 graduate hours. No professional credit. Prerequisite: Restricted to students enrolled in the MS in Taxation Program.

ACCY 556 Tax Research credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/556/)
Provides the student with a working knowledge of tax research methodology utilized by accountants in public practice. Aims to develop the student's capacity for either solving or defending his/her position with respect to a particular tax issue. 1 to 4 graduate hours. No professional credit. May be repeated with consent of the department. Prerequisite: Credit or concurrent enrollment in ACCY 451, or equivalent or consent of department.

ACCY 557 Accounting Periods and Methods credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/557/)
Covers federal income tax rules concerning the choice, utilization, and changes regarding tax accounting periods and methods, including the following: overall methods of accounting, revenue recognition, deductions, capitalization, accounting periods, and certain other special tax accounting concepts available to taxpayers. 2 graduate hours. No professional credit.

ACCY 558 Taxation of Closely-Held Bus. credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/558/)
The course analyzes the taxation and planning opportunities associated with all types of closely-held business entities and their stakeholders, including the tax impact of operating as an S corporation, converting from a C corporation to an S corporation, distributions, redemptions, liquidations, and termination of entities, at risk limitations, compensation vs. dividends, and fringe benefits. It also covers tax-exempt organizations.

ACCY 559 Tax Policy credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/559/)
A normative analysis of the structure and design of the tax system including the tenets of good tax policy; and the theoretical and empirical analysis of the impact of taxation on the economic system. 2 graduate hours. No professional credit.

ACCY 560 Information in Value Creation credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/560/)
Introduction to the role of information in processes employed by organizations to create value in market settings, including concepts and theories from strategic management, economics of organization, and systems theory and the relevance of such theories to the concepts and practices of accounting and auditing. This course is for graduate accountancy students who did not earn a BSA at University of Illinois at Urbana-Champaign. 1 to 4 graduate hours. No professional credit. May be repeated in the same or separate terms to a maximum of 4 hours with consent of the department. Prerequisite: Enrollment in graduate accounting degree program and consent of department.

ACCY 561 Taxes and Business Strategy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/561/)
To be a complete tax professional, one must understand both the tax law and how the law interacts with a broad spectrum of factors affecting business decisions. To this end, the course integrates concepts from finance, economics and tax law to develop a complete understanding of the role of taxes in business strategy. It also provides a platform to allow students to explore specific areas of tax law more deeply than a traditional course would permit. Prerequisite: Concurrent enrollment with ACCY 557 or consent of instructor.

ACCY 562 Tax Procedures credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/562/)
An in-depth analysis of IRS Procedures including the processes through which tax laws are enacted, interpreted, administered and applied, along with the remedies available to taxpayers within the tax controversy framework of the IRS, Federal government and the court system. 2 graduate hours. No professional credit.

ACCY 563 Consolidated Returns credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/563/)
Analyzes the technical tax law governing consolidated tax returns. Designed to further develop concepts discussed in the Corporate and Closely-Held Business courses. 2 graduate hours. No professional credit.

ACCY 564 Reorganizations credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/564/)
Analyze the technical tax law governing corporate reorganizations. Designed to further develop concepts discussed in the Corporate Tax, Closely-Held Business as well as the Taxes ad Business Strategies courses. 2 graduate hours. No professional credit.

ACCY 569 Data Driven Decisions in Accounting credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/569/)
This course prepares accounting students to use analytic software to explore, visualize, and statistically analyze accounting data. 2 graduate hours. No professional credit.

ACCY 570 Data Analytics Foundations for Accountancy credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/570/)
Concepts and foundations underlying data analytics for accounting. Provides fundamental knowledge of how to acquire, organize, synthesize and analyze (possibly large) volumes of data to address questions and problems. After completing this course, students should (1) have a foundational understanding of the techniques underlying data analytics, (2) recognize scenarios and identify appropriate tools for various types of data analysis and (3) use Python and Tableau to perform data analysis. 2 or 4 graduate hours. No professional credit. May be repeated up to 4 hours for iMSA and online students that complete the first part of the course content in a 2-hour section (part A) and then complete the remainder of the class in a second 2-hour section (part B). Prerequisite: Enrollment in graduate accounting program or consent of the department.

ACCY 571 Statistical Analyses for Accountancy credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/571/)
Fundamental knowledge of how to perform statistical analyses useful for leveraging accounting information to solve business problems. After completing this course, students should (1) have a foundational understanding of the statistical analyses underlying data analytics, (2) recognize scenarios and identify appropriate statistical tools for various types of data analysis and (3) use common computer-based tools to perform statistical analyses. 2 or 4 graduate hours. No professional credit. May be repeated up to 4 hours for iMSA and online students that complete the first part of the course content in a 2-hour section (part A) and then complete the remainder of the class in a second 2-hour section (part B). Prerequisite: Enrollment in graduate accounting program or consent of the department.

ACCY 574 Risk Management and Innovation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/574/)
Decision making and analytic approaches to help organizations navigate disruptive changes in practices, technology, regulation, and culture to serve stakeholders (customers, employees, investors, the public). Course content focuses on identifying and quantifying risks, and balancing between achieving consistent, measurable outcomes and delivering stakeholder-driven objectives. Cases and experiential learning will emphasize developing tools to translate data into insights, tie these insights into managing stakeholder interests, and communicating these insights to decision makers. 4 graduate hours. No professional credit. Prerequisite: Enrollment in MAS or MSA program.

ACCY 575 Data Analytics Applications in Accountancy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/575/)
Develops knowledge regarding the role, methods, and implications of business and data analytics in accounting. Building on prior coursework on the fundamentals of statistical analysis and business/data analytics, this course provides the opportunity to apply related theoretical and practical principles to a variety of accounting scenarios, including audit, tax, fraud identification and detection, financial reporting, and managerial accounting. 4 graduate hours. No professional credit. Prerequisite: ACCY 570.

ACCY 576 Data Preparation for Accounting credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ACCY/576/)
This course focuses on developing Python skills for assembling business data, taught within the context of multiple accounting settings (e.g., financial statement data, stock data, loan data, point-of-sale data, etc.). 2 graduate hours. No professional credit.

ACCY 577 Machine Learning for Accounting credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/ACCY/577/**)**
This course introduces machine learning algorithms and their applications in accounting problems. It covers classification, regression, clustering, text analysis, time series analysis. It also discusses feature importance and model optimization. 2 graduate hours. No professional credit. Prerequisite: ACCY 576.

ACCY 578 Accounting Analytics Applications credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/ACCY/578/**)**
Develops students' knowledge regarding the role, methods, and implications of business and data analytics in accounting via real-world applications of fundamental and advanced analytics principles. Application opportunities span multiple areas of accounting, including audit, fraud identification and detection, financial accounting, and managerial accounting. After engaging in this course, students should (1) have a foundational understanding of the role of business / data analytics in accounting and (2) be able to apply this knowledge to real-world clients, business decisions, etc. 1 graduate hour. No professional credit. May be repeated in the same or separate semesters to a maximum of 4 hours. Prerequisite: Some sections require the completion of ACCY 576 (or equivalent), and are denoted as requiring this prerequisite.

ACCY 585 Constructs in Atg Research credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ACCY/585/**)**
Examines the role of information in economic and behavioral models of decision making under uncertainty; presents major paradigms underlying contemporary accounting research. Interdisciplinary approach; readings drawn from the accounting, behavioral, economics, and finance literature. Prerequisite: MATH 463 and ECON 502.

ACCY 590 Adv Prof Internship in ACCY credit: 0 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ACCY/590/**)**
A formalized learning experience in combination with practice of accounting while engaged in an internship with a public accounting firm, business, or other off-campus organization; prior approval of learning plan and a summary report of learning experience required. Approved for letter and S/U grading. May be repeated to a maximum of 4 hours. Prerequisite: Open only to accountancy majors enrolled in the department's integrated bachelor/master program or students with graduate standing in accountancy; completion of 300-level accountancy courses appropriate to internship learning plan; and consent of department.

ACCY 592 Introduction to Accounting Research credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ACCY/592/**)**
Comparative study of alternative methodologies and conceptual frameworks and their application to selected current research issues central to the development of accounting thought, both theoretical and empirical. 4 graduate hours. No professional credit. Prerequisite: Courses in behavioral science, mathematics, and economics; or equivalent background and admission to the accountancy Ph.D. program; or consent of department.

ACCY 593 Special Research Problems credit: 1 to 8 Hours. **(**https://courses.illinois.edu/schedule/terms/ACCY/593/**)**
Individual investigations or research projects selected by the students, subject to approval by the graduate adviser and the executive officer of the Department. May be repeated in the same or separate terms. Prerequisite: Enrollment in graduate accounting degree program or consent of department.

ACCY 594 Doctoral Research Seminar credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ACCY/594/**)**
Seminars in various accounting areas designed to enhance the research abilities of doctoral students and to assist them in preparing research proposals; these include Behavioral Dimensions, Public Sector, Tax, Auditing, Managerial, and others announced in the Class Schedule. May be repeated. Prerequisite: Credit or concurrent registration in ACCY 592 or consent of department.

ACCY 595 Models of Decision and Choice credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ACCY/595/**)**
Same as PS 528 and PSYC 534. See PSYC 534.

ACCY 599 Thesis Research credit: 0 to 16 Hours. **(**https://courses.illinois.edu/schedule/terms/ACCY/599/**)**
Individual direction and guidance in writing theses; seminar discussion of progress made. Approved for S/U grading only. May be repeated.

ASRM - ACTUARIAL SCIENCE & RISK MANAGEMENT

ASRM Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/ASRM/)

Courses

ASRM 101 Introduction to Actuarial Science credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/ASRM/101/**)**
Introduction to actuarial science as a profession and as a field of study. Students will learn about the skills and qualities of professional actuaries, the process to become a credentialed actuary, and the various career paths for actuaries. The course will focus on what students can do during their time at the University to be as well prepared as possible to become a successful actuary after graduation Prerequisite: For freshman or new transfer students only.

ASRM 195 Foundations of Data Management credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/ASRM/195/**)**
An introduction to basic data management concepts and programming skills necessary for analyzing data in actuarial and financial applications. Students are expected to learn how to store, clean, explore and analyze data using a programming language and statistical software. Prerequisite: For actuarial science majors only. For freshman only.

ASRM 199 Undergraduate Open Seminar credit: 1 to 5 Hours. **(**https://courses.illinois.edu/schedule/terms/ASRM/199/**)**
Covers special topics. Approved for Letter and S/U grading. May be repeated in the same term up to 12 hours or separate terms up to 12 hours.

ASRM 210 Theory of Interest credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/ASRM/210/**)**
Study of compound interest and annuities; applications to problems in finance. Prerequisite: MATH 231 or equivalent.

ASRM 390 Introduction to Actuarial Research credit: 0 to 3 Hours. **(**https://courses.illinois.edu/schedule/terms/ASRM/390/**)**
Guided research on introductory actuarial topics. Approved for Letter and S/U grading. May be repeated in separate terms. Prerequisite: Instructor approval required.

ASRM 392 Actuarial Problem Solving credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/ASRM/392/**)**
Methods and techniques of solving problems in actuarial mathematics for advanced students intending to enter the actuarial profession. Approved for S/U grading only. May be repeated in the same or separate terms to a maximum of 4 hours. Prerequisite: Consent of instructor.

ASRM 398 Actuarial Internship credit: 0 Hours. **(**https://courses.illinois.edu/schedule/terms/ASRM/398/**)**
Full-time or part-time practice of actuarial science in an off-campus government, industrial, or research laboratory environment. Summary report required. Approved for S/U grading only. May be repeated in separate terms. Prerequisite: After obtaining an internship, Actuarial Science students must request entry from the Director of the Actuarial Science Program.

ASRM 401 Actuarial Statistics I credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ASRM/401/**)**
Same as STAT 408. See STAT 408.

ASRM 402 Actuarial Statistics II credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ASRM/402/**)**
Same as STAT 409. See STAT 409.

ASRM 406 Linear Algebra with Financial Applications credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ASRM/406/**)**
Emphasizes techniques of linear algebra and introductory and advanced applications to actuarial science, finance and economics. Topics include linear equations, matrix theory, vector spaces, linear transformations, eigenvalues and eigenvectors and inner product spaces. In addition, current research topics such as modeling, data mining, and generalized linear models are explored. 3 or 4 undergraduate hours. 3 or 4 graduate hours. Credit is not given for both ASRM 406 (formerly MATH 410) and any of MATH 125, MATH 225, MATH 415 or MATH 416. 4 hours of credit requires approval of the instructor and department with completion of additional work of substance. Prerequisite: MATH 241; ASRM 210 (formerly MATH 210) or FIN 221; or consent of instructor.

ASRM 409 Stochastic Processes for Finance and Insurance credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ASRM/409/**)**
An introduction to stochastic processes and their applications to finance and insurance. Topics include conditional probability, conditional expectation, Markov chains, Poisson processes, reliability theory, Brownian motion and elementary introductions to insurance risk theory and option pricing theory. 3 or 4 undergraduate hours. 3 or 4 graduate hours. Prerequisite: ASRM 401 (formerly MATH 408) or MATH 461.

ASRM 410 Investments and Financial Markets credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ASRM/410/**)**
Theoretical foundation in financial models and their applications to insurance and other financial risks. Topics include derivative markets, no arbitrage pricing of financial derivatives, interest rate models, dynamic hedging and other risk management techniques. 3 undergraduate hours. 4 graduate hours. Prerequisite: Credit or concurrent registration in ASRM 402 or STAT 410.

ASRM 450 Methods of Applied Statistics credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ASRM/450/**)**
Same as STAT 420. See STAT 420.

ASRM 451 Basics of Statistical Learning credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ASRM/451/**)**
Same as STAT 432. See STAT 432.

ASRM 453 Applied Bayesian Analysis credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ASRM/453/**)**
Same as STAT 431. See STAT 431.

ASRM 461 Loss Models credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/ASRM/461/**)**
Foundation in the actuarial modeling process; construction, selection and validation of empirical models and parametric models. Also covers survival, severity, frequency and aggregate loss models; statistical methods to estimate model parameters. 3 undergraduate hours. No graduate credit. Credit is not given for ASRM 461 (formerly MATH 478) and ASRM 561 (formerly MATH 568). Prerequisite: ASRM 401 (formerly MATH 408), MATH 461 or MATH 463; credit or concurrent registration in ASRM 402 (formerly MATH 409) or MATH 464.

ASRM 469 Casualty Actuarial Mathematics credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ASRM/469/**)**
An introduction to property/casualty actuarial science, exploring its mathematical financial, and risk-theoretical foundations. Specific topics include risk theory, loss reserving, ratemaking, risk classification, credibility theory, reinsurance, financial pricing of insurance, and other special issues and applications. 3 or 4 undergraduate hours. No graduate credit. Credit is not given for ASRM 469 (formerly MATH 479) and ASRM 569 (formerly MATH 569). Prerequisite: ASRM 210 (formerly MATH 210); credit or concurrent registration in ASRM 402 (formerly MATH 409); or consent of instructor.

ASRM 471 Life Contingencies I credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ASRM/471/**)**
Distribution of the time-to-death random variable for a single life, and its implications for evaluations of insurance and annuity functions, net premiums, and reserves. 4 undergraduate hours. 4 graduate hours. Prerequisite: ASRM 401 (formerly MATH 408) and ASRM 210 (formerly MATH 210).

ASRM 472 Life Contingencies II credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/ASRM/472/**)**
Continuation of ASRM 471. Introduction to tabular or parametric survival models with single or multiple-life states; life insurance and annuity premium calculations; reserving and profit measures; introductions to universal life insurances, participating insurances, pension plans and retirement benefits. 3 undergraduate hours. No graduate credit. Credit is not given for ASRM 472 (formerly MATH 472) and ASRM 575 (formerly MATH 565). Prerequisite: ASRM 471 (formerly MATH 471).

ASRM 490 Actuarial Research credit: 1 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ASRM/490/**)**
Guided research on actuarial topics. 1 to 4 undergraduate hours. 1 to 4 graduate hours. Approved for Letter and S/U grading. May be repeated in separate terms. Prerequisite: ASRM 390 or consent of instructor.

ASRM 499 Topics in Actuarial Science credit: 1 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ASRM/499/**)**
Covers special topics in actuarial science. 1 to 4 undergraduate hours. 1 to 4 graduate hours. Approved for Letter and S/U grading. May be repeated. Prerequisite: Consent of instructor.

ASRM 510 Financial Mathematics credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ASRM/510/**)**
Theoretical basis of financial models and their applications to insurance and other financial risks. Topics include derivative markets, no-arbitrage pricing of financial derivatives, interest rate models, dynamic hedging and other risk management techniques. 4 graduate hours. No professional credit. Credit is not given for ASRM 410 (formerly MATH 476) and ASRM 510 (formerly MATH 567). Prerequisite: ASRM 402 (formerly MATH 409) or MATH 464.

ASRM 533 Risk Management Practices and Regulation credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ASRM/533/**)**
Offers a comprehensive coverage of different aspects of risks and regulation of financial institutions. Topics include financial institutions and their trading, risk management frameworks, market risk, interest rate risk, liquidity risk, credit risk, operational risk, latest industry practices and regulation, including Basel and Solvency, fundamental review of trading books, scenario analysis and stress testing, etc. 4 graduate hours. No professional credit. Approved for Letter and S/U grading. Prerequisite: ASRM 401 or MATH 461 or STAT 400.

ASRM 539 Risk Analytics and Decision Making credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/ASRM/539/**)**
The course will give students the opportunity to practice their existing data analytics skills to solve diverse real-world cases. Students will also deepen their ability to select the appropriate method to solve each problem, clearly and concisely present results, and clearly articulate the strengths and limitations of their analyses. 2 graduate hours. No professional credit. Prerequisite: Basic knowledge of probability and statistics.

ASRM 551 Statistical Learning credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ASRM/551/**)**
Same as CSE 542 and STAT 542. See STAT 542.

ASRM 552 Predictive Analytics credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ASRM/552/**)**
Focuses on financial and insurance applications of statistical learning techniques to build predictive models, with integrated case studies and training on computational software packages and effective communication of statistical results. Topics include the model building process, data preparation, model selection, refinement and validation. Same as STAT 541. 4 graduate hours. No professional credit. Approved for Letter and S/U grading. Prerequisite: ASRM 401 or STAT 410.

ASRM 561 Loss Data Analytics & Credibility credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ASRM/561/**)**
Introduction to the actuarial modeling process: construction, selection and validation of empirical and parametric models. Survival, severity, frequency and aggregate loss models; statistical methods to estimate model parameters. 4 graduate hours. No professional credit. Credit is not given for ASRM 461 (formerly MATH 478) and ASRM 561 (formerly MATH 568). Prerequisite: ASRM 401 (formerly MATH 408), MATH 461 or MATH 463.

ASRM 569 Extreme Value Theory and Catastrophe Modeling credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ASRM/569/**)**
Principles and fundamental techniques of ratemaking for casualty and property insurances; risk classification; coinsurance; estimation of claim liabilities; financial reporting; catastrophe modeling. 4 graduate hours. No professional credit. Credit is not given for ASRM 469 (formerly MATH 479) and ASRM 569 (formerly MATH 569). Prerequisite: ASRM 401 (formerly Math 408).

ASRM 575 Life Insurance and Pension Mathematics credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ASRM/575/**)**
Tabular and parametric survival models with single or multiple-life states; life insurance and annuity premium calculations; reserving, and profit measures; introduction to universal life insurances, participating insurances, pension plans and retirement benefits. 4 graduate hours. No professional credit. Credit is not given for ASRM 472 (formerly MATH 472) and ASRM 575 (formerly MATH 565). Prerequisite: ASRM 471 (formerly MATH 471).

ASRM 593 Graduate Internship credit: 0 Hours. **(**https://courses.illinois.edu/schedule/terms/ASRM/593/**)**
Full-time or part-time practice of graduate-level actuarial science, risk management or advanced analytics in an off-campus government, industrial, or research laboratory environment. Summary report required. 0 graduate hours. No professional credit. Approved for S/U grading only. May be repeated in separate terms. Prerequisite: After obtaining an internship, Actuarial Science or Risk Management graduate students must request entry from the Director of the Actuarial Science Program. Departmental approval required.

ASRM 595 Advanced Topics in Actuarial Science and Risk Analytics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ASRM/595/)
Covers special topics in actuarial science and risk analytics. 1 to 4 graduate hours. No professional credit. May be repeated if topics vary. Prerequisite: Consent of instructor.

ASRM 597 Reading Course credit: 1 to 8 Hours. (https://courses.illinois.edu/schedule/terms/ASRM/597/)
Independent study in actuarial science and risk analytics. 1 to 8 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated. Prerequisite: Consent of instructor.

ASRM 598 Literature Seminar credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ASRM/598/)
Students present seminars and discussions on advanced topics in areas of actuarial and financial mathematics and advanced analytics. 0 to 4 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated in separate terms or up to 8 hours in the same term if topics vary. Prerequisite: Consent of instructor.

ASRM 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/ASRM/599/)
Research topics in actuarial science and risk analytics. 0 to 16 graduate hours. No professional credit. Approved for S/U grading only. May be repeated if topics vary. Prerequisite: Consent of Instructor.

ADV - ADVERTISING

ADV Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/ADV/)

Courses

ADV 150 Introduction to Advertising credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ADV/150/)
Introduction to the practice and profession of advertising. Course material covers various functional areas of advertising and integrated brand promotion, including account planning, creative, media, research, consumer behavior, sales promotion and interactive advertising. Topics also include how advertising relates to society in cultural, social, ethical and regulatory contexts. Open to all undergraduate majors.

ADV 199 Undergraduate Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/ADV/199/)
May be repeated to a maximum of 12 hours in separate semesters, if topics vary.

ADV 270 Principles of Sales credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ADV/270/)
This course focuses on the development of the sales process and the role of sales and sales people within organizations. It will also consider consultative and persuasive selling and interpersonal relationship building. It will include sales proposals, and simulation exercises that will reinforce concepts learned within the classroom. It will also feature exposure to sales experts from different areas of business.

ADV 281 Advertising Research Methods credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ADV/281/)
Introduces students to the wide spectrum of qualitative and quantitative research techniques that are commonly used in the advertising industry. In addition to examining the principles, methods and techniques of advertising research, the course will address issues such as when research should and should not be conducted, analyzing data sets, forming meaningful research questions, figuring out how to answer the questions, and presenting the answers to these questions in a clear and compelling manner. Credit is not given for ADV 281 if credit for ADV 481 has been earned. Prerequisite: ADV 150, STAT 100 or equivalent.

ADV 283 Advertising and Brand Strategy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ADV/283/)
Designed to help students acquire brand decision-making skills. Advertising and marketing theories, practical problems and traditional cases will be studied as they learn to build a strong brand strategy that will lead to a strong brand advertising strategy. This encompasses every facet of making advertising decisions for a brand. This involves understanding the content a consumer requires, how the consumer will come in contact with the brand, and what is the goal of the connection between consumer and content/contact. Prerequisite: ADV 150, ADV 281.

ADV 284 Consumer Insight credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ADV/284/)
Course focuses on methods of eliciting consumer insight. In particular, this class introduces the process and applied outcomes of consumer insight in terms of building brand strategy. Techniques for persuasive presentation of insight will also be introduced. Prerequisite: ADV 281.

ADV 290 Special Topics in Advertising credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/ADV/290/)
Designed to offer freshmen and sophomores opportunity to take courses in advertising's most recent developments. May be repeated to a maximum of 12 hours in separate terms, if topics vary.

ADV 305 Digital Advertising Content, Technologies and Concepts credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ADV/305/)
This introductory course systematically examines a wide range of topics related to the proliferation and use of digital media in a networked world, including psychology, social relationships, culture, economics, politics, and philosophy. It is designed to prepare students for living and working in an increasingly mediated society in which digital technologies are omnipresent, yet ubiquitous. While the scope of this course is highly interdisciplinary, its emphasis will be placed on specialist knowledge for media professions such as advertising and journalism. Prerequisite: ADV 150. Restricted to students with sophomore and junior standing.

ADV 310 Intro to Public Relations credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ADV/310/)
Introduces the student to the practice and profession of public relations. Course material covers topics such as the history of public relations, the role of law and ethics in public relations, and theories that guide public relations research and practice. The course will also introduce roles played by public relations practitioners within organizations, such as media relations, consumer relations, employee relations, community relations, and investor relations.

ADV 311 Classic Campaigns credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ADV/311/)
Analyzes the most recognized and successful direct mail, print, radio, television and digital advertising campaigns of the 20th and early 21st centuries. Includes particular attention to their strategy and development as well as their social, cultural, and economic impact.

ADV 312 Advertising History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ADV/312/)
In this course, you will develop a rich knowledge base of advertising and the advertising industry as it has evolved in the United States over the last two centuries. Included will be an analysis of the key events, forces, people and technology.

ADV 315 Emerging Media credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ADV/315/)
Same as AGCM 315. See AGCM 315.

ADV 320 Sales Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ADV/320/)
This course addresses conceptual and methodological issues related to the management of sales within organizations. Responsibilities, function and skills necessary to be an effective sales manager are covered, including an evaluation of sales organization structures, recruiting, selecting, testing, and training of salespeople. Related topics include compensation plans, controlling expenses, sales forecasting/projections, routing, quotas, ethics and motivation. It will consist of lectures, role playing exercises, and also may include guest lectures from industry leaders/alumni with experience in sales management. Prerequisite: ADV 270 (Principles of Sales).

ADV 350 Writing for Public Relations credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ADV/350/)
Focuses on the strategy of crafting and delivering PR messages to various audiences with special emphasis on pre-writing, preparation, revision and presentation. Prerequisite: ADV 310.

ADV 370 Sales and the Consumer credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ADV/370/)
This course focuses on different topics related to consumer behavior management, and the consumer's relationships to the sales process. It will include case studies and exercises that will facilitate application of effective sales techniques. Prerequisite: ADV 270 (Principles of Sales).

ADV 390 Content Creation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ADV/390/)
Explores theories of creativity; situates creativity and creative practices within the social structure of organizations that develop creative content; examines the relationship between creative strategy, creative concepts and creative executions; exposes students to the practice of creating content for traditional and non-traditional media vehicles. Prerequisite: ADV 284.

ADV 392 Advertising Immersion credit: 0 to 6 Hours. (https://courses.illinois.edu/schedule/terms/ADV/392/)
Covers a variety of topics designed to help students learn more about, and be better prepared to enter, the advertising industry as professionals. Course content will include an overview of careers in the advertising industry while paying particular attention to areas of future career growth. This course is centered on field study where students will participate in interactive discussions with industry professionals at media related agencies and other industry businesses. Additional fees may apply. See Class Schedule. Approved for S/U grading only. May be repeated in separate terms to a maximum of 6 hours, if topics vary. Credit hour(s) are determined by the instructor and approved by the department head.

ADV 393 Advertising and Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ADV/393/)
Provides a critical understanding of advertising's role in modern society. Advertising will be studied as a cultural force and social institution. Its role will be examined in relation to communications, economics, and political and legal systems. Credit is not given for ADV 393 if credit for ADV 493 has been earned.

ADV 396 Research Experience in Advertising credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/ADV/396/)
Supervised participation in research and scholarly activities, usually as an assistant to an investigator. Approved for Letter and S/U grading. May be repeated to a maximum of 9 hours. Prerequisite: ADV 150, ADV 281, or written consent of instructor.

ADV 399 Advertising Study Abroad credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/ADV/399/)
Provides credit toward undergraduate degree for undertaking study and/or a research project through faculty led programs or from an accredited foreign institution or approved overseas program. Approved for both letter and S/U grading. May be repeated in the same or separate terms to a maximum of 18 hours. Final determination of appropriate credit will be made upon completion of the work done abroad and/or on campus. Prerequisite: One academic year (or one semester in the case of transfer students) in residence at UIUC, good academic standing, completion of at least thirty semester hours toward the bachelor's degree, and prior approval of the Department of Advertising. Some programs have additional requirements.

ADV 400 Special Problems credit: 0 to 3 Hours. (https://courses.illinois.edu/schedule/terms/ADV/400/)
Special projects, research, and independent reading in advertising for students capable of individual work under the guidance of a faculty adviser. 0 to 3 undergraduate hours. No graduate credit. May be repeated in the same or in multiple semesters, if topics vary. Prerequisite: Written research proposal and consent of department.

ADV 409 Media Entrepreneurship credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ADV/409/)
Introduces students to the foundations of entrepreneurship and evolving business models for media. Students are introduced to the foundation and context of entrepreneurship. The course will cover the skills and practices necessary for new entrepreneurial ventures, as well as the processes of evaluating an idea, assessing the market, and implementing a new venture. Finally, students will examine business case studies for both successful and unsuccessful media start-ups. 3 undergraduate hours. No graduate credit. Prerequisite: Junior or senior standing in the College of Media.

ADV 410 Public Relations Strategies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ADV/410/)
Examines the intersection of public relations strategies and communication tactics used by organizations to meet reputation and relationship management objectives with relevant publics and stakeholder groups, such as journalists, consumers, employees, investors, government officials and agencies and community members. 3 undergraduate hours. No graduate credit. Prerequisite: ADV 310.

ADV 452 Creative Concepts I credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ADV/452/)
Planning and execution of advertising across media, with emphasis on the creation of campaigns 3 undergraduate hours. 4 graduate hours. Prerequisite: ADV 390 and consent of instructor (required).

ADV 454 Creative Concepts II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ADV/454/)
This portfolio-oriented course builds upon the core competencies acquired in ADV 452 and applies them to solving real-world advertising problems with integrated creative consumer communications efforts than span traditional and new media. 3 undergraduate hours. 3 graduate hours. Prerequisite: ADV 452.

ADV 460 Innovation in Advertising credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ADV/460/)
This course is intended to improve creative and critical thinking skill in advertising planning by understanding the core technology and perspective of digital and other innovative media in the context of integrated communication. This will allow students to understand how consumers perceive and process digital advertising messages; to research critical questions in digital consumer behavior; to learn how to utilize digital and non-digital media in the context of integrated communication; to apply knowledge of digital communication technology to the real-world advertising cases. 3 undergraduate hours. 3 graduate hours. Credit is not given for ADV 460 if credit for the Digital Advertising section of ADV 490 has been earned. Prerequisite: ADV 283, ADV 284.

ADV 461 Computational Advertising credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ADV/461/)
This class will survey the emerging landscape of computational advertising. It will provide students with a thorough understanding of the technologies including web-search, auctions, behavioral targeting, and mechanisms for viral marketing that underpin the display of advertisements on a variety of locations. These locations include web pages (banner ads), on prominent search engines (text ads), on social media platforms, as well as cell phones. The students shall also learn about new research areas in computational advertising including electronic billboards, moving objects (banners atop taxi cabs) and algorithmic synthesis of personalized advertisements. This class will also discuss issues related to consumer privacy. 3 undergraduate hours. No graduate credit. Prerequisite: ADV 460, ADV 483. Junior or senior standing required.

ADV 475 Multicultural Advertising credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ADV/475/)
Examines the role of multicultural issues upon advertising both as a practice and as an industry. Incorporates historical perspectives to understand the foundational role race, age, and sexual orientation has played in advertising and marketing and will address current issues of racial imagery in advertising, racial diversity in the industry, and a variety of topics related involving multicultural advertising and marketing. 3 undergraduate hours. 3 graduate hours.

ADV 476 Global Advertising credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ADV/476/)
Explores theories of culture and communication and applies them to advertising issues in the context of globalization. Through case studies and an applied research paper, students will develop strategies for advertising and communicating messages to local and global audiences. 3 undergraduate hours. 3 graduate hours. Prerequisite: ADV 150 or equivalent.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - Western

ADV 478 Psychology of Advertising credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ADV/478/)
Course is designed to familiarize students with theory and research at the intersection of advertising and psychology. Explores issues pertaining to advertising psychology, including: basic research methodology, the emergence of trends, attitudes and persuasion, human and brand personality, cross-cultural advertising, implicit consumer cognition, judgment and decision making, and others. 3 undergraduate hours. No graduate credit. Credit is not given for ADV 478 if credit for the Psychology of Advertising section of ADV 490 has been earned. Prerequisite: ADV 281 or equivalent.

ADV 481 Advertising Research Methods credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ADV/481/)
Overview of basic concepts of research methodology with particular emphasis on advertising research. Computer analysis and interpretation of actual data sets; measurement with both structured and unstructured techniques; principles of survey and experimental design. 3 undergraduate hours. No graduate credit. Prerequisite: ADV 150 and a specified course in statistical methods.

ADV 482 Qualitative Analysis in Advert credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ADV/482/)
Provides students with an understanding of the multiple qualitative methods used in advertising and consumer research; a deeper examination of design and analysis issues are covered with focus on analysis of texts to uncover consumer insights and test advertising strategy. 3 undergraduate hours. No graduate credit. Prerequisite: ADV 150 and ADV 281 or equivalent.

ADV 483 Audience Analysis credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ADV/483/)
Analyzes audiences and matches consumer insights with strategic ideas for brand communication, contact, and connection. 3 undergraduate hours. No graduate credit. Prerequisites: ADV 283 and ADV 284.

ADV 484 Quantitative Research Methods credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ADV/484/)
Advanced undergraduate course on quantitative research methods in advertising and consumer behavior. In-depth coverage of descriptive research, experimental research, descriptive and inferential statistics, and computer analysis and interpretation of actual data. 3 undergraduate hours. No graduate credit. Prerequisite: ADV 281.

ADV 490 Advanced Special Topics in Advertising credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/ADV/490/)
Covers current issues in various advertising areas not studied extensively in other courses. 1 to 3 undergraduate hours. 1 to 3 graduate hours. May be repeated in the same or separate terms to a maximum of 6 hours. Prerequisite: Announced separately for each topic.

ADV 491 Advertising Management Plan credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ADV/491/)
Application of analytical planning concepts to advertising planning and decision making; covers all of the decision making areas of advertising. 3 undergraduate hours. No graduate credit. Prerequisite: ADV 281.

ADV 492 Tech and Advertising Campaigns credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ADV/492/)
With the maturation of the internet as an advertising and media channel, advertising, journalism, and communications students need to know more about technology and how that impacts their messages and designs. Likewise, computer scientists could benefit from knowledge of what the end user is looking for when designing web content, applications and other web-based media. Students in this course will gain design knowledge as well as a hands-on experience in completing a technology-driven advertising campaign. Students will participate in engineering, advertising and project management activities with individual as well as team responsibilities. Same as CS 468. 3 undergraduate hours. No graduate credit. Credit is not given for ADV 492 and ADV 498. Prerequisite: CS 225 or consent of instructors. Junior or senior standing in Advertising or Computer Science.

ADV 494 Persuasion Consumer Response credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ADV/494/)
Addresses what makes a mass-mediated message persuasive by reviewing theories of mass communication and persuasion, consumer information-processing, and advertising effectiveness measures. 3 undergraduate hours. No graduate credit. Prerequisite: ADV 281.

ADV 495 Internship Seminar credit: 0 to 1 Hours. (https://courses.illinois.edu/schedule/terms/ADV/495/)
Seminar based on internship experience. Offered for College of Media students who complete an approved professional, industry related internship. 1 undergraduate hour. 1 graduate hour. Approved for S/U grading only. May be repeated in the same term to a maximum of 2 undergraduate hours or 2 graduate hours. May be repeated in subsequent terms to a maximum of 3 undergraduate hours or 3 graduate hours. Prerequisite: Consent of instructor.

ADV 496 UG Research Project credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/ADV/496/)
Supervised investigation of student-driven research on special topics related to advertising in individual or collaborative format. Topic and nature of research may vary. Capstone paper required. Type of course: Lecture-discussion 1 to 3 undergraduate hours. No graduate credit. May be repeated up to 3 hours in the same term or 6 hours in separate terms, if topics vary. Prerequisite: Evidence of adequate preparation for such study; consent of faculty member supervising the work; and approval of the department head. Restricted to majors only. Not available to freshman.

ADV 497 Colloquium in Advertising credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/ADV/497/**)**
Current topics, cases, and research in advertising are presented in a forum that fosters critical thinking and engagement. Weekly presentation and discussion of current research and cases by faculty, undergraduate/graduate students, visiting scholars and visiting professionals. 1 undergraduate hour. No graduate credit. Approved for S/U grading only. May be repeated up to 2 hours in separate terms, if topics vary. Prerequisite: ADV 281 and consent of instructor.

ADV 498 The Sandage Project credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/ADV/498/**)**
This course is named after the founder of the Advertising Department, Charles H. Sandage (known as the "father of advertising education"). His vision of educating the future of the industry was grounded in theoretical and foundational courses emphasizing the "why of advertising" - not just the "how." In this course, students will integrate the concepts, experiences, and skills that have been learned in the curriculum with a service-learning project. 3 undergraduate hours. No graduate credit. Prerequisite: ADV 283, ADV 390 and ADV 460.

ADV 509 Media Entrepreneurship credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/ADV/509/**)**
Introduces students to the foundations of entrepreneurship and evolving business models for media. Students are introduced to the foundation and context of entrepreneurship. The course will cover the skills and practices necessary for new entrepreneurial ventures, as well as the processes of evaluation an idea, assessing the market, and implementing a new venture. Finally, students will examine business case studies for both successful and unsuccessful media start-ups. 3 graduate hours. No professional credit. Credit is not given for both ADV 409 and ADV 509. Prerequisite: Limited to MS Advertising students.

ADV 550 Foundations of Advertising credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/ADV/550/**)**
Explores the development of American advertising through the 20th and into the early 21st century. Analyzes and evaluates American advertising through these primary areas: ethics, advertising philosophies, advertising structure, advertising education, its broader social impact, the role of media and technologies, and its place within a global framework. Prerequisite: Consent of department.

ADV 580 Advertising Theory credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/ADV/580/**)**
Reviews classic and contemporary theories used in advertising research and practice with multidisciplinary emphasis. Through reading, discussion and independent research, students will understand how basic social science and humanities research and advertising scholarship are related; how theories and concepts are applied, adapted, constrained and combined when applied to advertising and other communication issues; and how research evolves over time.

ADV 581 Quanti Research Methods in Adv credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/ADV/581/**)**
Provides students with an overview of quantitative research methodology in advertising and consumer behavior. Students will learn appropriate uses and techniques for conducting exploratory (e.g., focus groups, literature searches), descriptive (e.g., observational techniques, surveys), and casual (randomized- and quasi-experiments) research. Ethical considerations in research, and limitations of quantitative research will play an important role throughout the course. Students will learn basic descriptive and inferential statistical analyses to help analyze, and make sense of quantitative data. Prerequisite: Basic statistics course.

ADV 582 Qualitative Rsrch in Advert credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/ADV/582/**)**
Treatment of basic research concepts and procedures in the social sciences with emphasis on advertising. Prerequisite: Consent of the department.

ADV 587 Graduate Seminar I credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/ADV/587/**)**
Provides advertising students and faculty the opportunity to interact on significant topics. It draws on a wide range of perspectives to explore not only foundational theories and research in advertising, but also current issues, contemporary analytical approaches, and emerging trends in advertising scholarship and practice. Prerequisite: Consent of department.

ADV 588 Graduate Seminar II credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/ADV/588/**)**
Students write research proposals in this course. Prerequisite: The grade of B or better in ADV 587.

ADV 590 Special Topics in Advertising credit: 1 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ADV/590/**)**
May be repeated in the same or in multiple semesters if topics vary. Prerequisite: Consent of department.

ADV 594 Advanced Topics in Advertising credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ADV/594/**)**
This seminar explores topics associated with advertising theory and research. Topics will vary across different course offerings. They will include classic elements of advertising theory (e.g. persuasion, attitudes, cognition, emotion, motivation), as well as current research frontiers (e.g. decision-making, computational advertising, psychophysiology, gaming, social media). 4 graduate hours. No professional credit. May be repeated up to 12 hours, if topics vary. Prerequisite: Ph.D. student or instructor approval.

ADV 597 Proseminar in Advertising credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/ADV/597/**)**
Current topics, cases, and research in advertising are presented in a forum that fosters critical thinking and engagement. Weekly presentation and discussion of current research and cases by faculty, undergraduate/graduate students, visiting scholars and visiting professionals. Approved for S/U grading only. May be repeated up to 4 graduate hours in separate terms.

ADV 598 Professional Project credit: 0 or 6 Hours. **(**https://courses.illinois.edu/schedule/terms/ADV/598/**)**
This course serves as a capstone, requiring the student to demonstrate a mastery of knowledge in the primary areas of advertising. Approved for S/U grading only. May be repeated in separate terms to a maximum of 6 hours. Prerequisite: A grade of B or better in ADV 588.

ADV 599 Thesis Research credit: 0 to 6 Hours. **(**https://courses.illinois.edu/schedule/terms/ADV/599/**)**
Approved for S/U grading only. May be repeated in separate terms. Prerequisite: ADV 588 and consent of the department.

AE - AEROSPACE ENGINEERING

AE Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/AE/)

Courses

AE 100 Intro to Aerospace Engineering credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/AE/100/)
Introduction to the Aerospace Engineering curriculum and career. Typical section topics include aircraft and rocket design and flight. Overviews of the topics are presented along with theory to be experimentally verified.

AE 140 Aerospace Computer-Aided Design credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/AE/140/)
Computer-aided design (CAD) software modeling of engineered components. Sketching and three-dimensional solid modeling. Complex surface modeling. Production of assembly drawings and exploded views. Creation of dimensioned drawings using best practices for manufacturing. Sketching of parts in isometric views and multi-view drawings along with spatial visualization. Aerospace engineering-themed final project. Credit is not given for AE 140 and either SE 101 or ME 170. Prerequisite: Restricted to Aerospace Majors.

AE 199 Undergraduate Open Seminar credit: 0 to 5 Hours. (https://courses.illinois.edu/schedule/terms/AE/199/)
Undergraduate Open Seminar. Approved for Letter and S/U grading. May be repeated.

AE 202 Aerospace Flight Mechanics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AE/202/)
Fundamental principles of aerospace flight mechanics applied to spacecraft and aircraft. Orbital mechanics, rocket propulsion, and dynamics and control applied to spacecraft design. Aerodynamics, maneuvering, stability and flight performance applied to aircraft design. Prerequisite: Credit or concurrent registration in TAM 212.

AE 298 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/298/)
Lectures and discussions relating to new areas of interest. See class schedule for topics and prerequisites. May be repeated if topics vary.

AE 302 Aerospace Flight Mechanics II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AE/302/)
Fundamentals of aircraft and spacecraft dynamics and orbital mechanics; aircraft performance in various flight attitudes; aircraft stability and control; spacecraft attitude dynamics and control; the two-body problem of orbital mechanics; orbit transfer. Prerequisite: AE 352.

AE 311 Incompressible Flow credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AE/311/)
Equations of motion for incompressible flow, both inviscid and viscous; potential flow theory, inviscid airfoil theory: two- and three-dimensional, Navier-Stokes equations, laminar boundary layer and transition to turbulence. Prerequisite: Credit or concurrent registration in AE 202 and MATH 241.

AE 312 Compressible Flow credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AE/312/)
Dynamics of compressible fluid; conservation of mass, momentum, and energy; one-dimensional and quasi-one-dimensional flow; oblique shock waves & Parandtl-Meyer expansion fans; unsteady wave motion; linearized theory. Application to nozzles, diffusers, airfoils, shock tubes and other geometries. Prerequisite: AE 202 and MATH 285. Credit or concurrent registration in ME 200.

AE 321 Mechs of Aerospace Structures credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AE/321/)
Fundamental concepts in the linear theory of elasticity, including stress, strain, equilibrium, compatibility, material constitution and properties. Failure mechanisms and criteria. Application to plane stress-strain problems, beams in extension and bending, and shafts in torsion. Prerequisite: MATH 285 and one of TAM 210 or TAM 211.

AE 323 Applied Aerospace Structures credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AE/323/)
Fundamental concepts of stress, strain, equilibrium, compatibility, material constitution and properties. Analysis of beams and shafts of monocoque and semi-monocoque construction. Energy methods. Prerequisite: AE 321, MATH 241, MATH 285, and one of TAM 210 or TAM 211.

AE 352 Aerospace Dynamical Systems credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AE/352/)
Particle kinematics and dynamics; Lagrange's equations; vibration of multiple degree-of-freedom systems; rotational kinematics and dynamics of rigid bodies. Credit is not given for both AE 352 and TAM 412. Prerequisite: MATH 225, MATH 285, and TAM 212.

AE 353 Aerospace Control Systems credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AE/353/)
Modeling of linear dynamic systems; Laplace transform techniques; linear feedback control systems; stability criteria; design techniques. Credit is not given for both AE 353 and either GE 320 or ME 340. Prerequisite: MATH 225, MATH 285, and TAM 212.

AE 370 Aerospace Numerical Methods credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AE/370/)
Numerical methods used in aerospace engineering. Numerical integration, curve fitting, root finding, numerical solution of ODE, solution of linear systems of equations. Finite difference. Rayleigh-Ritz, and Finite element methods. Applications to simple structural mechanics and aerodynamics problems encountered in aerospace engineering. Prerequisite: Credit or concurrent registration in AE 311 or AE 312; credit or concurrent registration in AE 321 or AE 323.

AE 395 Honors Project credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/395/)
Special aerospace engineering project or reading course for James Scholars in engineering. Prerequisite: Consent of instructor.

AE 396 Honors Seminar credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/396/)
Special lecture sequences or discussion groups arranged each term to bring James Scholars in engineering into direct contact with the various aspects of engineering practices and philosophy. Prerequisite: Consent of instructor.

AE 397 Independent Study credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/AE/397/)
Independent theoretical and experimental projects in aerospace engineering. May be repeated. Prerequisite: Consent of instructor.

AE 398 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/398/)
Lectures and discussions relating to new areas of interest. See class schedule for topics and prerequisites. May be repeated if topics vary.

AE 402 Orbital Mechanics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/402/)
Analysis of orbits in an inverse-square gravitational field; elementary rocket dynamics, impulsive orbit transfer and rendezvous, and Lambert's Theorem with applications; patched-conic trajectories, planetary gravity-assist maneuvers, and linearized orbit theory with application to simplified analytical models; perturbations. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: AE 202.

AE 403 Spacecraft Attitude Control credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/403/)
Theory and applications of spacecraft attitude dynamics and control; Euler angles, direction cosines, quaternions, and Gibbs-Rodrigues parameters; attitude sensors and control actuators; spin, three-axis active, reaction wheel, control moment gyro, and gravity gradient control systems; environmental effects. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: AE 352 and AE 353.

AE 410 Computational Aerodynamics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/410/)
Computational technologies as solution tools for various aerodynamic problems; modeling and solution of one-and two-dimensional, incompressible and compressible, steady and unsteady inviscid external flow fields. Computational laboratory for practical experience. Same as CSE 461. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: AE 311; credit or concurrent enrollment in AE 312.

AE 412 Viscous Flow & Heat Transfer credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/412/)
Momentum and thermal transport in wall boundary-layer and free shear flows, solutions to the Navier-Stokes equations for heat conducting laminar and turbulent shear flows; similarity concepts; thermal boundary layers in ducts and high-speed aerodynamic boundary layers. Same as ME 411. 4 undergraduate hours. 4 graduate hours. Prerequisite: AE 311, ME 310 or TAM 335.

AE 416 Applied Aerodynamics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/416/)
Two-dimensional and finite wing theory with emphasis on the mechanisms of lift and drag generation; Reynolds number and Mach number effects; drag analysis; high-lift wing systems; propeller and rotor aerodynamics; control surface design; application of V/STOL aerodynamics. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: AE 311.

AE 419 Aircraft Flight Mechanics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/419/)
Steady and quasi-steady aircraft flight performance; take-off and landing, climbing and diving, cruise, level turn, and energy methods; longitudinal, directional, and lateral static stability and control; longitudinal and lateral motion and dynamic stability. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: AE 202 and AE 353.

AE 420 Finite Element Analysis credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/420/)
Same as CSE 451 and ME 471. See ME 471.

AE 428 Mechanics of Composites credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AE/428/)
Same as MSE 456 and TAM 428. See MSE 456.

AE 433 Aerospace Propulsion credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/433/)
Fundamentals of rocket and airbreathing jet propulsion devices electric propulsion; prediction of thrust, combustion reactions, specific fuel consumption, and operating performance; ramjets; turbojets; turbofans; turboprops; aerothermodynamics of inlets, combustors, and nozzles; compressors, turbines; component matching, fundamentals of electrothermal, electromagnetic elastostatis thrusters, and solar sails. 3 undergraduate hours. 4 graduate hours. Prerequisite: AE 312 and PHYS 212.

AE 434 Rocket Propulsion credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/434/)
Basic principles of chemical rocket propulsion and performance, rocket component design, liquid rockets, solid rocket motors, combustion processes, combustion instability. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: AE 312 and AE 433.

AE 435 Electric Propulsion credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/435/)
Elements of electric propulsion as applied to near-earth and deep-space missions; impact on spacecraft design; physics of ionized gases; plasmadynamics; electrothermal, electromagnetic, and electrostatic acceleration of gases to high velocity; high-impulse thruster design and performance; the resistojet, arcjet, ion engine, Hall thruster, MPD arc thruster, and plasma gun. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: AE 433.

AE 442 Aerospace Systems Design I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AE/442/)
Principles of systems engineering as they apply to the design process for aerospace flight systems; general design methodology; application of these concepts to the initial sizing of both aircraft and spacecraft systems. Intensive technical writing. 3 undergraduate hours. No graduate credit. AE 442 and AE 443 taken in sequence fulfill the Advanced Composition Requirement. Prerequisite: Credit or concurrent registration in AE 311, AE 323, and AE 352.

AE 443 Aerospace Systems Design II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AE/443/)
Continuation of AE 442. Conceptual design project of either an aircraft or spacecraft flight system to satisfy a given set of requirements. Project team organization. Emphasis on sizing, trade studies and design optimization, subsystem integration, and technical communication skills. 3 undergraduate hours. No graduate credit. To fulfill the Advanced Composition Requirement, credit must be earned for both AE 442 and AE 443. Prerequisite: AE 442.
This course satisfies the General Education Criteria for:
Advanced Composition

AE 451 Aeroelasticity credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/451/)
In-depth examination of aerodynamic and dynamic structural phenomena associated with flexible airplanes and missiles; divergence of linear and nonlinear elastic lifting surfaces; effect of elastic and inelastic deformations on lift distributions and stability; elastic flutter of straight and swept wings; equations of disturbed motion of elastic and inelastic aircraft; dynamic response to forces, gusts, and continuous atmospheric turbulence; creep divergence of lifting surfaces; flutter in the presence of creep; effect of temperature on inelastic divergence and flutter. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: AE 352 or TAM 412; TAM 251.

AE 452 Introduction to Nonlinear Dynamics and Vibrations credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/452/)
Same as TAM 416. See TAM 416.

AE 454 Systems Dynamics & Control credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/454/)
Examination of the common core of dynamics and control theory. Fundamental concepts of Lagrangian dynamics, state space representations, Hamiltonian and modern dynamics, stability theory, and control of dynamical systems. 3 undergraduate hours. 4 graduate hours. Prerequisite: AE 353.

AE 456 Global Nav Satellite Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/456/)
Same as ECE 456. See ECE 456.

AE 460 Aerodynamics & Propulsion Lab credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/AE/460/)
Theory and application of experimental techniques in aerospace engineering with emphasis on fluid dynamic, aerodynamic, thermal, combustion, and propulsion phenomena. 2 undergraduate hours. No graduate credit. Prerequisite: AE 311; credit or concurrent registration in AE 433.

AE 461 Structures & Control Lab credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/AE/461/)
Theory and application of experimental techniques in aerospace engineering with emphasis on structural mechanics, vibrations, dynamics, and control systems. 2 undergraduate hours. No graduate credit. Prerequisite: AE 321 and AE 352. Credit or concurrent registration in AE 323 and AE 353.

AE 468 Optical Remote Sensing credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AE/468/)
Same as ECE 468. See ECE 468.

AE 482 Introduction to Robotics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/482/)
Same as ECE 470 and ME 445. See ECE 470.

AE 483 Autonomous Systems Lab credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/AE/483/)
Theory and application of experimental techniques in aerospace engineering with emphasis on autonomous systems. 2 undergraduate hours. No graduate credit. Prerequisite: AE 202, AE 352, AE 353, AE 370, and PHYS 212.

AE 484 UAV Performance, Design, and Fabrication credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AE/484/)
This course will cover topics necessary to design, fabricate, and evaluate the performance of unmanned aerial vehicles (UAVs). After a brief introduction to UAVs, an overview will be given of aerodynamics, stability/control, propulsion, aircraft performance, UAV hardware, manufacturing methods, and computational tools needed to fabricate unmanned aerial vehicles. An emphasis of the course will be on aircraft fabrication techniques (welding, composites, turning, milling, joining, additive manufacturing, etc.) culminating in the construction of the final design project. 3 undergraduate hours. No graduate credit. Prerequisite: AE 202 and AE 311. Restricted to AE majors only.

AE 485 Spacecraft Environment and Interactions credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/485/)
The course focuses on the theoretical and practical aspects of spacecraft aerodynamics and environment. It covers topics related to free molecular flows. Materials interactions and onboard sensor optical backgrounds caused by spacecraft neutral interactions, chemical reactions of materials with ambient atomic O, spacecraft glow, ion and chemical thrusters are studied. The plasma space environment, its connection to our sun, and the presence of the van Allen Belts and their affect on spacecraft charging for LEO and GEO conditions are discussed. Spacecraft shielding requirements due to plasma interactions and the space radiation environment are examined. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: AE 311, AE 312, ME 200.

AE 497 Independent Study credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/497/)
Independent theoretical and experimental projects in aerospace engineering. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated. Prerequisite: Consent of instructor.

AE 498 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/498/)
Subject offerings of new and developing areas of knowledge in aerospace engineering intended to augment the existing curriculum. See Class Schedule or department course information for topics and prerequisite. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated in the same or separate terms if topics vary to a maximum of 9 undergraduate hours or 12 graduate hours.

AE 502 Advanced Orbital Mechanics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/502/)
Circular-restricted three-body problem; surfaces of zero velocity, libration points, and halo orbits; perturbed two-body motion; Gauss and Lagrange planetary equations, Hamilton's principle, canonical equations and Delaunay variables; application to artificial Earth satellites; orbit determination. Prerequisite: AE 402.

AE 504 Optimal Aerospace Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/504/)
Formulation of parameter and functional optimization problems for dynamic systems; applications of optimization principles to the control and performance of aerospace vehicles, including optimal flight paths, trajectories, and feedback control. Prerequisite: AE 352.

AE 508 Optimal Space Trajectories credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/508/)
Optimal rocket trajectories in inverse-square and linearized gravitational fields; orbital transfer, intercept, and rendezvous; high-thrust (impulsive) and low-thrust (continuous) trajectories; primer vector theory and applications; cooperative rendezvous. Prerequisite: Credit or concurrent registration in AE 504.

AE 510 Advanced Gas Dynamics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/510/)
Same as ME 510. See ME 510.

AE 511 Transonic Aerodynamics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/511/)
Fundamentals of transonic flows; transonic characteristics and flow modeling, shock wave development, properties of shock wave, transonic similarity, shock-boundary layer interactions, three-dimensional effects, transonic solution techniques, transonic design, and transonic testing. Prerequisite: ME 410.

AE 512 Molecular Gas Dynamics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/512/)
The course focuses on the molecular description of physical and chemical processes in gases. The molecular viewpoint is essential to promote the understanding of physical processes occurring at very high temperatures and low pressures. These conditions are typically encountered in high speed and non-equilibrium gas flows. After a brief review of the fundamental concepts of statistical mechanics and chemical thermodynamics, the course focuses on the fundamentals of kinetic theory of gases, equilibrium chemistry, non-equilibrium kinetics and non-thermal radiation. 4 graduate hours. No professional credit. Prerequisite: AE 311, AE 312, ME 200.

AE 514 Boundary Layer Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/514/)
Boundary layer concept at high Reynolds numbers; self-similar solutions of incompressible and compressible boundary layers; stability of parallel and nearly-parallel wall-bounded viscous flows; transition to turbulence; turbulent boundary layers; high-speed boundary layers; strong Reynolds analogy; Morkovin's hypothesis. Prerequisite: AE 412.

AE 515 Wing Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/515/)
Theoretical analysis of the aerodynamic characteristics of two- and three-dimensional wings and multiple-body systems in subsonic and supersonic flows. Prerequisite: AE 416.

AE 521 Fracture and Fatigue credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/521/)
Same as CEE 575. See CEE 575.

AE 522 Dynamic Response of Materials credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/522/)
One-dimensional stress waves; three-dimensional longitudinal and shear waves, reflection and refraction of plane waves; Rayleigh and Love waves; wave guides; spherical waves, inelastic wave propagation and shock waves; dynamic fracture and shear bandings of solids; wave propagation in anisotropic media; experimental techniques; acoustic emission, ultrasounds, split Hopkinson (Kolsky) bar, plate impact experiments, optical techniques in dynamic fracture, and high-speed photography. Prerequisite: TAM 451 or TAM 551.

AE 523 Nanoscale Contact Mechanics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/523/)
Short- and long-range dipole and electronic interactions; particle- and surface-force interactions; contact mechanics of rigid and nonrigid media; continuum adhesion models; principles of Atomic Force Microscopy (AFM); artifacts and remedies in AFM imaging; force and scale calibration; dynamics of AC-AFM imaging; force spectroscopy; instrumented nanoindentation. Prerequisite: TAM 451 or TAM 551.

AE 524 Nonlinear Solid Mech Design credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/524/)
Same as ME 570. See ME 570.

AE 525 Advanced Composite Materials credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/525/)
An extension of TAM 428. Advanced analysis of composite materials. Anisotropic elasticity; micromechanical theories; behavior of composite plates and beams under bending, buckling, and vibration; advanced elasticity solution techniques; hygrothermal behavior of polymer composites; strength prediction theories and failure mechanisms in composites; processing of metal, ceramic, and polymer composites; analysis of residual stresses. Prerequisite: TAM 428.

AE 526 Composites Manufacturing credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/526/)
Manufacturing methods for polymer-matrix composite materials; analysis of fiber processing techniques, interfacial treatments, and composites fabrication methods; analytical treatment of process modeling including heat transfer, cure kinetics, resin flow, and residual stresses. Term project. Prerequisite: TAM 428.

AE 527 Multi-Scale Modeling of Materials credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/527/)
This course introduces the theoretical foundation of multi-scale methods, and provides students with hands-on modeling and simulation experience. Students will be introduced to a variety of modeling techniques covering the full spectrum of length-scales from atomistics to continuum. The emphasis will be in the use of continuum-based concepts, such as the Principle of Virtual Work and conservation integrals, as bridging techniques to link atomistics and the continuum. The goal is to enable interpretation of material phenomena across different length-scales. 4 graduate hours. No professional credit. Prerequisite: TAM 451, AE 420, and CSE 401, or equivalent.

AE 528 Nonlinear Continuous Media credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/528/)
Fundamental concepts of large deformations in nonlinear elasticity and inelasticity with applications: generalized tensors, finite deformations, stress-strain relations in terms of strain energy functions, inverse problems, solutions of tension, shear and bending problems, finite plane strain, theory of successive approximations, fiber-reinforced beams, plates and cylinders, thermodynamics of deformable media, stability considerations, and constituent relations for inelasticity. Prerequisite: AE 321 or TAM 451.

AE 529 Viscoelasticity Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/529/)
Fundamental concepts of viscoelasticity with applications: elastic-viscoelastic analogies, creep and relaxation functions, Poisson's ratio, thermomechanical reciprocity relations, variational principles, model fitting, shear center motion, thick-walled cylinders under pressure and inertia loads with material annihilation, sandwich plates, propagation of viscoelastic waves, vibration of bars, plates and shells, nonlinear elastic-viscoelastic analogy, properties of nonlinear viscoelastic stress-strain laws, creep rupture, and torsion of nonlinear bars and shells. Same as TAM 529. Prerequisite: AE 321 or TAM 451.

AE 538 Combustion Fundamentals credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/538/)
Same as ME 501. See ME 501.

AE 542 Aerospace Syst Engineering I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/542/)
Aerospace systems engineering principles, processes and practices for the definition of spacecraft, aircraft, launch and associated systems, and the application of the systems approach across the development life cycle. Prerequisite: Any of AE 442, AE 443, ME 470, ECE 445, ECE 411; CS 492, CS 493, or CEE 465.

AE 543 Aerospace Syst Engineering II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/543/)
Fundamental aerospace industry methods for control of an engineering development effort of a complex aerospace system typical in development of spacecraft, launch vehicles, aircraft, remotely controlled vehicles, and associated supporting infrastructure system in current acquisition environments. Standards and techniques to control risk, integration of technologies, and exploration of "design-to" process tailoring and systematically make design decisions. Prerequisite: AE 542.

AE 550 Nonlinear Aeroelasticity credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/550/)
Integrated fundamental treatment of the physical and mathematical aspects of nonlinear aeroelasticity. Fluid-solid interactions of unsteady aerodynamics and flexible structures and their components with applications to air-space-land vehicles, wind mills, solar sails, and gossamer structures. Physical and mathematical modeling; solution protocols to nonlinear problems; self-excited nonlinear oscillators; torsional divergence, loss of stability and control due to structural flexibility; chordwise and un-symmetric bending; viscous and structural damping, motion control; straight and swept-wind flutter; stall divergence and flutter; panel flutter; aerodynamic noise; chaotic motion; gust loads; limit cycles. Prerequisite: AE 451.

AE 551 Elastodynamics and Vibrations credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/551/)
Same as TAM 514. See TAM 514.

AE 554 Dynamical Systems Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/554/)
This course is structured to introduce the graduate students into advanced concepts of the geometric theory of nonlinear dynamics. Topics to be discussed include vector fields and maps, conjugacies, structural stability and Peixoto's theorem, dynamical systems on two-manifolds; center manifold theory and normal forms for vector fields and maps; local bifurcations of vector fields and maps, co-dimension 1 and 2 bifurcations; global bifurcations, the Smale horseshoe map and invariant Cantor sets, the shift map and symbolic dynamics, chaos in the horseshoe, Conley – Moser conditions for chaos, hyperbolic invariant sets, Moser's theorem and Smale-Birkhoff homoclinic theorem, homoclinic bifurcations and Newhouse sinks; homoclinic and subharmonic Melnikov theories, conditions for homoclinic chaos, chaos in perturbed Hamiltonian systems; applications to mechanics. This course will demonstrate how these advanced concepts can be applied to the study of response, stability and bifurcation behavior of engineering systems. Same as TAM 516. 4 graduate hours. No professional credit. Prerequisite: TAM 416 and either ME 340, TAM 412 or AE 352.

AE 555 Multivariable Control Design credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/555/)
Frequency-response design specifications; algebraic and analytic constraints in scalar systems; uncertainty representation; Nyquist stability theory, small gain condition, and multi-input multi-output systems; singular value decomposition; robustness and u-function; linear quadratic regulator based design; recovery of LQ Design properties; Kalman filter; Riccati equations; H-infinity based design; reduction; balanced truncation; Hankel singular values; coprime factor reduction; loop shaping. Same as SE 521. 4 graduate hours. No professional credit. Prerequisite: ECE 515.

AE 556 Robust Control credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/556/)
Signal and system spaces; stability, robustness, and the small gain theorem; factorization and parameterization of all stabilizing controllers; performance and achievable closed loop maps; model matching; design of optimal single-input single-output systems in H-infinity, H2, L1 senses; extensions to multi-output systems; structured and unstructured uncertainty; robust performance analysis and synthesis; multi-objective control. Prerequisite: ECE 515 and MATH 446.

AE 560 Fracture Mechanics Laboratory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/560/)
Experimental and physical aspects of fracture mechanics including elastic crack tip stress field, thermoelasticity, thermoplasticity, optical techniques, J-integral, toughening mechanisms, dynamic fracture, and fatigue. Laboratory experiments illustrate concepts. Prerequisite: TAM 451 or TAM 551.

AE 564 Advanced Aero Propulsion Lab credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/564/)
Theory and application of advanced diagnostic techniques used in aerodynamics and propulsion research with an emphasis placed on wind tunnel testing and advanced optical and laser-based techniques. Experience with aircraft performance measurement, wind tunnel testing, schlieren/shadowgraph photography, interferometry, spectroscopy, laser Doppler velocimetry, particle and molecular-based scattering, particle image velocimetry, pressure/temperature/shear sensitive paint, and other recently developed techniques provided through lectures and laboratory exercises.Prerequisites: AE 311, AE 312, AE 433, AE 460.

AE 583 Advanced Robotic Planning credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/583/)
Same as ECE 550. See ECE 550.

AE 590 Seminar credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/AE/590/)
Presentation by graduate students, staff, and guest lecturers of current topics in aerospace engineering. Approved for S/U grading only.

AE 597 Independent Study credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/597/)
Independent theoretical and experimental projects in aerospace engineering. May be repeated. Prerequisite: Consent of instructor.

AE 598 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/AE/598/)
Subject offerings of new and developing areas of knowledge in aerospace engineering intended to augment existing formal courses. Topics and prerequisites vary for each section. See Class Schedule or departmental course information for both. May be repeated in the same or separate terms if topics vary to a maximum of 12 hours.

AE 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/AE/599/)
Research in the various areas of aerospace engineering. Approved for S/U grading only. May be repeated.

AFRO - AFRICAN AMERICAN STUDIES

AFRO Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/AFRO/)

Courses

AFRO 100 Intro to African American St credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/100/)
Interdisciplinary introduction to the basic concepts and literature in the disciplines covered by African American studies; surveys the major approaches to the study of African Americans across several academic disciplines including economics, education, psychology, literature, political science, sociology and others.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - US Minority

AFRO 101 Black America, 1619-Present credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/101/)
Sociohistorical survey of African American experiences from the West African background to North America, from the 17th century to the present. Same as HIST 174.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

AFRO 103 Black Women in the Diaspora credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/103/)
Explores the historical, social, economic, cultural and political realities of black women in the African diaspora with an emphasis on the U.S., Canada, Britain, Africa and the English speaking Caribbean. How macro structures such as slavery, imperialism, colonialism, capitalism, and globalization shaped and continue to circumscribe the lives of black women across various geographic regions. Discussion of the multiple strategies/efforts that black women employ both in the past and present to ensure the survival of the self and the community. Same as AFST 103 and GWS 103.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

AFRO 105 Black Literature in America credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/105/)
Survey of the literary work of Black Americans from 1746 to the present. Exploration of the social, cultural, and political contexts that have shaped the Black American literary tradition by analyzing not only poetry, drama, autobiographical narratives, short stories, and novels, but also folktales, spirituals, and contemporary music. Same as ENGL 150.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - US Minority

AFRO 106 Hist Arch Americas credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/106/)
Same as ANTH 106. See ANTH 106.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

AFRO 132 African American Music credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/132/)
Survey of African American music, from its origins to the present with a focus on understanding details of musical performance and the ways in which music interacts with its social and political context. Examines genres such as spirituals, the blues, jazz, R&B, soul, and hip-hop. No previous musical background is necessary.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - US Minority

AFRO 134 Religion, Race, and Resistance credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/134/)
Same as REL 134. See REL 134.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

AFRO 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/199/)
May be repeated.

AFRO 201 US Racial & Ethnic Politics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/201/)
Same as AAS 201, LLS 201, and PS 201. See PS 201.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - US Minority

AFRO 211 Intro to African-American Film credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/211/)
Same as MACS 211. See MACS 211.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

AFRO 212 Intro African American Theat credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/212/)
Same as THEA 263. See THEA 263.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

AFRO 215 US Citizenship Comparatively credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/215/)
Same as AAS 215, AIS 295, GWS 215, and LLS 215. See AAS 215.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

AFRO 220 Intro to Research Methods AfAm credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/220/)
Introduction to various methodologies to be employed in the interdisciplinary field of African American/Africana studies. Prerequisite: AFRO 100.

AFRO 221 History of the Prison credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/221/)
Same as HIST 219 and LA 221. See LA 221.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

AFRO 224 Humanist Persp of Afro-Am Exp credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/224/)
Presents the Afro-centric world view as it was manifested in traditional African society and in the Afro-American slave community. Shows that this world view merged with European notions of art and humanity, as revealed in modern Afro-American literature, art, and music. Same as CWL 226. Approved for both letter and S/U grading. Prerequisite: AFRO 100 or consent of instructor.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - US Minority

AFRO 226 Black Women Contemp US Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/226/)
Sociological perspective of the experience of African American women in the contemporary United States. Specifically, an examination of relationships between the economy, state policy, culture, work and motherhood for this demographic group. Same as GWS 226 and SOC 223.

AFRO 227 Studies in Black Television credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/227/)
Explores topics in black television in order to a) analyze the economic and political factors that lead to successful series; b) historicize black television of the Diaspora, including the U.S., Caribbean, UK, Canada, and Nigeria; c) identify conventions and define a "black aesthetic;" d) determine how black series in one genre (such as sitcoms or dramas) aid in mapping other genres; and e) discuss how these series navigate stereotypes and cultural shifts. Same as MACS 227.

AFRO 228 Hip Hop Music: History and Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/228/)
A study of hip-hop from its beginnings in the post-industrial South Bronx of the 1970s to the global present. By focusing on the work of specific artists and movements, we will compare and contrast the production and consumption of hip-hop with other forms of popular music (including jazz, rock, disco, and pop). This course shows how musicians and listeners use hip-hop to express ideas about topics such as economics, nationalism, black power, feminism, and violence.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - US Minority

AFRO 231 Lang Diff Dis: American Persp credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/231/)
Discusses the interaction of culture, ethnicity/race and language among American minorities. Emphasizes language difference theory as related to social and regional dialects and bilingualism/multilingualism. Distinguishes language differences from language disorders through examination of assessment and treatment approaches for different aged populations. Same as SHS 231.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

AFRO 243 Pan Africanism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/243/)
Provides an introduction to Pan African political movements and ideologies from the Americas to continental Africa. Examines the political, social, economic, and ideological relationships and connections between Africans and their descendants in the diaspora from an historical and comparative perspective. Same as AFST 243 and PS 243.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West

AFRO 250 Introduction to Health and Wellness in the Black Community credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/250/)
An introduction for understanding health-related issues and disparities affecting the African American community. We will explore health status across the lifespan, social and environmental challenges, chronic diseases, lifestyle behaviors, and intervention, research and policy implications. Students will learn how to integrate and situate these complexities in a broader systemic framework and understand how this population exhibits resiliency in the face of these adversities.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - US Minority

AFRO 259 Early African American Literature and Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/259/)
Same as CWL 259 and ENGL 259. See ENGL 259.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

AFRO 260 Modern African American Literature and Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/260/)
Same as CWL 260 and ENGL 260. See ENGL 260.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

AFRO 261 Intro to the African Diaspora credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/261/)
Introduction to the origin, development, and maturation of the African diaspora in the Americas and the Caribbean, beginning with the transatlantic slave trade and up to the end of the 20th century. Same as ANTH 261.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

AFRO 272 Minority Images in Amer Film credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/272/)
Same as ENGL 272. See ENGL 272.

AFRO 275 Afro-American History to 1877 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/275/)
Same as HIST 275. See HIST 275.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

AFRO 276 Afro-American Hist Since 1877 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/276/)
Same as HIST 276. See HIST 276.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

AFRO 281 Constructing Race in America credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/281/)
Same as AAS 281, HIST 281, and LLS 281. See HIST 281.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

AFRO 287 African-American Women credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/287/)
Same as GWS 287 and HIST 287. See HIST 287.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

AFRO 290 Af Am Urban Hist Since 1917 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/290/)
Examination of the changing interaction among black urban communities, the broader urban citizenry, municipal government, the local and national urban-industrial economy, and federal policy over time, giving particular attention to discourses about the black "ghetto" as both a physical space and set of social conditions. Same as HIST 284. Prerequisite: AFRO 101, HIST 276, HIST 172, SOC, 225, or PS 201.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

AFRO 298 Spec Topics African-Am Studies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/298/)
Seminar on selected topics with particular emphasis on current research trends. May be repeated to a maximum of 6 hours. Prerequisite: AFRO 100 or AFRO 101, or consent of instructor.

AFRO 310 Race and Cultural Diversity credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/310/)
Same as AAS 310, EPOL 310, EPS 310, and LLS 310. See EPOL 310.
This course satisfies the General Education Criteria for:
Advanced Composition
Cultural Studies - US Minority

AFRO 312 Psychology of Race & Ethnicity credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/312/)
Same as PSYC 312. See PSYC 312.

AFRO 315 African American Politics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/315/)
Same as PS 315. See PS 315.

AFRO 340 Dancing Black Popular Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/340/)
Same as DANC 340. See DANC 340.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

AFRO 341 Gov & Pol in Africa credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/341/)
Same as PS 341. See PS 341.

AFRO 342 Black Men and Masculinities credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/342/)
The sociological study of African American men in the contemporary U.S. Specifically, black manhood and masculinities and the experiences of this demographic group as it relates to the economy, state, policy, and institutions such as family, criminal justice system, and education. Same as SOC 325. Prerequisite: Introductory social science course.

AFRO 343 Criminalization and Punishment credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/343/)
Same as AAS 343, AIS 343, GWS 343, and LLS 343. See LLS 343.

AFRO 372 Class Politics & Blk Community credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/372/)
Exploration of the complex history of class relations among African Americans during the twentieth century, examining both the internal and external shapers of black class stratification. Considers the historical development of contemporary black "underclass", and the parallel expansion of the black middle class today. Same as HIST 384. Prerequisite: AFRO 101, HIST 276, or SOC 225 or consent of instructor.

AFRO 373 AfAm Cultr Politic Mid20C credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/373/)
Focusing on African American culture and history from World War II until the early 1960's, topics include citizenship, migration, urban life, the African Diaspora, Civil Rights Movement, and art forms. Approved for both letter and S/U grading. Prerequisite: AFRO 100 and AFRO 101, AFRO 261, ENGL 260 or HIST 276.

AFRO 378 Race and Revolutions credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/378/)
Focus on the relationship between race and slavery during the revolutions in American and Haiti, respectively. We will seek to understand how the themes of slavery, revolution and race affected blacks, whites and indigenous Americans. We will learn about life during the Revolutionary era by reading the biographies, political pamphlets and personal letters of former slaves, Revolutionaries and everyday men and women as well as historical scholarship. Same as HIST 389. Prerequisite: One African American Studies or History course at either the 100- or 200-level or the consent of instructor.

AFRO 380 Black Women Hist & Cultures credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/380/)
Same as GWS 380. See GWS 380.

AFRO 381 Black Women and Film credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/381/)
An examination of the contribution of Black women film directors to cinema. The study of documentary, experimental, animated, fictional shorts, and feature films will reveal their unique approach to constructions of the intersection of race and gender. Starting from the 1920's up to the present, the course considers themes, aesthetics, historical contexts, and ideological discourses presented in the films. Same as MACS 381. Prerequisite: College level film course or consent of instructor.

AFRO 382 African Amer Families in Film credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/382/)
Uses film as case studies to examine the diverse structures, social classes, and internal dynamics among African American families. Critical family processes such as family formation patterns, dating mate selection, parenting, male-female/gender relations, child adolescent, and adult development, family routines and practices, family communication, and family stress and coping will be examined. Also considers how families interact within larger contexts, such as the local neighborhood and key institutions (school, workplace, social service agencies). Films will be supplemented with readings drawn for diverse disciplines (African American Studies, Anthropology, Family Studies, History, Psychology, and Sociology) that allow us to examine key substantive, theoretical, methodological, and policy issues in the study of African American families. Same as HDFS 324.

AFRO 383 Hist of Blk Women's Activism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/383/)
Examination of the history of twentieth century black women's activism, specifically concerned with how African American female activists have been critical to building, sustaining and leading black freedom movements. Same as GWS 383 and HIST 383. Prerequisite: AFRO 100 or AFRO 101 or AFRO 103 or consent of instructor.

AFRO 398 Spec Topics Afro-Am Studies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/398/)
Advanced seminar on selected topics with particular emphasis on current research trends. May be repeated to a maximum of 6 hours. Prerequisite: Junior status and one of the following: AFRO 224, or HIST 275 or HIST 276, or ENGL 259 or ENGL 260.

AFRO 400 African Diasporic Thought in the Caribbean credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/400/)
Critical examination of the contributions of intellectuals of African descent in the Caribbean and its global circuits. Major streams of social/political thought, cultural analysis, and artistic expression from across the region and its diasporas are analyzed within post- and de-colonial theoretical frameworks. Dialogues with Caribbeanists and thinkers from other parts of the world will also be considered. Same as CWL 400. 3 undergraduate hours. 4 graduate hours. Prerequisite: AFRO 261 or consent of instructor.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West

AFRO 407 Slavery & Race in Latin Am credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/407/)
Same as HIST 407. See HIST 407.

AFRO 410 Hate Crimes credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/410/)
Hate crimes represent the manifestation of intergroup bias and aggression. Examples of these crimes will be examined while analyzing longstanding theories in social psychology. Same as PSYC 410. 3 undergraduate hours. 3 graduate hours. Prerequisite: PSYC 201 or consent of instructor.

AFRO 411 African American Psychology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/411/)
Introduction to the research, theories, and paradigms developed to understand the attitudes, behaviors, and psychological and educational realities of African Americans. Same as PSYC 416. 3 undergraduate hours. 4 graduate hours. Prerequisite: AFRO 100 or one psychology course.

AFRO 415 Africana Feminisms credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/415/)
Explores readings and research from the perspective of feminists throughout the African diaspora, with a focus on Black feminist thought emanating from the United States. Same as AFST 420 and GWS 415. 3 undergraduate hours. 4 graduate hours. Prerequisite: AFRO 103 and an additional 300 or 400-level African American Studies course or consent of the instructor.

AFRO 421 Racial and Ethnic Families credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/421/)
Same as EPOL 410, EPS 421, and HDFS 424. See EPOL 410.

AFRO 435 Commodifying Difference credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/435/)
Same as AAS 435, GWS 435, LLS 435 and MACS 432. See LLS 435.

AFRO 453 Plantation Soc in Americas credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/453/)
Comparative and interdisciplinary approach to study of the development of New World societies with focus on plantation agriculture from the 15th to 19th centuries. Course considers Portuguese, Spanish, British, French, and Dutch colonization. Students will study the relative importance of culture versus economy and demography in determining social structure. Same as HIST 470. 3 undergraduate hours. 4 graduate hours. Prerequisite: A survey course in early United States history and/or western civilization; junior status, or consent of the instructor.

AFRO 460 Slavery in the United States credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/460/)
Examination of slavery in the U.S. using primary sources (slave narratives, songs and tales, plantation records, laws and newspapers) from the 18th century through emancipation. Same as HIST 482. 3 undergraduate hours. 4 graduate hours. Prerequisite: AFRO 100 or AFRO 101 and one 300-level AFRO course.
This course satisfies the General Education Criteria for:
Advanced Composition

AFRO 465 Race, Sex, and Deviance credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/465/)
Same as AAS 465, GWS 465, and LLS 465. See LLS 465.

AFRO 466 Race, Science, and Medicine credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/466/)
Examines the development of race in in medical and scientific thought; how public health and medical institutions deploy the concept; and the process by which race emerged as a valid though controversial topic of scientific and biomedical inquiry. Also addressed is the relationship between slavery and nineteenth-century medicine, the birth of the eugenics movement, legacies of medical exploitation and mistrust, trends in genetic medicine, and contemporary disparities in health outcomes and health care delivery. Same as HIST 483. 3 undergraduate hours. 4 graduate hours. Prerequisite: AFRO 100 or AFRO 101 and one 300-level AFRO course.

AFRO 474 Black Freed Move, 1955-Present credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/474/)
Presents the struggle of African Americans for self-definition, self-development, and self-determination from the inception of the civil rights movement to the contemporary period. Same as HIST 478. 3 undergraduate hours. 4 graduate hours. Prerequisite: AFRO 101, HIST 276, or consent of instructor.
This course satisfies the General Education Criteria for:
Advanced Composition

AFRO 481 Urban Communities & Public Pol credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/481/)
Examination of how public policy has shaped urban communities and the life chances (i.e., the social, economic, mental and physical well-being) of families of color. Emphasizes the theoretical, political, and economic context of public policy making and specifically address urban issues of housing, communities and families, employment, welfare, and poverty. This course will draw on scholarship by sociologists, historians, policy analysts, race theorists, and economists. Same as SOC 472 and UP 481. 3 undergraduate hours. 4 graduate hours.

AFRO 482 Immersion Journalism credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/482/)
Same as JOUR 482. See JOUR 482.

AFRO 490 Theory in African American St credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/490/)
Introduction to various theories and methodologies rising out of the study of the Black world based on African American intellectual traditions. 3 undergraduate hours. 4 graduate hours. Prerequisite: AFRO 100 and one additional 400-level AFRO course, or consent of instructor.

AFRO 495 Senior Thesis Seminar credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/495/)
3 undergraduate hours. No graduate credit. Prerequisite: AFRO 100 and AFRO 220 or AFRO 490.

AFRO 498 Spec Topics African Am Studies credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/498/)
Seminar on selected topics with particular emphasis on current research trends. 3 undergraduate hours. 4 graduate hours. May be repeated up to a maximum of 6 undergraduate hours or 8 graduate hours. Prerequisite: Upper level AFRO course (300 or above) or consent of instructor.

AFRO 500 Core Probs African-Am Studies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/500/)
Introduction for grad students to the central concepts, theories, methodologies, and paradigms in Black Studies. Students will also be introduced to the key critical scholars, seminal works and emerging trends in Black Studies. Prerequisite: Graduate standing.

AFRO 501 Problems African American Hist credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/501/)
Same as HIST 575. See HIST 575.

AFRO 502 Researching Black Families, Communities, and Neighborhoods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/502/)
A critical examination of social scientific approaches to the study of black families, communities, and neighborhoods. Students are introduced to the methodological, epistemological, and ethical challenges of conducting research on this population. The class will be a learning community working together through the research process from the development of a research problem to the dissemination of results. 4 graduate hours. No professional credit. Prerequisite: Graduate standing.

AFRO 504 Black Women's Studies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/504/)
The study of black women and gender within critical discourses of history, the social sciences, and the humanities. Students are introduced to interdisciplinary and Black Women's Studies paradigms as means to study and understand the experiences of black women in the U.S. and other racialized women's groups.

AFRO 531 Race and Cultural Critique credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/531/)
Same as AAS 561, ANTH 565, GWS 561, and LLS 561. See AAS 561.

AFRO 552 Ethnography Urban Communities credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/552/)
Addresses substantive, theoretical, methodological, and policy issues within the field of urban community studies. Focusing primarily on African American urban communities, with comparisons to other racial-ethnic group communities (e.g. Euro-American, Latino, immigrant), ethnographic case studies are used to explore community processes (formation, ghettoization, gentrification, transnationalism), their relationship to historical, economic, social, and political factors, and how these processes are influenced by ethnicity, class, gender and developmental cycle. Attention will also be given to how empirical studies can be used to inform public policies affecting urban communities. Interdisciplinary readings draw primarily from anthropology, education, and sociology. Same as HDFS 543, SOC 578, and UP 578. 4 graduate hours. No professional credit.

AFRO 560 African Diaspora Seminar credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/560/)
Study of the key political, social, economic and cultural developments of the African Diaspora in Asia, Europe and the Americas. Using an interdisciplinary framework, students will examine recent scholarship in history, women's studies, political science, sociology and anthropology to understand the experiences and challenges faced by people of African descent. Same as AFST 560.

AFRO 595 Directed Independent Readings credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/595/)
Primarily but not exclusively for students who are completing a minor or concentration in African American Studies. Approved for both letter and S/U grading. May be repeated in the same or separate terms to a maximum of 12 hours. Prerequisite: Consent of instructor.

AFRO 597 Problems in African-Am Studies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/597/)
Focused reading and study of special problems in African American Studies. May be repeated to a maximum of 8 hours. Prerequisite: Graduate standing, AFRO 500 or equivalent, or consent of instructor.

AFRO 598 Res Sem in African-Am Studies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/598/)
Graduate seminar on special topics based on current research trends. May be repeated to a maximum of 8 hours. Prerequisite: Graduate standing, AFRO 500 or equivalent, or consent of instructor.

AFRO 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/AFRO/599/)
Individual direction in research and guidance in writing theses and dissertations for advanced degrees. Approved for S/U grading only. May be repeated in separate terms.

AFST - AFRICAN STUDIES

AFST Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/AFST/)

Courses

AFST 103 Black Women in the Diaspora credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFST/103/)
Same as AFRO 103 and GWS 103. See AFRO 103.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

AFST 111 History of Africa to 1800 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFST/111/)
Same as HIST 111. See HIST 111.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

AFST 112 History of Africa from 1800 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFST/112/)
Same as HIST 112. See HIST 112.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

AFST 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/AFST/199/)
May be repeated.

AFST 209 Constr Afr and Carib Identity credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFST/209/)
Same as CWL 225, FR 240, and LAST 240. See FR 240.

AFST 210 Introduction to Modern African Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFST/210/)
Significant contemporary African writings depicting the history and cultural traditions of African peoples. Same as CWL 210 and ENGL 211.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Non-West

AFST 213 African Muslim Societies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFST/213/)
Same as HIST 213 and REL 215. See HIST 213.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

AFST 222 Introduction to Modern Africa credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFST/222/)
Interdisciplinary introduction to Africa dealing with basic themes and problems in the politics, economics, sociology, anthropology, and history of Africa. Same as ANTH 222, PS 242, and SOC 222.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West

AFST 231 Elementary Swahili I credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/AFST/231/)
Same as SWAH 201. See SWAH 201.

AFST 232 Elementary Swahili II credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/AFST/232/)
Same as SWAH 202. See SWAH 202.

AFST 233 Context in International Interventions credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFST/233/)
Same as ABE 232. See ABE 232.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West
Social Beh Sci - Soc Sci

AFST 241 Elementary Wolof I credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/AFST/241/)
Same as WLOF 201. See WLOF 201.

AFST 242 Elementary Wolof II credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/AFST/242/)
Same as WLOF 202. See WLOF 202.

AFST 243 Pan Africanism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFST/243/)
Same as AFRO 243 and PS 243. See AFRO 243.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West

AFST 251 Elementary Zulu I credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/AFST/251/)
Same as ZULU 201. See ZULU 201.

AFST 252 Elementary Zulu II credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/AFST/252/)
Same as ZULU 202. See ZULU 202.

AFST 254 Economic Systems in Africa credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFST/254/)
Same as ACE 254. See ACE 254.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West
Social Beh Sci - Soc Sci

AFST 266 African Film and Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFST/266/)
Same as ANTH 266. See ANTH 266.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West

AFST 312 Central African Art credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFST/312/)
Same as ARTH 312. See ARTH 312.

AFST 313 Modern and Contemp African Art credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFST/313/)
Same as ARTH 313. See ARTH 313.

AFST 325 Social Media and Global Change credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFST/325/)
Same as ASST 325, EPOL 325, EPS 325, EURO 325, INFO 325, LAST 325, REES 325, and SAME 325. See EPOL 325.

AFST 338 Egypt Since World War I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFST/338/)
Same as HIST 338. See HIST 338.

AFST 405 Topics Swahili Lang & Lit I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFST/405/)
Same as SWAH 407. See SWAH 407.

AFST 406 Topics Swahili Lang & Lit II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFST/406/)
Same as SWAH 408. See SWAH 408.

AFST 407 Adv Topics Swahili Lang&Lit I credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AFST/407/)
Same as SWAH 409. See SWAH 409.

AFST 408 Adv Topics Swahili Lang&Lit II credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AFST/408/)
Same as SWAH 410. See SWAH 410.

AFST 410 Modern African Fiction credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AFST/410/)
Examines selected major African novels along thematic and formal lines; literary responses to colonialism and political independence and the crises that accompanied both in Africa; and study of critical approaches to the African novel and African characteristics of and contribution to the novel as a genre. Readings in English. Same as CWL 410 and ENGL 470. 3 undergraduate hours. 4 graduate hours. Prerequisite: AFST 210 or AFST 222, or junior standing.

AFST 412 Lang in African Culture & Soc credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AFST/412/)
Same as LING 412. See LING 412.

AFST 418 Topics Lingala Lang & Lit II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFST/418/)
Same as LGLA 408. See LGLA 408.

AFST 420 Africana Feminisms credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AFST/420/)
Same as AFRO 415 and GWS 415. See AFRO 415.

AFST 421 Sacred African Diaspora Arts credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AFST/421/)
Same as ARTH 413. See ARTH 413.

AFST 425 Southern Africa Race & Power credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AFST/425/)
Same as HIST 412. See HIST 412.

AFST 433 Intermediate Swahili I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AFST/433/)
Same as SWAH 403. See SWAH 403.

AFST 434 Intermediate Swahili II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AFST/434/)
Same as SWAH 404. See SWAH 404.

AFST 435 Advanced Swahili I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFST/435/)
Same as SWAH 405. See SWAH 405.

AFST 436 Advanced Swahili II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFST/436/)
Same as SWAH 406. See SWAH 406.

AFST 443 Intermediate Wolof I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AFST/443/)
Same as WLOF 403. See WLOF 403.

AFST 444 Intermediate Wolof II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AFST/444/)
Same as WLOF 404. See WLOF 404.

AFST 445 Advanced Wolof I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFST/445/)
Same as WLOF 405. See WLOF 405.

AFST 446 Advanced Wolof II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFST/446/)
Same as WLOF 406. See WLOF 406.

AFST 447 Topics Wolof Lang & Lit I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFST/447/)
Same as WLOF 407. See WLOF 407.

AFST 451 Intermediate Zulu I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AFST/451/)
Same as ZULU 403. See ZULU 403.

AFST 452 Intermediate Zulu II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AFST/452/)
Same as ZULU 404. See ZULU 404.

AFST 453 Advanced Zulu I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFST/453/)
Same as ZULU 405. See ZULU 405.

AFST 454 Advanced Zulu II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFST/454/)
Same as ZULU 406. See ZULU 406.

AFST 467 Kinship-Culture-Power-Africa credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AFST/467/)
Same as ANTH 469. See ANTH 469.

AFST 469 Structure of Semitic Languages credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AFST/469/)
Same as LING 469. See LING 469.

AFST 490 Independent Study credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/AFST/490/)
Supervised readings and research in selected fields in consultation with the instructor. 1 to 3 undergraduate hours. 1 to 4 graduate hours. May be repeated in separate terms up to 9 undergraduate hours or 12 graduate hours, if topics vary. Prerequisite: Consent of the Center for African Studies.

AFST 495 Special Topics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AFST/495/)
Subject offerings of new and developing areas of knowledge in African Studies intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. 3 undergraduate hours. 4 graduate hours. May be repeated if topics vary.

AFST 509 Seminar in African Art credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AFST/509/)
Same as ARTH 510. See ARTH 510.

AFST 510 Problems in African History credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AFST/510/)
Same as HIST 510. See HIST 510.

AFST 511 Research Seminar: Africa credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AFST/511/)
Same as HIST 511. See HIST 511.

AFST 515 Practicum in African Studies credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/AFST/515/)
A supervised practicum that emphasizes participation in the Center's educational activities and includes organizing conferences and outreach to K-12 educators, the media, and the community. Approved for S/U grading only. Prerequisite: Enrollment in graduate African Studies program or related Ph.D. programs, or consent of instructor.

AFST 522 Development of African Studies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AFST/522/)
Examines the development of Africanist scholarship during the 20th century and the changing paradigms in African Studies; focuses on the rise of the area studies model and its influences on the major Social Science and Humanities disciplines. Prerequisite: Graduate student status and approval of instructor.

AFST 550 Special Topics credit: 2 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/AFST/550/**)**
Topics vary with the disciplinary focus. May be repeated to a maximum of 12 hours. Prerequisite: Consent of instructor.

AFST 555 Multicultural Education and Global Perspectives credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/AFST/555/**)**
Same as CI 512. See CI 512.

AFST 560 African Diaspora Seminar credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/AFST/560/**)**
Same as AFRO 560. See AFRO 560.

AFST 599 Thesis Research credit: 0 to 8 Hours. **(**https://courses.illinois.edu/schedule/terms/AFST/599/**)**
Individual direction in research and guidance in writing theses for advanced degrees. Approved for S/U grading only. May be repeated to a maximum of 8 hours.

ACE - AGR & CONSUMER ECONOMICS

ACE Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/ACE/)

Courses

ACE 100 Introduction to Applied Microeconomics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ACE/100/)
Principles of microeconomics; demand, production, supply, elasticity, markets, and trade are presented and used in the analysis of decisions of individuals relating to agricultural and food production, consumption, and natural resource use. Credit is not given for ACE 100 if credit for ECON 102 has been earned.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

ACE 161 Microcomputer Applications credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACE/161/)
Instruction and practice in solving data-related problems with microcomputers and general purpose software packages.

ACE 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/ACE/199/)
Experimental course on a special topic in agricultural and consumer economics. Topic may not be repeated except in accordance with the Code. Approved for Letter and S/U grading. May be repeated if topics vary, up to 5 hours in the same semester, to a maximum of 12 hours.

ACE 203 Introduction to Public Policy and Law credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACE/203/)
Introduces students to public policy and law through federal legislation addressing agriculture, food, natural resources and rural economic development. Also introduces students to basic legal issues regarding judicial review of statutes, statutory interpretation and the Constitutional limits on Congressional powers. In addition to lectures, students will also participate in simulated legislative drafting efforts through assigned historic roles of committee members to write legislative proposals, debate and amendments.

ACE 210 Environmental Economics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACE/210/)
Economic issues surrounding environmental quality, including: costs and benefits of environmental protection; economics of environmental policies (such as those dealing with toxics, water, and air pollution, and municipal solid waste); and economics of international environmental problems (such as ozone depletion and climate change). Same as ECON 210, ENVS 210, NRES 210, and UP 210.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

ACE 222 Agricultural Marketing credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACE/222/)
Examines factors affecting the size of the market for agricultural products and the scope of marketing activities; functions and services performed; pricing agricultural products, including the nature and causes of price fluctuations; and costs of marketing and efforts to reduce costs and improve the marketing system.

ACE 231 Food and Agribusiness Mgt credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACE/231/)
Overview of management in the food and agribusiness sector. Major topics covered include: introduction to the food and agribusiness sector; the environment of the firm; fundamentals, structural design, and change in organizations; leadership, motivation, communication; and planning and control. Coverage is at the introductory level with a focus on textbook material and current issues.

ACE 232 Farm Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACE/232/)
Economic principles are applied to the management of farms using budgeting system analysis, record analysis, financial management, and lease analysis. Problems related to resource appraisal and business organization are also addressed.

ACE 240 Personal Financial Planning credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACE/240/)
Examines principles of financial planning applied to individuals and households, with attention to organizing and analyzing financial information, budgeting, acquiring financial assets, managing credit, planning for taxes, investments, risk management, retirement, and estate planning. Prerequisite: Sophomore standing or consent of instructor.

ACE 251 The World Food Economy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACE/251/)
Examination of global food production, consumption, and trade; problems of hunger and population; the role of agricultural development, trade, and aid in relieving hunger. Prerequisite: ACE 100 or ECON 102 or consent of instructor.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West
Social Beh Sci - Soc Sci

ACE 254 Economic Systems in Africa credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACE/254/)
Examines systems of production and exchange in Africa. Through lectures, discussions, readings and films participants will study the ways African people interact in local markets and the impact of national and international markets on their welfare. Same as AFST 254.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West
Social Beh Sci - Soc Sci

ACE 255 Economics of Food and Environmental Justice credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACE/255/)
Access to food and a healthy environment varies across rural/urban location, race, gender, and income in the U.S. Students in this course will analyze questions of "food justice" and "environmental justice" through the lens of economic theory. Students will learn important concepts in the scholarship of minority cultures, learn facts about how food security and experience of environmental quality varies among groups in the U.S., and learn how to use economic theory to understand those patterns and analyze policies to correct inequities.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - US Minority

ACE 261 Applied Statistical Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ACE/261/)
Statistical methods and computer applications for agricultural and consumer economics, including descriptive statistics, probability distribution, interval estimation, hypothesis testing, analysis of variance, simple and multiple regression, and non-parametric methods. Credit is not given for ACE 261 if credit for any of ECON 202, CPSC 440, STAT 100, or equivalent has been earned. Prerequisite: MATH 124 or MATH 125. This course satisfies the General Education Criteria for:
Quantitative Reasoning I

ACE 262 Applied Statistical Methods and Data Analytics I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACE/262/)
Statistics is a key tool in the data analysis process, which involves data collection, data description, data analysis, and results interpretation. ACE 262 discusses how to collect data and how to analyze these data using descriptive statistics. Descriptive statistics help summarize the data in a meaningful way and identify possible patterns. The course also introduces random variables, probability distributions, and simple linear regression, which serves as a transition to ACE 264, a course on inferential statistics. Credit is not given for ACE 262 if credit for any of ECON 202, CPSC 241, STAT 100, or equivalent has been earned. Prerequisite: MATH 124 or MATH 125.

ACE 264 Applied Statistical Methods & Data Analytics 2 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACE/264/)
Offers the statistical and econometric tools to describe and understand common economic issues. The emphasis will be on the multiple regression model and its associated extensions regularly used to overcome traditional econometric issues. The course will introduce and use an advanced statistical software for hands-on exercises. No prior experience with the software is expected or required. Credit is not given for ACE 264 if credit for ECON 203 or equivalent has been earned. Prerequisite: MATH 124 or MATH 125; ACE 262.

ACE 270 Consumer Economics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACE/270/)
Introduction to the study of the consumer in the American economy; sources of consumer information and consumer protection; and examination of current consumer issues within an economic framework.

ACE 291 Ag Policy & Leadership credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACE/291/)
Current policy issues affecting agriculture and the legislative and rulemaking process that determines those policies will be studied. A trip to Washington, DC during spring break will give the students an opportunity to interact with legislators, federal agencies, organization leaders and representatives of the national and international agricultural policy community to better understand the policy making process and the issues moving through it. Student participation will focus on developing leadership skills and having an opportunity to meet with leaders who are actively engaged in creating and changing public policy. Additional fees may apply. See Class Schedule. Prerequisite: Junior or Senior standing required or the approval of the instructor.

ACE 292 Farm, Food & Environmental Policy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACE/292/)
This course seeks to broaden students' understanding of the breadth and complexity of agriculture in the United States and the challenges and opportunities to be found in the U.S. food and agricultural system. It includes a week-long trip to an area outside of Illinois (such as California) during spring break where students will meet with farm, food and environmental leaders who are deeply involved in driving the issues shaping farm, food, and environmental policy. Additional fees may apply. See Class Schedule. Prerequisite: Sophomore, Junior or Senior standing required AND approval of the instructor.

ACE 293 Off-Campus Internship credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ACE/293/)
Supervised, off-campus experience in a field directly pertaining to a subject matter in agricultural and consumer economics. Approved for S/U grading only. May be repeated, up to 4 hours in the same semester, to a maximum of 10 hours. Independent Study courses are limited to 12 hours total applying to a degree in ACES. Prerequisite: Sophomore standing, cumulative GPA of 2. 5 or above at the time the internship is arranged, and consent of instructor.

ACE 294 On-Campus Internship credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ACE/294/)
Supervised, on-campus, learning experience with faculty engaged in research. Approved for S/U grading only. May be repeated up to 4 hours in a semester, to a maximum of 10 hours. Credit is not given for more than a total of 12 hours of Independent Study (IND) courses applying to a degree in ACES. Prerequisite: Sophomore standing, cumulative GPA of 2. 5 or above at the time the internship is arranged, and consent of instructor.

ACE 295 Independent Study credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ACE/295/)
Individual or small group research, special problems, or other studies under the supervision of an appropriate member of the faculty. Approved for both letter and S/U grading. May be repeated in the same or subsequent terms as topics vary. May be repeated up to 4 hours in a semester, but no more than 12 hours of special problems, research, thesis and/or individual studies may be counted toward the degree. Prerequisite: Junior standing, cumulative GPA of 2.5 or above at the time the activity is arranged, and consent of instructor.

ACE 300 Intermediate Applied Microeconomics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACE/300/)
Why could energy policy affect the profitability of farmers? Is it better to help families in developing countries with food aid or mini cash grants? Who will bear the cost of a carbon tax? Microeconomic theory helps us answer many important questions about markets and human behavior. Students in ACE 300 will learn rigorous intermediate microeconomic theory through applications to areas such as agriculture, development, finance, consumer behavior, and the environment. Credit is not given for both ACE 300 and ECON 302. Prerequisite: ACE 100 or ECON 102.

ACE 306 Food Law credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACE/306/)
Explores the legal and political dimensions of food law, policy and trade in the United States and major trading partners. Examines the development of major national and state laws that apply to production, distribution and retail sale of food. Evaluates current issues in food regulation, including: biotechnology, organics, health labeling claims, food safety and products liability litigation. Discusses food regulation in other countries within the context of international treaties such as the World Trade Organization and United Nations.

ACE 310 Natural Resource Economics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACE/310/)
Economic principles are used to analyze a broad range of natural resource policy and management issues. Economic concepts developed include public goods, social welfare, discounting, dynamic efficiency, and resource scarcity. Natural resources examined include biodiversity, fisheries, forests, minerals, soil, and water resources. Same as ENVS 310 and NRES 310. Prerequisite: ACE 100 or ECON 102.

ACE 321 Principles of Public Policy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACE/321/)
Same as ACCY 321, BADM 303, and PS 321. See PS 321.

ACE 335 Food Marketing and Behavior credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACE/335/)
This course will explore the food choices consumers make and what this means in the food and agribusiness industries. Students will also learn how to conduct basic research related to consumer behavior, including developing a research question, designing high quality surveys/experiments, and analyzing data.

ACE 341 Issues&Careers in Applied Econ credit: 1 or 2 Hours. (https://courses.illinois.edu/schedule/terms/ACE/341/)
Students study contemporary issues and career opportunities associated with various concentrations in the Department of Agricultural and Consumer Economics. An in-depth dialogue with industry professionals helps develop an understanding of the skill sets needed to succeed in each of the different career paths discussed. May not be repeated for credit.

ACE 345 Finan Decision Indiv Sm Bus credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACE/345/)
Introduction to financial decision-making for small businesses and individuals. Examines financial statement preparation and analysis; capital structure (use of debt and equity); investment analysis and portfolio theory; time value of money; interest rates and term structure; asset markets (pricing theories); evaluation of financial risk and insurance concepts, and an introduction to credit markets and financial capital suppliers. In addition, there is a class project involving a visit to either a lender or a financial planner/advisor, and other experiences to introduce students to services and careers in financial sectors. Prerequisite: ACCY 201 or equivalent, or consent of instructor.

ACE 346 Tax Policy and Finan Planning credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACE/346/)
Explores the federal tax system, including income, social security, Medicare, and estate taxes, and state and local tax systems. Students learn basic tax principles, public policy issues embedded in the tax systems, and how tax law influences financial plans and decisions. Helps students make wiser financial decisions through increased understanding of the tax impacts of those decisions, participate knowledgeably in public debates surrounding tax policy, and prepare for careers as financial planners. Prerequisite: Sophomore standing.

ACE 360 Spreadsheet Models and Applications credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ACE/360/)
Spreadsheet development and modeling skills intended for economics and finance applications. Advanced uses of spreadsheet software, development of user-defined functions, use of Visual Basic and comparable external interface languages, data query designs, and advanced data analyses, summary and presentation skills are stressed. Iintended to serve as a prerequisite for advanced modeling courses in specific disciplinary areas. Prerequisite: ACE 161 or CS 105.

ACE 396 Honors Research or Thesis credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ACE/396/)
Individual research, special problems, thesis, development and/or design work under the direction of the Honors advisor. May be repeated as topic vary, up to 4 hours in the same term to a maximum of 12 hours in separate terms. Credit is not given for more than 12 hours of special problems, research, thesis and/or individual studies may be counted toward the degree. Prerequisite: Junior standing, admission to the ACES Honors Program, and consent of instructor.

ACE 398 Seminar credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/ACE/398/)
Group discussion on a special topic in a field of study directly pertaining to subject matter in agricultural and consumer economics. Approved for Letter and S/U grading. May be repeated to 3 hours in a semester, up to a maximum of 12 total hours. Credit is not given for more than a total of 12 hours of Independent Study (IND) courses applying to a degree in ACES. Prerequisite: Junior standing and consent of instructor.

ACE 403 Agricultural Law credit: 3 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ACE/403/)
Relation of common-law principles and statutory law to land tenure, farm tenancy, farm labor, farm management, taxation, and other problems involving agriculture. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: Junior standing.

ACE 406 Environmental Law credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ACE/406/)
Examination of environmental law issues. Topics include common-law pollution control; role of administrative agencies and courts; federal and state power; air and water pollution; regulation of toxic substances; protection of land, soil and other natural resources. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: Sophomore or higher standing.

ACE 410 Energy Economics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ACE/410/)
Use of economics tools to understand and evaluate public policy issues surrounding energy markets and related environmental markets. Focus is on the economic drivers of energy production and use, biofuel policy, transportation and storage of energy commodities, regulation of energy markets, and policies designed to mitigate the impact of energy production and consumption on the environment. 3 undergraduate hours. 4 graduate hours. Prerequisite: ACE 300 or equivalent.

ACE 411 Environment and Development credit: 3 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ACE/411/)
Relationship between economic development and environmental sustainability through application of cost-benefit analysis and environmental economics. Developing and developed country issues are considered with an emphasis on hands-on applications of project appraisal, social benefit-cost analysis, green accounting, and non-market valuation. 3 undergraduate hours. 4 graduate hours.

ACE 427 Commodity Price Analysis credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACE/427/)
A comprehensive and in-depth survey of commodity price analysis with emphasis on the fundamental factors affecting prices of agricultural products; sources of information relating to production and demand factors; government activities as they relate to prices of agricultural products; technical analysis of agricultural product prices; and market efficiency and forecasting. 3 undergraduate hours. 3 graduate hours. Prerequisite: ACE 100 or ECON 102; ACE 261, or equivalent.

ACE 428 Commodity Futures and Options credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACE/428/)
Development of futures trading; operation and governance of commodity exchanges; economic functions of futures trading; operational procedures and problems in using futures markets; public regulation of futures trading; evaluation of market performance. 3 undergraduate hours. 3 graduate hours. Prerequisite: ACE 222 or FIN 300 or equivalent.

ACE 430 Food Marketing credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACE/430/)
Performance of the food system; marketing margins; transportation, advertising, and retailing of food products; structure, conduct, and performance of food marketing firms and industries; government and public interest in the food system. Same as FSHN 425. 3 undergraduate hours. 3 graduate hours. Prerequisite: ACE 100 or ECON 102, ACE 222 recommended.

ACE 431 Agri-food Strategic Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACE/431/)
Process of strategic decision-making in food and agribusiness firms; methods for analysis of business and regulatory environment; organizational issues in strategy choice for firms and supply chains. Same as BADM 438. 3 undergraduate hours. 3 graduate hours. Prerequisite: ACE 231, BADM 320, or ACE 222; or consent of instructor.

ACE 432 Advanced Farm Management credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ACE/432/)
Students develop expertise in evaluating and making decisions similar to those faced by farm operators and managers. 3 undergraduate hours. 4 graduate hours. Prerequisite: Junior or senior standing or consent of instructor.

ACE 435 Global Agribusiness Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACE/435/)
Examination of the economic and strategic management of food, textile, and agribusiness firms within a global business environment; topics include the global business environment and its institutions, organizational strategies and policies, and business operations in global agricultural, food and textile industries. 3 undergraduate hours. 3 graduate hours.Prerequisite: ACE 231, ACE 222, or BADM 320 or consent of instructor.

ACE 436 International Business Immersion credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ACE/436/)
Provides participants an in-depth, experiential immersion into the complex issues and constraints that confront international marketing channel participants. Contextually grounded and themed in a specific industry, the course combines on-campus lectures with an intensive international immersion experience to Europe, Asia, or Latin America. By following the complete marketing channel from raw materials procurement to final consumption, participants gain first-hand knowledge of the necessary managerial decision-making skills required to successfully operate in today's global business environment. Same as BADM 436. 4 undergraduate hours. 4 graduate hours. May be repeated to a maximum of 8 hours. Prerequisite: Consent of instructor.

ACE 440 Finan Plan for Professionals credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ACE/440/)
Capstone course applies financial planning principles and concepts in realistic case studies of specific planning needs, requires a comprehensive financial planning exercise, and covers professional ethics and responsibilities. 3 undergraduate hours. 4 graduate hours. Prerequisite: Concurrent enrollment in or completion of ACE 345, ACE 346, ACE 444, and ACE 449.

ACE 444 Financial Services & Investing Planning credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ACE/444/)
Advanced skills in and understanding of asset pricing, equity and debt investment, portfolio theory and diversification, asset allocation, financial risk management, and financial intermediation and regulation emphasizing applications in financial planning and agricultural finance. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: One of ACE 240, ACE 345, or FIN 221 or consent of instructor.

ACE 445 Intermediate Financial and Estate Planning credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ACE/445/)
Covers financial and estate planning philosophies, techniques, and procedures. Students will utilize case studies and problem-solving activities to construct financial plans for individuals and families in various life cycle stages and family structures. 4 undergraduate hours. 4 graduate hours. Prerequisite: ACE 240, ECON 302, and junior standing or consent of instructor; FIN 230 or ACE 398 (RM) are recommended.

ACE 446 Modeling App's Finan Plan credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ACE/446/)
Improves ability to make effective financial plans and decisions. Involves development of decision tools that are applied to "real world" financial data sets and planning/decision-making circumstances. Topics include applied data management techniques (designing queries/storable forms), financial statement analysis, numeric optimization tools, leverage assessment, incorporating risk in decisions, capital budgeting and time value of money, term structure of interest rates, and currency exchange. 2 undergraduate hours. 2 graduate hours. Prerequisite: One of ACE 240, ACE 345, FIN 221; or consent of instructor and advanced knowledge of spreadsheet software equivalent to the coverage of ACE 360.

ACE 447 Case Stud Agr Accy & Fin Plan credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACE/447/)
Capstone course for agricultural accounting, agricultural finance, and financial planning; applies business and planning concepts and tools to real-world situations; emphasizes group decision making; industry professions participate in the learning experience. 3 undergraduate hours. 3 graduate hours. Prerequisite: One of ACCY 301, ACE 444, FIN 300; or consent of instructor.

ACE 448 Rural Real Estate Appraisal credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ACE/448/)
Valuation methods and value bases of rural real estate; legal aspects of property rights, appraisal theory and procedures, condemnation appraisal, characteristics of the rural land market, soil identification and productivity, and other legal, economic, agronomic, and engineering aspects of real estate valuation. Laboratory field trips, including a practice appraisal; see Class Schedule for approximate cost. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: ACE 232 or ACE 360; NRES 201.

ACE 449 Retirement & Benefit Planning credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ACE/449/)
Employee benefit and retirement planning, including employer-sponsored or individually managed options, with particular attention to determining benefit and retirement needs and managing risks in specific planning situations. 3 undergraduate hours. 3 or 4 graduate hours. Credit is not given for both ACE 449 and FIN 434. Prerequisite: ACE 240, ACE 345, or consent of instructor.

ACE 451 Agriculture in Intl Dev credit: 3 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ACE/451/)
Economics of agricultural development and the relationships between agriculture and other sectors of the economy in developing nations; agricultural productivity and levels of living in the less developed areas of the world; and studies of agricultural development in different world regions including Africa, Asia, and Latin America. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: ECON 302 or consent of instructor.

ACE 452 The Latin American Economies credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ACE/452/)
Same as ECON 452. See ECON 452.

ACE 454 Econ Dev of Tropical Africa credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ACE/454/)
Types of African economies and growth of the exchange economy; development of natural resources, industry, trade, finance, and education; analysis of economic integration, governmental planning, and development projects; and demographic, land tenure, and institutional influences on development. 3 undergraduate hours. 2 to 4 graduate hours. Prerequisite: ECON 302 or consent of instructor.

ACE 455 International Trade in Food and Agriculture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACE/455/)
Economic theory used to analyze trends and patterns of international trade in major agricultural commodities and to understand interaction between economic development, policy, and trade; welfare implications of policies affecting production, consumption, and trade; implications of protectionism, free trade, regional trade blocs, and multilateral trade liberalization, and the role for international trade institutions. 3 undergraduate hours. 3 graduate hours. Prerequisite: ACE 300 or equivalent, or consent of instructor.

ACE 456 Agr and Food Policies credit: 3 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ACE/456/)
Analysis of agricultural and food policies and programs and their effects on producers and consumers of agricultural products. Formulation of agricultural and food policies are examined with an emphasis on historical and current economic problems affecting agriculture and rural America. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: ECON 302 or consent of instructor.

ACE 471 Consumer Economic Policy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACE/471/)
Analysis of choice-making, buying, using, and disposing of consumer goods by families, social policy Perspectives considered. 3 undergraduate hours. No graduate credit. Prerequisite: ACE 100 or equivalent and junior standing.

ACE 474 Economics of Consumption credit: 3 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ACE/474/)
Concepts, theories, and methods for analysis of the micro and macro aspects of consumption; includes standards and content of consumption and description of consumption patterns and trends in the USA and selected other countries. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: ACE 300 or consent of instructor; a course in statistics. Restricted to students with junior standing.

ACE 476 Behavioral Economics and Financial Decision Making credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ACE/476/)
Uses applied economics and finance coupled with insights from psychology to better understand human behavior and decision making. Application of core behavioral economic concepts and interventions to address pressing economic and financial challenges. 3 undergraduate hours. 4 graduate hours. Prerequisite: ECON 302 or consent of instructor; a course in statistics; senior standing.

ACE 496 Practicum credit: 4 to 12 Hours. (https://courses.illinois.edu/schedule/terms/ACE/496/)
Cooperatively supervised field experience in management and administration in a textile marketing business. Only four hours may be applied to the total required for a graduate degree. At the undergraduate level, up to four hours may be counted toward the hours required in Agricultural and Consumer Economics. 4 to 12 undergraduate hours. 4 to 12 graduate hours.Approved for both letter and S/U grading. Prerequisite: Consent of instructor. Not available to students on probation.

ACE 499 Seminar credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ACE/499/)
Group discussion or an experimental course on a special topic in agricultural and consumer economics. 1 to 4 undergraduate hours. 1 to 4 graduate hours. Approved for Letter and S/U grading. May be repeated in the same semester to 4 hours, or subsequent terms to a maximum of 12 hours as topics vary.

ACE 500 Applied Economic Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ACE/500/)
Provides an understanding of theory of the firm, consumer economics and various market models necessary to conduct applied professional economic research with special emphasis on applications relevant to agricultural, consumer, development, and resource economics. Multivariate calculus and optimization methods are used.

ACE 501 Risk and Info: Theory and App credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ACE/501/)
Applications of the theory of economic behavior under uncertainty and asymmetric information. Analysis of individual decision making under uncertainty includes: tests of the expected utility hypothesis; comparative statistics of changes in risk preferences and risk; and moment based models of decision making. Analysis of economic equilibrium under uncertainty and asymmetric information includes tests for complete markets and applications of noncooperative game theory. Prerequisite: Concurrent enrollment in ECON 500 and ECON 506.

ACE 502 Demand/Supply/Firms/Households credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ACE/502/)
Applications of demand and supply theories and applications of firm and household behavior. Topics include demand and supply systems, aggregation and separability, dynamics, formation and boundaries of the firm, household decision making, intrahousehold allocation, allocation of time, human capital, and hedonics. Same as ECON 553. Prerequisite: ECON 500 and ACE 501.

ACE 503 Equilibrium and Welfare Econ credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ACE/503/)
Provides a theoretical and applied treatment of economic equilibrium and the consequences of displacement of equilibrium for the welfare levels of economic agents. Displacement of equilibrium will be shown to be brought about by changes in government policy, technology, and consumer preferences. Welfare measures under partial equilibrium, general equilibrium, and multi-market models will be presented. Includes various applications of welfare economics in the analysis of policy and technological change. Prerequisite: ECON 500 and at least two semesters of college calculus.

ACE 510 Adv Natural Resource Economics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ACE/510/)
Economic theory is used to examine the allocation of renewable and efficiency issues that arise from natural resource policy and management issues. Same as ECON 548, ENVS 510, and NRES 510. Prerequisite: ECON 302 or equivalent.

ACE 516 Environmental Economics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ACE/516/)
Same as ECON 549. See ECON 549.

ACE 520 Time Series Econometrics for Price Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ACE/520/)
Examination of selected economic problems in marketing agricultural products and relevant theory and empirical methods for analyzing and interpreting research results. Topics include: operational efficiency in marketing firms and industries; efficient allocation over space, form, and time; price making institutions; and research in demand stimulation and selected issues in trade. Prerequisite: ACE 562 and ACE 563, and ECON 500; or equivalent.

ACE 527 Advanced Price Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ACE/527/)
Study of methods used to analyze factors affecting agricultural prices; analysis of agricultural prices and price movements with respect to time, space, and form; and examination of methods of price forecasting and techniques of time series analysis. Prerequisite: ACE 562 or ECON 507 and ECON 500; or equivalent.

ACE 528 Research in Futures Markets credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ACE/528/)
Research literature on commodity futures and options markets, both theoretical and empirical; topics include: supply of storage, basis models, theory of the firm and hedging under uncertainty, optimal hedging, speculative returns, market performance, pricing efficiency and option pricing. Prerequisite: ECON 500 or equivalent.

ACE 530 Microeconometrics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ACE/530/)
Applied micro-econometrics concentrating on cross section data, panel data, and treatment effects. Includes methods for estimating treatment effects in the Rubin causal model framework. Emphasis will be placed on econometric procedures relevant for agricultural and applied economists and their implementation in Stata, including Mata. Prerequisite: ECON 506 and ECON 507, or equivalent.

ACE 531 Impact Evaluation credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ACE/531/)
The problem of identification. Methods for impact evaluation, including randomized field experiments, propensity score matching, differences in differences, instrumental variables, and regression discontinuity. Includes exercises using the econometric software program STATA. Prerequisite: ACE 500 or ECON 500 or equivalent.

ACE 532 Spatial Econometrics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ACE/532/)
This course provides the statistical and econometric techniques required for spatial analysis and appropriate modeling of cross-sectional (and panel) datasets. While spatial statistics allow the students to identify the two spatial effects commonly found in geocoded samples (spatial autocorrelation and spatial heterogeneity), spatial econometrics is especially geared towards including these effects in a regression model. An important aspect of the course is to gain hands-on experience in applying the appropriate techniques and using state-of-the-art software (such as the spatial econometric toolboxes available in R). 4 graduate hours. No professional credit. Prerequisite: ACE 562, ACE 564, ECON 535, or the equivalent. Graduate students only.

ACE 542 Advanced Agricultural Finance credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ACE/542/)
Theory of financial decision making as applied to farms and firms related to agriculture. Topics include asset pricing models, financial markets, capital structure, farmland control, term structure of interest rates, risk management and credit evaluation. Prerequisite: ECON 500, calculus, and mathematical statistics, or equivalent; at least one course in finance strongly recommended; or consent of instructor.

ACE 552 Regional Development Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ACE/552/)
Same as UP 552. See UP 552.

ACE 555 Economic Impact Analysis credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ACE/555/)
Examines the theories and limitations of input-output models, sources and weaknesses of the data, and validity of selected impact studies by researchers in universities, government, and the private sector. Combining economic theory, county-level data, and state-of-the-art software, students build an input-output model and carry out a professional impact study. Students pick their topics and regions, think through the economics of a scenario, figure out how to make the scenario mesh with the peculiar economic logic of the input-output model, and complete a regional impact study with a sound knowledge of the inherent theoretical and data issues. Same as UP 555.

ACE 556 Agr Policy and Political Econ credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ACE/556/)
Economic theory is used to study both the effects and the causes of public policies that influence agricultural industries, consumers, and taxpayers. Neoclassical models of government intervention are used to study the welfare effects of income redistribution and stabilization policies and macroeconomic policies as they affect agriculture. Formal models of political economy and public choice are used to analyze the underlying causes of public policy. Emphasis is placed on the political power of interest groups as an explanation of public policy decisions. Prerequisite: ECON 500 or equivalent and ACE 502 and ACE 503.

ACE 557 Food, Poverty and Development credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ACE/557/)
Economic theory and empirical analyses are used to study economic development, emphasizing the structural transformation of an economy, poverty alleviation among households, improvement in food security and public policies to support those processes. Topics include poverty measurement, poverty dynamics, growth theory, and impact evaluation. Special attention is paid to the role of the agricultural sector and rural development. 2 graduate hours. No professional credit. Prerequisite: ACE 500 or ACE 501 or ECON 500 and basic econometrics.

ACE 559 Food, Trade and Development credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ACE/559/)
Economic theory and empirical analyses are used to study international trade, emphasizing food trade, agricultural policy and international development. Topics include theoretical models of international trade, regional agreements, and food trade. Special attention is given to the impact of trade in developing countries with large agricultural sectors and to issues relating to trade in food products. Prerequisites: ACE 500 or ACE 501 or ECON 500 and basic econometrics.

ACE 561 Adv Res and Scholarly Comm credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ACE/561/)
Seminar intended for Ph.D. students who have completed written preliminary examinations. Develops a comprehensive understanding of the research process. Discussions include identification of research topics, structure of research proposals, review of literature, effective communication, management of research activities, and contributions to scholarly debate. Prerequisite: Consent of instructor.

ACE 562 Applied Regression Models I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ACE/562/)
Application of simple regression methods to problems in agricultural and consumer economics with emphasis on foundational probability, random variable, and distribution concepts, development of the simple, two-variable regression model; estimation of model parameters; hypothesis testing; and prediction. Prerequisite: ACE 261 or equivalent; one of MATH 220, MATH 221, MATH 234.

ACE 563 Math Program App Econ I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ACE/563/)
Application of mathematical programming methods to discrete models in agricultural economics; Kuhn-Tucker theorem, Lagrange multipliers, duality, simplex method as applied to linear and quadratic programming, and input-output analysis models in agriculture. Prerequisite: MATH 124; one of MATH 220, MATH 221, MATH 234.

ACE 564 Applied Regression Models II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ACE/564/)
Application of multiple regression methods to problems in agricultural and consumer economics with emphasis on extensions to the simple, two-variable regression model, development of the multiple regression model; and problems created by violations of basic model assumptions. Prerequisite: ACE 562 or equivalent.

ACE 566 Mathematics for Applied Econ credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACE/566/)
Applications of concepts of linear algebra, calculus, and multivariate optimization to equilibrium analysis, comparative statistics, and other topics in agricultural and consumer economics.

ACE 567 Math Program App Econ II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ACE/567/)
Advanced mathematical programming methods with particular emphasis on applications in agricultural and consumer economics. Covers nonlinear programming, sector modeling, risk modeling, and methodological issues in mathematical programming modeling of agricultural systems. Prerequisite: ACE 563 or equivalent.

ACE 569 Career Development for PhDs credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/ACE/569/)
This course is intended to help doctoral candidates transition into careers in or out of academia. The class covers job market processes and strategies, presentation skills, teaching philosophies, and development of research trajectories. Approved for S/U grading only. Prerequisite: ACE 561.

ACE 571 Household Economics credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ACE/571/)
Discussion of current topics and review of the literature in household economics. Relevant topics include marriage, divorce, intergenerational transfers, investment in children, migration. Prerequisite: ECON 500 or equivalent.

ACE 591 Independent Study credit: 0 to 8 Hours. (https://courses.illinois.edu/schedule/terms/ACE/591/)
Individual research work under the supervision of an appropriate member of the faculty. Approved for both letter and S/U grading. May be repeated to a maximum of 8 hours if topics vary.

ACE 592 Special Topics credit: 0 to 8 Hours. (https://courses.illinois.edu/schedule/terms/ACE/592/)
Group instruction on a special topic under the direction of one or more members of the faculty. Approved for both letter and S/U grading. May be repeated in a semester to a maximum of 8 hours. May be repeated to a maximum of 24 total hours, if topics vary.

ACE 594 Seminars and Workshops credit: 0 to 8 Hours. (https://courses.illinois.edu/schedule/terms/ACE/594/)
Participation in a seminar or workshop with other graduate students and faculty members. Approved for both letter and S/U grading. May be repeated.

ACE 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/ACE/599/)
Individual research under supervision of members of the graduate teaching faculty in their respective fields. Approved for S/U grading only. May be repeated.

ACES - AGR, CONSUMER, & ENV SCIENCES

ACES Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/ACES/)

Courses

ACES 101 Contemporary Issues in ACES credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ACES/101/)
Study of contemporary issues in the human, food and natural resource systems, and an overview of the role of the College of Agricultural, Consumer and Environmental Sciences and the University of Illinois in these systems. Required of and limited to new freshmen enrolled in the College of ACES.

ACES 102 Intro Sustainable Food Systems credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACES/102/)
An objective approach towards critical systems thinking and towards collaborative analysis across multiple disciplines for the development, production, preparation, consumption, and utilization of food, feed, fiber and energy, while managing the disposal and reuse of byproducts, within complex socioeconomic, ecological and environmental systems. Students will be introduced to the fundamentals of modern crop, livestock, and other agricultural production systems, and consider the future challenges and opportunities in producing enough for a growing world population.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Life Sciences

ACES 179 History of Ag in IL Since 1860 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ACES/179/)
An introduction to the history of agriculture in the rural Midwest with an emphasis on Illinois based on an analysis of the attitudes of indigenous peoples, immigrants, farmers and agribusiness interests toward land, labor, crop selection and production, and technology. The course compares the regional characteristics of the rural Midwest to other U.S. regions, and explores factors that created the American "breadbasket," a region recognized for the commodities, equipment and ideas that it exports to the world.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

ACES 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/ACES/199/)
Experimental course on a special topic in the College of Agricultural, Consumer and Environmental Sciences. Approved for Letter and S/U grading. May be repeated as topics vary.

ACES 200 ACES Transfer Orientation credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/ACES/200/)
Introduction to College of ACES and campus resources for students new to the College of ACES. Required of all off campus transfer students and optional for Inter College Transfer students. First eight weeks course. Approved for S/U grading only.

ACES 293 International Internship credit: 0 to 5 Hours. (https://courses.illinois.edu/schedule/terms/ACES/293/)
Supervised learning experience designed for ACES students registering for an academic term abroad and/or for non-degree exchange students enrolling for an academic term at Illinois. The nature of the experience and the setting in which it takes place must be approved in advance by ACES faculty and by representative(s) of institutions/organizations/agencies that cooperate with the College of ACES in student exchange/study abroad programs. 0 to 3 undergraduate hours. Approved for both letter and S/U grading. May be repeated to a maximum of 10 hours. (Summer Session). Prerequisite: Written consent of ACES Study Abroad Office.

ACES 295 Undergrad Research or Thesis credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ACES/295/)
Individual research, special problems, thesis, development and/or design work under the supervision of an appropriate member of the faculty. May be repeated. Independent Study courses are limited to 12 hours total applying to a degree in ACES. Students may register in more than one section per term. Prerequisite: GPA of 3.0 or above at the time the activity is arranged, and consent of instructor.

ACES 298 International Experience credit: 1 to 9 Hours. (https://courses.illinois.edu/schedule/terms/ACES/298/)
International experience in agricultural, consumer and environmental sciences related areas involving foreign travel and study without enrollment in another institution. Experience must be planned and approved in advance through consultation with a College of Agricultural, Consumer and Environmental Sciences faculty member. Additional fees may apply. See Class Schedule. Approved for Letter and S/U grading. May be repeated to a maximum of 9 hours in separate semesters. Not open to students on probation. Prerequisite: Written consent of ACES Study Abroad Office.

ACES 299 ACES Study Abroad credit: 0 to 18 Hours. (https://courses.illinois.edu/schedule/terms/ACES/299/)
Provides campus credit in the College of Agricultural, Consumer and Environmental Sciences for study at accredited foreign institutions. Final determination of credit granted is made upon the student's successful completion of work. Approved for Letter and S/U grading. May be repeated to a maximum of 36 hours within one calendar year. 0 to 8 undergraduate hours in Summer session. Prerequisite: Consent of major department, college, and Study Abroad Office.

ACES 396 Honors Study Abroad Retrospect credit: 1 or 2 Hours. (https://courses.illinois.edu/schedule/terms/ACES/396/)
Provides James Scholars with an opportunity to earn honors credit based on a full-term international experience in a university approved study abroad program completed during the academic term preceding enrollment in this course. Students complete an honors assignment related to the experience, approved by the instructor in a Memorandum of Understanding. Students need to earn a grade of at least B- on the honors assignment in order to earn honors credit. No more than 12 hours of special problems, research, thesis and/or individual studies may be counted toward a degree. Credit in this course may serve as only one of the honors course needed to meet James Scholar's Honors Requirements. Prerequisite: Consent of instructor. An approved MOU is required prior to enrollment. Current enrollment in the James Scholar Honors Program is required.

ACES 399 Honors Seminar credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/ACES/399/**)**
Designed to promote exposure to, and subsequent critical reflection about a variety of topics relevant to ACES James Scholars. Feature presentations by faculty members on topics of current interest in the agricultural, consumer and environmental sciences. Students engage in the topics by responding to faculty members' presentations through classroom activities, lab tours, stimulating debates, and lively discussions. The writing of a seminar paper rounds out the course. Prerequisite: James Scholars enrolled in the College of ACES with preference given to those with junior or senior standing.

ACES 499 Interdisciplinary ACES Seminar credit: 0 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ACES/499/**)**
Platform for experimental courses on special interdisciplinary topics within the agricultural, consumer and environmental sciences. Designed to provide upper-level undergraduates and graduate students with access to subject offerings of new and developing areas of knowledge across the ACES curricula. 0 to 4 undergraduate hours. 0 to 4 graduate hours. Approved for Letter and S/U grading. May be repeated to a maximum of 8 hours in the same term and 12 hours in separate terms if topics vary. Independent Study courses are limited to 12 hours total applying to a degree in ACES.

ABE - AGRICULTURAL AND BIOLOGICAL ENG

ABE Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/ABE/)

Courses

ABE 100 Intro Agric & Biological Engrg credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/ABE/100/)
Introduction to the engineering profession with career opportunities in the agricultural and biological engineering discipline. Concepts necessary for becoming a successful engineer including time management, design concepts, ethics, and teambuilding. Familiarization with laboratories, computer facilities, internships, and other opportunities. Team design experience. Emphasis on technical communication and problem-solving skills as well as career planning.

ABE 141 ABE Principles: Biological credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ABE/141/)
Principles of biology relevant to agriculture, food, energy, and the environment, including microbiology, biochemistry, genetics, plant and animal systems, and ecosystems. Case studies of engineering applications where these biological principles have been taken into account or leveraged for the purpose of design.

ABE 152 Water in the Global Environment credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ABE/152/)
This course develops a comprehensive understanding and appreciation of water and its impact in a global context. The course emphasizes cultural practices associated with water and its use, especially for regions in non-western cultures. Students will develop critical knowledge of: 1) water availability, water quality, and global challenges; 2) historical perspectives of water use; 3) past, present, and future environmental sustainability in relation to water, food, and energy; and 4) conduct analysis of cultural practices and their sustainability based on water in a global context. Students attend 3-4 field trips related to the course.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West
Nat Sci Tech - Phys Sciences

ABE 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/ABE/199/)
May be repeated to a maximum of 12 hours.

ABE 223 ABE Principles: Machine Syst credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ABE/223/)
Machinery systems for off-road applications: internal combustion engines; fluid power; tractors, and traction; chemical application; grain harvesting. Prerequisite: One of MATH 220, MATH 221, MATH 234.

ABE 224 ABE Principles: Soil & Water credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ABE/224/)
Engineering principles and methods of design and management of natural resources and environmental systems; watershed and hydrologic cycle; infiltration and surveying; runoff and erosion; water quality; non-point source pollution. Prerequisite: One of MATH 220, MATH 221, MATH 234.

ABE 225 ABE Principles: Bioenvironment credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ABE/225/)
Principles of environmental control for biological structures: psychrometrics; mass and heat transfer through buildings; ventilation requirements. Prerequisite: One of MATH 220, MATH 221, MATH 234.

ABE 226 ABE Principles: Bioprocessing credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ABE/226/)
Principles of bioprocess engineering applied to food and agricultural products: material balances; fluid flow; heat and mass transfers; drying; evaporation; fermentation; distillation; process simulation. Prerequisite: One of MATH 220, MATH 221, MATH 234.

ABE 232 Context in International Interventions credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ABE/232/)
This multi-disciplinary course will examine a new approach to infrastructure engineering for alternately developed societies that seeks to counteract the disconnects and differing objectives among project stakeholders that result in lack of infrastructure sustainability and resiliency. Using a case study from Western Africa, the course will consider the impact of globalization, the attitudes of industrialized societies, and the role of place-based knowledge in designing and implementing infrastructure interventions for rural societies. Same as AFST 233.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West
Social Beh Sci - Soc Sci

ABE 341 Transport Processes in ABE credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ABE/341/)
Principles of transport processes involving momentum, heat, and mass as applied to biological systems in agriculture, food, energy, and the environment. Credit is not given for both ABE 341 and CHBE 421. Prerequisite: ABE 223, ABE 224, ABE 225, ABE 226, and PHYS 213.

ABE 361 Off-Road Machine Design credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ABE/361/)
Design and development concepts of agricultural and industrial machines; analysis and synthesis of tillage, planting, harvesting, chemical application, material handling mechanisms, and precision farming tools. Prerequisite: ABE 223 and TAM 212.

ABE 397 Independent Study credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ABE/397/)
Individual research, special problems, thesis, development or design work under the supervision of a member of the faculty. May be repeated to a maximum of 8 hours. Prerequisite: Consent of instructor.

ABE 398 Special Topics credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/ABE/398/)
Subject offerings of new and developing areas of knowledge in agricultural and biological engineering intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. May be repeated in the same or separate term if topics vary to a maximum of 12 hours.

ABE 425 Engrg Measurement Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ABE/425/)
Principles of instrumentation systems, including sensing, signal conditioning, computerized data acquisition, test design, data analysis and synthesis. Additional fees may apply. See Class Schedule. 4 undergraduate hours. 4 graduate hours. Credit is not given for both ABE 425 and ME 360. Prerequisite: ECE 205.

ABE 426 Principles of Mobile Robotics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ABE/426/)
Prepares students in design, navigation, control, and autonomy of aerial and ground robots that operate in harsh, uncertain, and changing field environments. Covers three primary aspects of field robotics: perception (sensing), motion control, and data analytics, and bring everything together through labs involving ground robots and flying unmanned aircraft (drones). Same as ECE 426. 4 undergraduate hours. 4 graduate hours. Prerequisite: MATH 221, MATH 225, and MATH 285, or ABE 415, or ABE 440, IE 300, or STAT 400 or equiv, CS 125 or equiv., or graduate standing.

ABE 430 Project Management credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ABE/430/)
Engineering team effectiveness; project definition; assessing related technologies; marketing and business planning related to engineering; budgeting and financial analyses of engineering projects; safety, ethics and environmental considerations; intellectual property; engineering proposal presentation. Same as TSM 430. 2 undergraduate hours. 2 graduate hours.

ABE 436 Renewable Energy Systems credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ABE/436/)
Renewable energy sources and applications, including solar, geothermal, wind, and biomass. Renewable energy's role in reducing air pollution and global climate change. Capstone project to design a system for converting renewable energy into thermal or electrical energy. 3 undergraduate hours. 4 graduate hours. Credit is not given for both ABE 436 and TSM 438. Prerequisite: PHYS 211.

ABE 440 Applied Statistical Methods I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ABE/440/)
Same as ANSC 440, CPSC 440, FSHN 440, NRES 440, and NUTR 440. See CPSC 440.

ABE 445 Statistical Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ABE/445/)
Same as ANSC 445 and NRES 445. See ANSC 445.

ABE 446 Biological Nanoengineering credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ABE/446/)
Nanodevice design through organization of functional biological components; bio-molecular function and bioconjugation techniques in nanotechnology; modulation of biological systems using nanotechnology; issues related to applying biological nanotechnology in food energy, health, and the environment. 3 undergraduate hours. 4 graduate hours. Prerequisite: MCB 150.

ABE 450 International Water Project I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ABE/450/)
First of two courses that assists an international rural community in establishing a sustainable water system. Serve a developing community effectively by working closely with alumni mentors and professional advisors on conceptual design development. Have the opportunity to travel to Honduras during Winter Break. Open to students in all majors. Same as LAST 440. 3 undergraduate hours. No graduate credit.

ABE 451 International Water Project II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ABE/451/)
Second of two courses that assists an international rural community in establishing a holistic water system. Complete final engineering designs, project funding documents and governance guidance by working closely with alumni mentors and professional advisors. Open to students in all majors. Same as LAST 441. 3 undergraduate hours. No graduate credit. Prerequisite: ABE 450 or instructor approval.

ABE 452 Engineering for Disaster Resilience credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ABE/452/)
A project-based experience designed to engage students in development of resilient food, energy, and water supply chains designs for disaster-prone regions. Students will investigate background factors that provide context for specific disaster-prone regions and viable design solutions. Students will quantify expected engineering reliability to potential solutions. Students will work with local communities, aid organizations, and peer institutions when identifying resilient designs, eventually seeking pathways to implement solutions with partner communities. 3 undergraduate hours. 4 graduate hours. May be repeated one time by undergraduate students if the term project differs from previous term, up to total credit of 6 hr for undergraduate students.

ABE 454 Environmental Soil Physics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ABE/454/)
Provides the theoretical basis for understanding and quantifying the physical, hydrological, geotechnical, and thermal properties of soil in relation to environmental processes. Topics include general soil properties as a porous media, particle size, soil structure and aggregation, water retention and potential, flow in saturated soil, flow in an unsaturated soil, soil temperature and heat flow, soil mechanics, infiltration, and soil-plant-water relations. 3 undergraduate hours. 3 graduate hours. Prerequisite: TAM 335 or NRES 201 or consent of instructor.

ABE 455 Erosion and Sediment Control credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ABE/455/)
Processes, estimation, and control of soil erosion by water, wind and resultant sedimentation. Upland, in-channel, urban, agricultural, disturbed (both military training and mining), and forested environments. Capstone experience in site planning and design. 2 undergraduate hours. 2 graduate hours. Prerequisite: CEE 350 or NRES 401; CEE 380 or NRES 201.

ABE 456 Land & Water Resources Engrg credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ABE/456/)
Hydrology, hydraulics, design, construction and cost estimating of structures for the conservation and quality control of soil and water resources; relationship of topography, soils, crops, climate, and cultural practices in conservation and quality control of soil and water for agriculture. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: Credit or concurrent registration in TAM 335.

ABE 457 NPS Pollution Processes credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ABE/457/)
Principles, concepts, and analysis of processes for nonpoint source pollution involving sediment, inorganic and organic chemicals, and microbial pathogens; hydrologic and pollutant interactions, pollutant fate and transport processes from storm water runoff and percolation; impact of pollutant transport on receiving water and ecosystems. 2 undergraduate hours. 2 graduate hours. Prerequisite: ABE 224 or CEE 350.

ABE 458 NPS Pollution Modeling credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ABE/458/)
Concepts, principles, and application of modeling for assessment and management of agricultural nonpoint source pollution. Modeling of agroecosystems and land use impacts on hydrologic and water quality response of upland catchments. Model selection, calibration, validation, and application for comparative analysis. Case studies in current watershed management issues, with a focus on agricultural waste and nutrient management, using existing field and watershed nonpoint source pollution models. 2 undergraduate hours. 2 graduate hours. Prerequisite: ABE 457.

ABE 459 Drainage and Water Management credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ABE/459/)
Design, construction, performance, and maintenance of agricultural drainage systems to meet both production and water quality objectives. Modeling drainage systems. Principles of conservation drainage. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: Credit or concurrent registration in TAM 335.

ABE 463 Electrohydraulic Systems credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ABE/463/)
Engineering principles of electrohydraulic control systems related to off-road vehicles. Basics of fluid power systems, concepts of electrohydraulic systems and controls, analysis and design of electrohydraulic control systems, and applications of electrohydraulic control. Additional fees may apply. See Class Schedule. 3 undergraduate hours. 3 graduate hours. Prerequisite: ECE 110 or both ECE 205 and ECE 206; ME 310 or TAM 335.

ABE 466 Engineering Off-Road Vehicles credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ABE/466/)
Design and application of off-road vehicles for farm and construction use; thermodynamics of engines; measurement of power and efficiencies; power transmission and traction; chassis mechanics; operator environment. 3 undergraduate hours. 3 graduate hours. Credit is not given for both ABE 466 and TSM 464. Prerequisite: ME 300.

ABE 469 Industry-Linked Design Project credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ABE/469/)
Industry-submitted and sponsored design projects which utilize principles of design, engineering analysis and functional operation of engineering systems. Design teams develop concepts, evaluate alternatives, model and analyze solutions, and build and test a final product. Emphases on communication skills, technical writing, and interaction with industry representatives. 4 undergraduate hours. 4 graduate hours. Prerequisite: One of ABE 361, CHBE 421, TAM 335; or credit or concurrent registration in ME 370.
This course satisfies the General Education Criteria for:
Advanced Composition

ABE 474 Indoor Environmental Control credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ABE/474/)
Analysis of indoor environments and relationship with humans, animals and plants. Interactions between facilities operation and both human comfort and animal plant production. Psychrometrics, occupant health and comfort, structural heat transfer, heating and cooling loads, and energy and mass balances as related to indoor environment, air properties, and ventilation. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: TAM 335, and ME 300 or CHBE 321, or consent of instructor.

ABE 476 Indoor Air Quality Engineering credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ABE/476/)
Principles and applications of indoor air quality. Particle mechanics, gas kinetics, air quality sampling principles and techniques, air cleaning technologies such as filters, cyclones, electrostatic precipitation for indoor environments; ventilation effectiveness for pollutant control. Research or design project. 4 undergraduate hours. 4 graduate hours. Prerequisite: PHYS 213, MATH 285, and TAM 335.

ABE 482 Package Engineering credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ABE/482/)
Same as FSHN 469. See FSHN 469.

ABE 483 Engineering Properties of Food Materials credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ABE/483/)
Physical properties of foods and biological materials; properties relating to equipment design and the sensing and control of food processes; thermal, electromagnetic radiation, rheological, and other mechanical properties. 3 undergraduate hours. 3 graduate hours. Prerequisite: Senior status in engineering or consent of instructor.

ABE 488 Bioprocessing Biomass for Fuel credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ABE/488/)
Engineering and scientific principles governing bioprocessing of biomass for production of ethanol and other fermentation products. Process unit operations; conventional and alternative feed stock materials; recovery of value-added coproducts and other variables involved in producing fuel ethanol; process simulation; economic analysis. 4 undergraduate hours. 4 graduate hours. Prerequisite: ME 200 or CHBE 321. Restricted to students with junior or senior class standing.

ABE 497 Independent Study credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ABE/497/)
Individual research, special problems, thesis, development or design work under the supervision of a member of the faculty. 1 to 4 undergraduate hours. No graduate credit. May be repeated to a maximum of 8 hours. Prerequisite: Consent of instructor.

ABE 498 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ABE/498/)
Subject offerings of new and developing areas of knowledge in agricultural and biological engineering intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated in the same or separate terms if topics vary to a maximum of 16 hours.

ABE 501 Graduate Research I credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/ABE/501/)
Basic research orientation, research methods, presentation skills, laboratory practices, case studies, and professional and ethical conduct.

ABE 502 Graduate Research II credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/ABE/502/)
Research methodology, teaching methods, lecture preparation and delivery, critical review of scientific articles, peer review and publishing, mentoring and peer relationships, time management, and intellectual property.

ABE 526 Autonomous Systems and Robots credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ABE/526/)
The objective of this course is to cover theory and techniques essential for building cyber-physical systems capable of autonomous decision making in the real-world. This course will lay a foundation for theory and techniques in autonomous planning, machine learning, and adaptive sequential decision making. Topics covered include Planning under uncertainty, Bayesian Nonparametric machine learning, Deep learning and Neural Networks, Markov Decision Processes, and Reinforcement Learning. A key emphasis of the course is placed on transition of fundamental aspects of autonomous decision making to application on robotics systems. 4 graduate hours. No professional credit. Prerequisite: MATH 225; MATH 416, or equivalent; STAT 400, MATH 461 or equivalent. An introductory course in machine learning (e.g. CS 446), control (e.g. SE 422), robotics (e.g. ABE 424, ECE 470), OR Artificial Intelligence (CS 440) is required. An introductory software programming course is recommended. Restricted to graduate students in Engineering.

ABE 532 Advanced Contextual Design credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ABE/532/)
Contextual Engineering addresses the loss of infrastructure usability, sustainability, and resiliency in non-industrialized societal settings that often results from disconnects and differing objectives among stakeholders. Using case studies and technical infrastructure designs, the impacts of globalization, Western attitudes, power dynamics, and place-based knowledge are explored and applied to infrastructure design and implementation processes, particularly when serving rural societies. Application of these concepts will then be conducted for specific design efforts associated with the student's own engineering discipline. 4 graduate hours. No professional credit.

ABE 594 Graduate Seminar credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/ABE/594/)
Presentations of thesis research by graduate students; other presentations on teaching or current research issues related to agricultural and biological engineering. Approved for S/U grading only. May be repeated up to a maximum of 6 times.

ABE 597 Independent Study credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ABE/597/)
Individual investigations or studies of any phases of agricultural engineering selected by the student and approved by the advisor and the faculty member who will supervise the study. May be repeated to a maximum of 16 hours. Prerequisite: Consent of instructor.

ABE 598 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ABE/598/)
Subject offerings of new and developing areas of knowledge in agricultural and biological engineering intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. May be repeated in the same or separate terms if topics vary to a maximum of 8 hours.

ABE 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/ABE/599/)
Approved for S/U grading only. May be repeated.

AGCM - AGRICULTURAL COMMUNICATIONS

AGCM Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/AGCM/)

Courses

AGCM 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/AGCM/199/)
An experimental course on a special topic in agricultural leadership, education and communications. May be repeated in the same or separate terms as topics vary to a maximum of 12 hours. Prerequisite: ALEC Program approval required.

AGCM 220 Communicating Agriculture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AGCM/220/)
Skills necessary to communicate complex information about the broad agriculture domain to different audiences. Application of communication theories. Emphasis on essential communication skills, including writing, conducting interviews, planning, and critical evaluation of information sources. Same as ENVS 220 and NRES 220. Prerequisite: Completion of a Composition I course.
This course satisfies the General Education Criteria for:
Advanced Composition

AGCM 230 Agricultural and Environmental Photography credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AGCM/230/)
Application of photojournalism principles and techniques in the communication of topics related to food, agriculture, the environment, energy and community development for print, broadcast and computer-mediated applications. Emphasis on creative and technical aspects of digital photography.

AGCM 250 Visual Principles for Ag Comm credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/AGCM/250/)
This course outlines fundamental design principles and techniques for effective visual communication on print. These principles will be applied in project--magazine pages, logos, brochures, newsletters, posters and signs--to achieve communication objectives. This course provides practical, hands on experience in developing visual presentations about topics related to agriculture, food, fiber, renewable fuel, the environment, and natural resources. Students are introduced to the use of industry-standard desktop publishing software (InDesign, Photoshop, Illustrator).

AGCM 270 Ag Sales and Persuasive Communication credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AGCM/270/)
Sales concepts and persuasive business communication techniques. Role, dynamics, and principles of sales communications related to food, agriculture, and the environment. Sales objectives, market segmentation, prospecting, handling obligations, relationship building, and the nuances of sales communications.

AGCM 315 Emerging Media credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AGCM/315/)
Theories, principles and practices of applying emerging tools, technology, and norms to communicate agriculture to broad audiences. Focus on the strategies and tactics of using new media to communicate food, fuel, fiber, natural resources, health, human nutrition and related topics. Same as ADV 315. Prerequisite: AGCM 220 or ADV 150 or consent of instructor.

AGCM 320 Public Information Campaigns credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AGCM/320/)
Coordinated approach to planning, implementing and evaluating information campaigns in the broad domain of food and agriculture. Students work with groups, agencies and organizations in designing communication campaigns strategies and tactics. Prerequisite: Sophomore standing and Composition I course.
This course satisfies the General Education Criteria for:
Advanced Composition

AGCM 330 Environmental Communications credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AGCM/330/)
Basics of communicating about environmental issues to various audiences, emphasizing communication to lay publics. Gathering information about a current environmental issue, analyzing interests of groups involved, and examining strategies for communicating clearly to different groups. Same as ENVS 330 and NRES 330. Prerequisite: Sophomore standing.

AGCM 398 Undergraduate Seminar credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/AGCM/398/)
Special topics in a field of study directly pertaining to subject matter in agricultural communications. Same as ALEC 398. May be repeated in the same or separate semesters, if topics vary.

AGCM 430 Comm in Env Social Movements credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AGCM/430/)
Examines the interests, values systems and communications strategies of key participants in the environmental movement. Students examine environmental issues and predict possible reactions from key participants in the environmental arena. Same as ENVS 430 and NRES 430. 3 undergraduate hours. 3 graduate hours. Prerequisite: Composition I course.

AGCM 499 Seminar credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/AGCM/499/)
Special topics in agricultural leadership, education or communications. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated in the same or separate semesters, if topics vary. Prerequisite: ALEC Program approval required.

AGED - AGRICULTURAL EDUCATION

AGED Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/AGED/)

Courses

AGED 100 Intro to Ag & Leadership Ed credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/AGED/100/)
Overview of agricultural and leadership education career pathways in school and non-school settings, including extension, corporate and government sectors, and international and industry organizations. Includes overview of certification requirements, professional development, and current issues for agricultural education professionals.

AGED 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/AGED/199/)
An experimental course on a special topic in agricultural leadership, education and communications. May be repeated in the same or separate terms as topics vary to a maximum of 12 hours. Prerequisite: ALEC Program approval required.

AGED 220 Prog Del in Ag & Leadership Ed credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AGED/220/)
Introduces formal and non-formal methods used to deliver education and training in agricultural and leadership education programs. Focuses on types and purposes of agricultural education, program components, principles of teaching and learning, community relationships, and reflective teaching. Technology-supported lab component provides skills needed to develop teaching and training materials.

AGED 250 Observation and Program Analys credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AGED/250/)
Early field experience in agricultural education, including observation and analysis activities in public schools, extension programs, or other selected settings; participation in clinical field experience activities; examination of educational program development and operation, teaching and learning processes, contextual factors in learning, evaluation of student learning; and professionalism. Approximately 45 hours of early field experience will be acquired. Off-campus observation begins the first week of January. Agricultural education programs in both school and non-school settings are examined. Prerequisite: AGED 220; concurrent enrollment in EDPR 203.

AGED 293 Ag Leadership Internship credit: 1 to 6 Hours. (https://courses.illinois.edu/schedule/terms/AGED/293/)
Supervised off-campus experience in a field directly pertaining to subject matter in agricultural leadership education. Approved for S/U grading only. May be repeated in the same or subsequent terms to a maximum of 12 hours.

AGED 295 Independent Study or Research credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/AGED/295/)
Individual research, special problems, thesis, development and/or design work under the supervision of an appropriate member of the faculty. May be repeated in the same or subsequent terms.

AGED 350 Early Field Experience credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AGED/350/)
Supervised experience during the summer months and fall semester including: supervision of students' agricultural experience programs and projects; development of problem-solving and decision-making skills related to use of instructional technologies, management of FFA activities, and supervision of agricultural experiences; review of teacher certification requirements and application for teacher certification; development of online teacher certification portfolio meeting state, UIUC, and program requirements. A minimum of 50 hours or early field observation is required. Prerequisite: AGED 250.

AGED 360 Advanced Leadership Studies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AGED/360/)
Same as LEAD 360. See LEAD 360.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

AGED 396 Honors Research or Thesis credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/AGED/396/)
Individual research, special problems, thesis, development and/or design work under the direction of the Honors advisor. May be repeated in the same or subsequent terms. Prerequisite: Junior standing, admission to the ACES Honors Program.

AGED 410 Grad Early Field Experience credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/AGED/410/)
An introduction to the application of pedagogy through early field experiences in agricultural education. Students participate in eight weeks of instruction and 40 hours of participatory experiences in approved agricultural education programs. Off-campus observation begins the first week of January. Restricted to graduate students in the teacher education option. 2 undergraduate hours. 2 graduate hours. Prerequisite: Concurrent enrollment in EDPR 203.

AGED 420 Curr Design & Instruction credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AGED/420/)
This instructional methodology course provides students the opportunity to analyze the principles of learning and teaching as they influence the academic motivation of learners in formal and non-formal environments within agricultural, food and environmental sciences. Topics include: the understanding and implementation of psychological aspects of learning, planning and development of agricultural courses and curricula, creating teaching plans, managing positive learning environments, evaluating student learning, and the utilization of effective self-reflective teaching behaviors. 3 undergraduate hours. 3 graduate hours. Prerequisite: AGED 220 for majors; consent of instructor for non-majors.

AGED 421 Teaching Strategies in AGED credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AGED/421/)
Synthesis of principles of teaching and learning as they influence educational activities in formal and non-formal environments within agricultural and related sciences. Gives individuals an opportunity to apply the educational concepts covered in AGED 300 or AGED 420. Individuals will design, implement, and evaluate learner-centered approaches in a variety of simulated educational environments. 3 undergraduate hours. 3 graduate hours. Prerequisite: AGED 300 or AGED 420 or graduate standing.

AGED 430 Youth Development Programs credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AGED/430/)
Instruction in the youth development process, including learning; philosophy and purposes of youth development policies, programs, and organizations; relationships to organizational missions; principles and procedures for developing, coordinating, and implementing youth development programs; and examining research and practice in youth-at-risk initiatives. 3 or 4 undergraduate hours. 3 or 4 graduate hours. Prerequisite: AGED 220, or HDFS 105, or PSYC 100.

AGED 450 Program Delivery and Eval credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AGED/450/)
Students complete this course during their twelve-week practice teaching or internship experience. Written assignments will focus on development of teaching plans, program initiation and improvement plans, and actual evaluation studies of agricultural education programs. Instruction will be provided during on-site faculty visits and by cooperating personnel. 4 undergraduate hours. 4 graduate hours. Prerequisite: AGED 420.

AGED 470 Leading Professional Organizations and Communities credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/AGED/470/)
Same as LEAD 470. See LEAD 470.

AGED 490 Adult Learning Principles credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AGED/490/)
Theory and practice of adult learning including: overview of teaching and learning theory related to adults; core adult learning principles; individual and situational learning differences; goals and purposes for learning; and the future of adult learning. 3 undergraduate hours. 4 graduate hours.

AGED 496 Beginning Agriculture Teachers Seminar credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/AGED/496/)
The purpose of this course is to gain knowledge and skills to be an effective agriculture educator. This course is intended for high school agriculture teachers who are entering their first year as an educator. This is a blended course; the majority of the course will take place during the two-day, face-to-face instruction at an off-campus location (16 contact hours), while the remainder of the course will occur through online instruction. No undergraduate credit. 2 graduate hours. Prerequisite: Restricted to students who have completed an undergraduate degree and have accepted a position teaching agriculture in a secondary school in the state of Illinois.

AGED 498 Second Year Agriculture Teacher Seminar credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/AGED/498/)
This course is intended for high school agriculture teachers who are entering their second or third year as an educator. The majority of the two-day face-to-face course (16 contact hours) will occur at an off-campus location in mid-July. The purpose of the course is to provide teachers with an opportunity to reflect on successes and challenges from the previous year, address concerns and/or areas of improvement, and provide teachers with a framework to support their efforts in the upcoming year. Assignments include: strategic planning for officer teams, community involvement, and classroom/shop management, in addition to revising existing curriculum and/or developing new curriculum. No undergraduate credit. 1.00 graduate hours. N/A Prerequisite: Restricted to students who have completed an undergraduate degree and have accepted a position teaching agriculture in a secondary school in the state of Illinois.

AGED 499 Seminar credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/AGED/499/)
Special topics in agricultural education. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated in the same or subsequent terms to a maximum of 12 undergraduate or graduate hours as topics vary.

AGED 500 Special Topics in Ag Education credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/AGED/500/)
Advanced study in selected phases of agricultural education applicable to agricultural educators in schools, community colleges, universities, cooperative extension, agribusiness, and community and governmental agencies. May be repeated in the same and subsequent terms.

AGED 510 Education Program Management credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AGED/510/)
Theoretical and practical approaches to planning, delivering and evaluating programs in agricultural education, with a focus on development of comprehensive educational plans.

AGED 511 Grad Professional Dev in Ag Ed credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/AGED/511/)
Analysis of teaching and learning processes, program improvement strategies, professional development, FFA chapter development, awareness of school law, program management, and discussion of trends and issues in agricultural education.

AGED 520 Teaching College-Level ACES credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/AGED/520/)
Planning, delivering and evaluating effective teaching and learning of college-level agricultural, consumer and environmental sciences; the role of faculty in the governance of higher education in the agricultural sciences. Prerequisite: Master's standing.

AGED 550 Advanced Program Delivery credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/AGED/550/)
Theory and practice of advanced program delivery in non-school settings, including the following: strategic planning; environmental scanning; logic model development; experiential and accelerated learning methodologies; and training and development strategies.

AGED 551 Advanced Program Evaluation credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/AGED/551/)
Theory and practice of advanced program evaluation in non-school settings, including the following: measuring the impact of educational programs; program outcomes and indicators; measuring behavior change, and developing, using, interpreting, and reporting pre-post evaluations, qualitative data, surveys, focus group data, and observational data.

AGED 560 Developmental Leadership and Supervision in Professional Organizations credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AGED/560/)
Contemporary societal needs have created organizations that are flatter, more transparent, more team-oriented, and more responsive to their environment than ever before. At every level within these organizations, effective leadership is required for sustainable success. This course examines the nature of contemporary organizations, along with the leadership and management knowledge and skills necessary for individuals to possess within them. More specifically, the course will cover modern leadership theories, communication and decision-making strategies, cross-cultural competencies, managing change, and assessing leadership success and organizational initiatives. Same as LEAD 560. 4 graduate hours. No professional credit. Prerequisite: Graduate students only.

ALEC - AGRICULTURAL LEADERSHIP, EDUCATION, & COMMUNICATIONS PROGRAM

ALEC Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/ALEC/)

Courses

ALEC 110 Introduction to Agricultural Leadership, Education and Communications credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ALEC/110/)
Provides an introduction to basic leadership, communications, and educational theory. Covers the practical application of theories in professional, educational, and community contexts. Designed as the foundational course underlying the ALEC undergraduate curriculum. No credit given if already completed AGCM 110 or AGED 100.

ALEC 293 Communications Internship credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/ALEC/293/)
Supervised experience in a field directly pertaining to agricultural leadership, education, or communications. Approved for S/U grading only. May be repeated up to 12 hours, if topics vary. Credit is not given for more than a total of 12 hours of Independent Study (IND) courses applying to a degree in ACES. Prerequisite: ALEC Program approval required.

ALEC 294 Research Internship credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ALEC/294/)
Supervised, on-campus, learning experience with faculty engaged in research. Approved for S/U grading only. May be repeated up to 12 hours, if topics vary. Credit is not given for more than a total of 12 hours of Independent Study (IND) courses applying to a degree in ACES. Prerequisite: Sophomore standing.

ALEC 295 Independent Study or Research credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/ALEC/295/)
Individual research, special problems, thesis, development and/or design work under the supervision of an appropriate member of the faculty. May be repeated up to 12 hours, if topics vary. Credit is not given for more than a total of 12 hours of Independent Study (IND) courses applying to a degree in ACES. Prerequisite: ALEC Program and instructor approval required.

ALEC 393 Internship in Agricultural Leadership, Education and Communications credit: 3 or 6 Hours. (https://courses.illinois.edu/schedule/terms/ALEC/393/)
Provides an opportunity to apply principles and theories related to Agricultural Leadership, Education & Communications within the field through meaningful work experiences. Upon completion of the internship experience, the student will be able to incorporate principles and theories from classroom knowledge to real-life work situations that benefit the supporting organization both qualitatively and quantitatively while enhancing the problem-solving abilities of the student. Approved for S/U grading only. May be repeated up to 6 hours in separate terms. Prerequisite: ALEC 110. Restricted to majors only.

ALEC 396 Honors Research or Thesis credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ALEC/396/)
Individual research, special problems, thesis, development and/or design work under the direction of the Honors advisor. May be repeated for up to 6 hours in separate terms. Credit is not given for more than a total of 12 hours of Independent Study (IND) courses applying to a degree in ACES. Prerequisite: Junior standing, admission to the ACES Honors Program.

ALEC 398 Undergraduate Seminar credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/ALEC/398/)
Same as AGCM 398. See AGCM 398.

ALEC 400 Foundations of Agricultural Leadership, Education and Communications credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ALEC/400/)
Comparative examination of the foundations of knowledge formation in agricultural leadership, education and communication, including extension education. Apply leadership, education and communication principles to trends and developments in food, fiber, agricultural and environmental systems. Examine approaches to teaching and learning throughout the careers associated with agricultural leadership, education and communications. 3 undergraduate hours. 3 graduate hours.

ALEC 410 Program Planning, Implementation and Evaluation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ALEC/410/)
Compare and contrast theory and practice of educational program planning, delivery and evaluation for youth and adult audiences in community settings. Incorporate the principles of community needs assessment, logic model development, program implementation and program evaluation into agriculture-related programs. 3 undergraduate hours. 3 graduate hours.

ALEC 451 Professional Development in ALEC credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ALEC/451/)
The purpose of this course is to serve as a professional capstone to the ALEC curriculum. Students will examine their learning over the course of their academic experience and synthesize key components for practical purposes. The main point of the class is to help provide students with practical tools for their professional success. Students will be expected to perform at the highest levels of Bloom's Taxonomy – synthesize, evaluate, and create. 2 undergraduate hours. 2 graduate hours. Prerequisite: Restricted to students with senior standing.

ALEC 499 Seminar credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ALEC/499/)
Special topics in agricultural leadership, education or communications. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated, if topics vary. Prerequisite: ALEC Program approval required.

ALEC 505 Science and Art of Teaching and Learning credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ALEC/505/)
Students will investigate theoretical principles of education and learning; evaluate the roles of emotion and motivation and their impacts on the acquisition and retention of knowledge; and explore psychological and physiological variables that impact learning. Additional topics to examine include: metacognition, fixed and growth mindset, approaches to learning, and specific teaching and learning techniques that predict learner success. 3 graduate hours. No professional credit. Prerequisite: Restricted to Graduate students.

ALEC 540 Volunteer Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ALEC/540/)
Theory and practice of volunteer management including: volunteer demographics; recruitment; selection; orientation; training and development; retention; supervision; motivation; evaluation; legal issues; and rick management. Students will develop a comprehensive volunteer management strategy based on using volunteers in non-profit organizations. 3 graduate hours. No professional credit. Prerequisite: Restricted to graduate students only.

ALEC 545 Research Methods and Design credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ALEC/545/)
Provides foundations for quantitative and qualitative research methodologies and design principles for investigating problems in social and behavioral sciences. Focuses on language of research and evaluation, purposes, validity threats, data collection methods, and critical evaluation of current literature. 3 graduate hours. No professional credit. Prerequisite: ALEC 505.

ALEC 549 Independent Study credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ALEC/549/)
Individual investigation and reporting of research on any phase of agricultural leadership, education or communications selected by the student and approved by the advisor and faculty member who will supervise the study. 1 to 4 graduate hours. No professional credit. May be repeated in the same or subsequent terms to a maximum of 8 hours.

ALEC 595 Capstone Curriculum Project credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ALEC/595/)
Consists of a curriculum development capstone project that includes a needs assessment, literature review, logic model, proposed budget, program evaluations, and instructional manuals for the facilitator(s) and learner(s). Students will plan and design educational program curriculum for adult, high school or youth learners appropriate for either formal classroom or informal developmental settings. 3 graduate hours. No professional credit. Approved for Letter and S/U grading. Prerequisite: ALEC 410 and ALEC 545. Restricted to graduate students only.

ALEC 599 Thesis Research credit: 0 to 8 Hours. (https://courses.illinois.edu/schedule/terms/ALEC/599/)
Individual research in the various areas of agricultural leadership, education, or communications under the supervision of faculty members. 0 to 8 graduate hours. No professional credit. Approved for S/U grading only. May be repeated in separate terms. Prerequisite: ALEC Program approval required.

AFAS - AIR FORCE AEROSPACE STUDIES

AFAS Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/AFAS/)

Courses

AFAS 102 Leadership Laboratory credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/AFAS/102/)
Leadership Laboratory (LLAB) is a dynamic and integrated grouping of leadership developmental activities designed to meet the needs and expectations of prospective Air Force second lieutenants and complements the AFROTC academic program (AFAS 111 - AFAS 342). It is a student planned, organized, and executed practicum conducted under the supervision of the Detachment Commander and operations Flight Commander. Approved for S/U grading only. May be repeated. Prerequisite: Consent of instructor.

AFAS 111 Heritage and Values of the United States Air Force I credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/AFAS/111/)
Heritage and Values of the United States Air Force is a survey course designed to introduce students to the United States Air Force and provides an overview of the basic characteristics, missions, and organization of the Air Force. Prerequisite: Concurrent enrollment in AFAS 102 is required.

AFAS 112 Heritage and Values of the United States Air Force II credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/AFAS/112/)
Heritage and Values of the United States Air Force is a survey course designed to introduce students to the United States Air Force and provides an overview of the basic characteristics, missions, and organization of the Air Force. Prerequisite: AFAS 111 or consent of instructor. Concurrent enrollment in AFAS 102 is required.

AFAS 120 Intro to US Armed Forces credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFAS/120/)
Same as MILS 120 and NS 120. See MILS 120.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil

AFAS 221 Team and Leadership Fundamentals I credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/AFAS/221/)
Team and Leadership Fundamentals focuses on laying the foundation for teams and leadership. The topics include skills that will allow cadets to improve their leadership on a personal level and within a team. The courses will prepare cadets for their field training experience where they will be able to put the concepts learned into practice. The purpose is to instill a leadership mindset and to motivate sophomore students to transition from AFROTC cadet to AFROTC officer candidate. Prerequisite: AFAS 112 or consent of instructor. Concurrent enrollment in AFAS 102 is required.

AFAS 222 Team and Leadership Fundamentals II credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/AFAS/222/)
Team and Leadership Fundamentals focuses on laying the foundation for teams and leadership. The topics include skills that will allow cadets to improve their leadership on a personal level and within a team. The courses will prepare cadets for their field training experience where they will be able to put the concepts learned into practice. The purpose is to instill a leadership mindset and to motivate sophomore students to transition from AFROTC cadet to AFROTC officer candidate. Prerequisite: AFAS 221 or consent of instructor. Concurrent enrollment in AFAS 102 is required.

AFAS 331 Leading People and Effective Communication I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFAS/331/)
Leading People and Effective Communication teaches cadets advanced skills and knowledge in management and leadership. Special emphasis is placed on enhancing leadership skill. Cadets have an opportunity to try out these leadership and management techniques in a supervised environment as juniors and seniors. Prerequisite: AFAS 222 or consent of instructor. Concurrent enrollment in AFAS 102 is required.

AFAS 332 Leading People and Effective Communication II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFAS/332/)
Leading People and Effective Communication teaches cadets advanced skills and knowledge in management and leadership. Special emphasis is placed on enhancing leadership skill. Cadets have an opportunity to try out these leadership and management techniques in a supervised environment as juniors and seniors. Prerequisite: AFAS 331 or consent of instructor. Concurrent enrollment with AFAS 102 is required.

AFAS 341 Nat Sec Afrs/Prep Actv Duty I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFAS/341/)
National Security Affairs/Preparation for Active Duty" is designed for college seniors and gives them the foundation to understand their role as military officers in American society. It is an overview of the complex social and political issues facing the military profession and requires a measure of sophistication commensurate with the senior college level. Requires concurrent enrollment with AFAS 102. Prerequisite: AFAS 332 or consent of instructor.

AFAS 342 Nat Sec Afrs/Prep Actv Duty II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AFAS/342/)
National Security Affairs/Preparation for Active Duty" is designed for college seniors and gives them the foundation to understand their role as military officers in American society. It is an overview of the complex social and political issues facing the military profession and requires a measure of sophistication commensurate with the senior college level. Requires concurrent enrollment with AFAS 102. Prerequisite: AFAS 341 or consent of instructor.

AIS - AMERICAN INDIAN STUDIES

AIS Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/AIS/)

Courses

AIS 101 Intro to Amer Indian Studies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AIS/101/)
Interdisciplinary introduction surveys the stories, histories, and lands of tribal peoples who became known as "American Indians".
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

AIS 102 Contemp Issues in Ind Country credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AIS/102/)
Surveys a variety of topics in contemporary American Indian life. Focusing on the modern experience, topics may include law and politics; lands and environment; education; visual arts; languages and literatures; health; social justice; business; treaties; the sacred; gender; sports; decolonization; comparative tribal, Indian and global indigenous concerns.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - US Minority

AIS 140 Native Religious Traditions credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AIS/140/)
An interdisciplinary survey of native religious traditions, exploring the breadth and depth of spiritual expression among native people in North America. Assigned readings and class discussions cover a variety of important themes including sacred landscapes, mythic narratives, oral histories, communal identities, tribal values, elder teachings, visionary experiences, ceremonial practices, prayer traditions, and trickster wisdom. Students also consider historic encounters with missionary colonialism and contemporary strategies for religious self-determination. Class discussions are supplemented by audiovisual materials and guest speakers.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

AIS 165 Lang & Culture Native North Am credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AIS/165/)
Same as ANTH 165. See ANTH 165.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West

AIS 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/AIS/199/)
May be repeated to a maximum of 6 hours.

AIS 214 American Indian Law & Politics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AIS/214/)
Same as PS 214. See PS 214.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - US Minority

AIS 265 Intro to American Indian Lit credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AIS/265/)
Introduces students to the study of American Indian literature by focusing on texts by contemporary American Indian novelists, poets, and playwrights. Over the course of the semester, students will consider how indigenous aesthetics shape narrative in addition to examining how American Indian authors engage the legacies of colonization and the histories of their tribal communities through their stories. Same as ENGL 265.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - US Minority

AIS 275 Am Indian and Indigenous Film credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AIS/275/)
Introduction to representations of American Indians and Indigenous peoples in film. Reconstructions of American Indians within the Western genre and more recent reconstructions by Native filmmakers will be considered. Other topics may include the development of an indigenous aesthetic; the role of documentaries and nonfiction films in the history of Native and Indigenous film; the role of commerce in the production of Native films. Same as ENGL 275 and MACS 275.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - US Minority

AIS 277 Encounters in Native America credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AIS/277/)
Same as HIST 277. See HIST 277.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

AIS 278 Native American History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AIS/278/)
Same as HIST 278. See HIST 278.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

AIS 280 Intro to Federal Indian Policy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AIS/280/)
Traces the evolution of U.S. federal law as it pertains to American Indian nations. From the doctrine of discovery, through which European nations asserted control over the lands they claimed, to the processes of reorganization and recognition that have shaped contemporary rights and struggles native nations currently face, this class will interrogate how American Indian nations were transformed into "domestic dependent nations".

AIS 285 Indigenous Thinkers credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AIS/285/)
An introduction to the English-language traditions of indigenous intellectuals. Specific topics vary. May be repeated in the same term to a maximum of 6 hours. May be repeated in subsequent terms to a maximum of 9 hours.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

AIS 288 American Indians of Illinois credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AIS/288/)
Same as ANTH 288 and HIST 288. See ANTH 288.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

AIS 291 Independent Study credit: 1 to 6 Hours. (https://courses.illinois.edu/schedule/terms/AIS/291/)
Supervised reading and research in American Indian Studies chosen by the student with instructor approval. Approved for both letter and S/U grading. May be repeated in the same or separate terms to a maximum of 6 hours. Prerequisite: One course in American Indian Studies and consent of instructor.

AIS 295 US Citizenship Comparatively credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AIS/295/)
Same as AAS 215, AFRO 215, GWS 215, and LLS 215. See AAS 215.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

AIS 343 Criminalization and Punishment credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AIS/343/)
Same as AAS 343, AFRO 343, GWS 343, and LLS 343. See LLS 343.

AIS 357 Literatures of the Displaced credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AIS/357/)
Same as AAS 357, ENGL 357, GWS 357, and LLS 357. See LLS 357.

AIS 430 Indigenous Governance credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AIS/430/)
Indigenous peoples have long and rich traditions of governance and political philosophies that have shaped institutions and informed diplomacies amongst each other and with European nations. This course examines the indigenous governance historically and within contemporary contexts with emphasis on the importance of sovereignty within institutions, education, language revitalization, and cultural resurgence. 3 undergraduate hours. 4 graduate hours. Prerequisite: Any 100 or 200-level American Indian Studies course or consent of instructor.

AIS 451 Politics in Children's Lit credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AIS/451/)
Students will revisit classic and popular children's books, applying critical theoretical perspectives to texts with the purpose of examining ideologies behind their creation, publication, review, distribution, and consumption. An emphasis will be placed on texts by and about American Indians. 3 undergraduate hours. 4 graduate hours. Prerequisite: Fulfillment of the Advanced Composition requirement; junior standing or above; or consent of instructor.

AIS 459 Topics in American Indian Lit credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AIS/459/)
Interdisciplinary seminar on special and advanced topics in American Indian and Indigenous Literatures. Same as ENGL 459. 3 undergraduate hours. 4 graduate hours. May be repeated in the same or subsequent terms to a maximum of 6 undergraduate hours or 8 graduate hours. Prerequisite: One year of college literature or consent of instructor.

AIS 461 Politics of Popular Culture credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AIS/461/)
Concerned with interdisciplinary frameworks that allow us to 'read' popular culture as well as with its actual forms and specific artifacts, this course seeks, first, to grasp how popular culture has legitimized the colonization of American Indian peoples and second, to reflect on the ways in which Indians engage popular culture to assert an anti-oppression politics. Same as MACS 461. 3 undergraduate hours. 4 graduate hours. Credit is not given for both AIS 461 and MACS 320 or MDIA 570. Prerequisite: Any 100 or 200-level American Indian Studies course or consent of the instructor.

AIS 481 History of American Indian Education credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AIS/481/)
Students will study various efforts to "civilize" American Indians through US government initiatives and religious churches, as well as educational models developed by tribal entities following passage of the Indian Self-Determination and Education Assistance Act of 1975. Same as EPOL 404 and EPS 481. 3 undergraduate hours. 4 graduate hours.

AIS 490 Adv Topics in Am Ind Studies credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AIS/490/)
3 undergraduate hours. 4 graduate hours. May be repeated to a maximum of 6 undergraduate hours or 8 graduate hours. Prerequisite: Any course in American Indian Studies; junior standing; or consent of instructor.

AIS 491 Readings in Am Ind Studies credit: 1 to 8 Hours. (https://courses.illinois.edu/schedule/terms/AIS/491/)
Individual guidance in intensive readings in the theories and practices of the field of American Indian Studies. 1 to 8 undergraduate hours. 1 to 8 graduate hours. May be repeated in the same or subsequent terms to a maximum of 6 undergraduate hours or 8 graduate hours. Prerequisite: Graduate standing or one course in AIS and consent of instructor.

AIS 501 Indigenous Critical Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AIS/501/)
Explores the distinctive form of inquiry which critiques settler-colonial ideas and institutions at the interdisciplinary crossroads where American Indian and Indigenous Studies engages other theories including but not limited to feminist theory, critical race theory, semiotics and phenomenology, psychoanalysis, and the postcolonial theory (to name only some of the many possibilities). Prerequisite: Graduate standing or consent of the instructor.

AIS 502 Indigenous Decolonial Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AIS/502/)
Introduction for graduate students to key critical scholars and prevailing and emerging models in research methods that seek ethical knowledge production in American Indian and/or Indigenous Studies, including ethnography, archival research, interviews, and translation (to name only some of the myriad options). Focus is on assisting students to initiate, develop, clarify, and justify the research methods they adopt and practice to reach their research goals. Prerequisite: AIS 501 or consent of the instructor.

AIS 503 Seminar in Indigenous Studies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AIS/503/)
Research and writing seminar that offers special topics based on current research questions and concerns in American Indian and indigenous Studies and opportunities for graduate students who have made considerable progress in defining a research project to advance the research and writing to the next stage (e.g., to include as a thesis or dissertation chapter or for publication). Topics vary. May be repeated as topic varies in subsequent semesters to a maximum of 8 hours. Prerequisite: AIS 501 and AIS 502, or consent of the instructor.

AIS 590 Am Indian Studies Grad Seminar credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/AIS/590/**)**
May be repeated up to a maximum of 8 hours. Prerequisite: Graduate standing or consent of instructor.

AIS 591 Problems in Indigenous Studies credit: 1 to 8 Hours. **(**https://courses.illinois.edu/schedule/terms/AIS/591/**)**
Offers flexible, rigorous, and wide-ranging opportunities for interdisciplinary graduate-level work in Indigenous (including American Indians) Studies; thus, depending on student needs and instructor interests, the course may be negotiated as a directed reading, directed research, supervised fieldwork, supervised teaching, project, or thesis supervision. May be repeated in the same or subsequent semesters to a maximum of 8 hours. Prerequisite: Consent of instructor.

ANSC - ANIMAL SCIENCES

ANSC Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/ANSC/)

Courses

ANSC 100 Intro to Animal Sciences credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/100/)
Survey of beef and dairy cattle, companion animals, horses, poultry, sheep, and swine. Includes the importance of product technology and the basic principles of nutrition, genetics, physiology, and behavior as they apply to breeding, selection, feeding, and management. Lecture and lab.

ANSC 101 Contemporary Animal Issues credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/101/)
Provides an understanding of fundamental issues impacting the care and use of animals, and their role in human welfare. Topics addressed include the fundamental principles of animal domestication and its impact on humans, animal welfare and care, animal-environmental interactions, food safety, diet and health issues, economic and societal issues facing the world today, and bioethical issues.

ANSC 103 Working With Farm Animals credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/103/)
Introductory course that will provide novice students with the fundamentals of animal-animal and animal-human interactions for domestic farm animals. Emphasizes hands-on experiences to develop a background in the concepts and practice of recognizing and understanding the animal's physiology and behavior, animal well being, and animal responses to human interactions. Prerequisite: ANSC 100.

ANSC 110 Life With Animals and Biotech credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/110/)
Lecture/discussion course that will provide students an overview of biotechnology and animals. Focuses on biotechnological achievements involving animals and how they influence the global development of agriculture, medicine, and industry. Topics will be covered from scientific, discovery, historical, social, and political perspectives. Credit is not given to Animal Science majors.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Life Sciences

ANSC 199 Undergraduate Open Seminar credit: 0 to 5 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/199/)
An experimental course on a special topic in animal sciences. Approved for Letter and S/U grading. May be repeated, if topics vary.

ANSC 201 Principles of Dairy Production credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/201/)
Surveys the dairy industry; examines principles of breeding, selection, reproduction, feeding, milking and management of dairy cattle. Prerequisite: ANSC 100.

ANSC 204 Intro Dairy Cattle Evaluation credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/204/)
Evaluation of physical traits of dairy cattle in relation to economic value and genetic improvement; sire selection, mating systems, and genetic merit for dairy cattle. Field trip required. Prerequisite: ANSC 100 or consent of instructor.

ANSC 205 World Animal Resources credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/205/)
Examination of the world's animals, domesticated and wild, and their uses in various climatic, economic and cultural contexts. Exploration of their contemporary management and their future prospects. Provides background for international experiences, such as ACES 298 and ACES 299. Prerequisite: Completion of the campus Composition I general education requirement.
This course satisfies the General Education Criteria for:
Advanced Composition

ANSC 206 Horse Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/206/)
Focus on the principles of managing horses from birth through breeding; topics include reproductive physiology, breeding management, nutrition, diseases, parasites, herd health programs, genetics, facility design and exercise physiology.

ANSC 207 The Science of Pets and How to Care for Them credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/207/)
An introduction to companion animal biology through consideration of the physical structure, nutrition, behavior, and reproduction of animal species most commonly kept as companions. The basic information is applied to discussion of basic preventive health care. Course content is largely focused on cats and dogs, although other mammals, birds and reptiles will be briefly considered. Legal and economic issues, and ethical considerations associated with companion animals are also incorporated into the course discussion. Credit is not given for both ANSC 207 and ANSC 307.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Life Sciences

ANSC 210 Grilling and BBQ Science credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/210/)
This course will focus on food preparation and safety, product quality, correct cooking methods, endpoint temperatures, and other general grilling-related topics. The objective is to expand student knowledge on how to utilize different cuts of meat and other products to produce meals. Students will work in groups to prepare a dish with a specific product assigned to them and present their results to the class. Grills and cooking equipment will be provided. Additional fees may apply. See Class Schedule.

ANSC 211 Breeding Animal Evaluation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/211/)
Application of current scientific tools, methods, and performance programs available to livestock breeders for improving beef cattle, swine, and sheep; emphasis on the changing nature of modern breeds of livestock as influenced by selection, economics, and consumer and market trends. Course requires visits (including weekends) to farms, related companies, and events to observe the latest techniques and scientific principles associated with livestock selection and evaluation. Students are responsible for personal expenses on the field trips. Prerequisite: Junior standing.

ANSC 215 Introduction to Animal Evaluation credit: 1 or 2 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/215/)
The objective of each section is to train students on industry evaluation techniques of animals and/or their by-products. Additionally, students will examine different industry production styles, selection for improvements, and end product marketability. This course is divided into sections that focus on evaluation of animals or animal by-products (meat or dairy) and will develop skills of basic evaluation associated with each section. Travel to production facilities may occur based on the section. May be repeated in separate semesters, if topics vary to a maximum of 6 credit hours. For Animal Science majors, only one instance (2 credit hours) taken in this course will count as an Applied Science credit towards their degree requirements. Prerequisite: Restricted to sophomore through senior standing required. Transfer students allowed. Freshman are not allowed to enroll in this course.

ANSC 219 Meat Technology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/219/)
Student participation in the transformation of live animals through harvest and carcass fabrication into food products for human consumption; includes laboratory. Purchase of personal equipment is required.

ANSC 221 Cells, Metabolism and Genetics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/221/)
Provides an introductory background in basic aspects of cell biology, physiology, and genetics. Topics addressed include cell structure, cell organelles, and different types of cells, protein synthesis and gene expression, chromosome structure, basic mechanisms of chromosome replication, basic principles of quantitative and population genetics, and an introduction to genomics and proteomics. Prerequisite: ANSC 100, CHEM 102 and 103 or concurrent enrollment.

ANSC 222 Anatomy and Physiology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/222/)
Provides an introductory background in basic and fundamental principles of animal anatomy and physiology. The major organ systems (muscle, skeletal, neural, endocrine, cardiovascular, respiratory, and renal) will be presented with an emphasis on comparative anatomy, integrated function, and specific homeostatic mechanisms. Prerequisite: ANSC 100.

ANSC 223 Animal Nutrition credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/223/)
Provides an introductory background in the fundamental principles of animal nutrition and how nutrition impacts animal well-being and performance. Students will develop comprehensive knowledge in gastrointestinal and digestive anatomy and physiology, nutrient function and requirements, and energy utilization in various species. Specific topics include different classes and properties of nutrients, differences in digestive mechanisms in monogastric vs. ruminant animals, and how carbohydrates, lipids, proteins, minerals, and vitamins contribute to the nutrient requirements of animals. Prerequisite: ANSC 100, ANSC 221, and CHEM 104 and CHEM 105.

ANSC 224 Animal Reproduction and Growth credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/224/)
Study of the basic principles of reproduction, lactation, growth, and hormonal regulation in animals as well as humans, including cell growth and differentiation, processes of reproduction, biotechnological methods of reproductive control, manipulation, performance enhancement of lactation and growth. Prerequisite: ANSC 100, ANSC 221.

ANSC 231 Evolution of Sex credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/231/)
Focuses on the reproductive strategies and reproductive life cycles of animal species beginning with lower invertebrates, then to insects, amphibians, reptiles, birds and mammals. Discussion will focus on how the ancient environment influenced reproductive strategies of early animals and how animal species are adapting to the environmental challenges they face today.

ANSC 250 Companion Animals in Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/250/)
Explores the current and historical functions and influences of companion animals in American society. Topics include the evolution of animal protection, the use of assistance and service animals, and the growth of the pet supply industry. Controversial issues which are of current concern to society will also be examined.
This course satisfies the General Education Criteria for:
Cultural Studies - Western

ANSC 251 Epidemics and Infectious Diseases credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/251/)
Introduces students to the major past and present causes of plague in humans as well as agricultural and companion animals. Smallpox, yellow fever, bubonic plague, polio, SARS, AIDS, West Nile encephalitis, Zika, PRRS, PEDV, foot and mouth disease, bovine spongiform encephalopathy, and others will be discussed. The characteristics of each disease, including, mode of transmission, symptoms, duration of illness, and mortality rates will be presented. History and probability of recurrence will also be explored. Prerequisite: Some knowledge in anatomy and physiology may be helpful.

ANSC 255 Animal Ethics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/255/)
This online course explores ethical issues raised by human use of animals. Students will be asked to apply philosophical perspectives to historical and current animal issues such as raising animals for food production, the keeping of pets, management and use of wild animals, use of animals in research, animal breeding and biotechnology, and animal control.

ANSC 256 Horse's Role in Human History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/256/)
Provides an understanding of the crucial roles that horses have played in the development and expansion of human civilization, including how the role of the horse in culture and society has changed throughout history. Topics addressed include an understanding of the evolution and domestication of horses, use of horses for transportation, sport, warfare and power, and the impact of horses on societal issues facing the world today.

ANSC 293 Internship Off Campus credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/293/)
Supervised, off-campus learning experience in an animal-related enterprise. May be repeated to a maximum of 12 hours. No more than 12 hours of special problems, research, thesis and/or individual studies may be counted toward degree in ACES. Prerequisite: Good academic standing; ANSC 100.

ANSC 294 Intern On Campus Practical Exp credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/294/)
Supervised, on-campus learning experience associated with subject matter specific to animal sciences. Approved for Letter and S/U grading. May be repeated to a maximum of 12 hours. No more than 12 hours of special problems, research, thesis and/or individual studies may be counted toward degree in ACES. Prerequisite: Good academic standing; ANSC 100.

ANSC 295 UG Research or Thesis credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/295/)
Individual research in animal sciences. May be repeated in the same or separate terms to a maximum of 12 hours. Independent Study courses are limited to 12 hours total applying to a degree in ACES. Prerequisite: Minimum GPA of 2.5; not open to students on probation; consent of instructor.

ANSC 298 Undergraduate Seminar credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/ANSC/298/)
Presentations and discussion of employment opportunities, departmental research activities, and topics relevant to animal agriculture. Prerequisite: Sophomore standing.

ANSC 299 Animal Mgt Field Studies credit: 1 or 2 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/299/)
Field studies of farms and service industries; discusses and demonstrates management practices on commercial farms. Trip normally taken during spring break. May be repeated up to 5 hours in the same term and 12 hours maximum if topics vary.

ANSC 301 Food Animal Production, Management, and Evaluation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/301/)
Provides an overview of how nutrition, genetics, and environment affect beef cattle, swine, and sheep growth, development, and end-product quality and value. Students get hands-on experience evaluating and determining value of live animals and carcasses. Prerequisite: Credit or concurrent enrollment in ANSC 223 and ANSC 224; or consent of instructor.

ANSC 305 Human Animal Interactions credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/305/)
Animals play a significant role in our society and in the lives of many individuals. This course explores the current and historical interactions of humans with non-human animals in our society from a multidisciplinary approach. Various cultures and historical periods will be examined when discussing these relationships with various non-human animals.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

ANSC 306 Equine Science credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/306/)
Understand and apply current scientific research and principles of equine science to intensive horse production. An in-depth approach to equine reproductive physiology, nutrition, anatomy and exercise physiology will be followed using a combined lecture and laboratory format. Emphasis on current research and hands-on techniques. Prerequisite: ANSC 206, ANSC 222 or equivalent, and credit or concurrent enrollment in ANSC 224 or equivalent; or consent of instructor.

ANSC 307 Companion Animal Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/307/)
This course provides an advanced overview of companion animal biology through consideration of the physical structure, nutrition, behavior, and reproduction of animal species most commonly kept as companions. Course content is applied to discussion of best management practices and basic preventive health care. Course content is largely focused on cats and dogs, although other mammals, birds and reptiles are briefly considered. Legal and economic issues, ethical considerations, and career opportunities associated with companion animals are also incorporated into course discussion. Credit is not given for both ANSC 307 and ANSC 207.

ANSC 309 Meat Production and Marketing credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/309/)
General approach to meat utilization with emphasis on selecting, grading, cutting, and pricing meat for the retail, restaurant, and food service industry. This course includes laboratory and may use field trips to establishments to highlight course concepts.

ANSC 310 Meat Selection and Grading credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/310/)
Study characteristics associated with the value of carcasses, primal and retail cuts from meat animals; emphasize USDA grading and specifications as well as written communication. Field trips to meat packing plants are required.

ANSC 312 Advanced Livestock Evaluation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/312/)
Advanced instruction in the selection of breeding animals of beef, sheep, and swine species and in the evaluation of market animals for slaughter. This course requires visits to farms, related companies, and events to observe the latest techniques and scientific principles associated with livestock selection and evaluation. Prerequisite: ANSC 211 or consent of instructor.

ANSC 313 Horse Appraisal credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/313/)
Advanced course for students interested in improving their performance and conformation evaluation skills; provides exposure to the horse show industry and the career opportunities associated with this facet of the horse industry; students may compete in intercollegiate judging contests.

ANSC 314 Adv Dairy Cattle Evaluation credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/314/)
Advanced instruction in the selection of breeding dairy animals. Involves visits to farms, related companies and events to observe the latest techniques and scientific principles associated with dairy cattle selection and evaluation. Field trips for cattle judging are required. Prerequisite: ANSC 204 or consent of instructor.

ANSC 322 Livestock Feeds and Feeding credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/322/)
Livestock feeds and practical feeding applications for livestock will be addressed. Feed identification and ration formulation will be strongly emphasized. One session of this class will take place at the UIUC Feed Mill. Prerequisite: ANSC 223.

ANSC 331 Biology of Reproduction credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/331/)
Study of comparative reproduction, lactation, behavior, reproductive strategies, assisted reproduction, and reproductive diseases in domestic and wild animals including mammals, birds, reptiles, and amphibians. Prerequisite: Sophomore standing; IB 104 or one introductory level biology course.

ANSC 350 Cellular Metabolism in Animals credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/350/)
Principles and regulation of cellular metabolism in animals, emphasizing energy derivation and its relationship to domestic animal and food production. Prerequisite: CHEM 104, CHEM 105, and ANSC 221 or equivalent.

ANSC 360 Technology and Management: The Basics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/360/)
Overview of agricultural systems' problems and application of different tools and sensors on problem-solving and efficient systems' design.

ANSC 363 Behavior of Domestic Animals credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/363/)
Introduction to concepts of animal behavior with emphasis on domestic animals; lecture and lab. Prerequisite: ANSC 100.

ANSC 366 Animal Behavior credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/366/)
Same as ANTH 342, IB 329, and PSYC 329. See IB 329.

ANSC 370 Companion Animal Policy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/370/)
This course provides an overview of public policy with respect to the use and treatment of companion animals in the United States. Current and alternative policies are considered in terms of their effectiveness in improving or otherwise altering the treatment of companion animals. The influences of animal protection organizations, consumer groups, politicians, the scientific community, and other stakeholders on the development and enforcement of policies are examined in detail. Prerequisite: ANSC 250.

ANSC 396 UG Honors Research or Thesis credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/396/)
Independent study, under the supervision of a faculty member, on a problem of appropriate scope and character that culminates in writing a thesis. Intended primarily for honors students who plan on conducting research or pursuing graduate study. Thesis projects must be supervised by a faculty member and reviewed by a departmental committee. Students must present a satisfactory thesis to receive credit. May be repeated to a maximum of 5 hours in the same semester and to a total maximum of 12 hours. No more than 12 hours of special problems, research, thesis and/or individual studies may be counted toward degree in ACES. Prerequisite: Junior standing, minimum GPA of 3.4; consent of a faculty member.

ANSC 398 UG Experiential Learning credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/398/)
Student-directed experiential learning on special topics directly pertaining to subject matter in animal sciences. Students are required to complete a Memorandum of Agreement prior to enrolling in this course. Additional fees may apply. See Class Schedule. Approved for Letter and S/U grading. May be repeated up to 5 hours per semester, up to a maximum of 12 total hours. Independent Study courses are limited to 12 hours total applying to a degree in ACES.

ANSC 400 Dairy Herd Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/400/)
The technology of modern milk production practices; application of principles in nutrition, physiology, economics, health and hygiene, waste management, and facilities design for efficient dairy herd management systems. 3 undergraduate hours. 3 graduate hours. Prerequisite: ANSC 201 or consent of instructor.

ANSC 401 Beef Production credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/401/)
The principles of the management of beef cattle enterprises. Applies science and technology to the breeding, selection, feeding, health and production of beef and beef products. Emphasizes the use of research findings in decision-making. 3 undergraduate hours. 3 graduate hours. Credit is not given for both ANSC 401 and ANSC 213. Prerequisite: ANSC 223 or equivalent.

ANSC 402 Sheep and Goat Production credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/402/)
The objective of this course is to understand the core principles of sheep and goat production. This course covers topics including common breeds, reproduction, breeding and selection, nutrition, health, fiber production, and management. Some lectures will be at the University farms. Other lectures will include demonstrations of sheep and goats evaluation principles, neonatal lamb and kid health, body condition scoring, and lamb and goat cooking. 3 undergraduate hours. 3 graduate hours. Prerequisite: ANSC 223 or equivalent.

ANSC 403 Pork Production credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/403/)
Applies science and technology to the selection, breeding, feeding, housing and management of swine in a production enterprise; emphasizes use of research findings in decision making. 3 undergraduate hours. 3 graduate hours. Credit is not given for both ANSC 403 and ANSC 213. Prerequisite: ANSC 221 or equivalent; ANSC 223 or equivalent; ANSC 467; and ANSC 224 or equivalent or ANSC 431.

ANSC 404 Poultry Science credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/404/)
Basic principles of genetics, physiology, nutrition, and health of avian species; the application of science and technology in solving the breeding, nutrition, disease, housing, and other management problems encountered in commercial egg and poultry meat production. 3 undergraduate hours. 3 graduate hours.

ANSC 405 Advanced Dairy Management credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/405/)
Advanced dairy management compliments the four other classes offered in the dairy certificate program featuring applied management principles and practices needed in modern dairy production. 2 undergraduate hours. 2 graduate hours. Prerequisite: ANSC 201 or equivalent or consent of instructor.

ANSC 406 Zoo Animal Conservation Sci credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/406/)
Topics related to the conservation, physiology and management of exotic animal species in a captive setting will be addressed. These include conservation biology, population genetics, nutrition, reproduction (natural and assisted), behavior, exhibitry, environmental enrichment and veterinary care. Also covers taxonomy, zoo research, the role of zoos in conservations, and the ethics of maintaining captive animals. 3 undergraduate hours. 3 graduate hours. One Saturday field trip may be required. Prerequisite: ANSC 221 or IB 104, or equivalent.

ANSC 407 Animal Shelter Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/407/)
Basic management concepts related to maintaining the physical and behavioral health of companion animals in a shelter setting will be addressed. Population dynamics and management will be heavily emphasized. Utilizes practical resources available through local and national animal welfare organizations. Two class sessions will take place at the Champaign County Humane Society. One Saturday field trip is required. 3 undergraduate hours. No graduate credit. Prerequisite: ANSC 207 or ANSC 307.

ANSC 409 Meat Science credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/409/)
Fundamental biological principles that influence composition, processing, preservation, and quality of meat and meat products. 3 undergraduate hours. 3 graduate hours. Prerequisite: ANSC 221 or equivalent, ANSC 222 or equivalent, ANSC 223 or equivalent, and ANSC 224 or equivalent.

ANSC 420 Ruminant Nutrition credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/420/)
Physiology and microbiology of digestion in the ruminant, and biochemical pathways of utilization of the absorbed nutrients for productive purposes. 3 undergraduate hours. 3 graduate hours. Prerequisite: ANSC 223 or equivalent.

ANSC 421 Minerals and Vitamins credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/421/)
Nutritional implications and metabolic roles of minerals and vitamins in animal metabolism. The course is designed to instill a basic understanding of vitamin and mineral functions, absorption, metabolism, and excretion. Research methodologies used in the study of vitamin and mineral nutrition will also be discussed. 3 undergraduate hours. 3 graduate hours. Prerequisite: ANSC 223 or equivalent, credit or concurrent registration in MCB 450 or ANSC 350, or consent of instructor.

ANSC 422 Companion Animal Nutrition credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/422/)
Digestive physiology and basic nutritional considerations of companion animals, with primary focus on dogs and cats. Topics discussed include nutritional idiosyncrasies of dogs and cats, the importance of nutrition in various physiological states, and nutrient needs during disease. Information on pet food regulations, common ingredients and formulation, manufacturing methods, and trends in the pet food industry will also be covered. Same as NUTR 422. 3 undergraduate hours. 3 graduate hours. Prerequisite: ANSC 223 or equivalent.

ANSC 423 Advanced Dairy Nutrition credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/423/)
All aspects of dairy cattle nutrition will be discussed including nutrients, phase feeding (milk curve analysis, dry matter intake, and body weight loss), dry and transition cow programs, forage feeding systems, feed delivery approaches, metabolic disorders related to nutrition, and application of various dairy feeding guides. 2 undergraduate hours. 2 graduate hours. Prerequisites: ANSC 201 or equivalent, or consent of instructor.

ANSC 424 Pet Food & Feed Manufacturing credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/424/)
Integrates principles of animal nutrition with various aspects pertaining to pet food and animal feed manufacturing. Topics discussed in this course include processing technologies (e.g., extrusion, retorting, baking) involved in the manufacturing of pet foods and animal feeds, principles of diet formulation and nutritional guidelines, and an overview of regulatory affairs, quality control, and good manufacturing practices. This course includes two field trips to a pet food manufacturing facility and a food and feed ingredient company. Same as NUTR 424. 3 undergraduate hours. 3 graduate hours. Prerequisite: Required - ANSC 223; Recommended - ANSC 322 and ANSC 422.

ANSC 431 Advanced Reproductive Biology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/431/)
Course is an upper-level undergraduate or entry-level graduate course dealing with reproductive biology. It will include the study of basic cell biology of reproduction, lactation, growth and hormone regulation of domestic and non-domestic animals as well as humans, including biotechnology methods of reproduction control, manipulation, performance enhancement of lactation and growth, and disease control. 3 undergraduate hours. 3 graduate hours. Prerequisite: ANSC 224 or equivalent.

ANSC 435 Milk Quality and Udder Health credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/435/)
An advanced course on the physiological basis of mammary growth, milk secretion, and udder health. Topics covered includes mammary gland anatomy, hormonal control, causes and control of mastitis, milk harvesting, and milk quality. The course will be delivered via CD and web-based synchronous discussion. Students should have a basic course in dairy/animal sciences, or physiology, or consent of the instructor before taking this course. 2 undergraduate hours. 2 graduate hours. Prerequisite: ANSC 201 or equivalent or consent of instructor.

ANSC 437 Adv Reproductive Management credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/437/)
The focus of this course is advanced techniques and technologies used to manage production livestock. The course will emphasize advanced and emerging technologies such as embryo transfer, cloning, semen sexing, and ultrasound pregnancy diagnosis and fetal sexing and innovations in existing procedures including artificial insemination, reproductive health management, and estrus synchronization. Implementation of existing and emerging techniques and technologies and research and discovery will be covered for individuals focusing on careers in livestock production, clinical veterinary medicine, education, technical service/support, and research and development. 2 undergraduate hours. 2 graduate hours. Prerequisite: ANSC 331 or equivalent, or consent of instructor.

ANSC 438 Lactation Biology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/438/)
Examines the structural and functional development of the mammary gland, cell biology, and control of milk synthesis, and composition and biochemistry of milk. Compares and analyzes the physiological processes of lactation in mammals. 4 undergraduate hours. 4 graduate hours. Prerequisite: ANSC 224 or equivalent.

ANSC 440 Applied Statistical Methods I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/440/)
Same as ABE 440, CPSC 440, FSHN 440, NRES 440, and NUTR 440. See CPSC 440.

ANSC 441 Human Genetics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/441/)
Same as ANTH 441. See ANTH 441.

ANSC 444 Applied Animal Genetics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/444/)
Principles of heredity and their application to the problems of animal improvement. 3 undergraduate hours. 3 graduate hours.

ANSC 445 Statistical Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/445/)
Design and analysis of experiments: multiple regression, method of fitting constants, factorial experiments with unequal subclass numbers, analysis of covariance, experimental design; computer applications to agricultural experiments using statistical packages. Same as ABE 445 and NRES 445. 4 undergraduate hours. 4 graduate hours. Prerequisite: CPSC 440, or equivalent.

ANSC 446 Population Genetics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/446/)
Conceptual and mathematical approach to the genetics of populations: estimation of allele and genotype frequencies; Hardy-Weinberg principle; measures of genetic diversity and distance; selection; non-random mating; genetic drift; mutation; neutral theory; migration and population subdivision; linkage and recombination; coalescence and phylogenetic inference. Applications to animals, plants, human health and wildlife conservation. Same as IB 416. 3 or 4 undergraduate hours. 3 or 4 graduate hours. Students desiring 4 hours credit do additional work in some area of population genetics. Prerequisite: An introductory genetics course (ANSC 221 or IB 204); one of MATH 220, MATH 221, or MATH 234; or consent of instructor.

ANSC 447 Advanced Genetics and Genomics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/447/)
Current principles and methods in genetics and genomics to better understand genome function, genome evolution, the genetic architecture of complex traits, the genetic basis of human and animal diseases, and animal productivity. To build a strong foundation for the application of novel genomic tools, the course will provide an overview of main concepts in genetics and genomics, including gene-environment interaction and epigenetic modifications. The focus of the course will be on mammals, but novel applications of the new sequencing technologies to other systems will be discussed. In addition to the presentation of scientific concepts and discoveries, the course will include a significant practical component. Students will learn software programs used for genetic mapping and bioinformatics analysis, will review and present scientific papers, and will write a research paper proposing their own experiments. 4 undergraduate hours. 4 graduate hours. Prerequisite: ANSC 221, MCB 150, or IB 150.

ANSC 448 Math Modeling in Life Sciences credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/448/)
Introduction to deterministic and stochastic mathematical models for the life sciences, statistical methods for fitting and testing models, and computer simulation programs. Applications to populations, processes, and products of animals, plants, and humans. Same as IB 487 and STAT 458. 3 or 4 undergraduate hours. 3 or 4 graduate hours. Students desiring 4 hours credit do additional work in some area of mathematical modeling in the life sciences. Prerequisite: IB 104; a course in calculus, and a course in computer sciences; or consent of instructor.

ANSC 449 Biological Modeling credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/449/)
Same as CPSC 448, GEOG 468, and IB 491. See GEOG 468.

ANSC 450 Comparative Immunobiology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/450/)
Advanced concepts of immunophysiology and immunogenetics. Immunophysiology with an emphasis on immune-neuroendocrine interactions. The molecular and cellular basis of self-nonself recognition with an emphasis on the major histocompatibility complex in vertebrates and innate immunity in both vertebrates and invertebrates. The mucosal immune system, which requires a complex interplay between innate and acquired immunity to protect mucosal surfaces exposed to the environment. A working knowledge of genetics and cellular and molecular biology is recommended. Same as MCB 442 and PATH 410. 4 undergraduate hours. 4 graduate hours.

ANSC 451 Microbes and the Anim Indust credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/451/)
Fundamental aspects of the ecology of microorganisms and their biochemical activities related to the degradation of organic matter with emphasis on the gastrointestinal tract of production animals. 3 undergraduate hours. 3 graduate hours. Prerequisite: MCB 100, and ANSC 350, MCB 300, MCB 424, or equivalent.

ANSC 452 Animal Growth and Development credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/452/)
Basic principles of animal growth from early fetal development through typical marketing ages for the major domestic animal species. Topics discussed include molecular and cellular determinants of tissue development and whole animal growth, with coverage of current and future technologies for manipulating growth to enhance animal production. 3 or 4 undergraduate hours. 4 graduate hours. Prerequisite: ANSC 221, ANSC 222, ANSC 223, and ANSC 224.

ANSC 453 Stem Cell Biology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/453/)
The history of stem cell biology as well as up-to-date topics in stem cell research will be presented and discussed with emphasis on experimental approaches. Each student is expected to present research articles relative to each focus area and lead the discussion for the whole class every week. Topics include Molecular Reproductive Biology, Genetics, Physiology of both adult- and embryo-derived stem cells, and their application to Biotechnology and Regenerative Medicine. 3 undergraduate hours. 4 graduate hours. Prerequisite: STAT 100 or equivalent, MCB 316, ANSC 221, ANSC 224, or equivalent; or consent of instructor.

ANSC 454 Neuroimmunology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/454/)
This course provides current information about the fundamental structures and functions of the 'neuroimmune' system. Later sessions address applied and contemporary neuroimmunology through research-focused lectures paired with 'journal club-style' discussions of recent, transformative publications. A working knowledge of basic immunology, anatomy, physiology, and cell and molecular biology is recommended. 3 undergraduate hours. 3 graduate hours. Prerequisite: ANSC 221, ANSC 222, ANSC 450 or equivalents.

ANSC 460 The Secret Life of Animals: How Technology Can Help You Observe It and Take Action credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/460/)
Fundamentals of animal-environment interactions as the basis for Precision Management of Animals (PMA) Systems' design. The course will explore the value added by those technologies, challenges, and opportunities. Students will develop a PMA project to uncover the hidden details of animal production. 3 undergraduate hours. 3 graduate hours. Prerequisite: ANSC 360.

ANSC 467 Applied Animal Ecology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/467/)
An in-depth multidisciplinary approach (physiology, behavior, immunology, neuroscience) to understanding animal-environment interactions (including thermal, air, microbic, photic and behavioral factors) as basis for prescribing practical environments for keeping animals. Courses in physiology, biology, nutrition, microbiology, and genetics are recommended. 3 undergraduate hours. 3 graduate hours. Prerequisite: ANSC 221 or equivalent, ANSC 222 or equivalent, and ANSC 223 or equivalent; or consent of instructor.

ANSC 471 ANSC Leaders & Entrepreneurs credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/471/)
Designed to familiarize students with the tools and skills necessary for successful business operation in industry and entrepreneurial environments including food animal production farms. The overall aim is to explore how enhanced interpersonal and leadership skills facilitate positive relations in business. Students will design a business plan, an entrepreneurial enterprise, that will be read by an external committee of professors, community members, and business owners and evaluated for its viability and creativity. This course is relevant for leaders as well as future entrepreneurs interested in acquiring valuable skills that may be applied to many careers. 3 undergraduate hours. 3 graduate hours. Prerequisites: Any advanced composition course.

ANSC 498 Integrating Animal Sciences credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/498/)
Introduction to the theoretical basis of and skills associated with leadership, inquiry, and collaborative learning. Capstone experience in integrating knowledge, practicing skills, and applying theory through collaborative projects that address current issues in animal sciences. Projects relate to the impact of animals and animal use on humans and societal issues facing the world today. 2 undergraduate hours. No graduate credit. Prerequisite: ANSC 298. Restricted to Animal Sciences major(s). Restricted to students with Senior class standing.

ANSC 499 Seminar credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/499/)
Group discussion or an experimental course on a special topic in animal sciences. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated if topics vary.

ANSC 509 Muscle Biology credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/509/)
Microstructure and chemical composition of muscle tissue; chemistry and biosynthesis of muscle and connective tissue proteins; and biochemical aspects of muscle contraction and rigor mortis. Prerequisite: ANSC 452, ANSC 409, and ANSC 350 or MCB 450.

ANSC 520 Protein and Energy Nutrition credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/520/)
Physiological aspects of protein and amino acids, fats and fatty acids, and carbohydrates as applied to higher animals; includes classification, digestion, absorption, utilization, metabolism, and dietary deficiencies and excesses. Same as NUTR 520. 3 graduate hours. No professional credit. Prerequisite: MCB 450 or equivalent and ANSC 222 or equivalent.

ANSC 521 Regulation of Metabolism credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/521/)
Same as FSHN 511 and NUTR 511. See NUTR 511.

ANSC 522 Advanced Ruminant Nutrition credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/522/)
Physiological and microbiological aspects of ruminant digestion and their influence on the metabolism of the extraruminal tissues; interpretation of nutritive requirements in terms of rumen microbial activities; and evaluation of research techniques. Offered in alternate years. Prerequisite: ANSC 420 or equivalent, and ANSC 350, MCB 450, or equivalent.

ANSC 523 Techniques in Animal Nutrition credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/523/)
Discusses and applies methods of laboratory analysis and animal experimentation frequently used in nutrition research. Same as NUTR 523. 3 graduate hours. No professional credit. Prerequisite: Courses in nutrition, physiology, and biochemistry and consent of instructor.

ANSC 524 Nonruminant Nutrition Concepts credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/524/)
Review of literature in nonruminant nutrition. Emphasizes basic concepts associated with food intake, carbohydrate and fat utilization, protein quality, bioavailability of nutrients, and diet formulation. Same as NUTR 524. 2 graduate hours. No professional credit. Prerequisite: Consent of instructor.

ANSC 525 Topics in Nutrition Research credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/525/)
Same as FSHN 510 and NUTR 510. See NUTR 510.

ANSC 526 Adv Companion Animal Nutrition credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/526/)
Students will learn how to effectively apply advanced concepts related to pet nutrition and disease, including the metabolism within healthy and diseased dogs and cats, how nutrition may aid in preventing and treating disease, and the science behind pet food formulation and production. Students will develop critical-thinking and problem-solving skills by writing and reviewing grant proposals and delivering an oral presentation. Same as NUTR 526. 3 graduate hours. No professional credit. Prerequisite: ANSC 422 or consent of instructor.

ANSC 533 Repro Physiology Lab Methods credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/533/)
Laboratory methods used in reproductive physiology studies, such as blood sampling, large animal surgery, collection of tissues and gametes, embryo recovery, in vitro fertilization, tissue culture, hormone measurements, and directed individual research problems. Same as MCB 533 and CB 533. Prerequisite: Consent of instructor.

ANSC 541 Regression Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/541/)
Same as CPSC 541. See CPSC 541.

ANSC 542 Applied Bioinformatics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/542/)
Introduction to theoretical and applied aspects of bioinformatics. Topics include genomic and proteomic databases, sequence alignment and search algorithms (e.g., BLAST, FASTA, CLUSTAL W), predictive methods in DNA sequence, machine-learning techniques (e.g., Hidden Markov Models) and data mining, biomolecular structure and its prediction, molecular evolution and phylogenetic reconstruction, structural genomics and phylogenomics. Concepts are complemented with hands-on experience with computational biology databases and bioinformatic tools. Same as CPSC 569 and IB 506. Prerequisite: Graduate level status or consent of instructor.

ANSC 543 Bioinformatics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/543/)
Same as CHBE 571, MCB 571, and STAT 530. See CHBE 571.

ANSC 545 Statistical Genomics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/545/)
This course presents current statistical approaches to analyze DNA microarray, quantitative trait loci and proteomic data and understand the genetic architecture of complex phenotypes including health, performance and behavior. DNA microarray studies measure the expression of thousands of genes simultaneously. Quantitative trait loci (QTL) mapping studies detect associations between genomic regions and phenotypes. Results from these and proteomic studies help identify and quantify genes, regulators and products leading to drug, biotechnology and scientific discoveries. Same as CPSC 545 and IB 507. Prerequisite: Graduate level course in Statistics and graduate level course in Molecular Biology.

ANSC 554 Immunobiological Methods credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/554/)
Same as PATH 544. See PATH 544.

ANSC 561 Animal Stress Physiology credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/561/)
Examines animal's physiological and behavioral adaptations to stress. Prerequisite: Consent of the instructor.

ANSC 590 Animal Sciences Seminar credit: 0 to 2 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/590/)
Discussions of current research and literature. Registration for 0 to 2 hours each term is expected for animal sciences graduate students. Same as NUTR 591. 0 to 2 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated to a maximum of 2 hours for Masters students and 4 hours for PhD students.

ANSC 591 Grad Bioinformatics Seminar credit: 0 to 2 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/591/)
Same as CPSC 591 and INFO 591. See INFO 591.

ANSC 592 Adv Topics in Animal Science credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/592/)
Selected topics associated with teaching, research, and production related to the animal industry. Prerequisite: Consent of instructor.

ANSC 593 Res Studies in Animal Sciences credit: 1 to 8 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/593/)
Directed and supervised study of selected research topics in Animal Sciences. 1 to 8 graduate hours. No professional credit. May be repeated in separate terms to a maximum of 8 hours. Prerequisite: Consent of instructor.

ANSC 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/ANSC/599/)
Approved for S/U grading only. May be repeated.

ANTH - ANTHROPOLOGY

ANTH Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/ANTH/)

Courses

ANTH 101 Introduction to Anthropology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/101/)
Anthropology was first envisioned as a holistic discipline, combining insights from the study of human anatomy and evolution, research on material remains of human settlements, and the analysis of social interaction in language and other cultural practices. Following this tradition, this course explores the questions about where humans came from, how societies live and communicate, and why human cultural groups vary.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - Western

ANTH 102 Human Origins and Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/102/)
Explores the origin and evolution of humans with an emphasis on reconstructing and interpreting fossil evidence. It provides an introduction to the fundamentals of biological anthropology and draws on a diverse range of other disciplines that contribute to the study of human evolution – evolutionary biology, population genetics, comparative anatomy, primatology, archaeology, geology and paleoecology. We examine the fossil and artifact record of the last several million years in order to develop an understanding of why we are interesting animals and a somewhat unique species.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

ANTH 103 Anthro in a Changing World credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/103/)
Presents the fundamental areas of anthropological analysis through a series of comparative cases that emphasize social and cultural relations in global contexts. Directs attention to the anthropological history of global empires and colonial states, their cultural exchanges, and contemporary studies of culture, society, and globalization.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West
Social Beh Sci - Soc Sci

ANTH 104 Talking Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/104/)
Introduces you to language-in-use from the perspective of linguistic anthropology. We explore how the language(s) people use creates a specific "worldview" or cultural "common sense" and how this creates and maintains distinct concepts of self, society and culture. We will examine critically the ways in which differences in language and communication work in the USA in relation to power and politics, the media, gender, ethnicity/race, age, class, and identity, with comparisons to other cultures. During the semester you will encounter new information about language structure and use, and learn methods of investigation and analysis used in contemporary linguistic anthropology. Same as LING 104.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

ANTH 105 World Archaeology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/105/)
Using archaeological data, traces our prehistoric heritage and the processes which led to the evolution of agriculture, settled villages, and civilization in many areas of the world. Lectures range from the earliest Homo sapiens to Sumeria, Egypt, Mexico, Peru, and the United States.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil

ANTH 106 Hist Arch Americas credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/106/)
Explores recent theoretical, methodological, and thematic developments in historical archaeology in North America and the Caribbean.
The temporal coverage is 1500-1900 AD. Examines how historical archaeologists use artifactual, documentary and oral history evidence in interpreting the past, and how historical archaeology can contribute to our understanding of the ways by which material culture can be used to study race, class, gender, and ethnic identities. Same as AFRO 106.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

ANTH 108 Religion & Society in West I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/108/)
Same as JS 108, PHIL 108, and REL 108. See REL 108.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

ANTH 109 Religion & Society in West II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/109/)
Same as PHIL 109 and REL 109. See REL 109.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

ANTH 110 Humanizing Science credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/110/)
Scientists are often taught that the skills they need are confined to conducting research in the lab, the field, or the observatory. Yet science is also a human endeavor. If scientists are not taught this lesson, mistakes can be made that have real implications for people's lives, for scientific progress, and for who gets to be a scientist. Therefore this course will introduce 1) a brief history of Western and non-Western science, 2) the influences of social categories and oppressions on scientific advancement, 3) the incentive and reward structure of science, and 4) stories of scientists who have chosen to walk a brave path in the way they conduct and disseminate their research. We will engage in a mix of ethnographic and case study work and bring interpretive and systematic analysis to bear on what it means to be a scientist. The ultimate goal of the course is to provide a substantive, rigorous, and broad introduction to the culture of science, and how that culture affects the people of science, its practice, and its process.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

ANTH 126 Humans and Animals - Food or Friend? credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/126/)
Emphasizes questions of how we can move toward a more sustainable future by focusing on two key realms of human relations with non-human animals: as food, and as "friend," or pets/companion animals. A third category, of animals as "fauna" or avatars of the wild will be touched on briefly. Anchored in humanistic social science, this course also exposes students to the benefits and challenges of interdisciplinary thinking and research, and provides an opportunity for active experiential learning and pubic engagement Prerequisite: This course is intended for first and second year students.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

ANTH 130 History of South Asia credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/130/)
Same as HIST 130. See HIST 130.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

ANTH 143 Biology of Human Behavior credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/143/)
Biological anthropology looks at human biology and behavior through the lens of evolutionary biology. However, as human behavior is complex, it cannot be understood independent of culture or the physical environment. We will explore how biology intersects with environmental factors, including culture, to influence human behavior. Students will learn the skills needed to become scientifically literate, learning their place in nature, the importance of the comparative method in learning about ourselves, and the interaction between biology and culture in understanding the human condition. Topics include evolutionary theory and human evolution, primate origins of human behaviors, social and sexual behaviors, aggression, cooperation, and language, cognition, and culture. Same as HDFS 143.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Life Sciences

ANTH 157 The Archaeology of Illinois credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/157/)
Traces the prehistory of Illinois from the first entry of people into the region more than 13,000 years ago until the 17th century and the beginning of historical records; examines subsequent cultural changes up to the 19th century and statehood from an archaeological and ethnohistorical perspective.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil

ANTH 160 Race and Contemporary Social Issues credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/160/)
Engages with issues such as migration, borders, policing and related topics to examine certain key interventions in the analysis of race in the United States. Introduces students to critical methods and theories in socio-cultural anthropology and allied disciplines in order to grapple with these issues. We will read a variety of material, including ethnographic accounts, scholarly and popular articles, and a work that blurs non-fiction with fiction-writing, as well as screening related films and documentaries. Students will develop a conceptual vocabulary (keywords) to begin analyzing the social problem that race and racism has become in US society.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

ANTH 165 Lang & Culture Native North Am credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/165/)
Develops understanding of the rich diversity of languages and cultures found among Native North American peoples from the perspectives of sociocultural and linguistic anthropology. Same as AIS 165.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West

ANTH 175 Archaeology and Pop Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/175/)
Examines the ways in which the ancient past has been interpreted, appropriated, represented, used, and misused for a variety of reasons by political parties, national governments, and religious and ethnic groups living in the present.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil

ANTH 180 The Archaeology of Death credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/180/)
Cross-cultural introduction to the celebration of death across time and space. Examines the anthropological and archaeological literature on death, particularly in terms of death ritual and burial practices. Students study popular films on death in different cultures.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - Western

ANTH 182 Latin American Cultures credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/182/)
Latin America considered as a theater of conflict and cultural experimentation among Native American, African, and Iberian peoples; their survival and transformation as reported in selected ethnographies and eyewitness sources; and some modern theories and controversies about their experience.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West
Social Beh Sci - Soc Sci

ANTH 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/199/)
May be repeated.

ANTH 209 Food, Culture, and Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/209/)
Introduces students to anthropological approaches to the study of food from socio-cultural, linguistic and archaeological perspectives. Topics include: food in popular culture; food, ethnicity and race; food and immigration; food and religious traditions; food and family; gendered roles in food production; food and national identity; competitive global marketing of food; food, class and status; socio-politics of food in ancient societies; food, ethics and human rights.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - Western

ANTH 210 Families in Global Perspective credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/210/)
Same as HDFS 220. See HDFS 220.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West
Social Beh Sci - Soc Sci

ANTH 220 Introduction to Archaeology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/220/)
Introduction to the problems of studying past cultures; special attention given to the ranges of techniques available and the adequacy of various methodologies as bases for sound inference about the structure of extinct cultures. Prerequisite: ANTH 102 or consent of instructor.

ANTH 222 Introduction to Modern Africa credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/222/)
Same as AFST 222, PS 242, and SOC 222. See AFST 222.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West

ANTH 223 Exploring African Cities credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/223/)
Same as LA 220. See LA 220.

ANTH 224 Tourist Cities and Sites credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/224/)
Examination of tourism's social, political, economic, cultural, and physical dimensions from an anthropological perspective.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

ANTH 225 Women in Prehistory credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/225/)
Course identifies the presence of women in the archaeological record and seeks to reconstruct women's lives and roles in a range of ancient societies. It also considers the intellectual history of gender studies in archaeology and anthropology. Same as GWS 225.

ANTH 230 Sociocultural Anthropology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/230/)
Introduction to the anthropological study of contemporary human societies; emphasis on the comparative study of social organization, interpersonal relations, cultural ecology, and processes of sociocultural change, but also includes some consideration of the method and theory of ethnographic field research.

ANTH 240 Biological Anthropology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/240/)
Past and present evolution of the human species and population and individual biological variation; topics include genetic principles relevant to human evolution, primate phylogeny and behavior, fossil evidence for human evolution, and the origin and significance of biological diversity in modern humans. Prerequisite: ANTH 102 or ANTH 143; or an introductory life sciences course; or consent of instructor.

ANTH 241 Human Biological Variation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/241/)
Examines the biological concept of race as applied and misapplied to Homo sapiens by anthropologists and others from the 18th century to the present and of the origin, nature, and significance of so-called racial variation.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Life Sciences

ANTH 242 History of Human Evolution credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/242/)
Reviews the history of evolution and its controversies from the pre-Darwinians to contemporary debates. Examines disciplinary and wider societal debates and how they affect each other.

ANTH 243 Sociality of the Great Apes credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/243/)
Examines the social organization, mating patterns, and group structure of free-ranging chimpanzees, gorillas, and orangutans. Presents historical perspective focusing on misconceptions that have colored our understanding of ape social behavior; addresses questions concerned with learning potential, food sharing, social cooperation, aggressive behavior, self-awareness, and the appropriateness of the apes as models for understanding human behavior. Prerequisite: ANTH 102, ANTH 143, or an equivalent course in animal behavior; or consent of instructor.

ANTH 246 Forensic Science credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/246/)
History and theory underlying methods used in forensic science. Topics include the courtroom, the units of a crime laboratory, methods of securing and investigating a crime scene, and the analysis of evidence collected from a crime scene such as blood, fibers, hair and fingerprints.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Life Sciences

ANTH 247 Forensic Science DNA Lab credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/247/)
Forensic science is the application of science to the law and encompasses a wide variety of scientific disciplines. This course introduces students to general laboratory practice, molecular biology and DNA analysis skill that are commonly used by forensic DNA scientists. Students will learn using a “hands-on” and interactive approach with many of the same tools used by professional forensic DNA scientists. Prerequisite: ANTH 246.

ANTH 248 Introduction to Engaged and Public Anthropology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/248/)
We ask 'How can activist scholars address observable social injustices such as inequality, poverty, and racism? What methods work best to intervene in public and policy debates? What are the implications of such interventions?' We explore the history of anthropological engagements with distinct "publics" as well as influences from other disciplines and forms of activism. These include Latin American Action Research traditions, Indigenous Studies, and Indigenous, Black, and Latinx feminist schools of thought. From these perspectives, we examine contemporary currents and influences inside and outside of the United States.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West
Social Beh Sci - Soc Sci

ANTH 249 Evolution and Human Disease credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/249/)
Principles of modern evolutionary theory are applied to medical problems. Topics include: transmission, pathogen strategies, symptoms and spectrum of disease, evolution of virulence, concept of cause, antimicrobial resistance, emerging diseases, stress and adaptation, nutrition, diachronic overview of changing patterns of human disease, and ecological factors.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Life Sciences

ANTH 250 The World Through Museums credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/250/)
Same as MUSE 250. See MUSE 250.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - Western

ANTH 258 Sex in Nature and Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/258/)
A simultaneous exploration of human sexuality from a biological and cultural perspective. Same as GWS 258.

ANTH 259 Latina/o Anthropology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/259/)
In this class, we will examine the contemporary cultures and communities of Latinas and Latinos in the United States. We will focus on recent ethnographic studies on the Latina/o experience written mainly (though not exclusively) by Latinas and Latinos who are active in the academy. Topics to be discussed include: ethnic and racial identity, language, sexuality, power, class hierarchies, cultural citizenship, racialization, gender inequality, cultural citizenship, legal citizenship, immigration, and popular culture—all from an anthropological perspective. In the process, we will critically examine the imagined, the lived, and the invented communities constituting the Latina/o population of this country in the West, Southwest, East Coast, and the Midwest. In particular, we will explore the experiences of Mexicans, Puerto Ricans, Central Americans, and Cubans in the United States. Same as LLS 259.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - US Minority

ANTH 261 Intro to the African Diaspora credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/261/)
Same as AFRO 261. See AFRO 261.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

ANTH 262 Women's Lives credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/262/)
Perceptions of women, their perceptions of themselves, and their varying roles and statuses in several contemporary societies in diverse countries; supervised ethnographic observation of women's behavior. Same as GWS 262.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

ANTH 263 Body, Personhood, and Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/263/)
In this course we examine cultural assumptions about the human body and what it means to be a "person" in Western and non-Western societies. We examine key themes in cultural anthropology and other social sciences concerning the relationship of the individual and society, nature and culture. We will also focus on contemporary concepts of "person" vis a vis new genders/sexualities, differently-abled persons, organ transplants and bio-medicine, cyborgs and virtual persons; and commodification. We also explore the interface between intellectual and experiential ways of knowing our own bodies as cultural, dynamically embodied persons.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

ANTH 266 African Film and Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/266/)
Introduction to African cinema as a contemporary art form and as a window on the social and cultural realities of Africa. The course includes discussion of modern African culture, the African film industry, and African cinema as an art form and as popular entertainment. Same as AFST 266.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West

ANTH 268 Images of the Other credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/268/)
Do all peoples view neighboring or distant populations as radically different "Others," or can humans create mutual images based on a notion of shared humanity? Course compares and analyzes the range of images of ethnic, "racial," gender, class, and bodily differences that have been enacted historically and cross-culturally in both Western and non-Western populations. Prerequisite: A previous course in history and/or one of the social sciences suggested.
This course satisfies the General Education Criteria for:
Advanced Composition
Humanities - Hist Phil
Cultural Studies - Western

ANTH 270 Language in Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/270/)
Examines the intersections of culture and language. Topics include the definition of language; the cultural shaping of discourse and narrative; how different linguistic systems guide speakers to think differently about the world; and how ideologies about language relate to beliefs about the nation, modernity, race, and gender. Prerequisite: Gen Ed. Composition 1.
This course satisfies the General Education Criteria for:
Advanced Composition
Social Beh Sci - Soc Sci

ANTH 272 Language and Culture in Turkey credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/272/)
Same as GLBL 272, SAME 272, and TURK 270. See TURK 270.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West

ANTH 277 Ancient Cities, Sacred Land credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/277/)
Examines urban development from its origins to the present day. Among the concepts covered are urbanism, urbanization, ceremonial centers and ceremonial cities, the city as a system, the spatial and economic organization of cities, and the built environment (sacred landscapes, vernacular architecture, places of power). Small field project is conducted in Champaign-Urbana.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - Western

ANTH 278 Climate Change & Civilization credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/278/)
Examination of how climate change impacts society. With the increasing need to understand how climate changes and society intersect at present, it is becoming important that we address critical questions about how lessons from the past inform present needs. Case studies from around the world are discussed.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West

ANTH 279 Economy, Business & Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/279/)
Introduction to anthropological approaches to economics, capitalism, and the world of business. We discuss these topics as influential cultural ideals in U.S. society, consider critical alternative approaches, and examine a range of specific business and related economic practices drawing upon case studies from the U.S. as well as international and cross-cultural contexts.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - Western

ANTH 285 Intro to Korea Through Film credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/285/)
Same as EALC 285. See EALC 285.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West

ANTH 287 Contemporary East Asia credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/287/)
Same as EALC 288. See EALC 288.

ANTH 288 American Indians of Illinois credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/288/)
An interdisciplinary survey of the Native American experience in the Illinois region from pre-Columbian times to the present. Introduces theories, concepts and methods in archaeology, history, and sociocultural anthropology. Includes archaeological field site and museum visits, plus guest lectures by American Indian scholars and community members. Same as AIS 288 and HIST 288.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

ANTH 290 Jewish Cultures of the World credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/290/)
Survey of the world's Jewish cultures with a particular focus on the non-Western world. Addresses the relations between Judaism and other religious systems and the nature of Jewish life in such locales as North Africa, Subsaharan Africa, India, China, and South America. Same as JS 290.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West

ANTH 340 Archaeology of Religion credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/340/)
We familiarize ourselves with how anthropologists approach the study of religion and then look at how we can best understand religion in the past. We examine the differences between religion, worldview, cosmology and culture, and investigate what archaeology can tell us about the origins of religion and the materiality and mundane practices of religion, revitalization and missionization. Lectures will cover theoretical, perspectives, and archaeological cases. Same as REL 342. Prerequisite: Consent of the instructor.

ANTH 341 Native People and Christianity credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/341/)
Same as REL 341. See REL 341.

ANTH 342 Animal Behavior credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/342/)
Same as ANSC 366, IB 329, and PSYC 329. See IB 329.

ANTH 343 Behavior and Biology of Women credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/343/)
Exploration of female biology and behavior in a broad evolutionary context. Explores development from pre-puberty through menopause, reproductive processes such as pregnancy, birth and lactation, cognitive and behavioral sex differences, and male and female reproductive strategies in a variety of cultural settings. Examples are drawn primarily from traditional and modern human societies as well as field and experimental data from other species, particularly non-human primates. Prerequisite: ANTH 143 or consent of instructor.

ANTH 346 Forensic Anthropology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/346/)
Analysis of human skeletal remains of the medico-legal profession. Topics include the development of the field of forensic anthropology, biological profile and skeletal trauma analysis, interval since death estimation. Additional topics include investigation of crime scenes, the legal role of the biological anthropologist as an expert witness and case report preparation. Attention will also be drawn to the incorporation of anthropological and ethical approaches to dealing with death and using human remains for research. Prerequisite: ANTH 246.

ANTH 347 Human Osteology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/347/)
Comprehensive knowledge of the human skeleton is central to reconstructing the anatomy, demography, health and evolution of past populations because most of our evidence is derived from preserved skeletal and dental remains. The primary goal of this course is the identification of isolated and fragmentary skeletal remains given that this is a prerequisite to all subsequent analysis. In addition to identifying the bones and landmarks of the human skeleton, students will learn about the structure and function of bone, understand the growth and development of the human skeleton and be introduced to analytical techniques used in human osteology including paleopathology, paleodemography and forensics. Prerequisite: ANTH 240.

ANTH 350 Cultures of Law credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/350/)
Covers major concepts and debates in the study of legal anthropology: the way in which different societies understand justice, practice law, engage or violate human rights, adjudicate responsibility. We examine the foundations of different legal systems, the cultural categories that different societies use to determine the meaning of justice, guilt, innocence, and the variations in systems for both preventing and punishing crime. In addition, we will consider the cultures of law as a profession. How do lawyers learn to read and see the world differently? How do Courts create their own cultural norms and social contexts in ways that impact how all of us receive due process? Finally we explore the relationship between state power, rule of law and democracy. Is there and should there be a role for politics in the law?.

ANTH 358 People of the Ice Age credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/358/)
Explores a vast period of human prehistory - 2 million to 10,000 years ago - before the first cities arose and before people domesticated plants and animals in the Old World; uses archaeological and paleoanthropological data to understand past life ways as well as reasons for change through time in human adaptation. Prerequisite: ANTH 102.

ANTH 360 Evolution and Human Health credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/360/)
Same as IB 360. See IB 360.

ANTH 361 Ecology and Human Health credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/361/)
Same as IB 361. See IB 361.

ANTH 363 Anth of Dance/Movement credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/363/)
Anthropological study of dance and other human movement systems in cultural contexts. Designed especially for students with little or no background in socio-cultural anthropology or the social sciences. Includes reading the works of major figures in the field, and learning how to study dances, signed languages and ritual events from an anthropological perspective. Students will also learn about socio-cultural theory and observation, doing fieldwork, movement literacy, problems of subjectivity and objectivity, and personal anthropology.

ANTH 364 Performing "America credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/364/)
Introduction to theories of performance and performativity or enactment, and applies these to an understanding of public events like political rallies, music, the arts, protests, and everyday life in the U.S. Emphasis on how these practices of production and consumption help articulate social identity, including gendered, sexual, racial/ethnic, religious, class, and generational affiliations. Focus on the contemporary U.S. with comparative case studies drawn from other parts of the world and some historical materials. Draws on anthropological studies, as well as scholarly literatures from communication studies, literature, the arts, and social history. Prerequisite: At least one course in anthropology or the social sciences.

ANTH 368 'America' in the World credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/368/)
Study of the lure and rejection of the U.S. around the world, by drawing on long-standing anthropological approaches to the histories of peoplehood, selfhood, and otherness. Examines the historical, political, cultural, economic, and social context of both anti- and pro-Americanism, in various parts of the globe. Prerequisite: Any previous course in cultural anthropology.

ANTH 370 Latina/o Ethnography credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/370/)
Same as LLS 370. See LLS 370.

ANTH 372 Topics in Lang & Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/372/)
Advanced topics in language and culture. May be repeated in separate terms. Prerequisite: ANTH 104, ANTH 270, or consent of instructor.

ANTH 373 Culture & Psychology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/373/)
Same as PSYC 373. See PSYC 373.

ANTH 374 Anth of Science and Technology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/374/)
Examination of science as a cultural system. Utilizing ethnographic methods and social theories, the course will locate scientific knowledge, institutions and practices within enduring anthropological questions around rationality and truth, meaning, personhood, sociality, power inequalities, social transformations, and social justice. Prerequisite: Junior standing.

ANTH 375 The Culture of Nature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/375/)
Examines how the natural and the cultural are mutually-constitutive concepts, and investigates contemporary and historical constructions of notions of a natural world. We will see how these concepts have varied over time and among different social groups, with a special emphasis on the contemporary United States. Topics will include the idea of landscape and of nature as a resource to be used, appreciated, represented, controlled, or enjoyed. In addition, the course will feature a special unit on sustainability, and one devoted to analyzing our relationships to animals. Prerequisite: At least one anthropology course or a course in another social science.

ANTH 379 Medical Anthropology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/379/)
Introduction to concepts and social aspects of health, illness, and curing in different cultures. Considers concepts of interaction between folk and modern medicine in developing nations and delivery of health care as an international social problem. Prerequisite: ANTH 230 or ANTH 260, or consent of instructor.

ANTH 380 Ethnography of the University credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/380/)
Introduces students to ethnographic research methods through research on the University of Illinois. Emphasizes qualitative research methods and institutional analysis. Student work builds on research done by prior students and student research is web archived. Reflection on and reconfiguration of research questions and hypotheses is encouraged as research projects proceed. Prerequisite: Any 100-level or 200-level sociocultural anthropology course: ANTH 103, ANTH 104, ANTH 230 etc.

ANTH 387 Anthropology of Crime credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/387/)
This course takes an anthropological perspective to challenge "common-sense" notions about crime. We will compare ideas about and representations of lawbreaking, criminality, danger, policing, and violence in different parts of the world, considering how they diverge from, and yet also overlap with, each other. Our goal is to find new ways to understand both how something becomes "crime" and also how it then quickly becomes sensationalized, stereotyped and simplified as it enters public debate.

ANTH 390 Individual Study credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/390/)
Supervised reading and research on anthropological topics chosen by the student with staff approval. Especially (but not exclusively) for students who are preparing for a summer field-work project, or who have some justifiable reason for doing independent study, but who do not qualify for the honors (departmental distinction) courses. Prerequisite: Junior or senior standing; 12 hours in anthropology; consent of instructor. May not be taken concurrently with ANTH 391 or ANTH 495.

ANTH 393 The World of Jewish Sepharad credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/393/)
Study of the cultural legacy and history of the Sephardic Jews, mostly focusing on the Mediterranean and the thriving communities they established in countries of Muslim governance and in the Balkans, and more recently in America. The Judeo-Spanish language, which has been preserved until the end of the twentieth century, the press, literature and music are components of this course. Same as HIST 393 and REL 393.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

ANTH 399 Special Topics credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/399/)
Topics are given on a one-time only, experimental basis. Faculty offer special topics in their areas of expertise that provide an opportunity for undergraduates to be exposed to some of the most current developments in faculty research. May be repeated.

ANTH 402 Transnational Islam, Europe-US credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/402/)
Anthropological approach to transnational Islam, focusing on its various expressions in Europe and the United States, particularly since World War II. Same as ASST 402 and REL 409. 3 undergraduate hours. 4 graduate hours. Prerequisite: ANTH 230 or consent of instructor.

ANTH 403 Women in Muslim Societies credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/403/)
Same as GLBL 403, GWS 403, HIST 434, REL 403, and SAME 403. See REL 403.

ANTH 404 Disability, Culture & Society credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/404/)
Same as CHLH 407, KIN 407, and REHB 407. See CHLH 407.

ANTH 405 Contemporary Central America credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/405/)
Explores cultural, political and historical processes in 20th- and 21st-century Central America--focusing on Costa Rica, Nicaragua, Honduras, El Salvador, and Guatemala--through an anthropological lens. Grapples with a core set of questions arising from changes in the global relations, including the rise of global neoliberalism, the crises and renovations of political projects, the transformations of spatial relations through transnational migration, and the proliferation of various pan-hemispheric as well as local identity-based movements. 3 undergraduate hours. 4 graduate hours. Prerequisite: ANTH 103 or ANTH 182 or ANTH 230 or a course in Latin American history or consent of instructor.

ANTH 407 Evolutionary Immunology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/407/)
Immune systems are a defense mechanism against microbial assault and dying and cancerous cells. They are under tremendous evolutionary pressure to cope with changing invasions and other stresses and have, therefore, evolved differently across species and populations. The resulting immune variation strongly impacts human and animal health. This seminar addresses animal immune system physiology and function in the context of evolutionary and anthropological theory and research. It is designed for advanced undergraduate and graduate students with a basic background in biology, biological anthropology and related fields. 3 undergraduate hours. 4 graduate hours.

ANTH 408 Human Evolutionary Anatomy credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/408/)
Comprehensive, comparative study of musculoskeletal anatomy in primates, focusing on functional and adaptive changes that have occurred in the masticatory apparatus, facial skeleton, and locomotor systems of New World monkeys, Old World monkeys, apes, and humans. Relationships between morphology, ecology, and behavior are discussed, applied to the fossil record, and used to address current issues in human evolution. 3 undergraduate hours. 4 graduate hours. Prerequisite: ANTH 443 or ANTH 440 or ANTH 456 or a course in human or comparative vertebrate anatomy.

ANTH 411 Research Methods in Socio-Cultural Anthropology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/411/)
Exploration of qualitative forms of research used by sociocultural anthropologists when conducting field research. Emphasis is on formulating research questions, research design, and application of these ethnographic methods to a substantial research project. 3 undergraduate hours. 4 graduate hours.

ANTH 414 Writing Ethnography credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/414/)
In this seminar we address the theoretical divide between the humanities and the social sciences, the unique authority of the scholar/author, and the invisibility of the reader in producing scholarly texts. Focusing on the ways in which scholars are also authors, we explore current debates by reading a selection of contemporary anthropological texts (and a few precursors) that experiment boldly with how ethnography is written. Students will experiment with several ethnographic writing styles. This course is designed for advanced undergraduate anthropology students and graduate students in cultural anthropology, writing studies, and education. 3 undergraduate hours. 4 graduate hours. Prerequisite: Undergraduate students should have already taken at least one 300-level course in cultural anthropology, and graduate students in cultural anthropology, writing studies, and/or education. Other students should contact the instructor.
This course satisfies the General Education Criteria for:
Advanced Composition

ANTH 416 Anthropology of Music credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/416/)
Same as MUS 416. See MUS 416.

ANTH 420 Case Studies Global Heritage credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/420/)
Cultural heritage encompasses major domains of social, economic, political, religious and environmental practice and policy-making under today's conditions of globalization. Students will critically examine cultural heritage case studies from around the world. 3 undergraduate hours. 4 graduate hours.

ANTH 421 Social Organization credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/421/)
Introduction to anthropological concepts of social organization and structure; considers kinship theory, descent and alliance systems, social stratification, nonkin association, social networks, group identification and boundaries, structural-functional interpretations of society, and the meaning of social or cultural structure. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: ANTH 230 or consent of instructor.

ANTH 423 Economic Anthropology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/423/)
Covers the emergence of economic anthropology as a subdiscipline; considers various definitions of economics with their implications for the study of human society; emphasizes the relationship between social organization and economic life from the perspectives of classical studies in anthropology and their contemporary interpretations. 3 undergraduate hours. 4 graduate hours. Prerequisite: ANTH 230.

ANTH 425 Anthropology of Education credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/425/)
Same as EPOL 414, EPS 425, and EPSY 466. See EPS 425.

ANTH 430 The History of Anthropology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/430/)
Provides a selective overview of the history and historiography of anthropology in the 19th and 20th centuries. The class moves chronologically and topically, paying particular attention to the social, institutional, and historical contexts of paradigmatic shifts, the interconnections between various national traditions, and the negotiations of the discipline's boundaries. 4 undergraduate hours. 4 graduate hours. Prerequisite: Graduate or senior standing in anthropology, or consent of instructor.

ANTH 432 Genes and Behavior credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/432/)
Same as IB 432, NEUR 432, and PSYC 432. See IB 432.

ANTH 435 The Neandertal Debate credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/435/)
A detailed investigation of the origin and biological adaptations of late archaic humans and the emergence of modern humans. Explores the practice and validity to using skeletal anatomy to interpret the behavior of past populations using evolutionary and comparative approaches. This course will interpret Neandertal biology and anatomy with particular emphasis on its relevance for theories about the origin and evolution of our species. 3 undergraduate hours. 4 graduate hours. Prerequisite: ANTH 240.

ANTH 436 Biogeography credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/436/)
Same as ESE 439, GEOG 436, IB 439 and NRES 441. See IB 439.

ANTH 437 Primate Behav Endocrinology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/437/)
Introduction to behavioral endocrinology, focusing on primate, especially human behaviors. Examines the relationship between hormones and behavior using an evolutionary and comparative approach, considering both how hormones influences behavior and how behavioral interactions regulate endocrine physiology. The course covers basic endocrine system physiology and function, hormonal influences on primate social behaviors such as male and female reproductive behaviors, courtship, parental care, bonding and attachment, as well as aggression and territoriality. Other topics include stress, hormones, and health. 3 undergraduate hours. 4 graduate hours. Prerequisite: IB 150 and ANTH 143; or an equivalent course in behavioral ecology, primate behavior, physiology or psychology; or consent of instructor.

ANTH 438 Primate Life History Evolution credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/438/)
Life history seeks to explain why differences exist in the pathways that organisms follow from conception to death. Examination of the diversity in the evolution of primate (including human) life histories. 3 undergraduate hours. 4 graduate hours. Prerequisite: ANTH 102, ANTH 143, ANTH 240, ANTH 243 or equivalent.

ANTH 440 Human Paleontology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/440/)
Principles of evolution and a survey of human evolution from the early primates through the Pleistocene epoch; emphasis on evolutionary theory as applied to humans and interpretation of the fossil record. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: ANTH 240 or consent of instructor.

ANTH 441 Human Genetics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/441/)
Principles of human genetics; anthropological aspects of race and race formation; and hereditary and environmental factors in the biological variation of modern humans. Same as ANSC 441. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: ANTH 102 or equivalent.

ANTH 443 Primate Form and Behavior credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/443/)
Survey of primate social behavior and the classification, morphology, and distribution of living and extinct species; emphasis on interrelationships among behavior, biology, and ecology. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: ANTH 240 or consent of instructor.

ANTH 444 Methods in Bioanthropology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/444/)
Supervised participation in biological anthropology research projects; techniques, methods, and procedures discussed and practiced under actual field or laboratory working conditions. Normally taken concurrently with ANTH 445. 3 undergraduate hours. 4 graduate hours. May be repeated if topics vary. Usually offered in the summer session only. Prerequisite: ANTH 240 or equivalent; consent of instructor.

ANTH 445 Research in Bioanthropology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/445/)
Analysis, interpretation, evaluation, and organization of field and laboratory data in biological anthropology; preparation of written reports on research. May be taken concurrently with ANTH 444 or subsequently. 3 undergraduate hours. 4 graduate hours. May be repeated if topics vary. Usually offered in the summer session only. Prerequisite: ANTH 240 or equivalent; consent of instructor.

ANTH 446 Behavioral Inference & Fossils credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/446/)
Theories and methods for interpreting behaviors inferred from the human and primate fossil record. Topics include discussions of adaptation, methods of inference in historical sciences, and practical experimental approaches to understanding aspects of diet, locomotor behavior and social organization in species known only from the fossil record. 3 undergraduate hours. 4 graduate hours. Prerequisite: ANTH 240.

ANTH 447 Advanced Skeletal Biology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/447/)
Human skeletal and dental remains form the basis for research in both bioarchaeology and forensic anthropology. We will examine the bases for making inferences about individual skeletons and past populations, with particular emphasis placed on paleodemography, reconstruction of diet, paleopathology, and biological distance analysis. 3 undergraduate hours. 3 graduate hours. Prerequisite: ANTH 347.

ANTH 448 The Prehistory of Africa credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/448/)
The study of cultural development in Africa from the appearance of hominids to the time of European domination. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: ANTH 220 or consent of instructor.

ANTH 449 North American Archeology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/449/)
Methods, techniques, and results of archaeology in North America; focuses on divergent approaches to the regional archaeology of North America; and surveys and synthesizes the archaeology of the subcontinent. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: ANTH 220 or consent of instructor.

ANTH 450 Zooarchaeology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/450/)
Zooarchaeology is the study of the many ways that animals fit into past human societies—including diet, economy, and ideology—through the analysis of animal remains (bones, teeth, and shell) recovered from archaeological sites. Given the broad range of ways that animals were involved in past human life, and the ubiquity of faunal remains in the archaeological record, faunal analysis is a method suitable for addressing many kinds of archaeological and anthropological research questions. This course will provide students with a practical working knowledge of basic laboratory identification and quantification techniques, and provide a framework for the interpretation of archaeological faunal assemblages. 3 undergraduate hours. 4 graduate hours. Prerequisite: ANTH 220 or graduate standing in Anthropology.

ANTH 451 Archaeological Surveying credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/451/)
Familiarization with methods used in the location and recording of archaeological sites, including techniques of mapping especially adapted to the needs of archaeology; attention given to means of presenting results and interpreting data derived from this work; and work both in the field and in the laboratory. 3 undergraduate hours. 4 graduate hours. Prerequisite: ANTH 220 or consent of instructor.

ANTH 452 Stone Tool Technology Analysis credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/452/)
Lecture and laboratory on the principles and techniques of stone and bone artifact manufacture, identification, classification, metrical analysis, interpretation, and integration with other classes of archaeological evidence. Emphasis on the use of lithics to test human behavioral models. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: ANTH 220.

ANTH 453 Landscape Archaeology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/453/)
The use of archaeological, documentary, and oral history evidence to study and interpret the ways past peoples shaped their landscapes through the deployment of cultural and social practices, and the ways, in turn, that such people were influenced, motivated, or constrained by their natural surroundings. Same as LA 454. 3 undergraduate hours. 4 graduate hours. Prerequisite: Introductory archaeology course, such as ANTH 220, or introductory landscape architecture course, or equivalent with instructor's permission.

ANTH 454 Archaeological Field School credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/454/)
Participation in archaeological excavations; techniques, methods, and procedures discussed and practiced under actual working conditions. Normally taken concurrently with ANTH 455. 3 undergraduate hours. 4 graduate hours. May be repeated if topics vary. Usually offered in the summer session only. Prerequisite: Consent of instructor.

ANTH 455 Lab Analysis in Archaeology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/455/)
Laboratory work including processing, classifying, dating, interpretation, evaluation, and preparation of written reports of archaeological research. May be taken concurrently with ANTH 454 or subsequently. Additional fees may apply. See Class Schedule. 3 undergraduate hours. 4 graduate hours. May be repeated in separate semesters, if topics vary. Prerequisite: ANTH 102 or consent of instructor.

ANTH 459 The Ancient Maya credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/459/)
Introduction to the Ancient Maya of Mexico, Guatemala, Belize, and Honduras. Evaluates theories that account for the rise and fall of Classic (c. A.D. 250-950) Maya rulership. Excavation data, inconography, and inscriptions are used to reconstruct political and social organization, ideology, subsistence activities, and inter-regional interactions. 3 undergraduate hours. 3 graduate hours. Prerequisite: ANTH 105.

ANTH 460 Heritage Management credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/460/)
Detailed examination of the theoretical and practical issues of archaeological heritage management. Focusing on the legal, environmental, ethical, social, political, educational, and touristic aspects of the management of ancient sites for their continued sustainability. Same as LA 460 and RST 459. 3 undergraduate hours. 4 graduate hours. Prerequisite: ANTH 220 and at least one ANTH 300- or 400-level archaeological area course.

ANTH 461 Hist of Archaeological Theory credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/461/)
Examines the prominent theories in archaeology from its inception to the present day and does so within the context of general developments in anthropological thought. Provides a foundation for graduate students and a capstone for major emphasizing archaeology. 3 undergraduate hours. 4 graduate hours. Prerequisite: For undergraduates: ANTH 220; anthropology major with focus on archaeology; senior standing or consent of the instructor. For graduate students: enrollment in ANTH 430 during the same term advised.

ANTH 462 Museum Theory and Practice credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/462/)
A foundational introduction to museology consisting of a critical examination of the history and social life of museums and how museums have been studied by scholars in a range of academic disciplines. Includes visits to campus and local museums. Same as ARTH 462 and LA 472. 3 undergraduate hours. 4 graduate hours.

ANTH 463 Religion and Society credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/463/)
Course focuses on theoretical issues raised by religion. Does religion address itself essentially to intellectual, emotional or pragmatic issues? Is religion created by rulers, clerics or worshippers? How does the individual experience religion, and (how) can s/he reshape it? In exploring these and related issues, we will read the writings of German, French, and British social scientists of the past 150 years as well as work by contemporary anthropologists. Theoretical perspectives covered include symbolic, processual, materialist, structural-functionalist, structuralist, and postmodernist approaches. Same as REL 463. 4 undergraduate hours. 4 graduate hours. Prerequisite: A 200-level course in cultural anthropology or consent of instructor; or graduate standing.

ANTH 464 Theories & Theologies of Liberation credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/464/)
Same as AAS 464, GWS 464, and REL 464. See GWS 464.

ANTH 466 Class, Culture and Society credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/466/)
Social hierarchies in a variety of cultural contexts; industrial societies and the process of industrialization; looks at other social forms for the purposes of comparison. A variety of social theories will be discussed and compared through ethnographic studies. 4 undergraduate hours. 4 graduate hours. Prerequisite: ANTH 103 and ANTH 230 or graduate standing.

ANTH 467 Cultures of Africa credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/467/)
Culture and social organization in traditional African societies with emphasis on the politics, kinship, and religion of a small sample of societies illustrating the main cultural variations found in sub-Saharan Africa; some discussion of ecological factors and ethnic group relations in precolonial times. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: ANTH 230 or consent of instructor.

ANTH 469 Kinship-Culture-Power-Africa credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/469/)
To present the classic approaches to kinship in anthropology that were developed for Africa; to explore the variety of kinship arrangements and strategies that exist in Africa; and to expose students to the panoply of contemporary critiques of classic works on kinship in Africa, and contemporary alternatives to them. Same as AFST 467. 2 or 4 undergraduate hours. 2 or 4 graduate hours. Prerequisite: For students outside anthropology or African Studies, at least one previous course in cultural anthropology is strongly recommended.

ANTH 471 Ethnography through Language credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/471/)
Overview of theoretical perspectives and methodologies in linguistic anthropology, including sociolinguistics, ethnography of communication, performance and poetics, discursive practices, and structural analyses. 3 undergraduate hours. 4 graduate hours. Prerequisite: ANTH 230 or ANTH 270 and preferably both.

ANTH 472 Border Latina, Latino Cultures credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/472/)
Explores and examines the production of U. S. Latina/Latino identities as instances of international, cultural, historical, and social border crossings. In both regional and global contexts, we will analyze the ways in which Mexican American, Cuban American and Puerto Rican identities have been shaped by colonial relations vis-a-vis Spain and by postcolonial conditions vis-a-vis the United States. Same as LLS 472. 3 undergraduate hours. 4 graduate hours. Prerequisite: ANTH 103, and ANTH 259 or ANTH 359.

ANTH 477 Pottery Analysis credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/477/)
Introduction to the theories and techniques of pottery analysis for archaeologists. In addition to presentation and discussion of the major literature, there is hands-on practice making, drawing, breaking and analyzing pottery. 3 undergraduate hours. 4 graduate hours. Prerequisite: ANTH 220 or consent of instructor.

ANTH 479 Race, Medicine, and Society credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/479/)
Same as AAS 479 and LLS 479. See LLS 479.

ANTH 481 Andean Ethnography credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/481/)
Survey of Andean cultures at the time of the Spanish conquest, of their subsequent history, and of modern Indian culture in the Andean countries. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: ANTH 182, ANTH 230 or consent of instructor.

ANTH 485 Anthropology of Policing credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/485/)
Introduction to the use of anthropological theories and methods in policing studies. Includes comparative historical survey of the diverse sources of power and authority which are bundled into the modern idea of "police power," considers the range of authors contributing to contemporary debates about policing in anthropology, and supports students focusing on both theoretical and applied questions. 3 undergraduate hours. 4 graduate hours.

ANTH 488 Modern Europe credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/488/)
Historical studies which deploy anthropological methods in the study of early modern and modern Europe; looks at processes of twentieth century modernization through ethnographic studies. Western, Central and Eastern Europe will all receive attention, but the study of Western Europe will predominate. 4 undergraduate hours. 4 graduate hours. Prerequisite: ANTH 103 and ANTH 230 or three history courses or graduate standing.

ANTH 494 Honors Senior Thesis I credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/494/)
The first of a two-term individual study and research project for those students who are candidates for departmental distinction in anthropology. 2 to 4 undergraduate hours. No graduate credit. Prerequisite: Senior standing; 3.25 GPA in anthropology; and consent of instructor. May not be taken concurrently with ANTH 390.

ANTH 495 Honors Senior Thesis II credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/495/)
The second of a two-term individual study and research project for those students who are candidates for departmental distinction in anthropology. 2 to 4 undergraduate hours. No graduate credit. Prerequisite: Senior standing; 3.25 GPA in anthropology; and consent of instructor. May not be taken concurrently with ANTH 390.

ANTH 496 Individual Field Research credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/496/)
Supervised participation in field research in ethnography, ethnology, linguistics, or social anthropology; techniques, methods, and procedures discussed and practiced under actual working conditions. 3 undergraduate hours. 4 graduate hours. May be repeated if topics vary. Usually offered in the summer session only. Prerequisite: ANTH 230; some knowledge of the language of the area concerned; consent of instructor. Normally taken concurrently with ANTH 497.

ANTH 497 Individual Field Data Analysis credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/497/)
Analysis, interpretation, evaluation, and organization of field data in cultural anthropology; preparation of written reports on research in ethnography, ethnology, linguistics, or social anthropology. May be taken concurrently with ANTH 496 or subsequently. 3 undergraduate hours. 4 graduate hours. May be repeated if topics vary. Prerequisite: ANTH 230; some knowledge of the language of the area concerned; consent of instructor.

ANTH 498 Senior Capstone Seminar credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/498/)
A guided independent research seminar for Anthropology majors normally taken during the Fall of the senior year. Students may select to conduct significant and original research in any of the four sub-fields of anthropology or combine interdisciplinary interests. Working closely with the course instructors and with additional guidance from a chosen anthropology faculty advisor, student will develop a research topic of their choice, identify significant research questions, before collecting and analyzing their field data. 3 undergraduate hours. No graduate credit.

ANTH 499 Topics in Anthropology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/499/)
Research seminar on specialized topics in anthropology. 4 undergraduate hours. 4 graduate hours. May be repeated. Prerequisite: Consent of instructor.

ANTH 503 Seminar on States & Governance credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/503/)
Explores theories of the state and governance through an anthropological perspective. Theoretical issues covered will include political economy, sovereignty, biopolitics, and empire across a range of social settings will attend to issues of race, class, gender, and sexuality. 4 graduate hours. No professional credit. May be repeated in separate terms up to 8 hours, if topics vary. Prerequisite: Grad Students only.

ANTH 504 Colonialism & Postcolonialism credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/504/)
Course examines the history of colonialism and post-colonialism in anthropological perspective. The relations of history and anthropology are explored through ethnographic studies that problematize historical memory. Theoretical works about colonized people will be debated and discussed. Same as HIST 519. Prerequisite: Graduate standing.

ANTH 508 Feminism, Gender and Sexuality credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/508/)
Theoretical issues raised in recent feminist writings in anthropology. Theoretical approaches to be explored include constructionist, postmodern, textual and historical materialist perspectives. Selected contemporary ethnographies introduce the integration of feminist theory into data analysis. Same as GWS 508. Prerequisite: Graduate standing or consent of instructor.

ANTH 511 Research Proposal Seminar credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/511/)
This seminar guides graduate students in designing a doctoral research project and writing a grant proposal. Focus is on developing a cogent theoretical framework, articulating significance of the project, identifying appropriate research methods, and considering ethical issues. Seminar format allows regular feedback from peers to clarify and hone ideas. Prerequisite: Graduate standing in anthropology or consent of instructor.

ANTH 512 Language in Culture I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/512/)
This first of our two core theoretical courses in linguistic anthropology pays particular attention to language in culture. Examines the historical development of the field and its debates, and its relationships with socio-cultural anthropology. Develops theoretical and critical analytical skills needed in contemporary ethnographic research. Same as LING 512. Approved for both letter and S/U grading. Prerequisite: Graduate standing.

ANTH 514 Seminar in Cognitive Science credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/514/)
Same as PSYC 514, CS 549, EPSY 551, LING 570, PHIL 514. See PSYC 514.

ANTH 515 Seminar in Anthropology credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/515/)
Analysis of selected topics of special interest in anthropology. May be repeated to a maximum of 8 hours in the same or subsequent semesters.

ANTH 517 Anthro Approach to Memory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/517/)
Examines individual memory, the construction of memories in collective practice, and the orchestration of memory in social institutions such as museums and ritual. Reflects critically on primary sources, to integrate theory and ethnography and to compare alternative approaches. Approved for both letter and S/U grading. Prerequisite: Graduate standing.

ANTH 518 Language in Culture II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/518/)
Part II of the core theoretical seminar in linguistic anthropology. Continues examination of historical developments in the sub-field and its debates, and relationships with socio-cultural anthropology. Develops theoretical and critical analytical skills needed in contemporary ethnographic research. Same as LING 518. Prerequisite: Graduate Standing.

ANTH 523 Dynamic Embodiment credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/523/)
Examines anthropological theories and methods for understanding systems of body movement and performance in cultural contexts. Explores the study of everyday skills as well as the expressive complexities of dances, gestural systems, sacred and secular ritual, sign languages, sports, theater, and martial arts. Prerequisite: Graduate standing.

ANTH 532 Dissertation Writing Seminar credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/532/)
Through reading style handbooks, theoretical works on the nature of writing, and published dissertations in anthropology, as well as completing specific dissertation writing assignments, this course provides a forum for advanced doctoral students to outline and complete substantial work on their doctoral thesis. The class format is a workshop in which every student circulates dissertation chapters for discussion by the instructor and other class members. Prerequisite: Students must have completed all requirements for the Ph.D. in anthropology but the dissertation, and they must have completed their doctoral fieldwork.

ANTH 540 Seminar in Bioanthropology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/540/)
Seminar designed to involve students in the theoretical and methodological approaches to problem areas in physical anthropology. May be repeated. Prerequisite: ANTH 440, ANTH 441, or ANTH 443; consent of instructor.

ANTH 543 Seminar in Primate Ecology credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/543/)
Group discussions and individual presentations of research reports and problems in fields of primate ethology, ecology, evolution, and related subjects; topics vary each term. 2 or 4 graduate hours. No professional credit. May be repeated in separate terms. Prerequisite: Consent of instructor.

ANTH 552 Res Prob in Archaeology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/552/)
Seminar oriented to current research problems in archaeology, designed to acquaint students with theoretical and methodological aspects of particular problems and to develop a critical perspective archaeological research. May be repeated. Prerequisite: Consent of instructor.

ANTH 555 The Archaeology of Complexity credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/555/)
Examines patterns of behavior archaeologists associate with complex societies and seeks to understand if and how these behaviors generate and/or reflect cultural complexity; theoretical literature and case studies discussed. Major topics include chiefdoms, settlement pattern analysis, and ideology. Prerequisite: Graduate student standing.

ANTH 557 Social Construction of Space credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/557/)
Consideration of anthropological, archaeological, and related disciplinary perspectives on space, place, landscape, the built environment, and architecture. Coursework encompasses critical review of major theoretical literature and case studies of ancient and modern societies. Same as LA 562. Prerequisite: Consent of instructor.

ANTH 560 Anthropology and Law credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/560/)
Introduction to the field of legal anthropology. Addresses anthropological theories of the nature of law and disputes, examines related studies of legal structures in non-Western cultures, and considers the uses of anthropology in studying facets of our own legal system. Same as LAW 678. 4 graduate hours. 3 professional hours. Prerequisite: Consent of instructor.

ANTH 561 Archaeological Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/561/)
Contemporary theory in archaeology. Different theoretical approaches are examined by critically analyzing seminal literature within the contexts of paradigmatic shifts in archaeology and general developments in the discipline of anthropology, focuses on materiality and corporality. Prerequisite: ANTH 461 or consent of instructor.

ANTH 565 Race and Cultural Critique credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/565/)
Same as AAS 561, AFRO 531, GWS 561, and LLS 561. See AAS 561.

ANTH 570 Cultural Aspects of Tourism credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/570/)
Same as RST 570. See RST 570.

ANTH 589 Readings in Anthropology credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/589/)
Individual guidance in intensive readings in the literature of one or more subdivisions of the field of anthropology, selected in consultation with the adviser in accordance with the needs and interest of the student. May be repeated in the same or separate semesters as topics vary. Prerequisite: One semester of graduate work in anthropology; consent of advisor.

ANTH 590 Dissertation Readings credit: 4 to 16 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/590/)
Supervised individual investigation or study of a topic not covered by regular courses. The topic selected by the student and the proposed plan of study are approved by the adviser and the staff member who supervises the work. Prerequisite: Consent of instructor.

ANTH 594 Cultural Heritage credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/594/)
Same as LA 594. See LA 594.

ANTH 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/ANTH/599/)
Preparation of theses. Approved for S/U grading only.

AHS - APPLIED HEALTH SCI COURSES

AHS Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/AHS/)

Courses

AHS 125 Freshmen Scholars Seminar credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/AHS/125/)
Designed for James Scholars for Applied Health Sciences who are in their first year of college to introduce them to research. Students will learn strategies to apply classroom material to community and society. Includes visits from faculty and staff from across campus and within the College who will expose students to an array of contexts and approaches for research. This course is a James Scholar course for freshmen only.

AHS 199 Undergraduate Open Seminar credit: 1 to 6 Hours. (https://courses.illinois.edu/schedule/terms/AHS/199/)
Topics will vary each semester. Please see section topic. May be repeated to a maximum of 12 hours in the same or subsequent terms as topics vary.

AHS 292 AHS Study Abroad credit: 0 to 18 Hours. (https://courses.illinois.edu/schedule/terms/AHS/292/)
Provides credit toward the undergraduate degree for study at an accredited international institution or approved overseas program. Final determination of credit granted is made upon the student' s successful completion of work. Approved for letter and S/U grading. May be repeated to a maximum of 44 hours. Prerequisite: One year or residence at UIUC and consent of major department and the college.

AHS 365 Civic Engagement in Wellness credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AHS/365/)
Same as CHLH 365, KIN 365, RST 365, and SHS 370. See KIN 365.

AHS 375 Comm Partners & Health credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AHS/375/)
Same as KIN 375 and SHS 375. See SHS 375.

AHS 399 Advanced Open Seminar credit: 1 to 6 Hours. (https://courses.illinois.edu/schedule/terms/AHS/399/)
Advanced undergraduate seminar. Topics will vary each semester. Please see section topic. Approved for letter and S/U grading. May be repeated in the same or subsequent terms to a maximum of 6 hours.

AHS 494 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/AHS/494/)
Lecture courses in topics of current interest; specific subject matter will be announced in the Class Schedule. 1 to 4 undergraduate hours. 1 to 4 graduate hours. Approved for Letter and S/U grading. May be repeated up to 12 hours if topics vary. Prerequisite: See Class Schedule for section requirements.

ARAB - ARABIC

ARAB Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/ARAB/)

Courses

ARAB 150 Lang&Culture of Arab World credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARAB/150/)
Interdisciplinary overview of the major aspects of the contemporary Arab culture. Based on scholarly research, textual resources, media, and literature from both the Arab World and elsewhere, examines the Arab people's historical background; language varieties; literary traditions; and representative social institutions. Same as SAME 150.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West

ARAB 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/ARAB/199/)
May be repeated.

ARAB 201 Elementary Standard Arabic I credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/ARAB/201/)
Mastery of the Arabic alphabet and phonetics; elementary formal grammar and the development of reading and writing skills; and conversation in the formal noncolloquial style. Participation in the language laboratory is required.

ARAB 202 Elementary Standard Arabic II credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/ARAB/202/)
Continuation of ARAB 201. Participation in the language laboratory is required. Prerequisite: ARAB 201.

ARAB 210 Colloquial Arabic I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARAB/210/)
Development of conversational fluency in one of the major colloquial dialects; see Class Schedule for dialect to be taught each term.

ARAB 211 Colloquial Arabic II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARAB/211/)
Continuation of ARAB 210. Prerequisite: ARAB 210.

ARAB 403 Intermediate Stand Arabic I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARAB/403/)
Survey of more advanced grammar; emphasis on increasing conversational fluency in the formal noncolloquial style; and reading of prose texts reflecting aspects of Arabic culture. 4 undergraduate hours. 4 graduate hours. Prerequisite: ARAB 202.

ARAB 404 Intermediate Stand Arabic II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARAB/404/)
Continuation of ARAB 403. 4 undergraduate hours. 4 graduate hours. Prerequisite: ARAB 403.

ARAB 405 Advanced Standard Arabic I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARAB/405/)
Practice to attain conversational fluency in the formal noncolloquial style; introduction to Arabic literature; and readings in social, political, and historic writings. 3 undergraduate hours. 3 graduate hours. Prerequisite: ARAB 404.

ARAB 406 Advanced Standard Arabic II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARAB/406/)
Continuation of ARAB 405. 3 undergraduate hours. 3 graduate hours. Prerequisite: ARAB 405.

ARAB 407 Topics Stand Arabic Lang&Lit I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARAB/407/)
Selected readings from Modern Standard Arabic authors, with a focus on novels, plays, and basic poetry illustrative of Arab cultural issues and advanced level MSA grammar, as well as development of expository writing skills. 3 undergraduate hours. 3 graduate hours. Prerequisite: ARAB 406.

ARAB 408 Topics Stand Arabic LangLit II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARAB/408/)
Continuation of ARAB 407 with increased emphasis on the reading and comprehension of literary texts exemplified in advanced level novels, plays, and poetry, as well as on advanced mastery of expository writing skills. 3 undergraduate hours. 3 graduate hours. Prerequisite: ARAB 407.

ARAB 409 Adv Top Stand Arabic LangLit I credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ARAB/409/)
Introduction to Modern Standard Arabic in the professions as documented in selected newspapers, educational radio and TV programs, works of fiction, biographies, anthologies, and professional journals. Students will be introduced to argumentative writing in MSA, expected to make oral presentations, and to write a research paper in their field. 3 undergraduate hours. 4 graduate hours. Prerequisite: ARAB 408.

ARAB 410 AdvTop Stand Arabic LangLit II credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ARAB/410/)
Continuation of ARAB 409 with increased emphasis on the development of comprehension and writing of professional language. 3 undergraduate hours. 4 graduate hours. Prerequisite: ARAB 409.

ARAB 412 Business Arabic credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ARAB/412/)
Introduction to Arabic business language as used in basic business settings, including commercial advertisement and business correspondence. Emphasizes language skills that will enable students to conduct job searches and locate job vacancies that match their fields of study and their interests. 3 undergraduate hours. 4 graduate hours. May be repeated in separate terms if topics vary to a maximum of 6 undergraduate hours or 8 graduate hours. Prerequisite: ARAB 405 or consent of instructor.

ARAB 413 Arabic-English Translation credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ARAB/413/)
Introduction to translation methodology and the profession of translation, with particular emphasis on the development of Arabic-to-English translation techniques and the acquisition of related knowledge above and beyond language skills. Students will be exposed to a variety of text types from different Arabic-speaking countries and learn to produce quality, professional translations and apply effective strategies to deal with the challenges of fully preserving the meaning of the original text while conveying the appropriate tone (style/register) and paying attention to grammar, mechanics, and audience-specific needs. Same as TRST 413. 3 undergraduate hours. 4 graduate hours. Prerequisite: Advanced standing in Arabic.

ARAB 490 Readings in Advanced Arabic credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ARAB/490/)
Directed reading course intended to develop an advanced student's facility with the Arabic language through various readings (authors, genres, themes, or other topical studies) and is conducted entirely in the Arabic language. Topics may vary from term to term. 3 undergraduate hours. 4 graduate hours. May be repeated in separate terms up to 6 undergraduate hours or 8 graduate hours, if topics vary. Prerequisite: ARAB 410 or consent of instructor.

ARCH - ARCHITECTURE

ARCH Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/ARCH/)

Courses

ARCH 101 Introduction to Architecture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/101/)
An introduction to architecture, architectural education and the profession with emphasis on issues that influence architecture and the people and processes involved.

ARCH 164 Architecture as a Second Language credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/164/)
The conceptual toolbox used by architects, and the tools in it, are unique and used by architects in both expected and unexpected situations. These tools can be thought of as a second language. Architecture as a Second Language is a hands-on, experiential online course that immerses students in challenging activities similar to those architects face. The course helps develop new perspectives, capabilities, and insights that can be applied to any calling or discipline.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

ARCH 171 Concepts and Theories of Architectural Design credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/171/)
This course introduces basic theories of architecture. It creates awareness of design concepts. Course content is arranged in three topical areas: Architecture and People, Architecture and Place, and Making Architecture. Each topical area addresses roles of designers and architects in contemporary and historical perspectives.

ARCH 172 Drawing and Modeling credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/172/)
Introduction to the architectural graphic communication skills that architects use to visualize, analyze, and record creative thoughts: freehand sketching, architectural delineation, and digital applications.

ARCH 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/199/)
May be repeated.

ARCH 210 Introduction to the History of World Architecture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/210/)
An introduction to the history of World Architecture, Urbanism, and the built environment from pre-history to the present; in addition to examining the formal properties of global architecture, this course explores buildings and cities in their cultural, social, political, and religious contexts. Prerequisite: Sophomore standing or consent of instructor.

ARCH 222 Islamic Gardens & Architecture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/222/)
Same as ARTH 219 and LA 222. See LA 222.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

ARCH 231 Anatomy of Buildings credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/231/)
A holistic approach to the introduction of architectural technology. Enabling students to integrate technical material with design, this lecture/lab course addresses building codes, zoning, construction documentation and delivery, digital fabrication, and the impact of energy, sustainability, and environmental forces on building construction, comparing general principles of light frame and heavy construction materials, components, and systems. Students learn how to build virtually and physically, understanding the roles design and construction professionals play on integrated teams.

ARCH 232 Structural Fundamentals credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/232/)
The study of forces, their distribution, and their impact on building structure. Topics include: equilibrium of rigid bodies in two and three dimensions; trusses; shear and bending moments in beams; arches and frames; stresses, strains, and deformations in axially loaded members; direct shear and bearing stresses; torsion; beam stresses and deflections; introduction to the design of structural members; and architectural applications. Prerequisite: MATH 220 or MATH 221, and MATH 231 or PHYS 101.

ARCH 273 Strategies of Architectural Design credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/273/)
Focuses on understanding architecture as holistic synthesis of principles, technology and form. Content is arranged in six areas: Research and Analysis, Typology Analysis, Street Analysis, Block Analysis, Neighborhood Analysis, and Development and Presentation. Students work both on individual assignments and in teams on design projects. Emphasis on combining graphic and modeling skills with analytical skills. Exercises require demonstration of skills and concepts introduced in earlier design and technology courses.

ARCH 274 Representation credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/274/)
Develops understanding of the representation of ideas, values, and meaning in the built environment. Focuses on three topic areas: analysis, technical communication, and modeling. Exposure to multiple software tools and mastery of basic skills in each.

ARCH 300 Ind Studies in Urban Design credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/300/)
The individual study of selected topics involving the history, design, and function of significant European cities. Prerequisite: One year of history of architecture or Art History; consent of instructor.

ARCH 314 History of World Landscapes credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/314/)
Same as LA 314. See LA 314.
This course satisfies the General Education Criteria for:
Advanced Composition
Humanities - Hist Phil
Cultural Studies - Western

ARCH 315 History of Modern Landscape Architecture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/315/)
Same as LA 315. See LA 315.

ARCH 321 Environment, Architecture, and Global Health credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/321/)
This course surveys current research at the intersection of the built environment, health, and well-being. It emphasizes relationships among people and multiple scales of the environments they inhabit and the health and well-being consequences of these relationships. It comparatively examines these relationships within a broad range of Western and Non-Western cultures and contexts by introducing significant historical and contemporary theories, data of relevance, research processes, and applications in environmental design and planning processes. To improve person-environment fit, the roles of social groups, institutions, and organizations in the person-environment-health/well-being nexus within various cultural and geographic contexts are examined and compared.

ARCH 341 Environment Tech HVAC credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/341/)
Study of the control of thermal environment, mechanical and related building sub-systems, and their integration into the overall building design. The specific topics include: thermal comfort and behavioral implications; fundamentals of thermal behavior of buildings; the principles of heat and moisture in buildings; indoor air quality and "Sick Building Syndrome"; energy and sustainability implications of building design; and mechanical systems including HVAC and plumbing systems. Prerequisite: ARCH 233.

ARCH 342 Environment Tech Ltg & Acoust credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/342/)
Study of the control of luminous and sonic environments, the supporting building systems, and their integration into the overall building design. Specific topics include: lighting fundamentals; light sources; effects of lighting on comfort and performance; lighting calculations and design; energy economy and sustainability; acoustic fundamentals; room acoustics; noise control; and basic electrical and sound systems. Prerequisite: ARCH 233.

ARCH 351 Statics & Dynamics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/351/)
Study of equilibrium of rigid bodies in two and three dimensions; trusses; shear and bending moments in beams; arches and frames; cables; friction; introduction to dynamics; architectural applications. Prerequisite: MATH 220 or MATH 221; and MATH 231 or PHYS 101.

ARCH 352 Mech of Mat & Design Appl credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/352/)
Study of stresses, strains, and deformations in axially loaded members; direct shear and bearing stresses; torsion; beam stresses and deflections; stresses under combined loading; column buckling; design of structural members; introduction to statically indeterminate structures; architectural applications. Prerequisite: ARCH 351.

ARCH 371 Architectural Design and Urbanism credit: 6 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/371/)
Building design in urban settings; including introductory urban design and site planning issues; urban zoning requirements; human-built environment relationships; life safety requirements; universal design and accessibility; architectural design methods and presentation techniques; required field trips. Prerequisite: ARCH 171, ARCH 172, ARCH 273, ARCH 274, or Consent of Instructor.

ARCH 372 Designing for Human Well-being credit: 6 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/372/)
This course focuses on person-environment relationships to improve the well-being outcomes of design. Students explore nested environmental scales, human and built context, natural environment systems, cultural perspectives, multi-sensory perception, and widely accessible, enabling and inclusive environments. This course introduces design projects as discrete places, both within and influenced by broader physical, social, cultural, and economic systems. This class requires field trips. Prerequisite: ARCH 171, 172, 273, 274, 321, 371 or consent of Instructor. Course restricted to BSAS majors with junior standing or above.

ARCH 399 Study in Versailles, France credit: 0 to 18 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/399/)
Study in the University of Illinois Architectural Program at Versailles, France. Approved for letter and S/U grading. May be repeated. Prerequisite: Concurrent registration in the Versailles, France Study Abroad Program.

ARCH 400 Senior Honors in Architecture credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/400/)
For candidates for honors in Architecture. Independent guided study and research in a selected area of architecture. 1 to 4 undergraduate hours. No graduate credit. May be repeated to a maximum of 6 hours with consent of Director of School. Prerequisite: Senior standing in architecture, a University grade-point average of 3.0 or, in special cases, consent of Director of School.

ARCH 401 Independent Study credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/401/)
Independent guided study and investigation in a selected area of architecture. 0 to 4 undergraduate hours. 0 to 4 graduate hours. Approved for both letter and S/U grading. May be repeated. Prerequisite: Junior standing in architecture, written proposal approved by a sponsoring faculty member and the approval of the Director of the School.

ARCH 402 Introduction to the History of Architectural Theory credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/402/)
Architectural theory, criticism, and historiography from antiquity to the present. Based on close readings of texts from antiquity to the present day. 3 undergraduate hours. 3 graduate hours. Prerequisite: ARCH 210 or consent of instructor.

ARCH 403 Special Topics in Architectural History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/403/)
Special topics in Architectural History courses. Topics and subject matter to be published in course listings. 3 undergraduate hours. 3 graduate hours. May be repeated in separate terms to a maximum of 6 hours. Prerequisite: ARCH 210 or consent of instructor.

ARCH 407 Rome: City of Visible History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/407/)
While primarily associated in popular imagination with its ancient, medieval, and Renaissance past, Rome is a vital, changing, and challenging contemporary city. Rome's many layers show the intersection of multiple periods of architecture and the effects of politics, economics, religion, and culture on the urban context. This course considers the city of Rome from its foundation until today, using critical strategies for understanding urban environments as well as individual monuments. We will employ a variety of evidentiary materials: individual monuments, maps, photographs, prints, primary texts, and films. 3 undergraduate hours. 3 graduate hours. Prerequisite: Sophomore standing.

ARCH 409 Special Topics in Spanish Arch credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/409/)
Explores aspects of the architecture and urban design of Spain from antiquity until the present. 3 undergraduate hours. 3 graduate hours. May be repeated to a maximum of 6 hours. Prerequisite: ARCH 210.

ARCH 410 Ancient Egyptian & Greek Arch credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/410/)
Architecture and urban form in Egypt and the Greek world through the Hellenistic period. Same as CLCV 410. 3 undergraduate hours. 3 graduate hours. Prerequisite: ARCH 210, ARTH 111 or CLCV 131.

ARCH 411 Ancient Roman Architecture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/411/)
Architecture and urban form in the ancient Roman world from the Etruscans to Late Antiquity. Same as CLCV 411. 3 undergraduate hours. 3 graduate hours. Prerequisite: ARCH 210; ARTH 111, CLCV 131, or CLCV 132.

ARCH 412 Medieval Architecture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/412/)
This course introduces the architecture, monumental arts, and urbanism of Byzantium and medieval western Europe from c. 300-1500, using a comparative approach. We will learn about Byzantium's domed churches and robust cities, Europe's Romanesque monasteries and pilgrimage destinations, and its soaring Gothic cathedrals, fortresses, and cities. It integrates architecture with the study of the roles of secular and ecclesiastical authority, design and technological developments, religious performance and observance, warfare and trade between regions, and developing urbanism. Same as MDVL 412. 3 undergraduate hours. 3 graduate hours. Prerequisite: ARCH 210 or ARTH 111.

ARCH 413 Renaissance Architecture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/413/)
Developments in architecture, urban design, and landscape architecture in Italy and western Europe in the fifteenth through the sixteenth centuries. 3 undergraduate hours. 3 graduate hours. Prerequisite: ARCH 210, ARTH 112, or consent of instructor.

ARCH 414 Baroque & Rococo Arch credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/414/)
Developments in architecture, urban design, and garden art in Italy, France, Germany, and England in the seventeenth and eighteenth centuries. 3 undergraduate hours. 3 graduate hours. Prerequisite: ARCH 210, ARTH 112, or consent of instructor.

ARCH 415 Modernity's Mirror: Nineteenth-Century Architecture 1750-1900 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/415/)
The course examines architecture and urbanism in the long nineteenth century (c1750-1900), focusing on Europe and North America. Significant attention will be paid to architectural responses to rapid technological and social changes, including industrialization and the rise of consumer culture, nationalism and colonialism, migration and urbanization, and changes to class and gender norms. We will also consider ancient and medieval architectural revivalism as anchors for political, social, and cultural meaning in the modern world. 3 undergraduate hours. 3 graduate hours. Prerequisite: ARCH 210 or ARTH 112, or consent of instructor.

ARCH 416 The Architecture of the United States, c.1650 to Present credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/416/)
This course surveys the architecture and urbanism in the territory of the present-day United States from c.1650 CE forward. Topics include Native American urban centers; the diverse national origins of colonial architecture; the ongoing significance of vernacular forms; the search for an architecture of democracy; the architecture of slavery; industrialization and the built environment; the Great Migration, urbanization, and architecture; the rise of a formal architectural profession; Modernist architectures in the U.S.; architecture, real estate, and the forces of capital investment; new technologies and the built environment. 3 undergraduate hours. 3 graduate hours. Prerequisite: ARCH 210, ARTH 112, or consent of instructor.

ARCH 417 Modern and Contemporary Global Architecture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/417/)
This course surveys the comparative history of world architecture and urbanism from c1900 to the present, including Modernist, postmodernist and contemporary architectures. Themes include the rise of new typologies, materials and techniques; the centrality of utopian thought, both built and imagined; architecture's role in forging emerging national and postcolonial identities; architecture as visual communication; the rise of spectacle and the privatization of public space; adaptive reuse and emerging discourses of sustainability. 3 undergraduate hours. 3 graduate hours. Prerequisite: ARCH 210 or ARTH 112, or consent of instructor.

ARCH 418 History of the Urban Environment credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/418/)
Examines the evolution of town planning and urban design from prehistory to the present; studies cultural and technical advancements affecting the form of the urban environment. 3 undergraduate hours. 3 graduate hours. Prerequisite: ARCH 210 or consent of instructor.

ARCH 419 Historic Building Preservation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/419/)
Introduces historic preservation: legal, financial, and administrative assistance, graphic examination of restored buildings and sites, and application of conservation technology. 3 undergraduate hours. 3 graduate hours.

ARCH 423 Soc/Beh Factors for Design credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/423/)
Research-oriented introduction to existing social and behavioral knowledge, methods, and tools for relating man to his physical and social environment, with implications for theories and a philosophy of architectural design. 3 undergraduate hours. 3 graduate hours. Prerequisite: Consent of instructor.

ARCH 424 Gender & Race in Contemp Arch credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/424/)
Analyzes how the built environment reflects social attitudes towards gender and race. Identifies the work of women and people of color in architecture and related disciplines as consumers, critics, and creators of the environment. Provides links with valuable professional networks in Chicago and elsewhere. Same as GWS 424. 3 undergraduate hours. 3 graduate hours. Prerequisite: Consent of instructor.

ARCH 433 Design of Steel and Reinforced Concrete Structures I credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ARCH/433/**)**
Loads and load combinations; design methods/structural safety; steel as a structural material; design of structural steel members subject to tension, compression, bending, and shear. Reinforced concrete as a structural material; design for bending, shear, and serviceability; introduction to design of columns. 4 undergraduate hours. 4 graduate hours. Prerequisite: ARCH 232. Restricted to undergraduate and graduate students in the School of Architecture.

ARCH 434 Environmental Control Systems I credit: 5 Hours. **(**https://courses.illinois.edu/schedule/terms/ARCH/434/**)**
Study of the control of thermal, luminous, and sonic environments with an emphasis on passive means of controls. Specific topics include: thermal comfort and behavioral implications; fundamentals of thermal behavior of buildings; the principles of heat and moisture in buildings; lighting fundamentals; light sources; effects of lighting on comfort and performance; energy economy and sustainability; acoustic fundamentals; room acoustics; noise control; basic electrical, plumbing, vertical transportation, and life safety systems. 5 undergraduate hours. 5 graduate hours.

ARCH 435 Structural Systems and Construction Methods credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ARCH/435/**)**
Presents a unified approach to architectural structures and construction technology to enable students to integrate design, engineering, and construction, while providing an understanding of how material/component/system decisions impact the work of architects, engineers, and constructors. Using a series of case-studies and project-based assignments, students learn about the various structural systems and construction methods used in the design of buildings. The evolution and state-of-the-art in structure and construction strategies will be discussed to provide requisite breadth and depth. Topics covered include: structural and building codes; structural systems and their layout planning; foundation systems; construction methods and technologies in wood, steel, concrete, and masonry; sustainability considerations; detailing; and digital modeling. 4 undergraduate hours. 4 graduate hours. Prerequisite: ARCH 231, ARCH 232 and ARCH 433.

ARCH 441 Heat and Moisture in Buildings credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/ARCH/441/**)**
Provides information and skills necessary for the designer to deliver dry, durable and healthful buildings. First half covers theory, including heat transfer, psychrometrics, steady-state diffusion and conduction analysis, and transient analysis. Second half covers building applications: roofs, walls, windows, foundations, and mechanical systems. 3 undergraduate hours. 3 graduate hours. Prerequisite: ARCH 341 or equivalent.

ARCH 451 Theory & Design Steel & Timber credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ARCH/451/**)**
Analysis and design of steel and timber structures for buildings. Steel columns, beams, trusses, connections, roof and floor framing systems; timber beams, columns, roof and floor framing systems. 4 undergraduate hours. 4 graduate hours. Prerequisite: ARCH 352.

ARCH 452 Theory of Reinforced Concrete credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ARCH/452/**)**
Concrete materials; behavior of reinforced concrete construction; behavior and design of structural elements, one-way slabs, beams, and girders; columns; ACI code requirements; and introduction to continuity in reinforced concrete structures. Course Information:4 undergraduate hours. 4 graduate hours. Prerequisite: ARCH 352.

ARCH 460 International Architecture credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ARCH/460/**)**
Interdisciplinary opportunity to focus on, study, and record the design and planning of cities and rural settlements in other cultures. Through directed study and participation in the intellectual environment of a foreign university, students analyze unfamiliar settings, developing insights to enrich their professional development. 4 undergraduate hours. 4 graduate hours. May be repeated in separate terms to a maximum of 8 hours. Prerequisite: Junior standing or higher in the School of Architecture, Department of Landscape Architecture, or the Department of Urban and Regional Planning.

ARCH 461 Critical Travel Documentation credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ARCH/461/**)**
Modern and historic city forms and rural practices are analyzed while experiencing the realities of daily life traveling in another culture. Journals include drawings and writings that record buildings, environs, and landscapes. 4 undergraduate hours. 4 graduate hours. May be repeated in separate terms to a maximum of 8 hours. Prerequisite: Junior standing or higher in the School of Architecture, the Department of Landscape Architecture, or the Department of Urban and Regional Planning.

ARCH 468 Overseas Architectural Studies credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/ARCH/468/**)**
This course is designed to enrich the professional development of students in a study abroad location. Students participate in thematic workshops, seminars, lectures and field trips focused on understanding and analyzing architectural and urbanistic landmarks and settings on site through both directed and independent assignments. 3 undergraduate hours. No graduate credit. May be repeated in separate terms up to 6 hours. Prerequisite: Senior standing in the School of Architecture.

ARCH 471 Fundamentals of Arch Design credit: 6 Hours. **(**https://courses.illinois.edu/schedule/terms/ARCH/471/**)**
Basic architectural design methods, fundamentals, principles and concepts including creative problem solving in two- and three-dimensions. 6 undergraduate hours. 6 graduate hours. Prerequisite: Limited graduate standing in Architecture and concurrent enrollment in ARCH 231.

ARCH 472 Arch Des in Landscape & Cities credit: 6 Hours. **(**https://courses.illinois.edu/schedule/terms/ARCH/472/**)**
Intermediate architectural design methods, fundamentals, principles and concepts focusing on buildings in landscape and urban contexts. 6 undergraduate hours. 6 graduate hours. Prerequisite: ARCH 471 and concurrent enrollment in ARCH 233.

ARCH 473 Architectural Design and Performance credit: 6 Hours. **(**https://courses.illinois.edu/schedule/terms/ARCH/473/**)**
Schematic design and development of a small-scale public building emphasizing the integration of the basic elements of building: materials, details, structure, technology, program, life safety, and universal design. 6 undergraduate hours. 6 graduate hours. Prerequisite: ARCH 371 and ARCH 372.

ARCH 474 Architectural Design and Making credit: 6 Hours. **(**https://courses.illinois.edu/schedule/terms/ARCH/474/**)**
Building design that emphasizes the creative process of making, experimentation, and theories of contemporary methods and materials. Projects focus on translating design ideas at multiple scales into reality through computation, representation, or production, utilizing fabrication processes. Outcomes foreground entrepreneurial design thinking and team-based learning. 6 undergraduate hours. 6 graduate hours. Prerequisite: ARCH 473.

ARCH 475 Arch Design & Development credit: 6 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/475/)
Schematic design and development of a small-scale public building emphasizing the integration of the basic elements of building; materials, details, structure, technology, program, life safety, and universal design. 6 undergraduate hours. 6 graduate hours. Prerequisite: ARCH 374 or ARCH 472.

ARCH 476 Arch Design & Exploration credit: 6 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/476/)
Exploration of boundaries of architecture and the built environment. Focused exploration into specific design topics, such as issue-oriented building problems, urban design theory, intermediate building design and site planning theory, human-environment relationship theory, interdisciplinary design, and architectural design and presentation methods. 4 undergraduate hours. 4 graduate hours. Prerequisite: ARCH 475.

ARCH 481 Concepts and Theories of Architectural Design credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/481/)
The first in a series of four introductory courses exploring the theoretical and practical foundations architecture and the built environment. This course introduces basic theories of architecture. It creates awareness of design concepts. Course content is arranged in three topical areas: Architecture and People, Architecture and Place, and Making Architecture. Each topical area addresses roles of designers and architects in contemporary and historical perspectives. No undergraduate credit. 1 to 3 graduate hours. Prerequisite: Restricted to graduate students.

ARCH 482 Drawing and Modeling credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/482/)
This course explores the theoretical and practical foundations of architecture and the built environment. It provides an introduction to the architectural graphic communication skills that architects use to visualize, analyze, and record creative thoughts including freehand sketching, architectural delineation, and digital applications. No undergraduate credit. 1 to 3 graduate hours. Prerequisite: Restricted to graduate students.

ARCH 483 Strategies of Architectural Design credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/483/)
Strategies of Architectural Design focuses on understanding the importance of site in relationship to human scale and the built environment through precedent analysis of typology, street, block and neighborhood. In addition, students will be introduced to basic strategies of architectural design and how these strategies are implemented through tectonics and materiality. No undergraduate credit. 1 to 3 graduate hours.

ARCH 484 Representation credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/484/)
This course develops understanding of how architects represent ideas, values and meaning in the built environment. The course focuses on three topic areas; • analysis and representation of existing contexts, including climate, built environment and natural features • 2d and 3D graphic communication techniques and tools • analog and digital modeling techniques and tools. Students will be introduced to multiple relevant software tools and acquire basic skills in each. No undergraduate credit. 1 to 3 graduate hours.

ARCH 490 Special Topics in Contemporary Architecture credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/490/)
Selected topics in and applications of contemporary architecture; see Class Schedule or department office for current topics. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated in separate terms up to 12 undergraduate hours or 8 graduate hours, if topics vary. Prerequisite: Consent of instructor. For majors only.

ARCH 491 Arch Professional Internship credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/491/)
Full-time or part-time professionally supervised field experience in design intended to introduce students to the practice of architecture in a commercial firm or agency of government. Students work in the school-approved firm or agency of their choice. Written work reports and reflective experiential learning reports are required. 0 undergraduate hours. 0 graduate hours. Approved for S/U grading only. May be repeated in separate terms a maximum of 3 times.Prerequisite: Graduate standing or upper-level undergraduate standing, or consent of instructor. For students enrolled in the BSAS and M.Arch. programs of study only.

ARCH 498 Directed Research in Arch credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/498/)
Participation in on-going research projects which may include energy management, environmental perception, facilities development, building science, and other topics. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated to a maximum of 8 hours. Prerequisite: Approval of written proposal by instructor and Director of School.

ARCH 499 Off-Campus Study credit: 0 to 12 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/499/)
Provides opportunity for approved off-campus study. Detailed proposal for study off campus must be submitted for approval to the appropriate committee in the School prior to such study. Final determination of credit and its application toward the degree is made after a review of the student's off-campus work by the above committee and the Director of School. 0 to 12 undergraduate hours. 0 to 12 graduate hours. Approved for both letter and S/U grading. Prerequisite: Senior or graduate standing in architecture and approval of program prior to registration.

ARCH 501 Architectural Practice credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/501/)
Role of the architect in the building enterprise, professional ethics, and the conduct of professional practice; legal aspects of architectural practice and building construction; introduction of business management, marketing, operational procedures, financial planning, and cost control of architectural practices; and the administration of construction contracts. Prerequisite: Graduate standing or consent of instructor.

ARCH 502 Structural Planning credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/502/)
General problems in the selection and design of structural systems for buildings; methods of analysis; site explorations, soils, and foundations; bracing; and special systems. Prerequisite: ARCH 451 and ARCH 452.

ARCH 510 History of World Landscapes credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/510/)
Same as LA 513. See LA 513.

ARCH 511 Seminar in Ancient Architecture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/511/)
Seminar on topics in ancient architecture. 3 graduate hours. No professional credit. Prerequisite: ARCH 410, ARCH 411, or equivalent as determined by the instructor.

ARCH 512 Seminar in Medieval Architecture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/512/)
Seminar on topics in medieval architecture and urbanism. Same as MDVL 512. 3 graduate hours. No professional credit. May be repeated to a maximum of 12 hours in separate terms. Prerequisite: ARCH 411, ARCH 412, or equivalent as determined by the instructor.

ARCH 513 Sem in Ren & Baroque Arch credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/513/)
Seminar on topics in European architecture from the fifteenth through the eighteenth centuries. Prerequisite: ARCH 413 and ARCH 414, or equivalent as determined by the instructor.

ARCH 515 History & Theory of Modern Landscape Architecture credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/515/)
Same as LA 515. See LA 515.

ARCH 516 Seminar in Modern Arch History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/516/)
Seminar on topics in architectural history from 1800 to the present. 3 graduate hours. No professional credit. May be repeated in separate terms to a maximum of 12 hours. Prerequisite: ARCH 415, ARCH 416, or ARCH 417.

ARCH 517 Modern Architectural History, 1850-Present credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/517/)
This course is a survey of significant buildings, movements, and figures of modern and contemporary architecture, contextualized in the social, cultural, political, economic, and technological developments of their time. It outlines the development of Modernist, postmodernist, and contemporary architectural thought. Key themes include industrialization and modernization, the development of global Modernisms and postmodernism in the twentieth-century, regionalism, globalization, the sustainability movement, and the development of digital technologies in architecture. 3 graduate hours. No professional credit.

ARCH 518 Recording Historic Buildings credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/518/)
Examines techniques for recording historic buildings and sites: measuring, photographing, and drawing to Historic American Building Survey standards; taking field notes and investigating public records to document reports. Prerequisite: ARCH 419 and demonstrated ability in architectural graphics; or consent of instructor.

ARCH 519 Conserv of Building Materials credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/519/)
Examination, analysis, and pathologies of building materials and techniques for treatment and repair of historic buildings. Emphasis is on conservation of traditional masonry, concrete, and metals. Field trips and lab work. To receive 4 hours credit, students must participate in lab. Prerequisite: ARCH 419.

ARCH 521 Applications in the Built Environment, Architecture and Global Health and Well-Being credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/521/)
Addresses topics at the intersection of environmental conditions and human health around the globe and engages students in reading, discussing, and applying the results of the latest research and translational studies linking environmental design to health in a range of diverse cultural contexts. Students consider the application of research to everyday practices and decision making, as well as to professional design, planning, and community health practices and engage in a secondary-source research project. 4 graduate hours. No professional credit. Prerequisite: Restricted to graduate students or consent of the instructor.

ARCH 522 Advanced Research in Environment, Architecture & Global Health credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/522/)
This course examines seminal and current research at the intersection of environmental conditions and human health globally. It introduces techniques for locating and interpreting research, and synthesizing findings. Students explore a range of epistemologies and research ontologies, compare results and utility for health-focused architectural and environmental design and policy interventions. Students apply research to professional design, planning, and community health-focused problems and decision making, and engage in a secondary-source research project and its dissemination. 4 graduate hours. No professional credit. Prerequisite: ARCH 321, ARCH 521, or consent of instructor. Restricted to graduate students.

ARCH 530 Management in Architecture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/530/)
Study of management and business administration topics relevant to the architecture profession. The application of: marketing, ethics, accounting, organizational behavior, quantitative analysis, finance, operations, economics, and strategic planning to the field of architecture. Management and economic issues that influence and motivate commercial, industrial, institutional, and individual clients are addressed. Prerequisite: Graduate standing in Architecture.

ARCH 534 Building Economics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/534/)
Study of factors affecting cost of building including: the building market, construction cost, estimates and cost control, time value of money and building life-cycle cost, measuring the worth of investments, depreciation and tax consideration of cash-flows. Prerequisite: Graduate standing or consent of instructor.

ARCH 536 Planning and Design of Structural Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/536/)
This course addresses the selection, planning, and preliminary design of structural systems for buildings. Emphasis is on understanding structural systems and their components as part of an integrated building system. Topics covered include a review of concepts from statics and strength of materials, structural requirements of strength-stiffness-stability, structural planning considerations, gravity loads and systems, lateral loads and systems, soils and foundations, and cable-net and other facade systems. 4 graduate hours. No professional credit. Prerequisite: ARCH 232 and ARCH 433 or consent of instructor.

ARCH 537 Environmental Control Systems II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/537/)
This course investigates the control of thermal and luminous environments with an emphasis on active means of controls and building envelope design. Specific topics include: heating and cooling load and energy calculations; primary (boilers, chillers, etc.) and secondary (comfort delivery) mechanical systems; indoor air quality; energy, lighting, and daylighting codes and metrics; electric lighting properties, selection, design, and calculations; advanced daylighting strategies and calculations; visual comfort assessment; curtain wall and masonry systems; and rain screen principles. 4 graduate hours. No professional credit. Prerequisite: ARCH 434 or consent of instructor.

ARCH 538 Econ Issues in Arch Develop credit: 4 or 6 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/538/)
Individual and team analysis of architectural development proposals addressing relevant economic topics and trends. Proposals are analyzed for development, construction, finance, operation, and sale costs. Potential and projected rate of return on investment is established for specific time periods. Economic and social forces impacting upon real estate values are examined. 4 or 6 graduate hours. No professional credit. Prerequisite: ARCH 501, ARCH 530, and ARCH 534; or consent of instructor.

ARCH 544 Bldg Sys & Design Integration credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/544/)
Advanced course on building design for greater performance, including the study of: the anatomical and functional variations of building subsystems and their design implications; inter-system relationships and synergistic integration of building subsystems into the overall building; and the strategies for designing buildings of high functional performance and greater overall value. Term paper is required for 4 hours credit. Prerequisite: Graduate standing in Architecture or consent of instructor.

ARCH 545 Design & Constructability credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/545/)
Advanced course on building design for greater constructability, including material alternatives and their architectural, performance, and construction implications; the implications of the specifics of design on the range of applicable construction methods, and therefore, on construction productivity and economy; and the strategies for designing buildings of high constructability and greater overall value. Term paper is required for 4 hours credit. Prerequisite: ARCH 544 or consent of instructor.

ARCH 546 Programming & Concept Studio credit: 6 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/546/)
An advanced course on programming architectural projects and developing design concepts to best meet the project goals and maximize value creation. Investigation of relevant issues and appropriate methods of programming and concept development are followed by programming and design exercises. The specific contents include: theories and methods of programming; general program requirements and exemplary design responses for selected major building types; testing of the viability of selected model programs through exploration of appropriate design responses; further enhancement of the subject programs in light of such explorations; and investigation and development of philosophically sound and operationally efficient methods of programming and design. May not be repeated for credit. Prerequisite: Graduate standing in architecture and consent of instructor.

ARCH 547 Architectural Practice Studio credit: 6 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/547/)
Comprehensive building design with emphasis on holistic design integration for optimum performance and constructability with best possible economy under the realistic temporal, technical, legal, and budgetary limitations. The projects, typically real ones, are executed through partial construction document phase through collaborative design by project teams. (Day-long Friday field trips). Prerequisite: ARCH 534, ARCH 545, and ARCH 546; or consent of instructor.

ARCH 548 Const Execution & Admin credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/548/)
Advanced course in construction with emphasis on acquiring knowledge and developing skills for successful project execution in a real-time project with numerous variables affecting the project outcome, including: devising methods and strategies for effective project execution; making decisions that can steer the project to the best possible direction; and skillfully mediating disputes and conflicts that might arise. For this purpose, on-going major construction projects are used as Learning Laboratories. May be repeated to a maximum of 8 hours. (Summer I credit: 1 graduate hour and Summer II credit: 2 graduate hours). Prerequisite: ARCH 501 and ARCH 545; or consent of instructor.

ARCH 550 Design of Steel and Reinforced Concrete Structures II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/550/)
Analysis and design of structural steel members subject to combined forces; analysis and design of bolted and welded joints, and simple connections. Presentation of reinforced concrete slab and roof systems and their characteristics; design of one-way slab-joist systems; design of multi-span reinforced concrete beams under pattern loading; influence lines and practical design of continuous beams; deflection of reinforced concrete beams and slabs; development length and bar cut-offs; design of short and slender reinforced concrete columns including biaxial bending 4 graduate hours. No professional credit. Prerequisite: ARCH 433. Restricted to graduate students in the School of Architecture.

ARCH 551 Structural Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/551/)
Advanced problems in the analysis of statically determinate structures; general theories and methods of analysis of statically indeterminate structures by geometric and energy methods; and introduction to theory of plastic design. Prerequisite: ARCH 451 and ARCH 452.

ARCH 552 Soil Mech and Foundations credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/552/)
Soil properties and site exploration; stresses in soils; soil consolidation and settlement; shear strength of soils; bearing capacity; design of spread and combined footings; mats; pile foundations; lateral soil pressure and retaining walls. Prerequisite: ARCH 452 and ARCH 551.

ARCH 553 Advanced Reinforced Concrete Design credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/553/)
Strengthening, evaluation, and repair of existing structures; design of two-way slab systems using direct design method; design of two-way slab systems using equivalent frame method; design of post-tensioned concrete systems; design of shear walls; design of deep beams. 3 graduate hours. No professional credit. Prerequisite: ARCH 550; ARCH 551; credit or concurrent registration in ARCH 560 or consent of instructor. Restricted to graduate students in the School of Architecture.

ARCH 554 Adv Steel Design credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/554/)
Advanced topics in the design of steel structures; critical study of the AISC specification; design of steel members and their connections; composite structures; and the analysis and design of continuous structures and tall buildings. Prerequisite: ARCH 560 or consent of instructor.

ARCH 555 Prestressed Concrete Design credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/555/)
Theory and design of prestressed concrete structures and suspension shell structures. Prerequisite: ARCH 553 or consent of instructor.

ARCH 556 Advanced Structural Planning credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/556/)
Study of the loads, functional and spatial requirements, and construction problems in the selection and design of structural systems for buildings; cost estimates; and integration of mechanical and electrical equipment. Prerequisite: ARCH 552and ARCH 553; credit or concurrent registration in ARCH 554 and ARCH 555, or consent of instructor.

ARCH 557 Seismic Analysis and Design credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/557/)
This course introduces the basic concepts of seismology, vibration theory, and their relevance to building structural design. The course gives students the opportunity to understand the codes and their application. The class will explore seismic forces and distribution in a building through computer modeling, calculation-based exercises, and two projects. 3 graduate hours. No professional credit. Prerequisite: ARCH 551 or ARCH 536 or consent of instructor. Students may be concurrently enrolled in ARCH 551.

ARCH 558 Structural Wood Design credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/558/)
Analysis and design of wood structures for buildings; response of wood buildings to gravity and lateral loads; design of structural elements: beams, columns, beam-columns, members in tension, and trusses using NDS specifications; connections; plywood panels; diaphragms and shear walls. Prerequisite: ARCH 451 or equivalent.

ARCH 559 Structural Masonry Design credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/559/)
Engineering properties of masonry materials; codes and standards for masonry structures; analysis and design of masonry structures including multistory buildings and arches. Prerequisite: ARCH 452 or equivalent.

ARCH 560 Advanced Structural Analysis credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/560/)
Advanced theory and analysis of statically indeterminate structures, recognizing effects due to temperature, settlement, and fabrication errors; matrix methods focusing on computer analysis techniques; introduction to plastic analysis and design. Prerequisite: ARCH 551.

ARCH 563 Soc/Beh Research Designed Env credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/563/)
Introduction to methods and techniques of systematically generating social and behavioral information relevant to the programming, design, and evaluation of physical environments. Same as LA 563. Prerequisite: Graduate standing in architecture, landscape architecture, or urban and regional planning.

ARCH 571 Design: Detail and Architectonics credit: 6 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/571/)
Design studio investigations of multiple techniques and methodologies addressing the design and fabrication of small-scale architectural constructions, explorations of specific sites and places, and interdisciplinary projects. Field trips may be required. Shop safety orientation required. 6 graduate hours. No professional credit. May be repeated in separate terms to a maximum of 12 hours. Prerequisite: Graduate standing or consent of instructor.

ARCH 572 Design: Health and Well-being credit: 6 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/572/)
Design studio explorations responding to social, economic, political, and behavioral dimensions of human existence and settlement to encourage healthier designed environments. Projects investigate the experience of physical environments at the human scale and socially sustaining design strategies addressing diverse human needs. Field trips may be required. 6 graduate hours. No professional credit. May be repeated in separate terms to a maximum of 12 hours. Prerequisite: Graduate standing or consent of instructor.

ARCH 573 Design: Technology and Performance credit: 6 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/573/)
Design studio investigations of buildings and systems focusing on structure, enclosure, technology and performance. Integration of building materials, components and systems and their impact on the design, construction, and sustainability of buildings. Field trips may be required. 6 graduate hours. No professional credit. May be repeated in separate terms to a maximum of 12 credit hours. Prerequisite: Graduate standing or consent of instructor.

ARCH 574 Design: Architecture and Urban Design credit: 6 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/574/)
Design studio investigations of issues that impact urban habitats, buildings and people. Architecture and urban design, preservation, and adaptation of new and existing buildings, cities, districts, public realms and urban environments. Designing and preserving buildings and communities in a sustainable manner. Field trips may be required. 6 graduate hours. No professional credit. May be repeated in separate terms to a maximum of 12 credit hours. Prerequisite: Concurrent enrollment in ARCH 536 or consent of instructor.

ARCH 575 Integrative Architecture Design Studio credit: 6 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/575/)
Schematic design and development of a public building focusing on the integration of environmental, structural, and building envelope systems, while also addressing issues of accessibility, life safety, environmental stewardship, and site conditions. Field trips may be required. 6 graduate hours. No professional credit. Prerequisite: ARCH 536 and ARCH 537.

ARCH 576 Architectural Design Seminar credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/576/)
Presentations and discussions relative to various areas of architectural and environmental design concerns. May be repeated to a maximum of 15 hours. Prerequisite: Consent of instructor.

ARCH 577 Theories of Architecture credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/577/)
Review of principles of architectural design; factors in programming architectural requirements; design development; and evaluation and criticism. 4 graduate hours. No professional credit. Prerequisite: ARCH 517 or consent of instructor.

ARCH 588 Independent Study credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/588/)
Independent guided study and investigation in a selected area of architecture. 0 to 4 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated in the same or separate semesters to a maximum of 12 hours, if topics vary. Prerequisite: Graduate standing in Architecture, written proposal approved by a sponsoring faculty member and the approval of the Director of Graduate Studies.

ARCH 589 PhD Colloquium credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/ARCH/589/)
Provides Ph.D. students insight on the opportunities, responsibilities and expectations of various career paths, including academia, industry, and government. Core responsibilities - research, teaching and service - required of academic faculty will be discussed, along with important resources and strategies to aid students in obtaining a position and plotting a successful career path. 1 graduate hour. No professional credit. Approved for S/U grading only. May be repeated in separate terms to a maximum of 2 hours. Ph.D. students must repeat in separate terms to a maximum of 2 hours.

ARCH 590 Directed Research credit: 0 to 8 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/590/)
Nature and scope of projects to be determined through consultation between student and faculty advisor; open to architecture and landscape architecture majors as well as those from other disciplines who wish to engage in interdisciplinary work. 0 to 8 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated by MArch students in the same or separate terms to a maximum of 12 hours. PhD students may repeat in the same term to a maximum of 12 hours or in separate terms up to 18 hours. Prerequisite: Consent of instructor.

ARCH 591 Special Problems in Architectural History and Theory credit: 3 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/591/)
Examines historical and/or theoretical problems in the history of architecture, the built environment, and related designed objects and arts in relation to emerging, interdisciplinary research. Topics can include thematic investigations of historical, conceptual, aesthetic, and theoretical problems; the work of particular architects and/or patrons; specific buildings or environments in a single or multiple geographic regions or periods. 3 to 4 graduate hours. No professional credit. May be repeated in separate terms to a maximum of 12 hours. Prerequisite: Consent of instructor. Graduate Standing.

ARCH 592 Special Problems in Urbanism credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/592/)
Addresses emerging issues and research focused on cities, regions and urbanism, with particular focus on issues pertinent to architecture. Topics may include urban theories, morphological studies, social, political and economic influences in cities, sustainable urbanism, comparative analysis or cities, and urbanism in global contexts. 2 to 4 graduate hours. No professional credit. May be repeated to a maximum of 12 hours. Syllabi for this course vary by instructor and semester. Prerequisite: Graduate Standing.

ARCH 593 Special Problems in Detail and Fabrication credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/593/)
The investigation and study of the design and fabrication of architectural components and assemblies. 2 to 4 graduate hours. No professional credit. May be repeated as topics vary to a maximum of 12 hours. Prerequisite: Restricted to Graduate Students.

ARCH 594 Special Problems in Building Performance credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/594/)
In-depth investigation of emerging issues and specific areas of research interest beyond what is covered in graduate courses of regular offering in the area of building performance. Students, as individuals or in groups, are expected to propose a research plan and methods for a specific topic of research interest in consultation with the instructor, and execute it under the guidance of the instructor through consultation on a regular basis. 2 to 4 graduate hours. No professional credit. May be repeated to a maximum of 12 hours. Prerequisite: Restricted to Graduate Students.

ARCH 595 Spec Prob Struct Theory & Des credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/595/)
Individual or group investigation and study in architectural engineering application; research in economy and design in correlation with architectural, mechanical, and structural requirements. May be repeated to a maximum of 12 hours. Prerequisite: Consent of instructor.

ARCH 596 Special Problems in Health and Wellbeing credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/596/)
In-depth investigation of emerging issues and specific areas of research interest by individuals or groups. Topics are those beyond what is covered in graduate courses regularly offered in the area of health and wellbeing, including theories and knowledge of specific buildings or projects in diverse global contexts; comparative studies; and theoretical, conceptual, and health-focused problems. 2 to 4 graduate hours. No professional credit. May be repeated to a maximum of 12 hours. Prerequisite: Restricted to Graduate Students.

ARCH 597 Special Problems in Architectural Design credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/597/)
Individual investigation of building types and systems, aesthetic theories, programming and other problems in architectural design. 2 to 4 graduate hours. No professional credit. May be repeated to a maximum of 12 hours. Prerequisite: Restricted to Graduate Students.

ARCH 598 Specialized Architectural Practice credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/598/)
This course adds an academic dimension to professionally supervised field experiences in which problems in architectural design and technology are defined, researched, and solved. Advanced doctoral students are introduced to applied research processes in any of architecture's sub-disciplines. Sites of applied research may include commercial firms, not-for-profit organizations, and government agencies. Students work in school-approved firms or agencies of their choice. Written accounts of work accomplished, documentation of research questions developed and pursued, and reflective experiential learning reports must be submitted for evaluation. Field experiences may be part time or full time. 0 graduate hours. No professional credit. Approved for S/U grading only. May be repeated for up to 11 months total of training. This course is intended to facilitate CPT in professionally focused environmental design research for students in the PhD program. Prerequisite: Required research methods course (ARCH 505/LA 505 or ARCH 563/LA 563 or equivalent) and approval of both PhD program chair and student's PhD adviser. For PhD students who have completed stage 1 of coursework.

ARCH 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/ARCH/599/)
For doctoral students in Architecture who have completed their required coursework and are working on their dissertations or who are completing their dissertation proposals prior to their preliminary examinations. Consists of focused writing of the dissertation or proposal as directed by Dissertation Advisor. Arranged sessions provide time devoted to meeting writing goals; discussion of the writing process; advisor feedback on students' writing, and guidance on how to make progress on the writing. Reserved for use by Ph.D. students in the writing phase of their dissertation work or in the semester leading to their preliminary examinations. In extraordinary cases it may be approved for use by M.S. students submitting a written thesis. 0 to 16 graduate hours. No professional credit. Approved for S/U grading only. May be repeated in separate terms to a maximum of 32 hours. Prerequisite: Consent of instructor and graduate program coordinator. Restricted to Ph.D. Students.

ART - ART

ART Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/ART/)

Courses

ART 100 Understanding Visual Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ART/100/)
Interdisciplinary methods in recognizing and understanding meaning of a wide range of visual messages in the arts, design, and culture, with emphasis on critical thinking and analysis. Topics include: visual perception, visual persuasion, the visual interpretation of time and space, humor. Contemporary art and design are explored through the use of semiotics and historical, cultural and ethical aesthetic and technical perspectives.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

ART 102 Drawing for Non-Majors credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ART/102/)
Students will work with a wide variety of drawing materials, methods and strategies in a studio art context. Students will explore drawing concepts, form, and technique through production and critique of artworks, as well as address theories and histories of visual representation through readings and discussion. Students with little or no background in visual art are encouraged to participate as well as those who may have significant knowledge and experience. Not open to students majoring in art and design. Additional fees may apply. See Class Schedule.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

ART 103 Painting for Non-Majors credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ART/103/)
Students will work with a wide variety of painting materials, methods and strategies in a studio art context. Students will explore painting concepts, form, and technique through production and critique of artworks, as well as address theories and histories of visual representation through readings and discussion. Students with little or no background in visual art are encouraged to participate along with those who have significant knowledge and experience. Additional fees may apply. See Class Schedule.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

ART 104 Sculpture for Non-Majors credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ART/104/)
Students will work with a wide variety of sculptural materials, methods and strategies in a studio art context. Students will explore sculpture concepts, form, and technique through production and critique of artworks, as well as address theories and histories of visual representation through readings and discussion. Students with little or no background in visual art are encouraged to participate along with those who may have significant knowledge and experience. Additional fees may apply. See Class Schedule.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

ART 105 Visual Design for Non-Majors credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ART/105/)
This course utilizes lectures, exercises, and projects to help students heighten their visual literacy, improve their ability to communicate in an increasingly visually oriented world, and gain a better understanding of the processes and methodologies that designers use. Additional fees may apply. See Class Schedule.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

ART 140 Introduction to Art credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ART/140/)
A creative and expressive exploration of multiple art media, including but not limited to drawing, painting and design elements. This course is an introduction to the art making process with weekly interactive lectures and hands on studio sections. Additional fees may apply. See Class Schedule. Not open to students in art and design and architecture.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

ART 150 Introduction to Drawing credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ART/150/)
This is an introductory drawing course with an emphasis on heightening visual awareness and utilizing basic elements of technique and concept. Media such as pencil and charcoal will be used through a variety of technical and conceptual exercises. This course is designed for students who have little to no prior experience with drawing. Approved for Letter and S/U grading. May be repeated in separate terms up to 4 hours. Prerequisite: Enrollment is restricted to students of Living Learning Communities and minors in Art + Design.

ART 151 Black & White Film Photography credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ART/151/)
Course offers a foundation in black & white film photography. Camera use, film exposure & processing, and printing processes will be explained and demonstrated. Provides a technical & conceptual understanding of photography as a visual medium for expression and communication of ideas. Approved for Letter and S/U grading. May be repeated in separate terms up to 6 hours. Prerequisite: Enrollment is restricted to students in Living Learning Communities and minors in Art + Design.

ART 152 Experimental Photography credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ART/152/)
Introduces students to a variety of alternative photographic media and image making practices, including: photograms, pinhole cameras and paper negatives, Diana medium format cameras, orthochromatic film, cyanotype and VanDyke brown printing, solarizing/specialty print developers and print toners. Approved for both Letter and S/U grading. May be repeated in separate terms up to 6 hours. Prerequisite: Enrollment is restricted to students of Living Learning Communities and minors in Art + Design.

ART 153 Digital Photography Seminar credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ART/153/)
Course offers a foundation in digital photography. Camera use and digital editing will be explained and demonstrated. Elements of visual composition for effective photographs will also be included. Course is taught as a service-learning project with the Champaign County Humane Society. Weekly field trips to photograph at CCHS are a component of the class schedule. Approved for both Letter and S/U grading. May be repeated in separate terms up to 4 hours. Prerequisite: Enrollment is restricted to students of Living Learning Communities and minors in Art + Design.

ART 154 Digital Video credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ART/154/)
This is an introductory course for those who have little or no experience working in digital video formats. Students will explore the tools and techniques of moving image production through individual and team projects, as well as view and discuss existing films and videos. Students will learn basic camera functions and the use of professional editing programs for video and sound. Projects will focus on the creation of time-based media with an emphasis on technique, documentation, narrative, and context. Approved for both Letter and S/U grading. May be repeated in separate terms up to 4 hours. Prerequisite: Enrollment is restricted to students of Living Learning Communities and minors in Art + Design.

ART 155 Introduction to Graphic Design - Unit One credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ART/155/)
This course introduces non-graphic design majors to visual literacy, composition, and the creative process. Students will solve real world visual communication problems in a hands-on studio environment using Adobe Creative Suite (Illustrator, Photoshop, and InDesign). Students will receive instruction in the elements of visual grammar and establish a foundation for visual literacy based on design principles. Using hands-on exercises and problem-solving projects, students will work through the creative process and learn industry standards necessary to function in today's commercial art field. Approved for Letter and S/U grading. Prerequisite: Enrollment is restricted to students of Living-Learning communities and minors in Art + Design.

ART 160 The Image World: Photography for Non-Majors credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ART/160/)
Explores photography and video as the most powerful media in today's image-saturated world. Students will look at, think about, discuss, and write about a diverse array of photography and video. They will study examples of historical and contemporary art, design, journalism and advertising, in various and numerous contexts. Students will make their own images, create their own videos, conduct visual research, and produce media-based projects. Students will also build their own individual social media sites for sharing their work with both their classmates and the world. Additional fees may apply. See Class Schedule. Credit is not given for ART 160 if credit for ARTD 160 has been earned. Prerequisite: For non-majors and Art & Design Minors.

ART 191 Unit One Studio/Seminar credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/ART/191/)
Topics vary; consult Unit One office. Approved for both letter and S/U grading. May be repeated if topics vary.

ART 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/ART/199/)
Additional fees may apply. See Class Schedule. May be repeated.

ART 201 Art in Early Childhood credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ART/201/)
Philosophical and practical foundations for teaching art in early childhood settings. Lectures, discussions and class activities focus on the value of art in the curriculum, artistic development and instruction, observation and guided teaching practice. Additional fees may apply. See Class Schedule. Prerequisite: Not open to students majoring in art and design.

ART 202 Art in the Elementary Grades credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ART/202/)
Introductory laboratory experiences with the elements of design in the visual arts and with processes, materials, and activities appropriate for the elementary grades. Additional fees may apply. See Class Schedule. Prerequisite: Not open to students majoring in art and design.

ART 205 Experience & Meaning in Design credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ART/205/)
Introduces students to the cultural impact of graphic design by connecting graphic design theory to the everyday experience of meaningful design. Graphic design will be studied as a mediating factor between culture and cognitive processing. The course utilizes a weekly pattern of assigned readings, online presentations, design assignments delivered online, and peer review. The reading and presentations will connect the students to major concepts. The assignments will allow students to demonstrate understanding of those concepts.
This course satisfies the General Education Criteria for:
Social Beh Sci - Beh Sci
Cultural Studies - Western

ART 206 Mining the University/Community credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ART/206/)
Mining the University/Community is an hybrid/online course allowing students to assemble their own intellectual experience by finding and attending creatively-stimulating public events outside of their majors. Students are charged to find challenging events each week (lectures, performances, screenings, discussions of intellectual value), contribute these 'finds' to a class calendar full of possibilities, attend one of those events and then post a written evaluation of their chosen event each week to the class blog on Compass. Each student creates a collection of 14 different intellectual experiences with observations and responses shared with all class members as well as a final class post to summarize the evolution of the collection.

ART 208 Digital Art and Sustainability credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ART/208/)
The course will explore the social and environmental impacts of art-making practices that rely heavily on computer and Internet technologies. We will examine the wide range of artistic practices that employ computer and internet technologies and will introduce students to artists and artistic practices that criticize computer and Internet technologies and their impacts. Students will research the source of materials and labor used to manufacture computer and Internet related technologies, the facilities that support the infrastructure of the Internet and the social, political and economic systems that impact end of life management of electronic waste. From this base of research, students will employ digital or Internet technologies to produce a final project that explores how they understand the impact of their use of these technologies in scholarly pursuits including research, writing and making art.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

ART 210 Special Topics for Non-Majors credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ART/210/)
Allows students to explore a revolving series of genres, specializations, and /or interdisciplinary practices. Possible subjects include, but are not limited to, site-specific public art, recycled and sustainable materials, performance, sound, or emerging technology. Topics and subject matter to be published in course listings. May be repeated to a maximum of 6 hours in separate terms.

ART 221 Visual Culture of Fandoms credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ART/221/)
The course will involve writing and art making as two modes of interpretation and response to mediated imagery. We will consider the idea that students may become so closely entwined with their own fandoms that it affects their sense of self, personal/societal relationships, and memory. We will also focus on the importance of imagination in creating/sustaining fandoms and fan art. The framework of this course will be supported by academic literature on fandoms as well as visual methodologies. Students will briefly learn about elements and principles of design; the codes and conventions that structure the image; the viewers and how they interpret or experience the image; and the contexts in which an image is exhibited and viewed.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

ART 240 Learning Through Contemporary Art credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ART/240/)
By looking at how contemporary artists research, strategize, and make, students in this class will learn about arts-based approaches to research, study, and learning. Students will respond to the work examined through their own video production instead of traditional writing.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

ART 280 Exploring Visual Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ART/280/)
Introduces key concepts for understanding the wide range of imagery that has come to characterize contemporary everyday life in the 21st century. Explores concepts drawn from the literature of visual culture studies. Analyzes images from popular culture, fine arts, and vernacular arts, with contemporary mass media, such as music videos and television dramas, being considered alongside historical paintings and sculpture.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

ART 299 Special Topics in Art credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/ART/299/)
Topics and subject matter to be published in course listings. Additional fees may apply. See Class Schedule. May be repeated in the same term to a maximum of 6 hours. May be repeated in separate terms to a maximum of 12 hours. Prerequisite: Sophomore standing.

ART 310 Design Thinking credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ART/310/)
Introduces design literacy and promotes an understanding of the field of contemporary design. Explores design thinking as a common thread that connects all disciplines concerned with the making of things, the solving of problems, and the organization of information. Through a series of lectures, case studies, and simple design projects, this course offers an extensible framework of tools and strategies that can be applied across multiple disciplinary boundaries.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

ART 350 Writing with Video credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ART/350/)
Students will engage in a comprehensive exploration of creative inquiry, self-reflection, social engagement, and media production. They will adapt the basic, traditional principles of critical writing and analysis, to communicate effectively using image production and post-production. Directed writings in concert with video production projects will allow students to experience an integrated process of thinking, creating, and problem-solving.

ART 375 Capstone Studio for Non-Majors credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ART/375/)
Non-majors with prior studio experience will identify and pursue project-based creative work, either individually or as part of a collaborative team. Students work closely with the instructor to identify individual interests and formulate a suitable semester-long project. Prerequisite: Two prior studio courses.

ART 499 Special Topics in Art credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ART/499/)
Topics and subject matter to be published in course listings. Additional fees may apply. See Class Schedule. 1 to 3 undergraduate hours. 1 to 4 graduate hours. May be repeated in the same term to a maximum of 6 undergraduate hours or 6 graduate hours. May be repeated in separate terms to a maximum of 9 undergraduate hours or 12 graduate hours. Prerequisite: Senior standing or consent of instructor.

ART 550 Writing with Video Workshop credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ART/550/)
Explores the use of video in research, scholarly, and/or creative endeavors. Students engage in a comprehensive examination of video as a rhetorical narrative medium, with a focus on the actual production of video work. Emphasizes the use of video as a tool for inquiry, engagement, composition, and communication across a broad range of cultural and professional practices. Additional fees may apply. See Class Schedule. Prerequisite: Graduate standing.

ARTD - ART--DESIGN

ARTD Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/ARTD/)

Courses

ARTD 101 Introduction to Industrial Design credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTD/101/)
Introduction to problem-finding and problem-solving processes in the design of products. This course teaches foundational industrial design skills, methods, philosophies, and design thinking. Creation of 3-dimensional products begins with a simplified design process, adding steps until a final project is completed that incorporates all components of the design process. This course satisfies the 3D requirement in the new Art + Design Foundations curriculum. Additional fees may apply. See Class Schedule. Prerequisite: For Art + Design majors only.

ARTD 151 Introduction to Graphic Design credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTD/151/)
An introductory course for students considering graphic design as their major. This course teaches design as a critical thinking and problem solving process that will be applied to class projects. Topics will include principles of visual perception, visual communication theory, precedents in design history, and technical skills common to the practice of graphic design and which relate to image making, surface design, typography, layout, design systems and their applications. This course satisfies the 2D requirement for the new Art + Design Foundation curriculum. Additional fees may apply. See Class Schedule. Prerequisite: For art and design majors only.

ARTD 201 Industrial Design I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTD/201/)
Introduction to the creative process and methods involved in industrial design; research, modeling, form giving, prototyping and communication with emphasis on user centered design. Projects of escalating scale and complexity complemented by lectures and demonstrations. Additional fees may apply. See Class Schedule. Prerequisite: Concurrent registration in ARTD 224 or ARTD 225.

ARTD 202 Industrial Design II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTD/202/)
Studio design problems of increasing complexity involving structures and mechanisms. Lectures and discussions to explore design issues affecting contemporary culture and aesthetics perceptions. Additional fees may apply. See Class Schedule. Prerequisite: ARTD 201. Concurrent registration in ARTD 224 or ARTD 225. Sophomore standing in Industrial Design major.

ARTD 215 Introduction to Typography for Non-Majors credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTD/215/)
ARTS EXCHANGE: This introductory studio functions as a survey of typography across different media. Students will create and understand fonts and typefaces and investigate strategies for using type in everyday life. Additional fees may apply. See Class Schedule.

ARTD 216 Introduction to Image Making credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTD/216/)
This introductory studio functions as a survey of representational strategies through image reproduction technology. Discussions center around the reader's construction of meaning through still and moving images. Students develop an authorial voice in visual practice. Additional fees may apply. See Class Schedule. Prerequisite: Sophomore standing in graphic design curriculum or consent of instructor.

ARTD 217 Graphic Design for Non-Majors credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTD/217/)
ARTS EXCHANGE: Introduces students to the field of graphic design in theory and practice. Examines what graphic designers make and the methods that are employed in contemporary design practice. Emphasis is placed on the organization and visual presentation of relevant content across media and their effect within systems. Additional fees may apply. See Class Schedule. Prerequisite: Restricted to students in FAA or permission of instructor.

ARTD 218 Interaction Design Foundation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTD/218/)
This 16-week course will immerse students in a series of assignments designed to help them develop a fundamental understanding of front-end web technologies, such as HTML5, CSS and JavaScript, and prepare them to plan and develop interactive experiences. Prerequisite: ARTD 251 and ARTD 270.

ARTD 222 Typographic Practice credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTD/222/)
This introductory studio functions as a survey of typographic practice across media platforms. Students relate typographic form to reading conventions and reproduction technologies. Additional fees may apply. See Class Schedule.

ARTD 225 Design Drawing credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTD/225/)
Introduction to rapid drawing methods and tools used by designers. Focuses on theory and application of orthographic and perspective drawing for communication of design ideas. Additional fees may apply. See Class Schedule. May be repeated to a maximum of 6 hours. Prerequisite: Concurrent registration in ARTD 201 or ARTD 202.

ARTD 228 Computer Applications credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTD/228/)
Concepts, methods and applications of computer-aided industrial design to the design of products for mass manufacture. Rendering and lighting techniques to communicate product forms. Additional fees may apply. See Class Schedule. Prerequisite: Industrial Design major, sophomore standing or consent of instructor. Concurrent registration in ARTD 201 or ARTD 202.

ARTD 230 Design Thinking/Need-Finding credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTD/230/)
Design thinking, a term with origins in industrial design practice, describes a human-centered approach to design and innovation in products and services, addressing the tri-partite requirements of feasibility, desirability and viability. With this focus on determining user needs, a variety of processes, including observation, empathy, ideation, prototyping and modeling, are used to discover people's needs and opportunities for design thinking, along with the communication of design outcomes by diagrammatic and narrative means. Design thinking is best done in teams, hence the project team basis for this course. This course concentrates on need-finding rather than the full resolution of design proposals. Same as TE 230. Additional fees may apply. See Class Schedule. Prerequisite: For Art+Design or Engineering majors only.

ARTD 240 eWaste: Sustainable Design credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/ARTD/240/**)**
Examines the topics of electronic waste, or eWaste, within the context of sustainable design. Students will learn about sustainable and "green" electronic product design practices and develop the ability to assess a variety of products according to these criteria. Case studies will be supplemented by assigned readings, directed writing, and group discussion.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

ARTD 251 Graphic Design Toolbox credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/ARTD/251/**)**
This studio introduces students to the field of graphic design in theory and practice. The course examines what graphic designers make and the methods that are employed in contemporary design practice. Emphasis is placed on the organization and visual presentation of relevant content across media and their effect within systems. Additional fees may apply. See Class Schedule.

ARTD 270 Design Methods credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/ARTD/270/**)**
Design Methods is a hybrid studio and seminar that introduces students to the principles and process of human-centered design through a focus on research and observation outside of the studio. This approach will allow students to address the social and cultural contexts in which designers intervene. Through a series of exercises and projects, students will begin to develop competencies in conducting research in specific environments in order to inform and inspire the direction of their design projects. Students will also learn how to iterate design solutions and prototypes based on expert input, testing and user feedback. Students will better understand and articulate the tools and methodologies shared by all design disciplines as it relates to a variety of actions and outcomes: visual communication and the design of objects, services, interactions and experiences. Additional fees may apply. See Class Schedule.

ARTD 299 Spec Topics in Design Courses credit: 1 to 5 Hours. **(**https://courses.illinois.edu/schedule/terms/ARTD/299/**)**
Topics and subject matter to be published in course listings. Additional fees may apply. See Class Schedule. May be repeated to a maximum of 6 hours in a semester, to a maximum of 12 total hours. Prerequisite: Sophomore standing in Art and Design.

ARTD 301 Industrial Design III credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ARTD/301/**)**
Design of user centered products for mass production; experience in the iterative problem solving processes and methods. Addresses practical constraints such as sustainability, environmental factors/ergonomics, manufacturing and materials, social and political and economic. Additional fees may apply. See Class Schedule. Prerequisite: ARTD 202.

ARTD 302 Industrial Design IV credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ARTD/302/**)**
Industrial design problems of increasing complexity, scope and size. Continuation of ARTD 301. Additional fees may apply. See Class Schedule. Prerequisite: ARTD 301.

ARTD 317 UI/UX Design for Non-Majors credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/ARTD/317/**)**
This User interface/User experience (UI/UX) studio introduces the non-designer to the construction of compelling user experiences that incorporate the use of digital products/code. Students investigate both the theoretical and practical aspects of UI/UX through projects involving information architecture, user scenarios, wireframing, interface design, and creative code for web and mobile products. Additional fees may apply. See Class Schedule. Prerequisite: ART 215 or ARTD 217.

ARTD 318 Interaction Design credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/ARTD/318/**)**
This studio explores the construction of compelling user experiences that incorporate the use of digital media. Students investigate both the theoretical and practical aspects of interaction through exercises involving information architecture, interface design, and creative code. Additional fees may apply. See Class Schedule. Prerequisite: ARTD 218.

ARTD 326 Sustainability & Manufacturing credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/ARTD/326/**)**
Exploration of environmental origins, theory and practice of sustainable product design. Environmentally-responsive design methodologies and topics such as industrial ecology, dematerialization, design for disassembly, design for recycling and life-cycle assessment. Additional fees may apply. See Class Schedule. Prerequisite: Junior standing in Art and Design or consent of instructor.

ARTD 328 Human-Centered Product Design credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/ARTD/328/**)**
Principles of human-centered design and usability applied to products, product systems, and product environments to enhance the user experience; strategies to enhance independent learning for professional development, to further research, and to acquire new skills. Additional fees may apply. See Class Schedule. Prerequisite: Junior standing in Art and Design or consent of instructor.

ARTD 333 Type & Image credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/ARTD/333/**)**
This studio extends typographic study with representational strategies for image reproduction technology. Students engage in practices for incorporating existing and created imagery into typographic systems. Additional fees may apply. See Class Schedule. Prerequisite: ARTD 222 and ARTD 251.

ARTD 351 Graphic Design Inquiry credit: 1 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ARTD/351/**)**
A series of topical studios that touch upon the myriad practices of graphic design. Students produce and analyze form and content according to each individual topic. Media engagement varies across sections. Additional fees may apply. See Class Schedule. May be repeated up to 8 hours. Prerequisite: ARTD 251.

ARTD 371 Graphic Design Practicum credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/ARTD/371/**)**
This analytical studio prepares students for entry into the field of graphic design. Professional practice is parsed into areas of opportunity, to which students ultimately align themselves and by which they structure their preparatory endeavors. Additional fees may apply. See Class Schedule. Prerequisite: ARTD 418 and ARTD 444.

ARTD 391 Special Problems in Design credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTD/391/)
Directed independent creative activity or research. Additional fees may apply. See Class Schedule. May be repeated to a maximum of 6 hours. Prerequisite: Junior standing in Art and Design; and consent of instructor, advisor, and associate director of the School. A contract must be completed & approved by the instructor & advisor. Must be Junior. 3.3 GPA, & only 6 hours total Ind. Study.

ARTD 399 Internship in Design credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTD/399/)
Internships to be pre-approved for variable credit. Students will be required to document work completed during the internship with verification of supervisor. Supervisor will also be required to fill out a questionnaire either by mail or on-line. Faculty members will assess work and questionnaires to assign a grade. Approved for S/U grading only. May be repeated if topics vary to a maximum of 4 hours. Prerequisite: Junior standing in School of Art and Design.

ARTD 401 Industrial Design V credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTD/401/)
Advanced design projects in the context of the business environment in which product design and development takes place; marketing, branding, merchandizing, entrepreneurship within the context of globalized marketing and manufacturing. Additional fees may apply. See Class Schedule. 4 undergraduate hours. 4 graduate hours. Prerequisite: ARTD 302.

ARTD 402 Industrial Design VI credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTD/402/)
Capstone project integrating all aspects of the design process from concept through final design, documentation and presentation; reconciliation of user centered constraints such as socio-economic, environmental-sustainability, manufacturability, health and safety and ethical. Standard approach that of an entry level industrial design professional. Additional fees may apply. See Class Schedule. 4 undergraduate hours. 4 graduate hours. Prerequisite: ARTD 401.

ARTD 415 Ninth Letter credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTD/415/)
Students develop, design, and produce issues of the national literary and arts journal, Ninth Letter. Also involves students in curating and designing content for the companion website, ninthletter.com. Additional fees may apply. See Class Schedule. 3 undergraduate hours. 4 graduate hours. May be repeated to a maximum of 6 undergraduate hours and 8 graduate hours. Prerequisite: Consent of instructor.

ARTD 418 Advanced Interaction Design credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTD/418/)
This advanced studio immerses students in design investigations that foster understanding of emergent digital interaction paradigms. Potential areas of exploration include design and development for both mobile devices and interactive environments. Additional fees may apply. See Class Schedule. 3 undergraduate hours. 3 graduate hours. Prerequisite: ARTD 318.

ARTD 420 Disability Design credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTD/420/)
Focuses on user-oriented, collaborative approaches to designing new products and services, with special emphasis on designing for people with disabilities. Students gain an understanding of the product development process by exploring empathic design research approaches, while working directly with prospective clients. Course work centers on designing products for mass production, and on recognizing opportunities to re-engineer existing products. 3 undergraduate hours. 4 graduate hours. Prerequisite: Junior standing.

ARTD 426 Product Innovation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTD/426/)
Presents an overview of the product development process from concept generation to design for manufacturing and project management. Emphasis on product definition, innovation, the early phases of development and the role of designer in new product development. 3 undergraduate hours. 3 graduate hours.

ARTD 444 Typographic Systems credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTD/444/)
Students engage with complex typographic systems across varied media in a studio setting. Additional fees may apply. See Class Schedule. 3 undergraduate hours. 4 graduate hours. Prerequisite: ARTD 333 and ARTD 351.

ARTD 445 Seminar in Design credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTD/445/)
Investigation of special problems and current topics in industrial and/or graphic design. Students will conduct original research which will be shared through papers, presentations, and discussions. Additional fees may apply. See Class Schedule. 3 undergraduate hours. 4 graduate hours. May be repeated in separate terms to a maximum of 12 undergraduate hours or 16 graduate hours. Prerequisite: Junior standing in Art and Design or consent of instructor.

ARTD 448 Professional Design Practice credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTD/448/)
Concentrates on developing presentation and communication skills that form the basis of a successful design career. Students will engage in portfolio reviews, plan and install exhibitions, prepare client presentations, and rehearse job interviews. Written work will include CV preparation. Emphasis will be placed on familiarizing students with professional practices and contexts. 3 undergraduate hours. No graduate credit.

ARTD 451 Ethics of a Designer in a Global Economy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTD/451/)
Ethics of a Designer in a Global Economy (EDGE) studio presents complex problems of ethics within the graphic design practice. Individual sections address social and environmental issues. Additional fees may apply. See Class Schedule. 4 undergraduate hours. 4 graduate hours. May be repeated up to 8 hours in the same term and 12 hours in separate terms, if topics vary. Prerequisite: Graphic Design majors must have completed prerequisite courses ARTD 218 and ARTD 333. Sustainable Design majors are restricted by junior standing.

ARTD 452 Interaction Design Problems credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTD/452/)
This series of topical studios presents complex problems of user experience through interactive media. Individual sections address professional, theoretical, or exploratory problems. Technological engagement varies across sections. 1 to 4 undergraduate hours. 1 to 4 graduate hours. Prerequisite: ARTD 222 and ARTD 318.

ARTD 471 Graphic Design Capstone credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTD/471/)
Students in this advanced studio articulate individual interests and conduct corresponding investigations to develop specialized expertise. The coursework represents the student's final preparation for practice in graphic design. Additional fees may apply. See Class Schedule. 3 undergraduate hours. No graduate credit. Prerequisite: ARTD 371.

ARTD 490 Senior Honors credit: 2 to 5 Hours. (https://courses.illinois.edu/schedule/terms/ARTD/490/)
Independent creative activity, guided study, or research for honors. 2 to 5 undergraduate hours. No graduate credit. May be repeated to a maximum of 5 hours. Prerequisite: Senior standing in Industrial Design, a cumulative grade point average of 3.0; and consent of instructor and department.

ARTD 499 Special Topics in Design credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTD/499/)
Topics and subject matter to be published in course listings. Additional fees may apply. See Class Schedule. 1 to 3 undergraduate hours. 1 to 4 graduate hours. May be repeated as topics vary to a maximum of 9 undergraduate hours or 12 graduate hours. Prerequisite: Senior standing or consent of instructor.

ARTD 501 Industrial Design I credit: 6 Hours. (https://courses.illinois.edu/schedule/terms/ARTD/501/)
Introductory graduate-level course emphasizing in-depth design research used to evaluate set studio projects. Focuses on the development of critical thinking and product evaluation, and the development of inherent skills required to communicate that thinking through designed artifacts. This course is the first level of a six-term study in a three-year program leading to a terminal degree of MFA in Industrial Design. Additional fees may apply. See Class Schedule. Prerequisite: BFA in Industrial Design or a related field (as accepted by the faculty), or consent of instructor.

ARTD 502 Industrial Design II credit: 6 Hours. (https://courses.illinois.edu/schedule/terms/ARTD/502/)
Second term of the introductory level year of the Industrial Design MFA degree program. Additional fees may apply. See Class Schedule. Prerequisite: ARTD 501.

ARTD 503 Industrial Design III credit: 6 Hours. (https://courses.illinois.edu/schedule/terms/ARTD/503/)
Start of the second level of a six-term study in a three-year program leading to a terminal degree of MFA in Industrial Design. For two-year program, emphasis is solely directed to a research and design project that is the first stage of a comprehensive written thesis. Additional fees may apply. See Class Schedule. Prerequisite: ARTD 502.

ARTD 504 Industrial Design IV credit: 6 Hours. (https://courses.illinois.edu/schedule/terms/ARTD/504/)
Completion of the second level of a six-term study in a three-year program leading to a terminal degree of MFA in Industrial Design. For two-year program, emphasis is solely directed to a research and design project that is the final stage of a comprehensive written thesis. Additional fees may apply. See Class Schedule. Prerequisite: ARTD 503.

ARTD 505 Industrial Design V credit: 6 Hours. (https://courses.illinois.edu/schedule/terms/ARTD/505/)
Beginning of the third year of six-term study in a three-year program leading to a terminal degree of MFA in Industrial Design. Emphasis is solely directed to a research and design project that is the first stage of a comprehensive written thesis. Additional fees may apply. See Class Schedule. Prerequisite: ARTD 504.

ARTD 506 Industrial Design VI credit: 6 Hours. (https://courses.illinois.edu/schedule/terms/ARTD/506/)
Final term of a three-year program leading to a terminal degree of MFA in Industrial Design. Emphasis is solely directed to a research and design project accompanied by a comprehensive written thesis. Additional fees may apply. See Class Schedule. Prerequisite: ARTD 505.

ARTD 510 Membership in a Design Research Team Project credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTD/510/)
Design research is fundamentally interdisciplinary, often involving domain and process experts from a variety of fields. Students will choose to join one among several continuing peer- or faculty-led design research projects at various stages of completion. They will learn how to adapt their existing expertise to contribute productively to the project in its current stage, absorb insight from work completed at earlier stages, and collaborate with team members to advance the project toward its defined goals. Additional fees may apply. See Class Schedule. 4 graduate hours. No professional credit. May be repeated to a maximum of 8 hours. Prerequisite: Restricted to students enrolled in the MFA or PhD program in Design for Responsible Innovation or consent of instructor.

ARTD 511 Leadership in a Design Research Team credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTD/511/)
Design research is fundamentally interdisciplinary, often involving domain and process experts from a variety of fields. Students will gain hands-on experience with design research team leadership by learning how to define, staff, and manage a new collaborative research project or new stage of a continuing project. Special attention will be paid to the distinctive features of the design research process such as the extended period of ambiguity and methods for eliciting significant contributions from team members with varied domain and process expertise. Additional fees may apply. See Class Schedule. 4 graduate hours. No professional credit. May be repeated to a maximum of 8 hours. Prerequisite: ARTD 510. Enrollment in the MFA or PhD program in Design for Responsible Innovation or consent of instructor.

ARTD 551 Design Research Impact credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTD/551/)
This seminar helps MFA design students connect their research with pedagogy and professional development strategies to disseminate their research into publishing, conferences, communities, and other relevant venues. 4 graduate hours. No professional credit.

ARTD 570 Design Research Methodology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTD/570/)
This seminar coordinates readings in design theory and the processes and principles of human-centered design with graduate students' emerging thesis research interests. Students will address the role of design research methodology in establishing design practice and design pedagogy. Graphic Design students enrolled in this course will be well-prepared to take leadership roles in the corresponding Design Methods (ARTD 270). 4 graduate hours. No professional credit. Prerequisite: MFA students in Graphic Design.

ARTD 591 Special Problems in Design credit: 1 to 8 Hours. (https://courses.illinois.edu/schedule/terms/ARTD/591/)
Directed individual creative activity or research. Additional fees may apply. See Class Schedule. 1 to 8 graduate hours. No professional credit. May be repeated if topics vary, in the same semester up to 10 hours; in separate semesters to a maximum of 20 hours. Prerequisite: Graduate standing in Design.

ARTD 595 MFA Design for Responsible Innovation Studio credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ARTD/595/**)**
This studio provides the MFA design student with tools to define and develop their body of work in the context of the DRI program's mission by pursuing an individual or collaborative path. The course enhances the student's ability to develop a rigorous theoretical framework and select appropriate methods and processes for design research and pedagogy. Additional fees may apply. See Class Schedule. 4 graduate hours. No professional credit. May be repeated in separate terms to a maximum of 20 hours. Prerequisite: Enrollment in the MFA concentration in Design for Responsible Innovation or consent of instructor.

ARTD 599 Thesis credit: 0 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ARTD/599/**)**
Faculty guidance in writing and depositing thesis for MFA concentrations in Industrial Design or Design for Responsible Innovation. Students should enroll with the faculty member who is supervising the thesis. Additional fees may apply. See Class Schedule. 0 to 4 graduate hours. No professional credit. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 8 hours. Prerequisite: Restricted to graduate study in Design For Responsible Innovation or Industrial Design.

ARTE - ART--EDUCATION

ARTE Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/ARTE/)

Courses

ARTE 101 Art, Design, and Society credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/ARTE/101/**)**
This course provides an introductory forum for beginning artists, designers, art historians, and art educators to think through the motivation(s) behind their/our creative work(s), research, and practices. Through topical examinations of contemporary art, craft, design, art history scholarship, art education scholarship, and interdisciplinary projects, developing artists will sift through pertinent issues around sustainability, ethics, ecologies, pedagogies, and civic engagement in order to inform our own burgeoning motivations and creative practices. Additional fees may apply. See Class Schedule. Prerequisite: For Art +Design majors only.

ARTE 201 Foundations of Art Education credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/ARTE/201/**)**
Provides students with philosophical foundations for teaching art including in public schools. The primary emphasis will be on understanding recent and contemporary orientations through readings and practical activities. Particular emphasis will be placed on emerging trends in Art Education, especially the use of technology and the value of visual culture in student lives. It is envisaged that this course will provide the primary theoretical foundation for further practical and pre-service teaching courses in Art Education. Additional fees may apply. See Class Schedule.

ARTE 202 Facilitating the Art Experience credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/ARTE/202/**)**
In this course students will learn how individuals can facilitate the art experience for others. Through mutual exploration, research, and invention, students in this course will develop personal methods for teaching art and guiding others through experiences with art. There is a strong emphasis made in this course on how teaching practice(s) are related to art making practice(s) and therefore how teaching is a means through which meaning is made for the self and the public. Additional fees may apply. See Class Schedule.

ARTE 203 Everyday Arts Lab credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/ARTE/203/**)**
In this course, undergraduates learn to design and teach arts curriculum for youth (k-12) in settings including libraries, community centers, and schools. Students will explore their identities as artists, educators, and citizens, and learn how to assess impact of their projects and teaching. The course welcomes all students; no prior teaching or community-based education experience necessary. Non-art education majors should expect to spend 1 day / 3 hours per week at a community site during the after-school hours (e.g. 2:00-5:00) during the second half of the semester. Additional fees may apply. See Class Schedule. Prerequisite: Art education majors should take ARTE 203 in conjunction with ARTE 204.

ARTE 204 Practicum Teaching Experience credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/ARTE/204/**)**
Provides undergraduate and graduates seeking certification in Art Education structured and supervised teaching experience in the Everyday Arts Lab program, held 2 afternoons per week during the second half of the semester. Professional development in lesson planning, instruction, and assessment will comprise the goals of the course. Additional fees may apply. See Class Schedule. Prerequisite: ARTE 202. Must be taken in conjunction with ARTE 203.

ARTE 260 Museums in Action credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/ARTE/260/**)**
Considers how scholarly discourse in museum interpretation and educational program development are translated into practices that engage culturally diverse audiences. Readings, research, and professional activities provide students with opportunities for examination of museum interpretive practices, programming decisions, and public engagement activities, along with analysis of Krannert Art Museum's presence on the university campus, in the larger community, and on the World Wide Web. Additional fees may apply. See Class Schedule.

ARTE 299 Spec Topics in Art Education credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/ARTE/299/**)**
Topics and subject matter to be published in course listings. Additional fees may apply. See Class Schedule. May be repeated to a maximum of 6 hours in a semester or, to a maximum of 12 total hours. Prerequisite: Sophomore standing in Art and Design.

ARTE 301 Curriculum, Assessment, and Art Education credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/ARTE/301/**)**
With a focus on problem-based learning, students will design lesson plans and curriculum around a complex human issue. Students will have hands-on experiences teaching in actual classrooms as these lessons will be taught in local schools. Additional fees may apply. See Class Schedule. Prerequisite: ARTE 203 and ARTE 204; Art education majors only.

ARTE 302 Art-Centered Learning at the Secondary Level credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/ARTE/302/**)**
Focusing on contemporary art and integration with other disciplines, students will design lesson plans and curriculum for secondary students. Observations and teaching of lessons will occur in local junior/high school art rooms. Additional fees may apply. See Class Schedule. Prerequisite: ARTE 203, ARTE 204, and ARTE 301; Art education majors only.

ARTE 350 Creative Dance for Children credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/ARTE/350/**)**
Same as DANC 350 and HDFS 361. See DANC 350.

ARTE 391 Independent Study credit: 1 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ARTE/391/**)**
Directed independent research or creative activity. Additional fees may apply. See Class Schedule. May be repeated to a maximum of 6 hours. Prerequisite: Junior standing in art and design; and consent of instructor, advisor, and associate director of the School.

ARTE 393 Teachers as Researchers credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTE/393/)
An undergraduate level course dedicated to providing an overview for informed understanding of the research process, including: definitions and examples of research; common issues such as the IRB, copyright and plagiarism; and exploring two qualitative methodologies used in teaching, specifically Case Study and [Participatory] Action Research. Students will complete 20 Early Field Experience [EFE] hours in this course by observing/teaching with elementary and/or secondary (art) teachers in the local Champaign-Urbana school districts. A substantial research project will complete the course. Prerequisite: Should be accepted into teacher certification program [such as art ed]. For Art Education majors only.

ARTE 401 Teaching Seminar credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTE/401/)
Examines responsibilities, methods, and techniques specific to teaching art in elementary and secondary schools; includes the psychology of the exceptional child in conjunction with methods of instruction and student teaching experience. 4 undergraduate hours. 4 graduate hours. Prerequisite: ARTE 302; concurrent registration in EDPR 438 and EDPR 442, art education sections only.

ARTE 402 Artistic Development credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTE/402/)
Historical and contemporary perspectives on children's artistic development, emphasizing relationships between general intellectual growth and the ability to create and respond to works of art. Additional fees may apply. See Class Schedule. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: Junior standing, and PSYC 100 and EPSY 201.

ARTE 475 Art Exhibition Practices credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTE/475/)
Explores issues pertaining to the preparation, installation and conservation of visual art. Students will learn how to organize, design, spot and install an exhibition; develop exhibition graphics; address conservation issues; handle works of art; and learn the business of art. Field trips and guest lectures by conservators, preparators, curators and exhibition designers will add further depth to the class. Additional fees may apply. See Class Schedule. 3 undergraduate hours. 4 graduate hours. May be repeated in separate terms to a maximum of 6 undergraduate hours or 8 graduate hours. Prerequisite: Junior standing in Art and Design.

ARTE 480 Popular Visual Culture credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTE/480/)
Focuses primarily on contemporary popular culture, but also draws upon fine art, folk art, and indigenous art from both the past and the present. Considers the often troubled relationships between the pleasures of visual culture and its ideologies. Students examine the literature of visual culture studies and develop research skills by examining a specific site of visual culture of their own choosing in terms of aesthetic pleasures and ideology including but not limited to sexism, class, ethnicity, religion, homophobia, and xenophobia. Theories of the body, consumerism, and globalization, among others will be considered. Additional fees may apply. See Class Schedule. 3 undergraduate hours. 4 graduate hours. May be repeated in separate terms to a maximum of 6 undergraduate hours or 8 graduate hours.

ARTE 490 Senior Honors credit: 2 to 5 Hours. (https://courses.illinois.edu/schedule/terms/ARTE/490/)
Independent guided research and study for honors. Additional fees may apply. See Class Schedule. 2 to 5 undergraduate hours. No graduate credit. May be repeated to a maximum of 5 hours. Prerequisite: Senior standing in art education, a cumulative grade point average of 3.0; and consent of instructor, advisor, and associate director of the School.

ARTE 501 Issues in Art Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTE/501/)
A range of topical issues are explored, which may vary from semester to semester, but may include children's artistic development, visual culture and curriculum, the philosophy of art, and cultural studies. Additional fees may apply. See Class Schedule. 4 graduate hours. No professional credit. May be repeated in the same or separate terms, if topics vary, to a maximum of 16 hours.

ARTE 502 Curriculum Development in Art credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTE/502/)
Analysis of curriculum organization in the visual arts; particular emphasis given to a range of curriculum positions in education and general research related to curriculum design. Additional fees may apply. See Class Schedule. Prerequisite: Consent of instructor.

ARTE 503 Professional Teaching Seminar credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTE/503/)
Advanced laboratory experiences in two-dimensional visual art techniques for elementary teachers, supervisors, and principals. Additional fees may apply. See Class Schedule. May be repeated to a maximum of 8 hours. Prerequisite: Consent of instructor.

ARTE 505 Foundations of Art Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTE/505/)
Designed for master's level students. Readings and discussions introduce the theories upon which classroom practices are based, and follow the historical sequence of three major movements within art education over the past 100 years: self-expression in art education, discipline-based art education, and the recent shift toward visual culture in art education. Primary emphasis will be on understanding recent and contemporary orientations. Designed to provide a basis for more in-depth study of curriculum and instruction, child development, multiculturalism, visual culture, and other areas germane to art education. Students compare and contrast the literature in terms of the theories offered, or assumed, of children, art, pedagogy, and society. In addition, students will be introduced to academic standards of writing.

ARTE 506 Theories of Art Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTE/506/)
Designed for doctoral level students. Readings and discussions introduce the theories upon which classroom practices are based, and follow the historical sequence of three major movements within art education over the past 100 years: self-expression in art education, discipline-based art education, and the recent shift toward visual culture in art education. Primary emphasis will be on understanding recent and contemporary orientations. Designed to provide a basis for more in-depth study of curriculum and instruction, child development, multiculturalism, visual culture, and other areas germane to art education. Students compare and contrast the literature in terms of the theories offered, or assumed, of children, art, pedagogy, and society. In addition, students will be introduced to academic standards of writing.

ARTE 591 Independent Graduate Studies credit: 1 to 8 Hours. (https://courses.illinois.edu/schedule/terms/ARTE/591/)
Individual direction in research and in creative activity; thesis. Additional fees may apply. See Class Schedule.

ARTE 593 Survey: Qualitative Methodologies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTE/593/)
An asynchronous online graduate level course dedicated to providing an overview and foundation [survey course] for informed understanding of the research process, including: definitions and examples of research; common issues such as the IRB, copyright and plagiarism; formulating a personal research guide book; and exploring various qualitative methodologies such as Case Study; Content Analysis; Historical Study; [Participatory] Action Research; Arts-based; A/r/t/ography; [Auto] Ethnography; Queer; Feminism; and Psychoanalysis. Substantive reading and writing is required. 4 graduate hours. No professional credit. Prerequisite: For graduate students only.

ARTE 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/ARTE/599/)
Guidance in research and writing theses for advanced degrees. Approved for S/U grading only. May be repeated. Prerequisite: Graduate standing in art education.

ARTF - ART--FOUNDATION

ARTF Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/ARTF/)

Courses

ARTF 101 Contemporary Issues in Art credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ARTF/101/)
Exposes the first year student in an interactive lecture/discussion format to contemporary issues and disciplines in the visual arts. Course requirements include attendance of course lectures, field trips, visiting artist presentations, keeping of a journal and the writing of a paper. Additional fees may apply. See Class Schedule.

ARTF 102 Observational Drawing credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTF/102/)
Theory and practice in observational drawing with emphasis on fundamental principles such as mark/line, shape/form, space/composition, linear/perspective, scale/proportion, value/tonal range, and pattern/texture. Additional fees may apply. See Class Schedule. Prerequisite: For art and design majors only.

ARTF 103 Design I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTF/103/)
Theory and practice in the elements, processes and principles of design. Course content is organized under three headings: COLOR, a study of the visual, material and psychological nature of color; COMMUNICATION, an introduction to the fundamentals of visual communication using primarily digital media; and 3D CRAFT, a survey of fabrication techniques using three-dimensional media. Additional fees may apply. See Class Schedule. Prerequisite: This course is open to Art and Design Majors only.

ARTF 104 Expressive Drawing credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTF/104/)
One of a suite of three drawing courses, this class includes the following drawing concepts: narrative, conceptual, applied, non-objective, format, process, seriality and collage. Additional fees may apply. See Class Schedule. Prerequisite: For art and design majors only.

ARTF 105 Design II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTF/105/)
Theory and practice in the elements, processes and principles of design. Course content is organized under three headings: RESEARCH, an introduction to methods used in research-driven project; TIME, an examination of the formal and technical aspects of temporal media such as sound, video or animation; and 3D EXPLORATION, a process-driven exploration of three-dimensional space and form. Additional fees may apply. See Class Schedule.Prerequisite: ARTF 103.

ARTF 106 Visualization Drawing credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTF/106/)
This studio course introduces students to the graphic representation techniques of visualization utilized within the fields of design and arts, as well as teaches drawing as a tool for thinking. Lectures and studio projects examine the language of three-dimensional form and deal with a wide range of analysis and representation of form, including mechanical drawing, freehand sketching and various means of rendering. Additional fees may apply. See Class Schedule. Prerequisite: For Art+Design majors only.

ARTF 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/ARTF/199/)
Additional fees may apply. See Class Schedule.

ARTF 201 Issues in Visual Communication credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ARTF/201/)
Survey ideas and movements that have had important impact on visual culture over the last century. Readings, discussions, presentations, and research projects, will introduce significant modern and contemporary theories, and the artists and designers who have exemplified and furthered those ideas. Students will gain an understanding of issues that have influenced visual art and design in recent history, improve their ability to analyze images, expand their concepts of how meaning gets attached to images and objects, and increase their ability to engage in debate and discussion about art and design practices.

ARTF 301 Art + Design Matters credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTF/301/)
Students attend a weekly lecture series featuring well-known artists, designers, art historians, and art educators. Provides an opportunity to hear leading contemporary practitioners talk about the ideas, concepts, and agendas behind their work. Lectures are supplemented by weekly online directed writing assignments that further explore issues and ideas raised in the lectures. As a final project, students research and write about a contemporary artist or designer of their choosing. Prerequisite: Junior standing.

ARTH - ART--HISTORY

ARTH Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/ARTH/)

Courses

ARTH 110 Introduction to the History of Art and Visual Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/110/)
This course introduces participants to foundational questions that shape the disciplines of art history and visual studies. It is not a comprehensive survey. Rather, it provides students critical frames for examining the visual world from various temporal, geographic, and methodological perspectives. Students will investigate the history, interpretation, and criticism of selected cultural objects, images, places, and spaces across time and around the globe.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

ARTH 111 Ancient to Medieval Art credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/111/)
Development of the visual arts in Western Europe and the Near East in their cultural contexts from prehistoric times until the early fifteenth century; includes Egyptian, Greek, Roman, and medieval art and architecture. Same as MDVL 111.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

ARTH 112 Renaissance to Modern Art credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/112/)
Development of the visual arts in Western Europe and the United States in their cultural contexts from the early fifteenth century to the present.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

ARTH 113 Introduction to African Art credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/113/)
An introduction to the arts of Africa. Sculpture, textiles, architecture, body adornment, and performance will be examined on the basis of aesthetic, religious, political, and social contexts. The main emphasis will be on traditional art, although the course will address many changes and continuities within African art as evidenced in the late 20th century. The course will proceed geographically from western through central to eastern and southern Africa. Videos, music, and museum visits will complement the lectures.

ARTH 211 Design History Survey credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/211/)
The historical, social and cultural context of design concentrating on manufactured products, communication, media and design from the Industrial Revolution to the present. Lectures, seminars and individual research projects.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

ARTH 214 Art in China credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/214/)
Introduction to the visual arts in China and the practices of their exhibition in public museums. The structure of the course, which follows that of our textbook, is both thematic and chronological. The themes encompass objects made for tombs; objects made at the imperial court; objects made for worship; objects exchanged among members of the elite; and objects bartered in a market place. Final projects involve designing an exhibition. Same as EALC 214. Credit is not given for ARTH 214 if credit for ARTH 114 has been given.
This course satisfies the General Education Criteria for:
Advanced Composition
Cultural Studies - Non-West

ARTH 215 Greek Art credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/215/)
Survey of architecture, sculpture, and painting of the Greek world from the geometric period to the beginning of the Christian era. Same as CLCV 217.

ARTH 217 Development of Ancient Cities credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/217/)
Same as CLCV 231 and JS 231. See CLCV 231.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

ARTH 218 Ancient Greek Sanctuaries credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/218/)
Same as CLCV 232 and REL 232. See CLCV 232.

ARTH 219 Islamic Gardens & Architecture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/219/)
Same as ARCH 222 and LA 222. See LA 222.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

ARTH 222 Medieval Art credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/222/)
The arts of Byzantium and Western Europe from the early Christian era to the Renaissance. Same as MDVL 222.

ARTH 230 Italian Renaissance Art credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/230/)
Architecture, painting, and sculpture of Italy during the Renaissance.

ARTH 231 Northern Renaissance Art credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/231/)
Architecture, painting, sculpture, and minor arts of Europe outside Italy in the fifteenth and sixteenth centuries. Same as MDVL 231.

ARTH 235 Art, Power and Culture in 17th-Century Europe credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/235/)
Explores the diverse functions of the visual arts in Europe in a period of religious strife; expanding global trade; the rise of early capitalism, and the consolidation of absolutist regimes.

ARTH 240 Art of the Nineteenth Century credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/240/)
Architecture, painting, sculpture, and minor arts of France, Germany, Spain, and England in the nineteenth century.

ARTH 241 Modern Art, 1880-1940 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/241/)
This course examines the ways in which artists reconceived how art should look and function in response to the many changes -- social, political, and technological -- that accompanied the modernization of Europe from 1880 to 1940. Topics to be covered include the avant-garde, modernism's relationship to "primitivism," pure abstraction, art's responses to the political upheavals of World War I and the Russian Revolution, the advent of design, and the politics of realism and representation. Although primarily focused in Europe, the course also touches on related modern movements globally.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

ARTH 242 Art Since 1940 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/242/)
The scope of this course begins amidst the devastation and geopolitical shifts that followed World War II and ends with the effects of globalization in the 1990s and 2000s. We will ask the same questions that faced artists and critics in between: Should art focus on its own material processes or open its borders to historical flux? Is it art's job to create the cultural myths that bind society together, or to deconstruct them? Who participates in modern and contemporary art, and who doesn't? What kinds of production should be considered art? How are specific formal strategies informed by the perspectives of different subject positions? What politics underwrite them? We will consider, and reconsider, the existing narratives about art during this period with a dual aim: first, to better understand the historical positions of the artists in question, and, second, to piece together a prehistory of the moment in which we currently find ourselves.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

ARTH 250 American Art credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/250/)
Surveys American art and architecture from the colonial period to the present.

ARTH 257 History of Photography credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/257/)
Examines a history of photography from its origin to the present, including both documentary and artistic approaches; considers relationships with other arts.

ARTH 260 Graffiti and Murals credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/260/)
From Bronx walls to the Berlin Wall, from ancient palatial decorations to spray-can art, murals and graffiti have been revolutionary political tools, objects of aesthetic contemplation, and vehicles for identity formation. Primarily a lecture course that examines ancient and early modern cases from different cultures, as well as focusing on modern examples from Latin America and the USA. Same as LLS 260.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

ARTH 299 Spec Topics in Art History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/299/)
Special topics in Art History Courses. Topics and subject matter to be published in course listings. May be repeated up to 6 hours in a semester, to a maximum of 12 total hours. Prerequisite: Sophomore standing in Art and Design.

ARTH 300 Art Criticism and Writing credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/300/)
This course introduces students to the history and practice of art criticism and provides them with relevant tools and experiences to craft their own body of art criticism. During the course of the semester, students will analyze and interpret texts of art criticism; analyze formal qualities of works of art and visual culture, and evaluate their meaning and historical significance; write about modern and contemporary art; and assemble an interview with a working artist.

ARTH 310 African Art and Society I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/310/)
Introduces the arts of Black Africa, i.e., dance, drama, songs, and poetry, as expressed in a multi-media framework and a social-religious context; surveys the art styles of the Dogon, Senufo, Mende, and Ashanti peoples.

ARTH 312 Central African Art credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/312/)
A one-semester introduction to the arts of central Africa. Sculpture, pottery, architecture, body adornment, contemporary art, and performance will be examined and discussed on the basis of aesthetic, religious, political, and social contexts. Discusses many changes and continuities within African artistic traditions as evidenced in late twentieth-century urban, popular, and political arts of central Africa. We shall also investigate some central African artistic influences found in African American arts. Same as AFST 312.

ARTH 313 Modern and Contemp African Art credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/313/)
Examines how multiple "modernisms" emerged from African independence movements, and thereby influenced the development of African and African-American art from the 1960s to the present. Same as AFST 313.

ARTH 342 Arts of Colonial Latin America credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/342/)
Introduction to the major art historical, stylistic and iconographic developments of several Latin American countries of the late sixteenth through eighteenth centuries. Themes to be investigate include: the pictorial representation of race; indigenous workshops, traditions, and the birth of European art academies; the constructions of gender; as well as the translation of styles. The course includes field trips to local museums and libraries. Previous introductory level art history or Latin American history course recommended. Same as LAST 342.

ARTH 343 Arts of Modern Latin America credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/343/)
This course is an introduction to the major visual materials, monuments, and critical debates of the arts of Latin America, from the 19th to the early 20th century. It studies a wide range of artistic media, including drawings, paintings, popular prints, performance, photography, film, murals, architecture, and urban planning, especially as they pertain to definitions of "Latin America". The course pays particular attention to constructions of race and gender in representing the modern nation. Same as LAST 343.

ARTH 344 Spanish Modern Art credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/344/)
Introduction to the rich visual cultures of Spain beginning with the Bourbon dynasty in the eighteenth century through the early decades of the twentieth century. The course examines a variety of themes: from the mythologized loves of Goya, to the grandeur of canvases recreating Spain's history; from Spanish Romanticism to the rise of vanguard movements and the advent of Pablo Picasso. 3 undergraduate hours. Prerequisite: Previous introductory level art history course recommended, but not required.

ARTH 345 Realism to Postimpressionism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/345/)
Studies European art from 1850 to 1900, with emphasis on French painting.

ARTH 350 American Art 1750-1900 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/350/)
Studies the two major directions of art in the United States from independence to the centennial, with focus on major figures and the scientific and philosophical movements which influenced them. Prerequisite: One year of art history or consent of instructor.

ARTH 351 Early American Modernism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/351/)
Examines American art, particularly painting and sculpture, 1876-1940, against its cultural background and the relation of the American artist to Europe in an attempt to isolate the roots of Modernism in the United States. Prerequisite: One year of art history or consent of instructor.

ARTH 360 Women and the Visual Arts credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/360/)
Explores the complex interconnections of women with the visual arts in Europe and North America from the classical era to the present, including the modes of artistic production and the representation of women in western society. Same as GWS 360.

ARTH 361 Contemporary Art credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/361/)
This class investigates the history of contemporary art, examining the key issues, institutions, and events that have shaped how and where contemporary art is made, displayed, encountered, and critiqued. Attention will center on the artistic and political engagements that inform contemporary practices, from the legacies of twentieth century artmaking to the fluctuations of global financial markets to artist responses to topics such as human rights crises and ecological disasters. Readings and discussions will also explore influential cultural centers in today's global art world, including Beirut, Lagos, New York, and Shanghai. Prerequisite: No prerequisites, but students are encouraged to take ARTH 242 - Modern Art prior to ARTH 361 - Contemporary Art.

ARTH 391 Individual Art History Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/391/)
Directed independent research. May be repeated to a maximum of 6 hours. Prerequisite: Junior standing in art and design; and consent of instructor, advisor, and associate director of the School.

ARTH 395 Junior Seminar in Art History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/395/)
Offers Art History majors grounding in the discipline' s historiography and exposure to diverse historical methods. Provides students with experience in a range of research techniques as preparation for their Senior Seminar. Prerequisite: Junior standing in Art History curriculum or in Art History minor.

ARTH 402 Ways of Seeing in Edo Japan credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/402/)
Focuses on modes of seeing and technologies of vision manifest in the visual arts of Edo Japan, 1615-1868. At the time, imported European instruments of seeing, such as the microscope, made possible unusual visual experiences; revivals of classical Japanese painting manipulated different ways of recreating and visualizing the past. A variety of themes, organized chronologically, will demonstrate the importance of seeing in painting and calligraphy, ceramics, woodblock prints, and architecture. Same as EALC 402. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: Junior standing required.

ARTH 403 Word and Image in Chinese Art credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/403/)
Study of the diverse correlations between verbal texts and visual images in Chinese art and art theory from the twelfth through seventeenth centuries. Same as EALC 403. 3 undergraduate hours. 3 or 4 graduate hours.

ARTH 404 China through Film credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/404/)
Examines a group of feature films from the 1980s through 2010s that were commercially produced in the People's Republic of China, Hong Kong, Taiwan, and the U.S.A. Our goal is to analyze how these films construct an image of China. Understanding the cultural and historical circumstances under which these films were produced is crucial to accomplishing this goal. But equally important is learning how to watch films and how to write about them. Same as EALC 404. 3 undergraduate hours. No graduate credit. Prerequisite: Restricted to undergraduate students only; junior standing required.

ARTH 410 West African Art and Ideas credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/410/)
Study of West African art styles in chronological and cultural perspectives with a special interest in the use of interdisciplinary source materials. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: Junior standing or consent of instructor.

ARTH 413 Sacred African Diaspora Arts credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/413/)
Explores African diaspora arts grounded in the diverse aesthetic, philosophical, historical, political, and religious consciousnesses of peoples of African descent living in the Caribbean and the Americas. Focuses on the preservation and ongoing transformations of African visual and religious cultures surviving in African diaspora communities from the period of the trans-Atlantic slave trade to the present. Same as AFST 421. 3 undergraduate hours. 4 graduate hours.

ARTH 415 The Archaeology of Greece credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/415/)
Same as CLCV 443. See CLCV 443.

ARTH 416 The Archaeology of Italy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/416/)
Same as CLCV 444. See CLCV 444.

ARTH 423 Romanesque Art credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/423/)
Art and architecture of the Romanesque period. Same as MDVL 423. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: Junior standing or consent of instructor.

ARTH 424 Gothic Art credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/424/)
Arts of western Europe from the end of the Romanesque period until the Renaissance. Same as MDVL 424. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: Junior standing or consent of instructor.

ARTH 430 Topics: Italian Art 1300-1500 credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/430/)
Special topics in the history of painting, sculpture, and architecture of Italy during the Renaissance selected for intensive study. 3 undergraduate hours. 3 or 4 graduate hours. May be repeated to a maximum of 6 undergraduate hours or 8 graduate hours. Prerequisite: Junior standing or consent of instructor.

ARTH 431 Topics: Northern Art 1300-1500 credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/431/)
Special topics in the history of painting, sculpture, and minor arts of France, Germany, Spain, and England during the Renaissance selected for intensive study. Same as MDVL 431. 3 undergraduate hours. 3 or 4 graduate hours. May be repeated to a maximum of 6 undergraduate hours or 8 graduate hours. Prerequisite: Junior standing or consent of instructor.

ARTH 432 Sixteenth-Century Italian Art credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/432/)
Painting, sculpture, and architecture in Italy from 1500 to 1580. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: Junior standing or consent of instructor.

ARTH 433 Fifteenth-Century Italian Art credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/433/)
Study of Italian painting, sculpture and architecture from circa 1300 to 1500. Same as MDVL 433. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: Junior standing or consent of instructor.

ARTH 435 Italian Baroque Art credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/435/)
Italian painting and sculpture during the period 1580-1700, with particular emphasis on art in Rome. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: Junior standing or consent of instructor.

ARTH 436 17th-Century Dutch & Flemish Art credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/436/)
Explores the functions of visual arts in the Netherlands in relation to shifting political and religious contexts; evolving notions of privacy, domesticity and subjectivity; the study of nature; and the expanding capital-based wealth of Northern Europe founded upon global trade. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: Junior standing or consent of instructor.

ARTH 440 Romantic Art credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/440/)
Studies English, French, and German art from the end of the eighteenth century through 1840; focuses on revivalist movements, historicism, landscape art, and changing conceptions of art and artist during the period. 3 undergraduate hours. 3 or 4 graduate hours.

ARTH 443 The Russian Avant-Garde: Revolutionary Forms and Socialist Norms credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/443/)
What happens to art's forms and institutions in a socialist society? What kind of patron is the working class, the public, or the state? Can art be revolutionary? If so, how so? What does it look like? In this course, we will look at the ways that artists strove to answer these questions in the decades surrounding the Russian Revolution of 1917. Examining formations across a broad range of media—including painting and sculpture, mass festivals and monuments, theater, design, architecture, photography, and cinema—we will attempt to understand how art was redefined in terms of collective forms of authorship, common spaces, and shared things. 3 undergraduate hours. 4 graduate hours.

ARTH 445 European Art Between the Wars credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/445/)
Study of the leading personalities and movements in European painting, sculpture, and architecture, with emphasis on painting. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: Junior standing or consent of instructor.

ARTH 447 France and Its Others credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/447/)
Examines the relationship between art and colonialism in nineteenth-century France. Topics include orientalism, primitivism, and exoticism; the central figures include Delacroix, Flaubert, Gerome, and Gauguin. 3 undergraduate hours. 3 or 4 graduate hours.

ARTH 450 Institutional Critique credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/450/)
Institutions—from the museum to the university—overwhelmingly frame the terms and conditions by which we encounter art and come to know what matters most in the so-called art world. This seminar focuses on artistic and activist efforts devised to bring these institutional frameworks into greater public view. Our primary concern will be to examine theories and practices of institutional critique, a genre of artmaking and mode of analysis that is often periodized as emerging in the 1970s and that was extensively conceptualized in the 1990s. We will also study its earlier twentieth century precedents and continued reverberations today. 3 undergraduate hours. No graduate credit. Prerequisite: Restricted to students with junior standing or consent of the instructor.

ARTH 460 Museum Management credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/460/)
This course is concerned with advanced theoretical issues of art museum work, taught by the professional staff of a museum. Topics covered include collections, curatorial issues, educational program planning, trustee relations, public outreach, fundraising, budgeting, and staff organization. 3 undergraduate hours. 4 graduate hours. Prerequisite: Junior standing or consent of instructor.

ARTH 462 Museum Theory and Practice credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/462/)
Same as ANTH 462 and LA 472. See ANTH 462.

ARTH 489 Senior Art-History Honors-BA credit: 2 to 5 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/489/)
Independent guided research and study in a selected area of art history for candidates for the Bachelor of Arts in Art History with departmental distinction. 2 to 5 undergraduate hours. No graduate credit. May be repeated to a maximum of 5 hours. (Counts for advanced hours in LAS). Prerequisite: Senior standing in the art history curriculum; a cumulative grade point average of 3.25; an art history grade point average of 3.5; and consent of instructor, department advisor, and associate director of the School.

ARTH 490 Senior Art-History Honors-BFA credit: 2 to 5 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/490/)
Directed independent research and study for honors. 2 to 5 undergraduate hours. No graduate credit. May be repeated to a maximum of 5 hours. Prerequisite: Senior standing in Fine and Applied Arts art history, a cumulative grade point average of 3.0, and consent of instructor, advisor, and associate director of the School.

ARTH 491 Topics in Art History credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/491/)
Variable content; consult the Class Schedule for current topics. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated if topics vary. Prerequisite: Junior standing or consent of instructor.

ARTH 495 Senior Seminar in Art History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/495/)
Required seminar for undergraduate majors that offers students practical experience in research techniques. Focuses on a specialized theme of the professor's choice, and will incorporate extensive reading in a specific field of Art History and the completion of a substantial research paper. 3 undergraduate hours. No graduate credit. May be repeated to a maximum of 6 undergraduate hours. Prerequisite: ARTH 395.

ARTH 500 Graduate Writing Workshop credit: 1 to 2 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/500/)
A weekly writing workshop for doctoral Art History students who have completed their required coursework and are working on dissertation proposals or on their dissertations. The weekly sessions will provide structured time devoted to meeting specific writing goals; discussion of the writing process; peer review and instructor's individual feedback on students' writing, and guidance on how to make progress on their work. 1 to 2 graduate hours. No professional credit. Approved for S/U grading only. May be repeated to a maximum of 6 hours in separate semesters. Prerequisite: Completion of all other required coursework. For doctoral students only.

ARTH 501 Seminar in Chinese Art credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/501/)
Investigation of selected phases, concepts, and problems of the art of China; intensive reading and reports. Same as EALC 501. May be repeated to a maximum of 12 hours. Prerequisite: ARTH 401 or consent of instructor.

ARTH 510 Seminar in African Art credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/510/)
This seminar includes a variety of topics, such as African Diaspora Theory, Contemporary African Art, Performance Art in Africa, Tourist art in Africa. Each graduate seminar will have a significant reading list with weekly responses, as well as a research paper and presentation. Same as AFST 509. May be repeated to a maximum of 20 hours. Prerequisite: Consent of instructor.

ARTH 515 Seminar in Ancient Art credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/515/)
Research seminar in subject selected from the art and architecture of the ancient period. Same as CLCV 515. May be repeated to a maximum of 12 hours. Prerequisite: Consent of instructor.

ARTH 520 Seminar in Class Archaeology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/520/)
Same as CLCV 520. See CLCV 520.

ARTH 522 Seminar in Medieval Art credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/522/)
Research seminar in subjects selected from the art and architecture of the medieval period. Same as MDVL 522. May be repeated to a maximum of 12 hours. Prerequisite: Consent of instructor.

ARTH 530 Seminar Italian Art credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/530/)
Special problems in the history of Italian Renaissance art. May be repeated to a maximum of 12 hours. Prerequisite: Consent of instructor.

ARTH 531 Seminar in N. Renaissance Art credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/531/)
Research seminar in subjects selected from the art of the Northern Renaissance. Same as MDVL 540. May be repeated to a maximum of 12 hours. Prerequisite: Consent of instructor.

ARTH 535 Seminar in Baroque Art credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/535/)
Research seminar in problems selected from the art of seventeenth-century Europe. May be repeated to a maximum of 12 hours. Prerequisite: Consent of instructor.

ARTH 539 Academies of Art credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/539/)
Academies, schools of art, and training workshops, have been educational, administrative, political and economic centers for the debate, control, dissemination, and legitimization of the theories, teaching and practice of the "Fine Arts." This seminar analyzes the aims, parameters and meanings ascribed to these heavily invested and historically empowered sites through an examination of historiography, as well as models traditionally used in their defense or denigration.

ARTH 540 Seminar in Art 1750 to 1900 credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/540/)
Intensive study of selected problems in European art. 4 graduate hours. No professional credit.

ARTH 541 Seminar in Modern Art credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/541/)
Investigation of special problems in the history of twentieth-century art. Students present reports of their research. 4 graduate hours. No professional credit. May be repeated to a maximum of 12 hours. Prerequisite: Consent of instructor.

ARTH 545 Realism to Postimpressionism credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/545/)
Studies European art from 1850 to 1900, with emphasis on French painting. 4 graduate hours. No professional credit.

ARTH 546 Seminar in Contemporary Art credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/546/)
Intensive study of selected problems or artists. May be repeated to a maximum of 12 hours. Prerequisite: Consent of instructor.

ARTH 550 Seminar in American Art credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/550/)
Investigation of selected problems in the history of American art. May be repeated to a maximum of 12 hours. Prerequisite: ARTH 350 and ARTH 351, or consent of instructor.

ARTH 560 Collections, Museums & Patrons credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/560/)
Deals with specific aspects of art collecting practices, patronage, and/or museology. Introduces students to the major debates and history of private and public art collections, origins of museums and patronage, the new museology. Taught in alternate years by art history faculty with different specializations. May be repeated in separate terms to a maximum of 8 hours. Prerequisite: Graduate standing or consent of instructor.

ARTH 588 Pedagogy: Theory and Practice credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/588/)
This seminar offers professional preparation for graduate students in art history, art education, or the A+D MFA program who will be pursuing college or university teaching careers. Focus is on the development of course design and teaching techniques informed by current theories of teaching and learning. Special attention will be given to teaching the elements of visual analysis and interpretation. 2 graduate hours. No professional credit. Approved for S/U grading only.

ARTH 591 Individual Readings credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/591/)
Directed readings in special fields or aspects of history of art not provided in depth by the current course offerings. Registration allowed for each section is 2 to 4 hours. Prerequisite: Consent of instructor.

ARTH 593 Theory and Methodology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/593/)
Investigation of the theory and practice of art history as a discipline. Discussions address historiographical and methodological issues and include both traditional and recent approaches to the discipline. Prerequisite: Consent of instructor.

ARTH 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/ARTH/599/)
Guidance in research and writing theses for advanced degrees. Approved for S/U grading only. May be repeated. Prerequisite: Graduate standing in art history.

ARTJ - JAPAN HOUSE

ARTJ Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/ARTJ/)

Courses

ARTJ 199 Special Topics in Japanese Aesthetic Practices credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTJ/199/)
Topic and subject matter to be published in individual course listings. Additional fees may apply. See Class Schedule. May be repeated in the same term or separate terms, if topics vary, to a maximum of 12 hours.

ARTJ 209 Chado (The Way of Tea) credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTJ/209/)
Explores the Japanese Tea Ceremony and its relevance to everyday life. Students will acquire a better understanding of Japanese culture and a new appreciation of their own cultures through the study of the Tea Ceremony and the Zen worldview that informs it. Additional fees may apply. See Class Schedule.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West

ARTJ 299 Seminar in Japanese Aesthetics credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTJ/299/)
Offers an in-depth look at specific aspects of different Japanese art forms including anime, manga, and more. Topic and subject matter to be published in individual course listings. May be repeated in the same term or separate terms, if topics vary, to a maximum of 12 hours.

ARTJ 301 Manga: The Art of Image and Word credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTJ/301/)
Introduction to manga (Japanese comics), its production, its history in both a Japanese and global context, and the fundamentals of manga as an art form and part of the larger cultural traditions of Japan; emphasis on critical analysis of a variety of manga in translation and related scholarly articles; discussion of the evolution of manga and the ways it interacts with culture and society.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Non-West

ARTJ 302 Intro to Japanese Animation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTJ/302/)
Introduction to anime (Japanese animation), its history, its relevance in both a Japanese and global context, and its international impact; emphasis on philosophical inquiry into issues raised in a variety of dubbed/subtitled anime and critical analysis of related scholarly articles; discussion of the mechanics of anime creation and examination of its interaction with other media including videogames and manga.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

ARTJ 399 Japan House Internship credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTJ/399/)
Students will participate in outreach programming and development, communications, and special projects that focus on traditional Japanese arts and culture. Students must apply with an essay and interview process. Instructor approval required.

ARTS - ART--STUDIO

ARTS Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/ARTS/)

Courses

ARTS 200 Introduction to Book Arts credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/200/)
Creative expression and communication through the production of a variety of unique and limited edition books. Students will learn the tools and techniques of binding books by hand while studying the physical and narrative properties of books. Additional fees may apply. See Class Schedule. Prerequisite: Sophomore standing in Art and Design, in an Art History major, or in the Art History minor.

ARTS 201 Crafts Design credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/201/)
This course will provide students the opportunity to 1) explore craft practice as a medium of personal aesthetic expression 2) develop skills and a technical competency in working with a variety of craft materials to include glass, metal, paper, clay, enamel, wood 3) design objects of utility 4) experience creative and technical experimentation 5) establish an awareness of historical and contemporary movements in craft practice. This course includes field trips to the studios of practicing craft artist and visits to Krannert Art Museum and local art galleries. Patience, determination, fine motor skills, critical thinking, and problem solving skills will be developed and exercised in the course. This course satisfies the 3D requirement in the new Art + Design Foundations curriculum. Additional fees may apply. See Class Schedule. Prerequisite: For art and design majors only.

ARTS 205 Introduction to Printmaking credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/205/)
Introduction to the materials and techniques of printmaking, including intaglio, relief, lithography, and screenprint. Over the course of several projects, students will develop a familiarity with print processes while learning about the unique history and conceptual concerns of print media. Composition and technique are emphasized, and projects that relate to work developed in other studio and design areas are encouraged. Additional fees may apply. See Class Schedule.

ARTS 210 Ceramics Sculpture I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/210/)
Introduction to materials and techniques involved in the ceramic process. By achieving technical expertise using clay, students can begin to develop a personal artistic language employing clay as an art medium. Students will explore a variety of assignments employing hand-building techniques, as well as investigating various firing processes. Additional fees may apply. See Class Schedule. Prerequisite: Sophomore standing or consent of instructor. For Art majors only.

ARTS 220 Introduction to Fashion credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/220/)
An overview of the many diverse areas of interest and employment available to someone with and interest in fashion. This course will focus on the development of an individual apparel design process. Other topics include basic garment construction concepts, properties of textiles, fashion illustration, 20th century dress history, manufacturing, trend forecasting, merchandising, and social psychology of dress.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

ARTS 221 Fashion Illustration credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/221/)
This course covers fundamental techniques specific to fashion design using apparel industry best practices. Students will be introduced to hand and computer techniques to create fashion illustrations, technical flats, and fabric renderings. Reflective of the fashion industry, students will be instructed in becoming visual communicators through the composition of concept boards and collection plates. Students will learn the basics of apparel collection design creating several two-dimensional representations of mini-collections with their personal expression. Additional fees may apply. See Class Schedule. A student registered in one or more Art & Design course(s) exhibiting this message, will be assessed a $95 facility use fee once each term. Prerequisite: For Art and Design Majors Only.

ARTS 223 Experimental Fashion credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/223/)
Focuses on the exploration of fabric as a medium for designers, artists, and performers within the context of the discipline of fashion. Students will be introduced to basic strategies for bringing two-dimensional materials into three-dimensional form through draping, pattern making, and machine and hand sewing techniques. The elements and principles of design as they apply to fabric and the body will be the foundation for experimental works that delve into fashion's role in understanding, forming, and presenting identity. Field trips may include visits to the Krannert Art Museum and the Fashion Study Collection, Columbia College, Chicago. Three dimensional work from this class will be juried for acceptance into the Re-Fashioned fashion show. Additional fees may apply. See Class Schedule. Prerequisite: Restricted to Art and Design Majors, Minors or with instructor's approval.

ARTS 230 Jewelry/Metals I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/230/)
Design and execution of jewelry and related objects through fabrication, focusing on surface embellishment, joining, and finishing processes; exploring metal as a medium of personal aesthetic expression. Additional fees may apply. See Class Schedule. Prerequisite: Sophomore standing or consent of instructor. For Art majors only.

ARTS 231 Jewelry/Metals II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/231/)
Additional experience and experimentation in designing and executing jewelry and related objects through fabrication, refinement of surface embellishment, joining, and finishing skills; further exploration of metal as a medium of personal aesthetic expression. Additional fees may apply. See Class Schedule. Prerequisite: ARTS 230.

ARTS 241 Image Practice credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/241/)
Looks at the production and reception of images through a combination of historical, theoretical and practical perspectives. A variety of contexts from contemporary art, design and popular culture will be explored through research and visual projects. Special consideration will be given to current forms of reproduction, with students learning and utilizing common methods for rendering and realizing still images, including both print and screen-based output. This course satisfies the 4D requirement for the new Art andDesign Foundations curriculum. Additional fees may apply. See Class Schedule. Prerequisite: For art and design majors only.

ARTS 243 Time Arts I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/243/)
Explores the potential of time-based media for creative expression and communications within the context of visual art and design. Classroom discussion will focus on historical and contemporary examples of time arts, written materials, and student work. Hands-on projects will introduce tools, issues and strategies particular to creating and analyzing work based in time. This course satisfies the 4D requirement for the new Art and Design Foundations curriculum. Additional fees may apply. See Class Schedule. Prerequisite: For art and design majors only.

ARTS 244 Interaction I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/244/)
Introduction to the conceptualization and construction of interactive experience for art and design. Interaction will be examined as technical, structural, social, and historical. Work will include practice, research, discussion, and lecture. This course satisfies the 4D requirement in the new Art and Design Foundations curriculum. Additional fees may apply. See Class Schedule. May be repeated to a maximum of 6 hours. Prerequisite: For art and design majors only.

ARTS 250 Life Drawing credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/250/)
Representational and interpretive drawing from life explored through close observation and structural analysis of the human figure and other subject matter. Additional fees may apply. See Class Schedule. May be repeated to a maximum of 6 hours. Prerequisite: ARTF 102 and ARTF 104. For Art majors only.

ARTS 251 Beginning Painting credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/251/)
This studio course familiarizes students with basic oil painting materials, techniques, and concepts. Topics to be addressed include composition, color theory, historical painting techniques, illusionistic space, and paint handling and application. Exploration and discussion of the ways in which paintings make meaning. This course satisfies the 2D requirement in the Art Foundations curriculum. Additional fees may apply. See Class Schedule. Prerequisite: For art and design majors only.

ARTS 252 Making and Meaning credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/252/)
Introduction to the relationship of material, method, and process to meaning in art practice. Through research, critique, and application of concepts in material studio processes, students will explore a diverse range of methods of achieving meaning in an artwork. Additional fees may apply. See Class Schedule. May be repeated to a maximum of 6 hours. Prerequisite: ARTS 102 and ARTS 104.

ARTS 264 Basic Photography credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/264/)
Investigates basic image making and meaning. Student works with digital camera, exposure meter and learns digital printing. Student must furnish camera. This course satisfies the 2D requirement for Art & Design majors, and is required for both the BA and BFA Studio Art concentrations in Photography. Additional fees may apply. See Class Schedule. Credit is not given for ARTS 264 if credit for ARTD 260 has been earned. Prerequisite: Freshman standing in Art and Design; or Art and Design Minor; or consent of instructor. For Art and Design majors or minors.

ARTS 265 Photography II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/265/)
Uses darkroom process to express content with emphasis on the development of a personal aesthetic. Student must furnish camera. Additional fees may apply. See Class Schedule. Credit is not given for ARTS 265 if credit for ARTD 261 has been earned. Prerequisite: ARTS 264. For Art majors only.

ARTS 266 View Camera credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/266/)
Includes work with camera movements, exposure, black and white film development and basic wet process silver printing as tools of creative expression. Most equipment furnished. Additional fees may apply. See Class Schedule. May be repeated in separate terms to a maximum of 6 hours. Prerequisite: ARTS 265 or consent of instructor.

ARTS 267 Digital Photographic Output credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/267/)
Explores the potential of color printing and output in digital media as a form for creative expression. Student must furnish camera. Additional fees may apply. See Class Schedule. Credit is not given for ARTS 267 if credit for ARTD 263 has been earned. Prerequisite: ARTS 264.

ARTS 280 Beginning Sculpture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/280/)
Introduction to basic concepts, processes, and materials in sculpture, with an emphasis on the relationship among these three aspects of producing works of art. Materials including wood, plaster, and clay will be used additively to fabricate, model and cast forms. Subtractive methods utilizing carving, and the making of meaning via materials, methods and context are also discussed. This course satisfies the 3D requirement in the Art Foundations curriculum. Additional fees may apply. See Class Schedule. Prerequisite: For art and design majors only.

ARTS 299 Special Topics in Studio Art credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/299/)
Topics and subject matter to be published in course listings. Additional fees may apply. See Class Schedule. May be repeated, if topics vary, to a maximum of 12 hours but no more than 6 hours in any one term. Prerequisite: Sophomore standing in Art and Design.

ARTS 310 Ceramics Sculpture II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/310/)
Students will develop more sophisticated techniques and processes necessary to develop their personal voice and take more responsibility for concept, process and material in their work. Emphasis will stress processes related to creating ceramic sculpture such as hand construction techniques, kiln firing, clay and glaze experimentation. Additional fees may apply. See Class Schedule. Prerequisite: ARTS 210.

ARTS 320 Fashion and Textiles Design credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/320/)
Introduces students to fashion textile design through the investigation of traditional and innovative sustainable techniques used in the fashion industry. Students will be introduced to textile properties, 2D print design, and 3D textiles experimentation, learning basic weaving techniques and innovative processes. Students will design original textiles to be utilized in the development of mini fashion collections and they will develop and construct one piece from the collections into a 3D ensemble. Additional fees may apply. See Class Schedule. A student registered in one or more Art & Design course(s) exhibiting this message, will be assessed a $95 facility use fee once each term. Prerequisite: For Art and Design Majors, Art and Design Minors, or by instructor's approval.

ARTS 321 Sustainable Fashion Development and Branding credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/321/)
Provides the tools to develop a sustainable fashion collection, from concept to consumer. Students will learn the fundamental aspects of the cycle, from the first spark in the creative process to consumer and market analysis, emphasizing the development of sustainable fashion lines, branding and communication. Investigations of new business models and best practices for apparel production will guide class discussions. Students will be responsible for launching their own fictional sustainable labels and collections. Additional fees may apply. See Class Schedule. A student registered in one or more Art & Design course(s) exhibiting this message, will be assessed a $95 facility use fee once each term. Prerequisite: For Art and Design Majors, Art and Design Minors, or by instructor approval.

ARTS 330 Jewelry Metals III credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/330/)
The design and production of jewelry and related objects with additional experience in manipulative techniques such as casting, electroforming, surface decoration, enamelling, complex construction and forming. Additional fees may apply. See Class Schedule. Prerequisite: ARTS 231 and enrollment in the crafts curriculum. For Art majors only.

ARTS 331 Jewelry Metals IV credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/331/)
Expands the general techniques of ARTS 330 with emphasis on experimentation and development of personal style through advanced techniques of hollowware, complex construction, enamelling, electroforming and plating, forging and the use of varied materials. Additional fees may apply. See Class Schedule. Prerequisite: ARTS 330. For Art majors only.

ARTS 332 Metal Technology credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/332/)
Understanding of the working properties of nonferrous metals. Experimentation with little known processes of metalwork to be subjects of individual research. Additional fees may apply. See Class Schedule. May be repeated in separate semesters to a maximum of 4 hours. Prerequisite: ARTS 330 and junior standing in crafts, or consent of instructor. For Metals majors only.

ARTS 333 Enamelling credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/333/)
Exploration and experimentation in image development and color through traditional enamelling processes; emphasis on cloisonne, champleve, bassetaille, plique-a-jour, limoges, and grisaille; exploration of enamel and metal as a medium of personal aesthetic expression. Additional fees may apply. See Class Schedule. May be repeated in separate semesters to a maximum of 9 hours, if topics vary. Prerequisite: ARTS 230 or consent of instructor.

ARTS 334 Metalsmithing credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/334/)
Experience and experimentation in designing and executing hollowware through traditional forming processes; emphasis on sinking, angle raising, crimping, stretching, seaming and snarling, cold forging, tube and spiculum forming, planishing, surface embellishment, and patination; exploration of metal as a medium of personal aesthetic expression. Additional fees may apply. See Class Schedule. May be repeated in separate semesters to a maximum of 12 hours. Prerequisite: ARTS 230 or consent of instructor.

ARTS 340 The Art of 3D Imaging credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/340/)
Investigation of the three-dimensional modeling capabilities of 3D Studio Max software through a series of original tutorials, class projects and individual problems. The emphasis will be on quality of form and content rather than technical expertise. The end result will culminate in the understanding and production of limited edition digital prints. Additional fees may apply. See Class Schedule. This course may not be repeated for credit.

ARTS 350 Intermediate Studio I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/350/)
Combined painting, sculpture and new media studio. Self-directed arts practice. Individual and group critique; includes seminars, discussions, demonstrations, visiting artists and critics, and field trips. Interaction and collaboration among students in painting, sculpture and new media. Additional fees may apply. See Class Schedule. Prerequisite: ARTS 254 or ARTS 281 or ARTS 240. For Art majors only.

ARTS 351 Intermediate Studio II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/351/)
Continuation of ARTS 350. Combined painting, sculpture and new media. Self-directed arts practice. Individual and group critique; includes seminars, discussions, demonstrations, visiting artists and critics, and field trips. Interaction and collaboration among students in painting, sculpture and new media. Additional fees may apply. See Class Schedule. Prerequisite: ARTS 350. For Art majors only.

ARTS 354 Intermediate Painting credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/354/)
This studio course introduces students to diverse topics and strategies in historical and contemporary painting, including impasto, collage, and various kinds of abstraction. Students will consider contemporary definitions of painting and explore alternative materials including industrial and craft painting materials, found materials, and newly-available painting media. Students will discuss recent and contemporary conceptual issues in painting. Additional fees may apply. See Class Schedule. May be repeated to a maximum of 6 hours in separate terms. Prerequisite: ARTS 251.

ARTS 364 Photography III credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/364/)
Explores creative expression through various media but primarily photography. Students select format based on prior experience; group critiques held weekly; initial opportunity to experiment in personally selected directions and assignments which will be refined and amplified in ARTD 460. Additional fees may apply. See Class Schedule. Credit is not given for ARTS 364 if credit for ARTD 360 has been earned. Prerequisite: Junior standing in Photography concentration or consent of instructor.

ARTS 365 Photography Workshop credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/365/)
Advanced course on a special topic: see Class Schedule section note for description. Additional fees may apply. See Class Schedule. May be repeated to a maximum of 12 hours. Prerequisite: Junior or senior standing in art and design; or consent of instructor based upon announced criterion that varies with topic.

ARTS 367 RAW Photography credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/367/)
An advanced Photoshop course for the student interested in a digital approach to Fine Art Photography. Students will explore the use and conversion methods of the RAW digital process, and learn how to extract, control, and enhance digital image files. Over the course of the semester, an effective and personal workflow within the Photoshop environment will be developed. Access to a digital SLR camera is required. Additional fees may apply. See Class Schedule. May be repeated in separate terms to a maximum of 6 hours. Prerequisite: Junior or above standing in Art and Design, or consent of the instructor. ARTS 264 and ARTS 265 are suggested.

ARTS 381 Intermediate Sculpture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/381/)
This studio course introduces students to diverse topics and strategies in historical and contemporary sculpture, including welding and metal work, working with fibers, and various kinds of additive processes. Students will consider contemporary definitions of sculpture and explore alternative materials including industrial and craft materials, found materials, and newly-available digital media and processes. Students will discuss recent and contemporary conceptual issues in sculpture, and respond to a variety of fabrication assignments. Additional fees may apply. See Class Schedule. May be repeated to a maximum of 6 hours in separate terms. Prerequisite: ARTS 280.

ARTS 391 Independent Study credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/391/)
Directed independent creative activity or research. Additional fees may apply. See Class Schedule. May be repeated to a maximum of 6 hours. Prerequisite: Junior standing in Art and Design; and consent of instructor, advisor, and associate director of the School. For Art majors only.

ARTS 392 Current Art Issues Seminar credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/392/)
Seminar with readings, lectures, discussions on ideas and issues affecting contemporary art. Attendance is required at visiting artists' and scholars' lectures and field trips. May be repeated to a maximum of 6 hours. Prerequisite: Junior standing in Fine and Applied Arts or consent of instructor.

ARTS 394 Special Topics in Photography credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/394/)
Advanced study of photographic issues and the creative process. Discusses creativity, aesthetics, criticism, and current imagery, as well as photography's relationship to other media. Specific topics of focus will vary. Additional fees may apply. See Class Schedule. May be repeated to a maximum of 6 hours. Credit is not given for ARTS 394 if credit for ARTD 393 has been earned. Prerequisite: Junior standing in Photography concentration, or consent of instructor.

ARTS 399 Internship in Studio Arts credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/399/)
Internships to be pre-approved for variable credit. Students will be required to document work completed during the internship with verification of supervisor. Supervisor will also be required to fill out a questionnaire either by mail or on-line. Faculty members will access work and questionnaires to assign a grade. Approved for S/U grading only. May be repeated if topics vary to a maximum of 4 hours. Prerequisite: Junior standing in School of Art and Design.

ARTS 400 Advanced Book Arts credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/400/)
Advanced study of the history and techniques of hand bookbinding. Variations on binding structures and emphasis on creative expression through mixed media, collage, painting, photography, and writing. Field trips to book collections. Additional fees may apply. See Class Schedule. 3 undergraduate hours. 4 graduate hours. Prerequisite: ARTS 200, and junior standing in Art and Design or consent of instructor.

ARTS 405 Special Topics in Printmaking credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/405/)
Advanced exploration of specific printmaking processes. Students will develop skills through a progression of projects, while increasing their awareness of conceptual concerns unique to printmaking through discussion and field trips. Projects that relate to work developed in other studio and design areas are encouraged. Additional fees may apply. See Class Schedule. 3 undergraduate hours. 4 graduate hours. May be repeated to a maximum of 12 undergraduate hours or 12 graduate hours if topics vary. A student registered in one or more Art & Design course(s) exhibiting this message, will be assessed a $95 facility use fee once each term. Prerequisite: ARTS 205. Junior standing or higher in Art & Design required.

ARTS 410 Advanced Ceramics Sculpture credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/410/)
Students will develop more sophisticated techniques and processes necessary to develop their personal ideas. Emphasis will be placed on processes related to creating ceramic sculpture such as kiln firing, clay and glaze experimentation. At this level, the student begins to take more responsibility for concept, process and material in their work. Additional fees may apply. See Class Schedule. 3 undergraduate hours. 4 graduate hours. May be repeated up to 15 undergraduate hours or 20 graduate hours. Prerequisite: ARTS 210 and ARTS 310.

ARTS 412 Ceramics credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/412/)
Ceramic design with emphasis on the development of professional style and personal expression. Additional fees may apply. See Class Schedule. 2 to 4 undergraduate hours. 2 to 4 graduate hours. May be repeated to a maximum of 6 hours. Prerequisite: Consent of instructor.

ARTS 420 Making Fashion: Apparel Design in Context credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/420/)
Focuses on developing a personal apparel design process from inspiration to construction through the lens of fashion history and within the context of the current cultural zeitgeist. Concepts covered include: sewing and construction techniques, properties of textiles, fashion illustration, and 20th and 21st century fashion history. Field trips may include visits to the Krannert Art Musuem and the Fashion Study Collection, Columbia College, Chicago. Student ensembles will be juried for acceptance into the end-of-semester Re-Fashioned fashion show. Additional fees may apply. See Class Schedule. 3 undergraduate hours. No graduate credit. May be repeated to a maximum of 6 hours in separate semesters. Prerequisite: Restricted to Art and Design Majors, Art and Design Minors, or by instructor's approval.

ARTS 430 Jewelry Metals V credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/430/)
Expands the general techniques of ARTS 331 with emphasis on experimentation and development of personal style. Additional fees may apply. See Class Schedule. 5 undergraduate hours. No graduate credit. Prerequisite: ARTS 331.

ARTS 431 Jewelry Metals VI credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/431/)
Continuation of ARTS 430; emphasis on experimentation and development of personal style, a portfolio, and a senior exhibition. Additional fees may apply. See Class Schedule. 5 undergraduate hours. No graduate credit. Prerequisite: ARTS 430. For Art majors only.

ARTS 443 Time Arts II credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/443/)
Provides semester-long, in-depth explorations of single time arts topics. Using the ideas and basic tools from Time Arts I, students will study the advanced concepts and techniques particular to individual time arts genres while producing their own work. Additional fees may apply. See Class Schedule. 3 undergraduate hours. 4 graduate hours. May be repeated in separate terms to a maximum of 6 undergraduate or 8 graduate hours. Prerequisite: ARTS 243 or consent of instructor.

ARTS 444 Interaction II credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/444/)
Further exploration of interaction, with an increased emphasis on realization and application of designed interactive experience, and depth of exposure to particular technical platforms. Additional fees may apply. See Class Schedule. 3 undergraduate hours. 4 graduate hours. May be repeated to a maximum of 6 undergraduate or 8 graduate hours. Prerequisite: ARTS 244 and consent of instructor.

ARTS 445 Special Topics in New Media credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/445/)
Course will explore one specialization within the field of New Media. Topics will rotate through each semester; possible subjects include Performance, Sound, Radio, Public Art, and Social Media. Additional fees may apply. See Class Schedule. 3 undergraduate hours. 4 graduate hours. May be repeated in the same or separate semesters to a maximum of 12 undergraduate hours or 16 graduate hours if topics vary. Prerequisite: Junior standing.

ARTS 448 BASA Capstone Project credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/448/)
This course is designed to provide instruction and support in identifying, articulating, researching, developing and refining the concepts underpinning the BASA candidate's studio work. Students will maturate professional practice skills and knowledge in the field of Studio Arts. Students will develop a portfolio, a professional website, a written statement and a curriculum vita. Candidates will be prepared for professional opportunities or further study in Studio Arts and related fields. Additional fees may apply. See Class Schedule. 4 undergraduate hours. No graduate credit. May be repeated in separate terms up to 8 hours. Prerequisite: Any 300 level ARTS course.

ARTS 449 Advanced Seminar in New Media credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/449/)
Students will explore current issues in New Media with the goal of understanding their own artwork in a disciplinary context. Through reading, writing, research and discussions, students will be exposed to significant work in their field. 3 undergraduate hours. No graduate credit. May be repeated to a maximum of 6 undergraduate hours. Prerequisite: Open to New Media majors or consent of instructor.

ARTS 450 Advanced Studio I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/450/)
First of two capstone courses in studio arts practice, individualized study for painting, sculpture, and new media majors. Explores and develops conceptual and aesthetic interests, topics, and projects; expands and refines material knowledge and expertise; develops research strategies and methodologies. Includes individual and group critiques, dynamic interaction with faculty and peers. Additional fees may apply. See Class Schedule. 4 undergraduate hours. No graduate credit. Prerequisite: ARTS 351 Intermediate Studio II. For Art majors only.

ARTS 451 Advanced Studio II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/451/)
Continuation of ARTS 450. Second of two capstone courses in studio arts practice, providing individualized study for painting, sculpture, and new media majors. Explores and develops conceptual and aesthetic interests, topics, and projects; expands and refines material knowledge and expertise; develops research strategies and methodologies. Includes individual and group critiques, dynamic interaction with faculty and peers. Additional fees may apply. See Class Schedule. 4 undergraduate hours. No graduate credit. Prerequisite: ARTS 450. For Art majors only.

ARTS 454 Advanced Drawing credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/454/)
An advanced studio course that considers a variety of activities defined traditionally, historically and contemporarily as drawing. Students will investigate the questions of what drawing is and how it communicates meaning. They will use and experiment with a wide variety of materials and concepts as they work on in-class projects and outside assignments, investigate the work of contemporary artists to see how the practice of drawing is being redefined, and consider the influence drawing has had on design and visual culture. Students will be encouraged to experiment, innovate, and develop new visual vocabularies. Additional fees may apply. See Class Schedule. 3 undergraduate hours. 3 graduate hours. May be repeated to a maximum of 6 hours. Prerequisite: Two prior courses in drawing; junior standing.

ARTS 455 Advanced Painting credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/455/)
An advanced studio course focusing intensively on the practice of painting. Students will research contemporary painting and its recent history, discuss its relevance and place in contemporary art, and investigate and articulate their own conceptual motivations in using painting media. Topics will include the relationship of the history of painting to how its use generates meaning in a contemporary context. Students will engage in self-generated studio practice; this work will be the basis of group and individual discussion and critique. Additional fees may apply. See Class Schedule. 3 undergraduate hours. No graduate credit. May be repeated to a maximum of 6 hours. Prerequisite: ARTS 251 and ARTS 254; junior standing.

ARTS 456 Advanced Sculpture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/456/)
Advanced studio course designed to integrate basic sculpture and other 3-D studio skills with advanced knowledge of contemporary sculptural practices and materials, along with an understanding of concepts and theories influencing contemporary sculptural art. Studies will investigate topics including site specificity, context, and criticality as they develop research and studio production methods that allow them to generate work that is relevant to current and future discourse in the field. 3 undergraduate hours. No graduate credit. May be repeated to a maximum of 6 hours. Prerequisite: ARTS 280 and ARTS 281; junior standing.

ARTS 457 Art in Context credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/457/)
Focuses on the relationship between artworks and their historical, institutional, spatial, geographic, architectural or other contexts for the purpose of engaging in a critical analysis of artworks, as well as developing informed, intentional studio production. Students will encounter topics related to a critical and ethical understanding of context including site-specificity, phenomenology, public art, Situationism, relational aesthetics, and the production of space through social and political process such as building and mapping. The goal is to investigate and understand the dynamic relationship between art and its context. Additional fees may apply. See Class Schedule. 3 undergraduate hours. No graduate credit. May be repeated to a maximum of 6 hours. Prerequisite: Junior standing.

ARTS 461 Advanced Photography credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/461/)
Concentrated use of photographic processes for creative expression with emphasis on professionalism and the production of a photographic portfolio. Additional fees may apply. See Class Schedule. 3 undergraduate hours. 3 graduate hours. May be repeated to a maximum of 6 undergraduate hours and 4 graduate hours. Prerequisite: Senior standing in Photography, or consent of instructor.

ARTS 490 Senior Honors credit: 2 to 5 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/490/)
Independent creative activity, guided study, or research for honors. 2 to 5 undergraduate hours. No graduate credit. May be repeated to a maximum of 5 hours. Prerequisite: Senior standing in Art & Design, a cumulative grade point average of 3.0; and consent of instructor, advisor, and associate director of the School. For Art majors only.

ARTS 499 Special Topics in Studio Art credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/499/)
Special topics in studio arts. Topics and subject matter to be published in course listings. Additional fees may apply. See Class Schedule. 1 to 3 undergraduate hours. 1 to 4 graduate hours. May be repeated to a maximum of 9 undergraduate hours or 12 graduate hours if topics vary. Prerequisite: Senior standing or consent of instructor.

ARTS 591 Graduate Studio credit: 1 to 8 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/591/)
Directed individual creative activity or research. Additional fees may apply. See Class Schedule. 1 to 8 graduate hours. No professional credit. May be repeated if topics vary, in the same semester up to 10 hours; in separate semesters to a maximum of 20 hours. Prerequisite: Graduate standing. For Art majors only.

ARTS 593 Seminar: Methods Criticism credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/593/)
Prerequisite: Graduate standing in art.

ARTS 595 Graduate Laboratory credit: 4 to 12 Hours. (https://courses.illinois.edu/schedule/terms/ARTS/595/)
Individually directed research and personal. MFA students in studio can be registered in multiple sections during the same semester. Additional fees may apply. See Class Schedule. 4 to 12 graduate hours. No professional credit. May be repeated to a maximum of 48 hours, but no more than 12 hours in a single term. Prerequisite: Enrollment in the MFA program in Art & Design or consent of departmental graduate committee. For Art majors only.

AAS - ASIAN AMERICAN STUDIES

AAS Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/AAS/)

Courses

AAS 100 Intro Asian American Studies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AAS/100/)
Interdisciplinary introduction to the basic concepts and approaches in Asian American Studies. Surveys the various dimensions of Asian American experiences including history, social organization, literature, arts, and politics.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - US Minority

AAS 105 Introduction to Arab American Studies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AAS/105/)
Interdisciplinary introduction to the basic concepts and approaches in Arab American Studies. Addresses the issues of history, race, social organization, politics, literature, and art related to Arab American experiences.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

AAS 120 Intro to Asian Am Pop Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AAS/120/)
Introductory understanding of the way U.S. popular culture has affected Asian Americans and the contributions Asian Americans have made to U.S. media and popular culture since the mid 1880's.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

AAS 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/AAS/199/)
May be repeated to a maximum of 6 hours.

AAS 200 U.S. Race and Empire credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AAS/200/)
Invites students to examine histories and narratives of U.S. race and empire, drawing upon multiple theoretical and methodological works in Asian American studies and related fields. Same as LLS 200.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

AAS 201 US Racial & Ethnic Politics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AAS/201/)
Same as AFRO 201, LLS 201, and PS 201. See PS 201.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - US Minority

AAS 211 Asian Americans and the Arts credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AAS/211/)
Examination of Asian American artistic expressions in the visual and the performing arts providing historical, theoretical, and conceptual foundations of understanding the history of various art genres in Asian American communities. Prerequisite: AAS 100 or AAS 120, or consent of instructor.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - US Minority

AAS 215 US Citizenship Comparatively credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AAS/215/)
Examines the racial, gendered, and sexualized aspects of US citizenship historically and comparatively. Interdisciplinary course taught from a humanities perspective. Readings draw from critical legal studies, history, literature, literary criticism, and ethnography. Same as AFRO 215, AIS 295, GWS 215, and LLS 215. Prerequisite: One of: AAS 100, AAS 120, AFRO 100 AIS 101, GWS 250, LLS 100.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

AAS 246 Asian American Youth in Film credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AAS/246/)
Examines both mainstream and independent films and documentaries representing and/or produced by Asian American youth. Explores the role of multiculturalism and diversity issues in informing young people's experiences.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - US Minority

AAS 258 Muslims in America credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AAS/258/)
Introduction to the study of Muslims in the United States and broadly the history of Islam in the Americas. Using a comparative approach, we study how the historical narrative of African American and Latino Muslims relates to newer immigrant populations, primarily Arab American and South Asian American Muslim communities. Same as LLS 258 and REL 258.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - US Minority

AAS 260 Intro Asian American Theatre credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AAS/260/)
Same as THEA 260. See THEA 260.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

AAS 265 Politics of Hip Hop credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AAS/265/)
Same as LLS 265. See LLS 265.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

AAS 275 The Politics of Fashion credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AAS/275/)
Same as GWS 275. See GWS 275.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

AAS 281 Constructing Race in America credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AAS/281/)
Same as AFRO 281, HIST 281, and LLS 281. See HIST 281.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

AAS 282 Feminist and Queer Activisms credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AAS/282/)
Same as GWS 282 and LLS 282. See GWS 282.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

AAS 283 Asian American History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AAS/283/)
Same as HIST 283. See HIST 283.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

AAS 286 Asian American Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AAS/286/)
Same as ENGL 286. See ENGL 286.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - US Minority

AAS 287 Food and Asian Americans credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AAS/287/)
Introduction to the interdisciplinary study of food to better understand the historical, social, and cultural aspects of Asian American food preparation, distribution and consumption. Students will investigate the politics and poetics of Asian American foodways by examining social habits, and rituals around food in restaurants, ethnic cookbooks, fictional works, memoirs, magazines, and television shows. Prerequisite: AAS 100 or AAS 120, or consent of instructor.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - US Minority

AAS 288 Global Islam and Feminisms credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AAS/288/)
Same as GWS 288. See GWS 288.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West

AAS 290 Individual Study credit: 2 to 3 Hours. (https://courses.illinois.edu/schedule/terms/AAS/290/)
Supervised reading and research in Asian American Studies chosen by the student with instructor approval. May be repeated to a maximum of 6 hours. Prerequisite: AAS 100.

AAS 291 Hinduism in the United States credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AAS/291/)
Same as REL 291. See REL 291.

AAS 297 Asian Families in America credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AAS/297/)
Same as HDFS 221 and SOCW 297. See SOCW 297.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - US Minority

AAS 299 Begin Topics Asian Am Studies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AAS/299/)
May be repeated in the same or subsequent terms to a maximum of 6 hours.

AAS 300 Theories of Race, Gender, and Sexuality credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AAS/300/)
Explores theories for performing interdisciplinary, intersectional and comparative studies within the field of Asian American studies. Follows multiple genealogies of critical work in ethnic and American studies.
Same as GWS 305 and LLS 305.
This course satisfies the General Education Criteria for:
Advanced Composition

AAS 310 Race and Cultural Diversity credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AAS/310/)
Same as AFRO 310, EPOL 310, EPS 310, and LLS 310. See EPOL 310.
This course satisfies the General Education Criteria for:
Advanced Composition
Cultural Studies - US Minority

AAS 315 War, Memory, and Cinema credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AAS/315/)
Interdisciplinary examination of the ways that memories of war, trauma, and immigration are produced through the medium of film. Because war has been key to discourses and practices of imperialism and globalization, some questions addressed will include how these wars have impacted the nation and the global order, as well as how images about these wars produced important constructions of race, gender, and sexuality for national and cultural identities. Also examines the aftereffects of war by analyzing connections between war's trauma, race, immigration, and incarceration. Students will read critical texts, film theory, screenplays, and view films. Same as GWS 315. Prerequisite: AAS 100 or AAS 120, or consent of the instructor.

AAS 317 Asian American Politics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AAS/317/)
Same as PS 317. See PS 317.

AAS 328 Asian Americans & Inequalities credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AAS/328/)
Same as SOC 328. See SOC 328.

AAS 343 Criminalization and Punishment credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AAS/343/)
Same as AFRO 343, AIS 343, GWS 343, and LLS 343. See LLS 343.

AAS 346 Asian American Youth credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AAS/346/)
Explores cultural production of second-generation Asian American youth as a historical and social formation. Course examines how youth are actively shaping the U.S. landscape in terms of identity formation, youth, culture, education, juvenile justice, politics and activism, and community formations. These experiences are examined in backdrop of larger historical, economic, racial, social and political forces in the United States. Same as HDFS 341.

AAS 355 Race and Mixed Race credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AAS/355/)
Same as LLS 355 and SOC 355. See LLS 355.

AAS 357 Literatures of the Displaced credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AAS/357/)
Same as AIS 357, ENGL 357, GWS 357, and LLS 357. See LLS 357.

AAS 365 Asian American Media and Film credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AAS/365/)
An examination of media generally and films and videos more specifically (experimental, documentary, independent, and Hollywood features) by, for, and about Asian Americans. Same as MACS 365. Prerequisite: Any AAS course at the 100- or 200-level, or consent of instructor.

AAS 370 Immigration, Law, and Rights credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AAS/370/)
Exploration of the histories, cultures, and experiences of immigration to the United States by examining cultural production (literary and visual narratives and texts) alongside legal discourses (legislation, federal court cases). Same as LLS 372.
This course satisfies the General Education Criteria for:
Advanced Composition

AAS 375 Prisons, Race, and Terror credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AAS/375/)
Examination of the U.S. prison regime, focusing on three dimensions of U.S. imprisonment -- criminal justice, immigrant detention, and martial imprisonment, particularly under the War on Terror. Same as LLS 377.

AAS 390 Intermed Topics Asian Am St credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/AAS/390/)
May be repeated in the same or subsequent terms to a maximum of 6 hours.

AAS 395 Adv Asian Am Undergrad Reading credit: 2 or 3 Hours. (https://courses.illinois.edu/schedule/terms/AAS/395/)
Supervised reading and research in upper level Asian American Studies topics chosen by the student with instructor approval. May be repeated to a maximum of 6 hours. Prerequisite: AAS 100.

AAS 400 Critical Ethnic Studies credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AAS/400/)
Examines the formation of the field of Critical Ethnic Studies and elaborates its key concepts, such as settler colonialism, indigeneity, heteropatriarchy, decolonization, and liberation. Same as LLS 460. 3 undergraduate hours. 4 graduate hours.

AAS 402 Asian American Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AAS/402/)
Same as EPS 402 and EPOL 402. See EPOL 402.
This course satisfies the General Education Criteria for:
Advanced Composition
Cultural Studies - US Minority

AAS 435 Commodifying Difference credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AAS/435/)
Same as AFRO 435, GWS 435, LLS 435, and MACS 432. See LLS 435.

AAS 464 Theories & Theologies of Liberation credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AAS/464/)
Same as ANTH 464, GWS 464, and REL 464. See GWS 464.

AAS 465 Race, Sex, and Deviance credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AAS/465/)
Same as AFRO 465, GWS 465, and LLS 465. See LLS 465.

AAS 479 Race, Medicine, and Society credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AAS/479/)
Same as ANTH 479 and LLS 479. See LLS 479.

AAS 490 Adv Topics in Asian Am Studies credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/AAS/490/)
Research seminar on specialized topics in Asian American Studies. 3 or 4 undergraduate hours. 3 or 4 graduate hours. May be repeated if topics vary. Students may register in more than one section per term if topics vary. Prerequisite: AAS 100 or any Asian American Studies course, or consent of instructor.

AAS 501 Theory and Methods in AAS credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AAS/501/)
Foundational gateway course for graduate study in Asian American Studies, examining the political, historical, epistemological, and cultural bases of the field through an intensive reading of canonical works and study of core concepts in the field. Also highlights the problems of interdisciplinary research and scholarship and adopts an intersectional and coalitional approach to Asian American Studies as it assumes the necessary linkages between other areas in ethic/racial and gender/sexuality studies.

AAS 539 Youth, Culture and Society credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AAS/539/)
Same as EPOL 518, EPS 539, and HDFS 539. See HDFS 539.

AAS 561 Race and Cultural Critique credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/AAS/561/)
Introduction to graduate level theoretical and methodological approaches in Comparative Race Studies. As a survey of theories of race and racism and the methodology of critique, this course offers an interdisciplinary approach that draws from anthropology, sociology, history, literature, cultural studies, and gender/sexuality studies. In addition, the study of racial and cultural formation is examined from a comparative perspective in the scholarship of racialized and Gender and Women's Studies. Same as AFRO 531, ANTH 565, GWS 561, and LLS 561.

AAS 589 Readings in Asian Am Studies credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/AAS/589/)
Individual guidance in intensive readings in the literature of one or more subdivisions of the field of Asian American Studies. May be repeated to a maximum of 8 hours. Students may register in more than one section per term if topics vary. Prerequisite: Graduate standing or consent of instructor.

AAS 590 Asian Am Studies Seminar credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/AAS/590/)
Approved for letter and S/U grading. May be repeated to a maximum of 8 hours. Prerequisite: Graduate standing or consent of instructor.

ASST - ASIAN STUDIES

ASST Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/ASST/)

Courses

ASST 104 Asian Mythology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ASST/104/)
Same as REL 104. See REL104.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

ASST 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/ASST/199/)
May be repeated.

ASST 208 Cultures & Literatures of South Asia credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ASST/208/)
Same as CWL 208, REL 208 and SAME 208. See REL 208.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Non-West

ASST 218 S Asian Cultural Landscapes credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ASST/218/)
Same as LA 218. See LA 218.

ASST 325 Social Media and Global Change credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ASST/325/)
Same as AFST 325, EPOL 325, EPS 325, EURO 325, INFO 325, LAST 325, REES 325, and SAME 325. See EPOL 325.

ASST 346 Gov & Pol of South Asia credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ASST/346/)
Same as PS 346. See PS 346.

ASST 347 Gov & Pol of Middle East credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ASST/347/)
Same as PS 347. See PS 347.

ASST 390 Individual Study credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ASST/390/)
Directed readings in the languages and literatures of South Asia, Southeast Asia, or the Near East. The area selected depends on the student's interest. Prerequisite: Consent of instructor.

ASST 391 Honors Tutorial credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ASST/391/)
Tutorial in the civilizations of South Asia, Southeast Asia, or the Near East. The geographical area or nation and discipline depend on student interests. All students submit a substantial paper. May be repeated to a maximum of 6 hours. Prerequisite: Completion of two honors activities, work in Asian studies, and consent of instructor.

ASST 398 Colloquium in Asian Studies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ASST/398/)
Prerequisite: Junior standing.

ASST 402 Transnational Islam, Europe-US credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ASST/402/)
Same as ANTH 402 and REL 409. See ANTH 402.

ASST 550 Seminar in Asian Studies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ASST/550/)
Seminar on selected Asian topics. May be repeated to a maximum of 12 hours if topics vary. Topics will vary with instructor. Prerequisite: Consent of instructor.

ASST 590 Individual Study and Research credit: 2 to 12 Hours. (https://courses.illinois.edu/schedule/terms/ASST/590/)
Supervised individual investigation or study of a topic not covered by regular course offerings. The topic selected by the student and the proposed plan of study must be approved by the student's adviser and the instructor who supervises the work. Approved for both letter and S/U grading. May be repeated. Prerequisite: Consent of instructor.

ASTR - ASTRONOMY

ASTR Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/ASTR/)

Courses

ASTR 100 Introduction to Astronomy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ASTR/100/)
Introduces the student to the basic concepts of modern astronomy. Covers topics including the night sky; the solar system and its origin; the nature and evolution of stars; stellar remnants, including white dwarfs, neutron stars, and black holes; extrasolar planetary systems; galaxies and quasars; dark matter and dark energy; the Big Bang and the fate of the universe; and life in the universe. Credit is not given for ASTR 100 if credit in any of ASTR 121, ASTR 122, ASTR 210, or equivalent has been earned. Students with credit in PHYS 211 are encouraged to take ASTR 210.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences

ASTR 121 Solar System and Worlds Beyond credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ASTR/121/)
Introductory survey of the Solar System; structure and motions of the Earth and Moon; planetary motions; natures and characteristics of the planets and smaller solar system bodies; planetary moons and rings; meteors, meteoroids, and meteorites; properties of the Sun; origin and evolution of the Solar System; discovery of extrasolar planetary systems; architecture of extrasolar planetary systems and comparison to our solar system; habitable extrasolar planets. Emphasis will be placed on problem-solving and scientific methods. Credit is not given for ASTR 121 if credit in either ASTR 100 or ASTR 210 has been earned. Students with credit in PHYS 211 are encouraged to take ASTR 210.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences
Quantitative Reasoning II

ASTR 122 Stars and Galaxies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ASTR/122/)
Introduction to celestial objects and phenomena beyond the Solar System, and their governing basic physical principles; galaxies, quasars, and structure of the universe; dark matter and dark energy; the Big Bang and the fate of the universe; the Milky Way; the interstellar medium and the birth of stars; stellar distances, motions, radiation, structure, evolution, and remnants, including neutron stars and black holes. Emphasis will be placed on problem-solving and scientific methods. Credit is not given for ASTR 122 if credit in either ASTR 100 or ASTR 210 has been earned. Students with credit in PHYS 211 are encouraged to take ASTR 210.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences
Quantitative Reasoning II

ASTR 131 The Solar System Lab credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/ASTR/131/)
Laboratory studies which complement the lecture course, ASTR 121. Laboratory exercises will include properties of telescopes, observations of the Moon and planets using telescopes at the Campus Observatory, and computer-based activities that illustrate modern astronomical techniques using digital data. Prerequisite: Credit in ASTR 100 or ASTR 121, or concurrent registration in ASTR 121.

ASTR 132 Stars and Galaxies Lab credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/ASTR/132/)
Laboratory studies which complement the lecture course, ASTR 122. Laboratory exercises will include properties of telescopes, observations of star clusters, nebulae and galaxies using telescopes at the Campus Observatory, and computer-based activities that illustrate modern astronomical techniques using digital data. Prerequisite: Credit in ASTR 100 or ASTR 122, or concurrent registration in ASTR 122.

ASTR 150 Killer Skies: Astro-Disasters credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ASTR/150/)
Exploration of the most dangerous topics in the Universe, such as meteors, supernovae, gamma-ray bursts, magnetars, rogue black holes, colliding galaxies, quasars, and the end of the Universe, to name just a few.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences

ASTR 199 Undergraduate Open Seminar credit: 0 to 5 Hours. (https://courses.illinois.edu/schedule/terms/ASTR/199/)
See course schedule for topics. Approved for Letter and S/U grading. May be repeated in the same term up to 5 hours or separate terms up to 8 hours, if topics vary.

ASTR 210 Introduction to Astrophysics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ASTR/210/)
Survey of modern astronomy for students with background in physics. Topics include: the solar system; nature and evolution of stars; white dwarfs, neutron stars, and black holes; galaxies, quasars and dark matter; large scale structure of the universe; the Big Bang; and Inflation. Emphasis will be on the physical principles underlying the astronomical phenomena. Prerequisite: PHYS 211.

ASTR 310 Computing in Astronomy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ASTR/310/)
An introduction to the use of computers in astrophysics research. Topics covered include a basic introduction to computing hardware concepts, Unix shell commands, programming in Python, data structures, astronomical libraries, modern software engineering concepts and tools, plotting and visualization of data, and fundamental numerical algorithms. Applications and examples drawn from astrophysics are stressed throughout. Prerequisite: PHYS 211; MATH 220; Credit or concurrent registration in ASTR 210.

ASTR 330 Extraterrestrial Life credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ASTR/330/)
Scientific discussion of the search for extraterrestrial life. Topics include: cosmic evolution (protons to heavy elements to molecules); terrestrial evolution (chemical, biological, and cultural); high technology searches for extraterrestrial life in the solar system (Mars, Venus, outer planets); and beyond the solar system (Drake equation and current SETI projects).

ASTR 350 The Big Bang, Black Holes, and the End of the Universe credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ASTR/350/)
Studies the origin, evolution, and eventual fate of the universe, and the scientific tools used to study these issues. Topics include aspects of special and general relativity; curved spacetime; the Big Bang; inflation; primordial element synthesis; the cosmic microwave background; dark matter and the formation of galaxies; observational evidence for dark matter, dark energy, and black holes. Credit is not given for ASTR 350 if credit in ASTR 406 has been earned. Prerequisite: ASTR 100, or ASTR 121, or ASTR 122, or ASTR 210, or consent of instructor.

ASTR 390 Individual Study credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ASTR/390/)
Individual study at an advanced undergraduate level. May be repeated in separate terms to a maximum of 8 hours. Prerequisite: Consent of advisor and of faculty member who supervises the work.

ASTR 401 Scientific Writing for Astronomy credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ASTR/401/)
Development of journal-style writing skills. Papers written in accordance with the Astrophysical Journal Manual of Style on topics approved by the instructor. Emphasis on developing adequate and critical coverage of the topic, brevity compatible with clarity, and effective presentation. Proper referencing, footnotes, and bibliography are covered. 2 undergraduate hours. No graduate credit. Prerequisite: Completion of campus Composition I general education requirement. Concurrent enrollment in a designated 400-level astronomy course. Not intended for graduate students.
This course satisfies the General Education Criteria for:
Advanced Composition

ASTR 404 Stellar Astrophysics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ASTR/404/)
Introduction to astrophysical problems, with emphasis on underlying physical principles; includes the nature of stars, equations of state, stellar energy generation, stellar structure and evolution, astrophysical neutrinos, binary stars, white dwarfs, neutron stars and pulsars, and novae and supernovae. 3 undergraduate hours. 3 graduate hours. Prerequisite: PHYS 212; or consent of instructor. Recommended: ASTR 210, PHYS 213, PHYS 214.

ASTR 405 Planetary Systems credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ASTR/405/)
This course traces, from a physical perspective, the evolution of planetary systems from star formation in molecular clouds to the emergence of habitable worlds. Topics include the properties of HII regions and molecular clouds, gravitational collapse and disk formation, formation of planetesimals and planets, dynamics of the solar system, physics of planetary atmospheres, properties of individual planets and their rings and satellites, detection and characterization of extra-solar planets, and searches for life in the Solar System and beyond. 3 undergraduate hours. 3 graduate hours. Prerequisite: PHYS 212 or consent of instructor. Recommended: ASTR 210, PHYS 213.

ASTR 406 Galaxies and the Universe credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ASTR/406/)
Nature of the Milky Way galaxy: stellar statistics and distributions, stellar populations, spiral structure, the nucleus and halo. Nature of ordinary galaxies; galaxies in our Local Group, structure of voids and superclusters. Nature of peculiar objects: Seyfert galaxies, starburst galaxies, and quasars. Elementary aspects of physical cosmology. 3 undergraduate hours. 3 graduate hours. Prerequisite: PHYS 212; or consent of instructor. Recommended: ASTR 210, PHYS 213, PHYS 214.

ASTR 414 Astronomical Techniques credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ASTR/414/)
Introduction to techniques used in modern optical and radio astronomy with emphasis on the physical and mathematical understanding of the detection of electromagnetic radiation; includes such topics as fundamental properties of radio and optical telescopes and the detectors that are used with telescopes. Lectures and laboratory. 4 undergraduate hours. 4 graduate hours. Prerequisite: MATH 241 or equivalent; PHYS 212; or consent of instructor. Recommended: ASTR 210, PHYS 213, PHYS 214.

ASTR 450 Astrochemistry credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ASTR/450/)
Same as CHEM 450. See CHEM 450.

ASTR 451 Astrochemistry Laboratory credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ASTR/451/)
Same as CHEM 451. See CHEM 451.

ASTR 490 Senior Thesis credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ASTR/490/)
Research with thesis, under the direction of a faculty member in astronomy. This course is recommended for all students who plan to do research and graduate study, and it is a prerequisite for graduation with highest distinction in astronomy. In the term preceding their initial enrollment, those interested in taking the course should consult with an academic advisor as well as the potential research advisor. A thesis must be presented for credit to be received. 3 undergraduate hours. No graduate credit. Prerequisite: Two 400-level Astronomy courses and consent of academic advisor and of faculty member who supervises the work. Intended for Astronomy majors of senior standing.
This course satisfies the General Education Criteria for:
Advanced Composition

ASTR 496 Seminar in Astronomy credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ASTR/496/)
Lectures on topics of current interest in astronomy and astrophysics; for advanced undergraduates and graduates. See Class Schedule for current topics. 1 to 4 undergraduate hours. 1 to 4 graduate hours. Approved for both letter and S/U grading. May be repeated. Prerequisite: Consent of instructor.

ASTR 499 Astronomy Laboratory credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ASTR/499/)
Provides hands-on observational experience: how to use a telescope, how to image sources using a modern CCD camera, how to use a modern CCD spectrometer, and how to apply data analysis to astrophysical problems. 2 undergraduate hours. 2 graduate hours. Prerequisite: One 400-level astronomy course.

ASTR 501 Radiative Processes credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ASTR/501/)
Fundamentals of radiative processes in astronomy. Topics include radiative transfer, classical theory of radiation fields, relativistic covariance and kinematics, synchrotron emission and absorption, bremsstrahlung, plasma effects, atomic and molecular spectroscopy, and dust. Prerequisite: ASTR 404 or consent of instructor.

ASTR 502 Astrophysical Dynamics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ASTR/502/)
Introduction to stellar dynamics and fluid dynamics. Topics include two body collisions, two body relaxation, potential theory for stellar systems, adiabatic invariance, stellar system models, Jeans equations, and the virial theorem. Also hydrodynamics, magnetohydrodynamics, waves, instabilities, shocks, explosions, density waves, and wind-blown bubbles. Prerequisite: PHYS 436, PHYS 427, and PHYS 486; or consent of instructor.

ASTR 503 Observational Astronomy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ASTR/503/)
Techniques and basic results of observational astronomy; gamma ray, x-ray, ultraviolet, visible, infrared, and radio astronomy; photometry, imaging, spectroscopy, and polarimetry; gravitational waves; cosmic rays; neutrinos; positional astronomy; noise; statistics; data analysis; optics. Prerequisite: Consent of instructor.

ASTR 504 Theoretical Stellar Physics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ASTR/504/)
Application of physical principles to energy generation and flow in astrophysical environments: equations of state; thermonuclear reactions; radiative transport; convection; stellar spectra; nebular spectra; evolution of both single and binary stars; compact stars; accretion disks; thermal and particle history of the universe. Same as PHYS 542. Prerequisite: PHYS 436, PHYS 427, and PHYS 486; or consent of instructor.

ASTR 505 Star Formation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ASTR/505/)
Survey of the current state of astrophysical research into the topic of star formation. Particular emphasis placed on interpreting observations and how they relate to the theory of star formation. Prerequisite: ASTR 405 or consent of instructor.

ASTR 506 Galaxies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ASTR/506/)
Survey of the different constituents of the Universe, including galaxies, active galaxies, galaxy clusters, and intergalactic gas. Particular emphasis will be placed on observable properties of the Milky Way and other galaxies, as well as relating such observations to the understanding of the dynamics and evolution of galaxies. Prerequisite: ASTR 406 or consent of instructor.

ASTR 507 Physical Cosmology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ASTR/507/)
A survey of the essentials of modern cosmology, providing an overview of the state of the field, of open questions, and of observational and theoretical tools. Topics include: classical cosmology--the Friedmann universe; the early universe--inflation, nucleosynthesis, dark matter; the cosmic microwave background--basic physics, anisotropies, polarization; large scale structure formation--theoretical models and observational tests; dark energy--observational evidence, theoretical ideas. Emphasizes applying physical principles to understand observations, and on using observations to constrain the nature of matter and spacetime on cosmic scales--viewing the universe as a laboratory for fundamental physics. Course work focuses heavily on problem solving. Prerequisite: ASTR 406 or consent of instructor.

ASTR 510 Computational Astrophysics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ASTR/510/)
Prepares students to use numerical simulations to study complex problems in astrophysics and cosmology. Numerical methods and parallel computing will be covered together with the design, validation, and analysis of simulations. Emphasis is placed on solving ordinary and partial differential equations that arise in astrophysical contexts. Students work on assigned numerical problems and perform simulations using existing simulation codes, writing a final paper which presents the results of simulations using one of these codes. There are no formal prerequisites except knowledge of a scientific programming language such as Fortran, C, and C++. Familiarity with Unix/Linux and astronomical analysis tools is useful but not required.

ASTR 515 General Relativity I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ASTR/515/)
Same as PHYS 515. See PHYS 515.

ASTR 516 General Relativity II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ASTR/516/)
Same as PHYS 516. See PHYS 516.

ASTR 540 Astrophysics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ASTR/540/)
Same as PHYS 540. See PHYS 540.

ASTR 541 Physics of Compact Objects credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ASTR/541/)
Same as PHYS 541. See PHYS 541.

ASTR 590 Individual Study credit: 2 to 16 Hours. (https://courses.illinois.edu/schedule/terms/ASTR/590/)
Individual study or non-thesis research. May be repeated. Prerequisite: Consent of adviser and of faculty member who supervises the work.

ASTR 593 Astronomy Internship credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/ASTR/593/)
Full-time or part-time practice of graduate-level astronomy and astrophysics in an off-campus government, industrial, or research facility environment. Summary report required. 0 graduate hours. No professional credit. Approved for S/U grading only. May be repeated in separate terms. Prerequisite: Instructor approval required. International students on the F-1 visa must also seek CPT approval. 12 months of full-time CPT eliminates a student's eligibility for OPT. Intended for graduate students who require an internship course.

ASTR 596 Seminar in Special Topics credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/ASTR/596/)
Approved for both letter and S/U grading. May be repeated. Prerequisite: Consent of instructor.

ASTR 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/ASTR/599/)
Approved for S/U grading only. May be repeated.

ATMS - ATMOSPHERIC SCIENCES

ATMS Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/ATMS/)

Courses

ATMS 100 Introduction to Meteorology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/100/)
Introduces the student to the basic concepts and principles of meteorology via the interpretation of weather maps and charts; uses current weather information to illustrate key concepts, emphasizes the physical atmospheric processes responsible for weather. By the end of the class students will be able to interpret and make basic weather forecasts as well as be able to explain basic atmospheric phenomena. Same as GEOG 100.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences

ATMS 120 Severe and Hazardous Weather credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/120/)
Most extreme manifestations of weather and climate are analyzed in terms of their physical basis and their historical, economic and human consequences. Emphasis is placed on the interplay between technological advances, the evolution of meteorology as a science, and the impacts of extreme weather (winter storms, floods, severe thunderstorms, hurricanes, El Nino). Technological advances include satellites, weather radars and profilers, and computer models used for weather prediction. Same as ESE 120.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences
Quantitative Reasoning II

ATMS 140 Climate and Global Change credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/140/)
Introduces climate change and its interactions with the global environment; surveys the physical, chemical, biological and social factors contributing to global change; includes topics such as greenhouse warming, acid rain, ozone depletion, distinguishes anthropogenic influences and natural variability of the earth system; addresses societal impacts, mitigation strategies, policy options and other human responses to global change. Same as ESE 140.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences

ATMS 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/199/)
Special topics each term. May be repeated.

ATMS 201 General Physical Meteorology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/201/)
Introduction to physical processes in the atmosphere, focusing on those relevant to weather and storms. Emphasizes quantitative problem solving. Topics include atmospheric structure, atmospheric thermodynamics, clouds, synoptic meteorology, weather forecasting, and storms. For students in atmospheric sciences, physics, mathematics, engineering, and other physical and natural sciences. Prerequisite: MATH 220 or MATH 221; credit or concurrent registration in MATH 231 and PHYS 211.

ATMS 202 General Physical Climate credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/202/)
Study of the physical process that govern Earth's climate. Students will learn basic principles of large-scale circulations, radiation and energy balances and the role of greenhouse gases, paleoclimate, how climate is changing in the present day, and how climate is projected to change in the future. Societal impacts of climate change and climate change policy are also addressed. Students gain hands-on experience by performing data analysis on historical and projected climate data. Prerequisite: MATH 220 or MATH 221.
This course satisfies the General Education Criteria for:
Quantitative Reasoning II

ATMS 207 Weather and Climate Data Science credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/207/)
Introduces python programming fundamentals as applied to real-world problems in the atmospheric sciences. Students will develop an understanding of the structure and use of weather and climate datasets; use computers for data representation, presentation, and visualization; and implement introductory methods for weather and climate data reduction and statistical analysis. Prerequisite: Prior enrollment in STAT 107 is recommended but not required.

ATMS 301 Atmospheric Thermodynamics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/301/)
Introduction to fundamental thermodynamic processes that occur in Earth's atmosphere. Defines, describes, and derives various thermodynamic concepts including (1) the conservation of energy, (2) laws of thermodynamics, (3) kinetic theory, (4) phase transitions of water, and (5) thermodynamic processes of the atmosphere. Applies thermodynamic concepts to atmospheric structure and stability, water phase transformations, and energy and mass transport within the atmosphere. Prerequisite: ATMS 201, MATH 241, and PHYS 211.

ATMS 302 Atmospheric Dynamics I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/302/)
Introduction to fundamental dynamical processes in the atmosphere through a descriptive and quantitative analysis of dynamical meteorology at the synoptic and global scale. Covers basic laws of fluid mechanics as applied to the atmospheric sciences, vorticity and circulation in 2-D and 3-D flows, boundary layer dynamics and friction, basic concepts of geophysical waves, and baroclinic instability. These topics will be covered both descriptively and mathematically with emphasis on computer representation of the fundamental processes governing atmospheric motion and application of theory to real-world examples. Same as PHYS 329. Prerequisite: ATMS 201, MATH 241 and PHYS 211.

ATMS 303 Synoptic-Dynamic Wea Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/303/)
Conceptualizes the structure and dynamics of the atmosphere through interpretation and analysis of weather charts, time and cross sections, soundings, and forecast products. Students develop case studies of weather system structure, and participate in discussions of weather processes as depicted by weather maps. Depiction of atmospheric kinematic and dynamic processes on weather charts is emphasized. Students learn conceptual models of the structure of mid-latitude cyclones and convective weather systems, including cyclogenesis, frontogenesis, the process of storm intensification, occlusion and frontolysis. Prerequisite: ATMS 201 and credit or concurrent registration in MATH 241.

ATMS 304 Radiative Transfer-Remote Sens credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/304/)
Introduction to the laws governing the propagation of electromagnetic radiation in the Earth's atmosphere. Topics include absorption, emission, and scattering of radiation, absorption and scattering properties of atmospheric constituents, the Sun as a source of radiation, the radiative transfer equation, and simple radiative balance models. Emphasis will be placed on the role of radiation in weather and climate, the description of atmospheric optical phenomena, and the application to remote sensing. Prerequisite: MATH 241 and PHYS 212.

ATMS 305 Computing and Data Analysis credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/305/)
Introduction to the statistical treatment and graphical representation of atmospheric sciences data, both in the space and time domain. Emphasis is placed on applications and real-world examples. Discusses relevant statistics, methods of interpolation and least squares, and linear and nonlinear correlations. Students gain experience using Python for data analysis, develop theoretical skills for analyzing and modeling data, and perform virtual experiments and analyze real-world publicly available data sets. Prerequisite: MATH 241 or consent of instructor.

ATMS 306 Cloud Physics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/306/)
Develops an understanding of microphysical processes occurring within clouds through use of in-situ observations, modeling, and theoretical studies; topics covered include nucleation, diffusional growth of water and ice particles, the warm rain process, the cold rain process (including riming, aggregation, graupel and hail), weather modification, and an introduction to radar meteorology. Prerequisite: ATMS 301.

ATMS 307 Climate Processes credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/307/)
Introduces students to Earth's climates and the processes that determine them. Examines factors that control natural climate change over long and short time scales, processes by which humans impact climate and climate change, methods to predict climate change, and climate change response by policymakers. Prerequisite: ATMS 201.

ATMS 312 Atmospheric Dynamics II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/312/)
Rigorous examination of the dynamical nature of various manifestations of the atmospheric circulation. Topics include the intrinsic effects of earth's rotation and stratification, vorticity and potential vorticity dynamics, various forms of boundary layer, wave dynamics (gravity waves and Rossby waves), geostrophic adjustment, cyclogenesis, frontogenesis and a potpourri of instability theories. Same as PHYS 330. Prerequisite: ATMS 301, ATMS 302.

ATMS 313 Synoptic Weather Forecasting credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/313/)
Examines the tools and techniques of weather forecasting, with heavy emphasis on actual forecasting. Numerical models used to forecast weather are reviewed and compared. Forecasting using numerical, statistical and probabilistic forecasting techniques is studied. Forecasts of significant winter weather, convection, floods and other weather hazards are emphasized. Students learn the process behind Severe Weather Watches and Warnings, Quantitative Precipitation Forecasts, precipitation type forecasts, flood forecasts and forecasts of other significant weather. Prerequisite: ATMS 302, ATMS 303 or consent of instructor.

ATMS 314 Mesoscale Dynamics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/314/)
Examination of the structure and dynamics of weather systems that occur on the mesoscale. The course first reviews what is meant by "mesoscale". Examines the structure and dynamics of both free and forced mesoscale circulations. Free circulations are those internal to the atmosphere, such as thunderstorms, mesoscale convective systems, squall lines, hurricanes, jet streaks, and fronts. Forced circulations are those tied to features external to the atmosphere, such as shorelines (the sea breeze), lakes (lake effect storms), and mountains. Prerequisite: ATMS 301, ATMS 302, ATMS 303, or consent of instructor.

ATMS 315 Meteorological Instrumentation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/315/)
A survey of the meteorological instrumentation used to document and investigate weather and climate. Students will gain hands-on experience with a variety of instrumentation integrated with the data analysis techniques and scientific communication formats used professionally within the field of atmospheric sciences. The focus is to explore modern methods of weather observation used in research, governmental, and industrial settings while training each student to gather, assess, interpret and communicate weather data. Students will gain hands-on experience with a variety of instrumentation integrated with data analysis techniques and intensive scientific writing exercises. Each writing exercise has been designed to teach the variety of writing techniques employed in Atmospheric Sciences. Prerequisite: ATMS 201. Concurrent enrollment in ATMS 305 is encouraged. Restricted to Atmospheric Sciences Majors. Additional seats may be available for Atmospheric Sciences Minors.
This course satisfies the General Education Criteria for:
Advanced Composition

ATMS 322 Soc Impacts Weather & Climate credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/322/)
Same as ENSU 301. See ENSU 301.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

ATMS 323 Air Pollution to Global Change credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/323/)
Same as ENSU 302. See ENSU 302.

ATMS 324 Field Studies of Convection credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/324/)
Students learn to recognize the structural features characteristic of supercellular convection, organized mesoscale convective systems, frontal squall lines, and ordinary thunderstorms, and to relate these structures to theory and conceptual models. Students forecast atmospheric convection, providing daily meteorological forecast discussions and analysis of current and future weather conditions. This course includes a mandatory 12-14 day field trip. Additional fees may apply. See Class Schedule. Approved for S/U grading only. May be repeated in separate terms to a maximum of 6 hours. Prerequisite: ATMS 201. ATMS Majors or Minors only with consent of instructor.

ATMS 390 Internship in Atmospheric Sciences credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/390/)
Facilitates participation of students in unpaid, part-time internships in the atmospheric sciences. The tasks performed as part of the internships will vary depending on the student and host, but will allow the students to: apply concepts from atmospheric sciences coursework to real problems, develop a familiarity with tools and methods used by practicing atmospheric scientists, practice communicating technical information, and gain experience in multi-tasking and time management. Approved for S/U grading only. May be repeated to a maximum of 8 hours in separate terms. Prerequisite: Restricted to Majors and Minors Only.

ATMS 391 Topics in Atmospheric Sciences credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/391/)
Special topics in atmospheric sciences at the undergraduate level. See Class Schedule for topics and prerequisites. Additional fees may apply. See Class Schedule. Approved for Letter and S/U grading. May be repeated in the same or separate terms to a maximum of 12 hours if topics vary. Prerequisite: ATMS 201. Consent of Instructor.

ATMS 401 Applied Meteorology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/401/)
Examines how providers of meteorological information work with stakeholders who value that information to develop decision support systems in fields such as aviation, hydrometeorology, energy, health, national security, transportation, agriculture, emergency management, air quality, and climate sustainability. 3 undergraduate hours. 3 graduate hours.

ATMS 404 Risk Analysis in Earth Science credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/404/)
Introduction to concepts and methods of quantitative risk analysis in the Earth system. Key concepts will include probability, impacts, risk, uncertainty, statistical estimation, and decision making. Students will use simple risk analysis methods to apply these concepts to example problems related to drought, flooding, weather extremes, and anthropogenic climate change. The students will learn the R programming language for statistical computing, which will be used to integrate concepts and methods using observational data sets and model output. Same as GEOL 485. 3 undergraduate hours. 4 graduate hours. Prerequisite: MATH 241 or consent of instructor.

ATMS 405 Boundary Layer Processes credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/405/)
Course will qualitatively and quantitatively describe atmospheric boundary layer characteristics and processes. The course will focus on the turbulent structure of the boundary layer and the factors that influence this structure over a variety of surfaces (e.g., soil, vegetation, marine) and under a variety of atmospheric conditions (e.g., stability, diurnal/nocturnal). This atmospheric layer is important to our daily lives because it is where humans live and it connects the small-scale fluxes of energy and mass to the large-scale atmospheric circulation. 4 undergraduate hours. 4 graduate hours. Prerequisite: ATMS 301, ATMS 302, and ATMS 304; MATH 285; or consent of instructor.

ATMS 406 Tropical Meteorology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/406/)
Covers the mesoscale, synoptic scale and planetary scale motions in the tropical circulation. Emphasis will be on delineating the unique characteristics of tropical dynamics. Topics include Hadley circulation, Walker circulation, Madden-Julian oscillation, monsoons, easterly waves, equatorial waves, hurricanes, the quasi-biennial oscillation, El Nino and the Southern Oscillation. 4 undergraduate hours. 4 graduate hours. Prerequisite: ATMS 301 and ATMS 302 and MATH 285; or consent of instructor.

ATMS 410 Radar Remote Sensing credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/410/)
Basic principles of radar and references to other ground based remote sensing systems, with emphasis on radar. Discusses principles of conventional and Doppler radar, data processing, and use of Doppler radar in meteorology. Emphasizes radar observations of meteorological phenomena, such as severe thunderstorms and wind shear. Students analyze data from national radar facilities. 4 undergraduate hours. 4 graduate hours. Prerequisite: ATMS 201 and MATH 231 and credit or concurrent registration in MATH 241; or consent of instructor.

ATMS 411 Satellite Remote Sensing credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/411/)
Review of the basic techniques used in satellite remote sensing of the Earth's surface and atmosphere, as well as other planets in our solar system. Topics include radiative transfer, scattering and absorption processes, the Sun, mathematics of inversion, atmospheric properties and constituents, surface properties, precipitation, radiation budgets, image classification, satellite technology and orbital configurations. Laboratory work on radiative transfer modeling and satellite data analysis emphasized. All students participate in a team project that has novel and practical applications. 4 undergraduate hours. 4 graduate hours. Prerequisite: MATH 285 and PHYS 212.

ATMS 420 Atmospheric Chemistry credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/420/)
Biochemical cycles of atmospheric trace gases, their interactions on global and regional scales, and their significance for the chemistry in the atmosphere. Important fundamental concepts central to understanding air pollutants, e.g., the formation of aerosols and the transformation and removal of species in the atmosphere. Same as CEE 447. 4 undergraduate hours. 4 graduate hours. Prerequisite: CHEM 102, PHYS 211, and MATH 241.

ATMS 421 Earth Systems Modeling credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/421/)
Introduces the fundamentals of python programming as applied to numerical modeling within the earth and environmental sciences. Students will identify key processes and relationships in systems, represent these elements numerically, use models to predict system behavior, and assess the validity of the model predictions. Previous models developed include Eulerian representations of global energy balance, glaciation, population, and a Lagrangian volcanic plume model. No computing background is required, but a prior course on integral calculus is strongly recommended. Same as ESE 421, GEOG 421, GEOL 481, and NRES 422. 4 undergraduate hours. 4 graduate hours. Prerequisite: Junior, senior, or graduate standing in a natural science, geography, natural resources and environmental studies, or engineering. No Computing background is required, but prior course on integral calculus is strongly recommended.

ATMS 446 Climate & Social Vulnerability credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/446/)
Same as GEOG 496 and SOC 451. See GEOG 496.

ATMS 447 Climate Change Assessment credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/447/)
Provides students with first-hand experience with computer models used to study climate change and permits them to test hypotheses, develop scenarios, learn about the implications of various structures of the modeled system, and evaluate the climatic impacts of anthropogenic emissions. Students perform calculations and produce model scenarios using a web interface to our Integrated Science Assessment Model (ISAM). 3 undergraduate hours. 3 graduate hours.

ATMS 449 Biogeochemical Cycles credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/449/)
Presents the key physical, biological, and chemical concepts of biogeochemical cycles central to understanding the causes of global changes in climate and air quality, focusing on an atmospheric sciences view of these cycles and their influences. 4 undergraduate hours. 4 graduate hours. Prerequisite: Consent of instructor.

ATMS 490 Individual Study credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/490/)
Individual study or reading at an advanced undergraduate level in a subject not covered in normal course offerings or undergraduate research performed under faculty supervision. 1 to 4 undergraduate hours. No graduate credit. May be repeated to a maximum of 8 hours. Prerequisite: Consent of advisor and faculty member supervising work.

ATMS 491 Adv Topics in Atmospheric Sci credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/491/)
Special topics in atmospheric sciences. See Class Schedule for topics and prerequisites. 2 to 4 undergraduate hours. 2 to 4 graduate hours. May be repeated in the same or separate terms as topic varies to a maximum of 12 hours.

ATMS 492 Capstone Undergraduate Research credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/492/)
All senior Atmospheric Sciences undergraduate majors have the opportunity to take a Capstone Undergraduate Research experience. Students will be engaged in an atmospheric science research project with an ATMS faculty supervisor. 4 undergraduate hours. No graduate credit. May be repeated to a maximum of 8 undergraduate hours. Prerequisite: Restricted to students with senior standing in Atmospheric Sciences, or permission of ATMS faculty supervisor.

ATMS 500 Dynamic Meteorology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/500/)
Examines the observed behavior of the atmosphere through the application of physical and hydrodynamical principles to analyses of real meteorological data; develops concepts for studying atmospheric circulations, particularly extratropical cyclones and anticyclones. Laboratory work includes the development of diagnostic techniques suitable for a better understanding of the current weather. 4 graduate hours. No professional credit. Prerequisite: Restricted to graduate standing or consent of instructor.

ATMS 502 Numerical Fluid Dynamics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/502/)
Addresses numerical techniques for solving linear and nonlinear differential equations in initial value fluid flow problems. Students receive a thorough background in the principles used to evaluate numerical methods, the ability to critically interpret these methods as presented in the literature, and in particular, the practical application of these techniques in modeling multi-dimensional flow on high-performance computers. Temporal and directional splitting, finite differencing/volume methods, and adaptive nesting will be discussed. Same as CSE 566. 4 graduate hours. No professional credit. Prerequisite: MATH 285 or equivalent. Graduate Standing or Consent of Instructor.

ATMS 504 Physical Meteorology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/504/)
Examines the physical processes that occur in the atmosphere. Topics include atmospheric thermodynamics, cloud physics and atmospheric radiation. 4 graduate hours. No professional credit. Prerequisite: Graduate standing or consent of instructor.

ATMS 505 Weather Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/505/)
Examination of the structure and dynamics of mid-latitude weather systems, integrating weather observations, with the current state of dynamic theory, numerical weather prediction models, and the physical principles of atmospheric thermodynamics, cloud and precipitation physics, and radiation to the problems of weather analysis and forecasting. Students will be required to give weather forecast briefings to develop an understanding of the weather forecasting process, and gain experience in communicating weather forecasts. 4 graduate hours. No professional credit. Prerequisite: Graduate standing or consent of instructor.

ATMS 507 Climate Dynamics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/507/)
Investigates the dynamical and physical processes that govern Earth's paleo, current, and future climates. Emphasizes principles of climate change, natural and anthropogenic, and regional, national, and global. Global climate models and their predictions are examined in the context of scenarios for future population growth and energy consumption. 4 graduate hours. No professional credit. Prerequisite: Graduate standing or consent of instructor.

ATMS 510 Precipitation Physics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/510/)
Develops an understanding of precipitation processes through cloud observations, microphysics, dynamics, and comprehensive theoretical models; includes growth by condensation, coalescence, and riming; and studies ice crystals, hail, and weather modification. 4 graduate hours. No professional credit. Prerequisite: ATMS 504 or consent of the instructor. Restricted to graduate standing.

ATMS 511 Atmospheric Radiation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/511/)
Reviews the physics governing the propagation of electromagnetic radiation in the Earth system. Emphasis is placed on modern numerical techniques to solve radiative transfer problems, including those found in the study of remote sensing, weather and climate. Students gain hands-on experience in using these techniques in solving radiative transfer problems encountered in the atmospheric sciences through term projects of their choosing and those of their peers. 4 graduate hours. No professional credit. Prerequisite: ATMS 504 or consent of the instructor. Restricted to graduate standing.

ATMS 512 Clouds and Climate credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ATMS/512/)
The following topics are addressed to examine the role of clouds in the climate system: aerosols and aerosol cloud interactions, direct, semi-direct and indirect aerosol effects, in-situ measurements of clouds, properties of liquid and ice clouds, precipitation mechanisms and representation in models, scattering by cloud particles and model representations, remote sensing of cloud properties, and representation of clouds in climate models. 4 graduate hours. No professional credit. Prerequisite: ATMS 504 or consent of instructor. Restricted to graduate standing.

ATMS 514 Dynamics of Convective Clouds and Storms credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ATMS/514/**)**
Describes the initiation, subsequent organization, and then morphology of deep convective clouds and storms. Includes the dynamics of cumulus updrafts, downdrafts, and cold pools; long-lived rotating thunderstorms and attendant tornadogenesis; and mesoscale convective systems and their hazards. Also provides material on how convective processes are observed, numerically modeled, and theoretically treated. Concludes with how convective clouds/systems interact with the larger-scale atmosphere, especially in the context of climate variability and change. 4 graduate hours. No professional credit. Prerequisite: ATMS 500 or equivalent, MATH 241 or equivalent, PHYS 211 or equivalent, or consent of the instructor. Restricted to graduate standing.

ATMS 517 Data Science for the Geosciences credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ATMS/517/**)**
Many petabytes of geosciences data have been observed and curated by NASA and NOAA in anticipation of new data science tools designed to yield insights and improve forecasts of Earth processes. Students will learn the fundamentals of data science using publicly available datasets toward the end of conducting novel research in the geosciences. Topics include data ethics, uncertainty, data curation and management, version control, cluster and cloud computing, introductory Unix and Python, and visualization. Same as GEOL 517. 4 graduate hours. No professional credit. Prerequisite: Restricted to graduate standing or consent of instructor.

ATMS 520 Physical and Dynamical Meteorology credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ATMS/520/**)**
Course introduces atmospheric properties, their measurement, atmospheric composition, and structure, and introduces and applies principles of atmospheric thermodynamics to understand physical processes such as heat transfer, cloud formation, cloud physics and radiative transfer. The course also examines the observed behavior of the atmosphere flows and storms through the application of physical and hydrodynamical principles to analyses of meteorological data, and investigates atmospheric circulations in Earth's middle latitudes and tropics, including thunderstorms, extratropical cyclones, and hurricanes. 4 graduate hours. No professional credit. Cannot be used to satisfy course requirements for on-campus MS and PHD programs in Atmospheric Sciences. On-campus students must take ATMS 500 and 504. Prerequisite: Restricted to graduate standing or consent of instructor.

ATMS 521 Climate Analysis, Variability, and Prediction credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ATMS/521/**)**
This course provides a graduate-level treatment of the analysis and prediction of the Earth's climate over subseasonal, seasonal, and decadal time scales. Following the preliminaries on how these scales are realized in climate observations, we will describe the drivers of the climate system across these scales. Modes of natural climate variability, which include El Nino/Southern Oscillation (ENSO), the North Atlantic Oscillation (NAO), and the Madden-Julian Oscillation (MJO), will then be described, as will the statistical techniques used to reveal them. Statistical prediction models based on multivariate regressions often incorporate index-representations of ENSO and other relevant variables. Accordingly, we will devote some time and exercises on methods in which these models are developed as well as tested. Dynamical models are also used for climate prediction, but require computational capability and relatively more thought in design and application. Thus, we will complete the course with a significant treatment of global models as well as regional models. Both models are based on the same basic set of equations, but typically have different applications. Model setup and implementation will be illustrated through practical exercises with open-source community global and regional models. 4 graduate hours. No professional credit. Prerequisite: Graduate standing and ATMS 520; or equivalent, by permission of the instructors.

ATMS 523 Weather and Climate Data Analytics credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ATMS/523/**)**
In this course, students will get real-world hands on experience with a broad range of data analysis tools that are currently being used in academic, national laboratory, consulting, and private industry. Data sources in the atmospheric sciences are diverse and require specialized tools to open and reduce those datasets in an efficient manner. The intention of this course is to prepare the student to become a developer of data analysis tools in collaborative research environments in a variety of professional settings. Students will learn how to discover and cite earth science datasets, and curate those sources and code developed, and enable reproducibility of the workflow to allow for transparency, open peer-review, and extension of the work by the student or others. 4 graduate hours. No professional credit. Prerequisite: Restricted to graduate standing or consent of instructor.

ATMS 526 Risk Analysis in the Geosciences credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ATMS/526/**)**
This course will introduce concepts and methods in quantitative risk analysis in the Earth, atmospheric, and environmental sciences. Key concepts will include probability, impacts, risk, uncertainty, statistical estimation, and decision making. Students will use simple risk analysis methods to apply these concepts to example problems related to drought, flooding, weather extremes, and anthropogenic climate change. The students will learn the R programming language for statistical computing, which will be used to integrate concepts and methods using observational data and model output, and we will focus on real-world multi-disciplinary applications. 4 graduate hours. No professional credit. Cannot be used to satisfy course requirements for DAS on-campus MS and PHD programs. On-campus students must take ATMS 406. Prerequisite: Restricted to graduate students or consent of instructor.

ATMS 535 Aerosol Sampling and Analysis credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ATMS/535/**)**
Same as CEE 545. See CEE 545.

ATMS 571 Professional Development credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/ATMS/571/**)**
Aimed at professional development in the atmospheric sciences so that students recognize the importance of breath of knowledge, effective oral and written scientific communication, and other skills they will need as professionals. 1 graduate hour. No professional credit. Approved for S/U grading only. Prerequisite: Graduate student in Atmospheric Sciences or consent of instructor.

ATMS 590 Individual Study credit: 1 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ATMS/590/**)**
Individual study or reading in a subject not covered in normal course offerings. 1 to 4 graduate hours. No professional credit. May be repeated to a maximum of 8 hours. Prerequisite: Consent of instructor.

ATMS 591 Atmospheric Sciences Seminar credit: 0 Hours. **(**https://courses.illinois.edu/schedule/terms/ATMS/591/**)**
Seminar on topics of current interest. Approved for S/U grading only. Prerequisite: Consent of instructor.

ATMS 596 Non-Thesis Research credit: 0 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ATMS/596/**)**
Non-thesis research in the Atmospheric Sciences. 0 to 4 graduate hours. No professional credit. Approved for S/U grading only. May be repeated to a maximum of 8 hours. No more than 8 hours may be counted towards a master's degree in ATMS. Prerequisite: Restricted to students in the non-thesis options, which includes the online master's degree.

ATMS 597 Special Topics in Atmospheric Sciences credit: 0 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ATMS/597/**)**
Lecture course in topics of current interest; subjects such as tropical meteorology, aerosol physics, and geophysical fluid dynamics will be covered in term offerings on a regular basis. 0 to 4 graduate hours. No professional credit. Approved for Letter and S/U grading. Prerequisite: Graduate standing or consent of instructor.

ATMS 599 Thesis Research credit: 0 to 16 Hours. **(**https://courses.illinois.edu/schedule/terms/ATMS/599/**)**
Check with the department to identify which CRN is needed for your advisor and any related registration questions. Approved for S/U grading only. Prerequisite: Consent of instructor.

BASQ - BASQUE

BASQ Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/BASQ/)

Courses

BASQ 401 Beginners' Basque credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BASQ/401/)
Basic communication skills in Basque (listening, speaking, reading and writing). Introduction to basic information on Basque culture and history. 3 undergraduate hours. 3 graduate hours. Prerequisite: Four semesters or equivalent of Spanish, French or another Romance language.

BASQ 402 Readings in Basque Studies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BASQ/402/)
Directed research providing individualized instruction on specific topics in Basque linguistics and culture. 3 undergraduate hours. 3 graduate hours. May be repeated to a maximum of 6 hours. Prerequisite: BASQ 401 or consent of instructor.

BIOC - BIOCHEMISTRY

BIOC Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/BIOC/)

Courses

BIOC 190 Biochemistry Orientation credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/BIOC/190/)
Lectures designed to acquaint biochemistry majors with the various specializations available in the field, career exploration procedures, and a wide range of opportunities of special interest to biochemistry students. Prerequisite: Biochemistry Specialized Curriculum majors, transfers and first year freshmen only.

BIOC 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/BIOC/199/)
Approved for both letter and S/U grading. May be repeated.

BIOC 290 Individual Topics credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/BIOC/290/)
Laboratory work and/or reading in fields selected in consultation with an appropriate faculty member. May be repeated in separate terms to a maximum of 10 hours. Prerequisite: Consent of instructor.

BIOC 406 Gene Expression & Regulation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BIOC/406/)
Same as MCB 406. See MCB 406.

BIOC 440 Physical Chemistry Principles credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BIOC/440/)
Same as CHEM 440. See CHEM 440.

BIOC 446 Physical Biochemistry credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BIOC/446/)
Physical properties of biological macromolecules, with the emphasis on spectroscopic methods, including UV, visible and FTTR spectroscopies, magnetic resonance techniques as well as X-ray diffraction methods. Same as CHEM 472 and MCB 446. 3 undergraduate hours. 3 graduate hours. Prerequisite: It is strongly recommended to take CHEM 440 (section B) prior to this course. MCB 354 or MCB 450 or equivalent background in biochemistry is also recommended.

BIOC 455 Technqs Biochem & Biotech credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BIOC/455/)
Introduction to modern methods of experimentation with biochemical experimentation. Lectures and labs on the theory and practices underlying various methods and instrumentation. Includes protein purification and quantitative analyses, immunoassays, enzymology, peptide sequencing, lipid analysis, carbohydrate analysis, and bioinformatics. 4 undergraduate hours. 4 graduate hours. Prerequisite: CHEM 232 or CHEM 236, or equivalent; credit in MCB 251 or equivalent, and MCB 354 or MCB 450 or equivalent, or consent of instructor.

BIOC 460 Biochemistry Senior Seminar credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BIOC/460/)
Writing intensive course dealing with the technical literature, current issues, and current advances in Biochemistry. 3 undergraduate hours. 3 graduate hours. Graduate students may register, but priority will be given to undergraduate students. Prerequisite: Completion of the Campus Composition I general education requirement; MCB 354 and BIOC 455, or consent of instructor.
This course satisfies the General Education Criteria for:
Advanced Composition

BIOC 492 Senior Thesis credit: 1 to 6 Hours. (https://courses.illinois.edu/schedule/terms/BIOC/492/)
Limited in general to seniors in biochemistry. BIOC 492 is recommended for all those who plan to do research and graduate study, and it is a prerequisite for graduation with distinction in biochemistry. Each student who desires to do thesis research must receive written permission from a member of the biochemistry faculty. Accordingly, prospective students are encouraged to contact the biochemistry staff in the term prior to registration in this course. Students must present a thesis to receive credit in this course. 1 to 6 undergraduate hours. No graduate credit. May be repeated; enrollment is limited to three semesters. Prerequisite: MCB 354 and BIOC 455, or consent of instructor.

BIOC 555 Anlys Biochemical Literature credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/BIOC/555/)
Same as MCB 555. See MCB 555.

BIOC 590 Individual Topics credit: 1 to 16 Hours. (https://courses.illinois.edu/schedule/terms/BIOC/590/)
Designed for students in biochemistry who wish to undertake individual studies of a non-Ph.D. thesis nature under the direction of a faculty member of the department. Approved for S/U grading only. May be repeated. (Summer Session, 1 to 8 hours). Prerequisite: Consent of head of department.

BIOC 595 Biochemistry Seminar credit: 0 to 1 Hours. (https://courses.illinois.edu/schedule/terms/BIOC/595/)
Students, faculty, and invited speakers present seminars and discussions on current research topics. Required of all Biochemistry Ph.D. students. Approved for S/U grading only. May be repeated to a maximum of 12 hours. Prerequisite: Graduate standing in Biochemistry.

BIOC 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/BIOC/599/)
Approved for S/U grading only. May be repeated.

BIOE - BIOENGINEERING

BIOE Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/BIOE/)

Courses

BIOE 100 Bioengineering Freshman Seminar credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/BIOE/100/**)**
Bioengineering Freshman Seminar provides a broad introduction to the field, practice, and curriculum of Bioengineering. The major goals are for students to (1) meet the department faculty, (2) understand the curriculum and the 4-year goals, (3) understand and apply technologies central to the field through individual and group projects, (4) begin independent explorations into technologies in the field, and (5) practice teamwork, technical writing, and presentation. The course is designed for freshman Bioengineering majors. Prerequisite: Bioengineering Freshmen Only.

BIOE 120 Introduction to Bioengineering credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/BIOE/120/**)**
Lectures and discussions of recent trends in bioengineering; topics typically include biological interaction with ultrasound and microwave radiation, modeling, instrumentation, biomaterials, biomechanics, biological heat and mass transfer, and medical imaging techniques.

BIOE 198 Special Topics credit: 1 to 3 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/198/**)**
Subject offerings related to Bioengineering intended to augment the Bioengineering curriculum. Offerings will be at the freshman level. See class schedule or course information websites for topics and prerequisites. May be repeated if topics vary. Prerequisite: Majors only.

BIOE 199 Undergraduate Open Seminar credit: 1 to 5 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/199/**)**
May be repeated.

BIOE 200 Bioengineering Career Immersion credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/BIOE/200/**)**
This course provides exposure to Bioengineering careers through experiences in medicine, industry, and research. Students will observe professional practices to facilitate problem-based discoveries and technology design. Prerequisite: BIOE 120. Majors only.

BIOE 201 Conservation Principles Bioeng credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/201/**)**
Material, energy, charge, and momentum balances in biological problems. Steady-state and transient conservation equations for mass, energy, charge, and momentum will be derived and applied to mathematically analyze physiological systems using basic mathematical principles, physical laws, stoichiometry, and thermodynamic properties. Prerequisite: CHEM 104, MCB 150, and PHYS 211.

BIOE 202 Cell & Tissue Engineering Lab credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/202/**)**
Principles of cell biology inherent in tissue engineering design. Lab experience in safely and skillfully manipulating cells of the four tissue types and performing various quantitative analyses on products produced by cells that have differentiated. Prerequisite: MCB 150, and credit or concurrent enrollment in BIOE 206.

BIOE 205 Signals & Systems in Bioengrg credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/205/**)**
Introduction to signals and linear systems with examples from biology and medicine. Linear systems and mathematical models of systems, including differential equations, convolution, Laplace transforms, Fourier series and transforms, and discrete representations. Class examples and coursework apply general techniques to problems in biological signal analysis, including circuits, enzyme kinematics, and physiological system analysis. Use of Matlab and Simulink software to understand more complex systems. Prerequisite: CS 101, PHYS 212, and credit or concurrent registration in MATH 285.

BIOE 206 Cellular Bioengineering credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/206/**)**
Molecular and cellular biology focusing on instrumentation and measurement techniques: gene expression, translation, and regulation; cellular energetics and enzyme kinetics; membrane transport and cell signaling; cytoskeleton and the cell cycle; cell biology fundamentals emphasizing modern imaging and measurement systems to quantify cellular function. Credit is not given for both BIOE 206 and MCB 252. Prerequisite: MCB 150.

BIOE 210 Linear Algebra for Biomedical Data Science credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/210/**)**
Using analytical and computational tools from linear algebra, students will Solve large systems of linear equations, systems of linear ODEs, and linear PDEs; Analyze large, multivariable datasets to quantify relationships between variables; Decompose complex datasets into simpler representations; Introduce and solve common problems in classification, image processing, and machine learning; Develop a geometric understanding of high-dimensional spaces. Prerequisite: CS 101 and MATH 231. For Bioengineering majors only.

BIOE 297 Individual Study credit: 1 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/297/**)**
Special project or reading activity. May be repeated in the same or separate terms to a maximum of 12 hours. Prerequisite: Approved written application to department as specified by department or instructor.

BIOE 298 Special Topics credit: 0 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/298/**)**
Subject offerings of new and developing areas of knowledge in bioengineering intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. May be repeated in the same or separate terms if topics vary to a maximum of 8 hours.

BIOE 302 Modeling Human Physiology credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/302/**)**
Description, quantification, and modeling of human physiological systems, based on systems fundamentals. Components, relationships, and homeostatic controls of neural, musculoskeletal, respiratory, cardiovascular, endocrine, digestion, and renal-filtration systems. Application of mathematical modeling and MATLAB simulation to further understanding of the systems and relate physiological consequences to changes in environment or component function. Prerequisite: BIOE 205 and one of MCB 252 or BIOE 206.

BIOE 303 Quantitative Physiology Lab credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/BIOE/303/)
Experiments involving the modeling and measurement of animal and human physiology systems. Use of computer simulations to provide mathematical descriptions of physiology behavior. Calibration and validation of models through hands-on experiments. Focus on quantitative measurement of neural, cardiovascular, respiratory, muscular, and endocrine system functions. Prerequisite: Concurrent enrollment in BIOE 302 is allowed.

BIOE 306 Biofabrication Lab credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BIOE/306/)
Experiments involving design of bioreactors and microfluidic systems, advanced cell culture, and quantitative analysis techniques such as polmerase chain reaction and atomic force microscopy. Laboratory techniques relating to current literature and state of the art in the field of bioengineering. Prerequisite: BIOE 202. Departmental approval required for non-majors.

BIOE 310 Comp Tools Bio Data credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BIOE/310/)
Fundamental and applied statistics, including probability distributions, parameter estimation, descriptive statistics, hypothesis testing, and linear regression. Statistical methods in genomics including sequence analysis, gene expression data analysis, human genomic variation, regulatory genomics, and cancer genomics. Credit is not given for both BIOE 310 and IE 300. Prerequisites: BIOE 205 and BIOE 206.

BIOE 360 Transport & Flow in Bioengrg credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BIOE/360/)
Fundamentals of fluid dynamics and mass transport applied to analysis of biological systems. Quantitative understanding of microscopic to macroscopic phenomena in biological systems related to their sensing by imaging techniques. Molecular phenomena in both healthy tissue and disease using examples from cardiovascular problems and cancer using ultrasound, optical and MRI techniques. Credit is not given for both BIOE 360 and any of CHBE 421, CHBE 451, or TAM 335. Prerequisite: BIOE 201 and MATH 285.

BIOE 380 Biomedical Imaging credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BIOE/380/)
Same as ECE 380. See ECE 380.

BIOE 397 Individual Study credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/BIOE/397/)
Special project or reading activity. May be repeated up to 8 hours in a term to a maximum of 12 total hours. Prerequisite: Approved written application to department as specified by department or instructor.

BIOE 398 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/BIOE/398/)
Subject offerings of new and developing areas of knowledge in bioengineering intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. May be repeated in the same or separate terms if topics vary to a maximum of 8 hours.

BIOE 414 Biomedical Instrumentation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BIOE/414/)
Engineering aspects of the detection, acquisition, processing, and display of signals from living systems; biomedical sensors for measurements of biopotentials, ions and gases in aqueous solution, force, displacement, blood pressure, blood flow, heart sounds, respiration, and temperature; therapeutic and prosthetic devices; medical imaging instrumentation. Same as ECE 414. 3 undergraduate hours. 3 graduate hours. Prerequisite: BIOE 205, ECE 205 or ECE 210.

BIOE 415 Biomedical Instrumentation Lab credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/BIOE/415/)
Laboratory to accompany BIOE 414. Use of sensors and medical instrumentation for static and dynamic biological inputs. Measurement of biomedical signals. Same as ECE 415. 2 undergraduate hours. 2 graduate hours. Prerequisite: Credit or concurrent registration in BIOE 414.

BIOE 416 Biosensors credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BIOE/416/)
Same as ECE 416. See ECE 416.

BIOE 420 Intro Bio Control Systems credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BIOE/420/)
Systems engineering approach to modeling physiological systems to examine natural biological control systems, homeostasis, and control through external medical devices. Introduces open loop and closed loop feedback control; Laplace and Fourier analysis of system behavior; impulse and steady state responses; physiological modeling and system identification; and stability. Includes biological systems for endocrine function, muscle position, neuronal circuits, and cardiovascular function. Mathematical modeling, Matlab and Simulink simulation, and physiological measurements to relate control systems to maintenance of internal environment. 3 undergraduate hours. No graduate credit. Credit is not given for BIOE 420 if credit for AE 353, ECE 486, SE 320, or ME 340 has been earned. Prerequisite: BIOE 302, BIOE 303, BIOE 414, BIOE 415.

BIOE 430 Intro Synthetic Biology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/BIOE/430/)
Introduction to the field of synthetic biology. Engineering applications of biomolecular systems and cellular capabilities for a variety of application biological background of gene regulation, experimental methods for circuit engineering, and mathematical basis for circuit modeling. Examples in biofuels, biomedicine, and other areas will be discussed. 3 undergraduate hours. 4 graduate hours. Prerequisite: BIOE 206 or MCB 252; and MATH 285.

BIOE 435 Senior Design I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/BIOE/435/)
Capstone bioengineering design activity to develop solutions to projects provided by academia, industry, or clinical settings, utilizing principles of design, engineering analysis, and functional operation of engineering systems. Concept-design, safety, human-factors, quality, and Six-Sigma considerations. Initial solution proposals meeting professional technical-writing and communication standards. Concluded in BIOE 436. 2 undergraduate hours. No graduate credit. Prerequisite: BIOE 414, BIOE 415, BIOE 302, and BIOE 303.

BIOE 436 Senior Design II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/BIOE/436/)
Continuation of BIOE 435. Design teams finalize concepts, evaluate alternatives, model and analyze solutions, build and test a final product, and present the results professionally to project sponsors. 2 undergraduate hours. No graduate credit. Prerequisite: BIOE 435.

BIOE 460 Gene Editing Lab credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/460/**)**
The objective of this course is to provide the knowledge and hands-on experience required for both designing and building tools that are necessary to engineer biological systems at the molecular and cellular levels. This particular course will highlight diverse examples of applications in synthetic biology. It will deal with such topics as gene editing, epigenome engineering, regulation of gene expression and synthetic life. Projects will be assigned for small teams. Students will submit a report after completion of each project. Students will have the opportunity to independently design and execute a genetic engineering project and present their project to the class. 3 undergraduate hours. No graduate credit. Prerequisite: BIOE 202 and BIOE 206. For bioengineering undergraduate majors only.

BIOE 461 Cellular Biomechanics credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/461/**)**
Same as TAM 461. See TAM 461.

BIOE 467 Biophotonics credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/467/**)**
Same as ECE 467. See ECE 467.

BIOE 476 Tissue Engineering credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/476/**)**
Tissue engineering therapies for cell-based, material-based, and therapeutic-based solutions. Stem cells, immunology, and clinical applications. 3 undergraduate hours. 3 graduate hours. Prerequisite: MCB 150 and BIOE 206.

BIOE 479 Cancer Nanotechnology credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/479/**)**
An elective course for undergraduate students who are interested in learning nanotechnology and its applications in biology and medicine. Key topics include: (1) cancer biology and clinical oncology, (2) fundamentals of nanoscience, (3) principles of nanoscale engineering, (4) major classes of nanoparticles and nanostructures, and (5) nanomedicine - technologies and applications 3 undergraduate hours. No graduate credit. Approved for Letter and S/U grading. Prerequisite: BIOE 206, CHEM 232.

BIOE 480 Magnetic Resonance Imaging credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/480/**)**
Same as ECE 480. See ECE 480.

BIOE 481 Whole-Body Musculoskel Biomech credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/481/**)**
Same as ME 481. See ME 481.

BIOE 482 Musculoskel Tissue Mechanics credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/482/**)**
Same as ME 482. See ME 482.

BIOE 483 Biomedical Computed Imaging Systems credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/483/**)**
The frontier of biomedical imaging is computed imaging where multi-dimensional images must be reconstructed from measured data that is otherwise not meaningful to human observers. In this course, computational image reconstruction techniques will be developed and employed across a broad range of radiographic, magnetic resonance, and nuclear imaging modalities. General imaging and detection principles common to all computational modalities will be covered in context of specific biomedical imaging scenarios. X-ray computed tomography will be covered in depth and in the context of the imaging science principles presented the co-requisites; this also includes practical concerns about computing resources and modern GPU-based computing. The physics of magnetic resonance imaging will be presented and related to specific mathematical issues of image reconstruction and under-sampled measurement space. Positron emission tomography (PET) will be covered and specific clinical issues discussed in terms of reconstruction algorithm and parameter choices. 3 undergraduate hours. 4 graduate hours. Prerequisite: BIOE 205, BIOE 210, ECE 380/BIOE 380. Concurrent enrollment in BIOE 485 and BIOE 580 is required.

BIOE 484 Statistical Analysis of Biomedical Images credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/484/**)**
Biomedical image data often come in extreme numbers: there is either so many of them that humans can't analyze them in reasonable time (e.g., three-dimensional light sheet microscopy data) or they are few, highly varied and of limited spatial and intensity resolutions (e.g., positron emission tomography scans). Furthermore, the extraction of image features and the characterization of modality-dependent background noise can be particularly challenging in typical biomedical scenarios. In this course, several applications of statistical learning to biomedical image data will be covered in depth from first principles. Analyses will be done in Python using the Scikit-learn package and all homework assignments comprise statistical analyses of biomedical image data in real decision scenarios. Histogram transforms and the fundamental properties of image texture will be introduced and revisited throughout the course. The extraction of both low- and high-order spatial features at multiple scales will be demonstrated and employed throughout the course. Support vector machines will be introduced and applied to image classification and interpretation tasks. The random forest algorithm will be introduced and used on a number of large- and small-data tasks. Multiple linear regression will be applied to neuroimaging data and some common methods of assessing model robustness shown. Cross-validation of image-derived decisions and some common methods of assessing model robustness will be shown. Feature selection and dimensionality will be discussed in terms of diagnostic task performance. The effects of inter-feature correlation upon prediction confidence will be discussed. Principal component analysis will be described and applied to various image processing tasks. Unsupervised clustering and cluster analysis of extracted image features will be introduced. Stochastic object models will be introduced and applied in various validation tasks. 3 undergraduate hours. 4 graduate hours. Prerequisite: BIOE 485 or permission of the instructor. Students are expected to be familiar with calculus, basic probability & sampling, vector spaces, matrix algebra and constrained optimization. Several NumPy objects and manipulations will be reviewed, and all necessary Sci-kit functions introduced; however, students are expected to have substantial experience with Python programming as the basics of such will not be covered.

BIOE 485 Computational Mathematics for Machine Learning and Imaging credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/485/**)**
Covers fundamental mathematical and computational methods needed to implement computational imaging and machine learning solutions. First, relevant aspects of probability theory, matrix decompositions, and vector calculus will be introduced. Subsequently, methods that underline approximate inference, such as stochastic sampling methods, are introduced. Finally, numerical optimization methods that represent core components of computed imaging and machine learning will be introduced. This will include numerical optimization-based formulations of inverse problems. An emphasis will be placed on first order deterministic and stochastic gradient-based methods. Second order optimization techniques including quasi-Newton and Hessian free methods will also be surveyed. The application of these methods to computed imaging and machine learning problems will be addressed in detail. 4 undergraduate hours. 4 graduate hours. Prerequisite: Restricted to senior undergraduate or graduate standing in an engineering degree program or consent of instructor.

BIOE 486 Applied Deep Learning for Biomedical Imaging credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/486/**)**
Covers basic concepts, methodology and algorithms in deep learning and their applications to solve various biomedical imaging problems. Introduction to neural networks and their application to supervised and unsupervised learning problems formulated for biomedical imaging will be provided. Connections between general learning methodologies and specific challenges in the field of biomedical imaging, and design, implementation and evaluation of deep neural network-based solutions to imaging problems will be emphasized. Problems covered will include imaging system design and optimization, image recovery and reconstruction (built on the imaging physics and system course – BIOE 483), image processing (e.g., denoising, super-resolution and enhancement) and image analysis (e.g., same-contrast, multi-contrast and multimodal image registration, segmentation, classification and quality assessment). Biomedical application specific problems and solutions will be covered via hands-on problems and team-based projects. 3 undergraduate hours. 4 graduate hours. Prerequisite: MATH 241 or equivalent; BIOE 210, MATH 415 or equivalent; BIOE 310, ECE 310, STAT 410 or equivalent; BIOE 198, CS 101 or equivalent; BIOE 483; BIOE 485; or consent of the instructor.

BIOE 487 Stem Cell Bioengineering credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/487/**)**
Stem Cell Bioengineering will provide a foundation in the application of engineering approaches for the quantitative analysis of stem cell biology and the translation of stem cells into therapies. There will be 4 main sections of the course; (i) Stem Cell Basics, (ii) Stem Cell Genetics, (iii) Stem Cell Microenvironments, and (iv) Stem Cell Applications. The course will be targeted for first year graduate students and senior-level undergraduate students. The course will use a lecture and discussion format to effectively present relevant information. 3 undergraduate hours. 4 graduate hours. Prerequisite: BIOE 476.

BIOE 488 Applied High-Performance Computing for Imaging Science credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/488/**)**
Will introduce students to basic principles and practical applications of scientific computing as they relate to problems in machine learning and computed imaging. In this self-contained course, students will be introduced to a variety of important topics that underlie real-world machine learning and biomedical image computing tasks that are not typically comprised in a single course. The material will be presented in a practical way that will be accessible to engineering students who have a moderate level of experience in scientific computing but lack specific training in computer science. The emphasis will be on immediate applicability of scientific computing techniques as opposed to theoretical knowledge. The course will begin with an overview of good scientific coding practices in Python and introductions to canonical computing architectures. Subsequently, parallel computing concepts will be surveyed that address multi-core CPU and GPU-enabled systems. Distributed GPU computing on a cluster will also be covered. The salient aspects of TensorFlow and/or other relevant machine learning programming environments will be introduced and utilized in applications of machine learning. 3 undergraduate hours. 3 graduate hours. Prerequisite: Familiarity with the Python programming language. Restricted to students with senior undergraduate or graduate standing in an engineering major.

BIOE 489 Regulations, Ethics and Logistics in Biomedical Applications of Machine Learning credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/489/**)**
The application of machine learning (ML) to medical image data is an area of intense, well-funded research. Due to practical logistics, however, the ideas expounded in published research articles do not necessarily translate perfectly into clinical implementation. The purposeful design and assessment of machine learning experiments will be introduced and revisited throughout the course. The financial cost of training, data acquisition and expert labelling will be considered in the context of product delivery. Some relevant university, corporate and governmental regulatory policies will be presented by expert guest lecturers. Specific issues of clinical implementation and adoption of new technology will be covered. The ethics of using images influenced or analyzed by ML in patient care and/or medical research will be explored in depth. Topics include: diagnosis accuracy, mandated system upgrades, informed consent, patient privacy, researcher/vendor liability and the role and reliability of federal regulations in ethical application of ML to biomedical data. The policies and procedures of NIH study sections and internal review boards will be highlighted and some key issues related to intellectual property will be surveyed. 3 undergraduate hours. 4 graduate hours. Prerequisite: Restricted to students with senior undergraduate or graduate standing and familiarity with machine learning principles.

BIOE 497 Individual Study credit: 1 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/497/**)**
Special project or reading activity. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated up to 8 hours in a term to a maximum of 12 total hours. Prerequisite: Approved written application to department as specified by department or instructor.

BIOE 498 Special Topics credit: 1 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/498/**)**
Subject offerings of new and developing areas of knowledge in bioengineering intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated in the same or separate terms if topics vary to a maximum of 12 hours, but no more than 8 in any one term.

BIOE 499 Senior Thesis credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/BIOE/499/)
Limited in general to seniors in the curriculum in bioengineering. Any others must have the consent of the department chief advisor. Each student taking the course must register in a minimum of 5 hours either in one term or divided over two terms. 1 to 5 undergraduate hours. No graduate credit. May be repeated to a maximum of 10 hours between two semesters. Prerequisite: Senior Standing.

BIOE 500 Graduate Seminar credit: 0 or 1 Hours. (https://courses.illinois.edu/schedule/terms/BIOE/500/)
Lecture surveying a broad range of Bioengineering topics. 0 or 1 graduate hours. No professional credit. Approved for S/U grading only. May be repeated to a maximum of 2 hours.

BIOE 501 Seminar Discussion credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/BIOE/501/)
Familiarization with reading and discussing academic journals in Bioengineering. Approved for S/U grading only.

BIOE 502 Bioengineering Professionalism credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/BIOE/502/)
Ethical questions and conduct, procedures, and professional standards in the practice of bioengineering. Authorship and mentoring, use of animal and human subjects, conflict of interest, ethical behavior in scientific research, intellectual property, and approval processes for drugs and biomedical devices. 2 graduate hours. No professional credit.

BIOE 504 Analytical Methods in Bioeng credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BIOE/504/)
Mathematical concept relating to modeling of physiological and bio-molecular processes and the instrumentation used to measure those processes. Review of matrix methods, probability, linear systems, and integral transforms. Singular value decomposition, Bayesian decision making, and linear system solutions to ordinary differential equations. Application of concepts to biosensor design and evaluation, tracer kinetic modeling, and filtering and curve-fitting approaches to forward modeling problems. Prerequisite: MATH 285.

BIOE 505 Computational Bioengineering credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BIOE/505/)
Mathematical and statistical models plus accompanying computational techniques central to many aspects of systems biology and bioengineering research. Theory of supervised and unsupervised learning; linear models; dimension reduction; Monte Carlo computation; analysis of gene expression data and genome sequence data; modeling of gene transcription network signaling pathways. Same as CSE 505. 4 graduate hours. No professional credit. Prerequisite: STAT 400.

BIOE 506 Molecular Biotechniques credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BIOE/506/)
Introduction to modern biotechnologies for studies on the Central Dogma of Biology (DNA, RNA, and Protein) as well as cellular organelles and cell imaging. In-depth review of traditional established methods and emerging ones, emphasizing high precision, high spatial/temporal resolution, high-throughput, molecular accuracy, sensitivity and real-time imaging. Techniques include single molecule sequencing, super resolution cell imaging, and gene therapeutic methods. Example applications of technology are included through relevant journal articles. 4 graduate hours. No professional credit. Prerequisite: MCB 250.

BIOE 507 Advanced Bioinstrumentation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BIOE/507/)
Instrumentation and underlying theory employed in bioengineering. Concepts in the design and operation of sensors, fundamentals of optics, basic control theory and systems, digital components, and fundamental principles of medical imaging techniques. Specific knowledge of one biomedical instrument or system will be emphasized including detailed mathematical analysis. Prerequisite: BIOE 504.

BIOE 510 Computational Cancer Biology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BIOE/510/)
Mathematical modeling of the process of carcinogenesis as somatic cell evolution. Focus on current research topics in cancer biology using data from next-generation sequencing technologies. Overview of database resources and algorithmic and modeling methods relating to biological problems. 4 graduate hours. No professional credit. Prerequisite: BIOE 206, CS 101, MATH 285.

BIOE 531 Principles of Pharmaceutical Technology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BIOE/531/)
This is a core course for the pharmaceutical engineering concentration. Drug manufacturing often relies on principles of chemistry, pharmaceutics, and technology. This course will discuss in-depth understanding of compounds and materials to help designers predict and measure compound properties to define and characterize their constitutive behaviors. This course will provide students with an understanding of the principles, strategies, and materials used in the processes of controlled drug delivery systems. Gaining knowledge in ingredient interaction (thermodynamics vs. kinetics) and how the delivery requirements determine the ingredients and the corresponding processing is critical for the success of a pharmaceutical development. This course will first discuss the synthetic approaches to new drug discovery and repurposing followed by introducing the technology methodologies involved in translating a drug compound produced in the lab to an industrial process. It will also focus on topics at the interface between engineering and chemistry and biology covering fundamentals of drug delivery, including physiology, pharmacokinetics/pharmacodynamics, drug diffusion and permeation, and biomaterials used in drug delivery. Controlled release strategies for various administration routes will also discussed. 4 graduate hours. No professional credit. Prerequisite: Student should have completed courses in advanced math, including linear algebra and differential equations, as well as courses in chemistry and biological sciences. Open to all M.Eng. in Bioengineering students.

BIOE 532 Advanced Pharmaceutical Technology credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/532/**)**
This is a core course for the pharmaceutical engineering concentration. This course will follow a combination of modular lecture and laboratory-based teaching (lab modules will require students to participate in conducting wet lab experiments followed by calculations). Drug manufacturing often relies on principles of chemistry, pharmaceutics, and technology. Most of the classical pharmaceutical engineering degree programs either do not extensively address newly defined design-based approaches or require long years of work experience to acquire integrated knowledge on pharm-science, relevant regulations and process technology. This knowledge gap on the interface of pharmacy and process technology has been identified independently by WHO and AAPS survey (Lawrence 2017; O'Connor 2016). The goal of this course is to help develop the desired skill sets covering the concepts to adapt technology principles to pharmaceutical and life sciences with topics ranging from process technology in the drug discovery, high throughput characterization and optimization of new chemical entities, solid-state engineering, and intelligent pharmaceutical manufacturing systems. The basic features of common unit operations used in the pharmaceutical industry will be reviewed, including batch reaction, solid-liquid separation, crystallization, drying, mixing, batch distillation and other separation systems. 4 graduate hours. No professional credit. Prerequisite: BIOE 531. Open to all M.Eng. in Bioengineering students.

BIOE 570 Seminar Series credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/BIOE/570/**)**
Guest topics will vary, but will typically cover topics of current interest relevant to the bioengineering field. Lecture and discussion on topics relevant to the development, regulatory approval, marketing, and application of systems used in the fields of biomedical imaging, life science research, and pharmaceutical discovery. Emphasis upon case studies on topics that will include regulatory approval, intellectual property, strategy, and technology innovation. 1 graduate hour. No professional credit. Approved for S/U grading only. May be repeated up to 2 hours in separate terms. Prerequisite: For students enrolled in the M.Eng. in Bioengineering degree program.

BIOE 571 Biological Measurement I credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/571/**)**
With special focus on medical imaging, this course will introduce fundamental concepts related to the detection and analysis of biological analytes, biomedical images, and physiological parameters. Topics include signal-to-noise analysis, noise characterization, data aliasing, analog-to-digital conversion, common strategies for noise reduction, exogenous contrast agents and fundamentals of molecular imaging. The fundamental phenomena behind biological measurements such as DNA sequencing, fluorescence microscopy. MRI imaging, OCT imaging, and ultrasound imaging will be discussed along with the factors that influence noise and contrast from the standpoint of fundamental physics, instrumentation/hardware, and post-measurement data/signal processing. 4 graduate hours. No professional credit. Prerequisite: For students enrolled in the M.Eng in Bioengineering degree program.

BIOE 572 Biological Measurement II credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/572/**)**
With special focus on medical imaging, learn about advanced techniques relating to state-of-the-art bioinstrumentation technologies. Topics will broadly include fluorescence, genomic and proteomic diagnostics, biosensors, ultrasound imaging, microscopy and their uses relevant to physiological changes related to major human diseases. 4 graduate hours. No professional credit. Prerequisite: BIOE 571. For students enrolled in the M.Eng in Bioengineering degree program.

BIOE 573 Managing Business Operations credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/573/**)**
Introduction to fundamental principles of design, management, and improvement of business operations and product innovations. Strategies and techniques for managing processes, projects, process improvement and new product development. 4 graduate hours. No professional credit. Prerequisite: For students enrolled in the M.Eng in Bioengineering degree program.

BIOE 574 Innovation and Introduction to Financial Decision Making credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/574/**)**
Tools, concepts, and analytical frameworks that enhance the ability to define and analyze strategic problems stemming from innovation and technological change, and to identify sources of competitive advantage from both an industry and firm-level perspective. Introduction to financial decision making, including topics in valuation, project analysis and risk-return relationships. 4 graduate hours. No professional credit. Prerequisite: For students enrolled in the M.Eng. in Bioengineering degree program only.

BIOE 575 Capstone Project credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/575/**)**
Students in the Master of Engineering (M.Eng.) in Bioengineering program will demonstrate their proficiency through a capstone project, where students will work on a translational project to develop solutions for real world problems utilizing principles of design, engineering analysis, and functional operation of engineering systems. Depending on the student's flexibility and availability, capstone projects may include collaboration with other online M.Eng. students on a team-based project, analysis of case studies, or even a self-directed project that directly relates to a specific area of interest or on behalf of their employer. Project presentations and demonstrations may be required at the end of the program. 3 graduate hours. No professional credit. May be repeated for 6 hours in separate semesters. Students in the Master of Engineering program will be required to sign up for BIOE 575 in both the Fall and Spring semesters. Prerequisite: Proficiency in MATLAB and completion of or concurrent enrollment in core classes required for the Master of Engineering (M.Eng.) in Bioengineering program. Class only available to students in the M.Eng. in Bioengineering degree program.

BIOE 580 Foundations of Imaging Science credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/580/**)**
Exposes students to a broad treatment of the mathematical and statistical principles of biomedical imaging. In addition to providing a foundation for understanding general principles of image formation and objective image quality assessment that are widely applicable, this material will be essential for the principled and successful application of artificial intelligence methods in biomedical imaging. This course will cover the mathematical concepts needed for the deterministic analysis of imaging systems. Linear operator theory will be employed to describe continuous-to-continuous, continuous-to-discrete, and discrete-to-discrete mappings from objects to images. In addition, imaging systems will be analyzed in a statistical framework where stochastic models for objects and images will be introduced. Methodologies for objective assessment of image quality (OAIQ) will be introduced, which will address classification tasks, receiver operator characteristic (ROC) analysis, and salient aspects estimation theory. An introduction to numerical observers for quantification of OAIQ will be provided. 4 graduate hours. No professional credit. Prerequisite: Concurrent enrollment in BIOE 485 and BIOE 483 is required. Restricted to graduate standing or consent of instructor.

BIOE 581 MRI Pulse Sequence Design credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/581/**)**
Modular approach to pulse sequence programming in magnetic resonance imaging; descriptions of current pulse sequences; RF pulse design; data sampling considerations; k-space acquisition trajectories. Pulse sequence development simulator usage to program, simulate, and reconstruct images from student-designed acquisitions. Prerequisite: ECE 480.

BIOE 582 Stats & Algo in Genomic Bio credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/582/**)**
This course will provide students with the practical knowledge of statistical analysis and computational modeling techniques relevant for applications in genomics and systems biology. The focus will be on the fundamental concepts and algorithms for gene finding, genome annotation, sequence alignment, phylogenetic reconstruction, gene expression and network analysis, Genome-Wide Association Studies (GWAS), etc. 4 graduate hours. No professional credit. Prerequisite: STAT 100, MCB 250, MATH 220, CS 101, or equivalent. Restricted to MEng Students only.

BIOE 583 HT Genomic Data Analysis credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/583/**)**
The course will provide students with important practical skills for handling genomic big data and analyzing the results of various types of high-throughput sequencing experiments. The focus will be on achieving proficiency in data management and processing based on popular file formats in genomic biology. 4 graduate hours. No professional credit. Prerequisite: STAT 100, MCB 250, CS 101, or equivalent. For students enrolled in the M.Eng in Bioengineering program or with consent of the M.Eng. program.

BIOE 586 Deep Generative Models in Bioimaging credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/586/**)**
A generative model is a powerful way of learning any kind of data distribution using unsupervised learning and they have achieved tremendous success in recent years. In the context of biomedical imaging, generative models are being actively explored for many important and diverse applications that include image and video synthesis, representation learning and semi-supervised learning, domain adaptation, text to image synthesis, image compression, super-resolution, inpainting, saliency prediction, image enhancement, style transfer and texture synthesis, and image-to-image translation. Generative models also hold great potential for regularizing inverse problems that arise in biomedical image formation. This course will provide an introduction to the use of deep neural networks for generative modeling in the context of biomedical image science. An emphasis will be placed on variational autoencoders (VAEs) and generative adversarial networks (GANs), as these are currently two of the most commonly employed and efficient approaches. The use of generative models for exploring data-acquisition designs optimizing the performance of imaging systems will also be introduced. Practical details regarding the successful training and evaluation of deep generative models using biomedical image data will introduced throughout the course. This will be reinforced via homework assignments and a final project that require hands-on training of networks facilitated by allocations of GPU time. 4 graduate hours. No professional credit. Prerequisite: BIOE 486, BIOE 485, BIOE 483, BIOE 580 or consent of instructor.

BIOE 588 Biomedical Image Computing Capstone Project Literature Review credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/BIOE/588/**)**
This journal-club style course will expose students to the modern literature on biomedical imaging and machine learning. Students will be exposed to cutting edge topics in the rapidly evolving field of biomedical image computing. Additionally, the course will prepare students for the capstone project in the Biomedical Image Computing MS degree program that will take place in the third semester of the program. During this course, students will interact with potential project mentors and engage in detailed literature reviews related to potential projects. 1 graduate hour. No professional credit. Approved for S/U grading only. Prerequisite: Graduate student standing. Concurrent enrollment in BIOE 484 and BIOE 486 is required. Restricted to students in the Biomedical Image Computing M.S. degree program only.

BIOE 589 Biomedical Image Computing Capstone Project credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/589/**)**
In this course students will complete a project that utilizes machine learning methods and advanced computational tools to solve a problem related to bioimaging. The projects will utilize experimental bioimage data that is contributed by a project sponsor and/or available via open source databases. While these projects need not be publishable or perfectly novel, they will involve the systematic application and evaluation of machine learning and image computing methods. It is expected that, by solving actual problems posed by industry or clinical partners, students will gain marketable experience but, ideally, also will make inroads with their future employers. 4 graduate hours. No professional credit. Prerequisite: BIOE 588, BIOE 484, BIOE 486, BIOE 580. Concurrent enrollmment in BIOE 489 is required. Restricted to students enrolled in the Biomedical Image Computing MS degree program only.

BIOE 597 Individual Study credit: 1 to 8 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/597/**)**
Special project or reading activity. May be repeated. Prerequisite: Approved written application to department as specified by department or instructor.

BIOE 598 Special Topics credit: 1 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/598/**)**
Subject offerings of new and developing areas of knowledge in bioengineering intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. 1 to 4 graduate hours. No professional credit. May be repeated in the same or separate terms if topics vary.

BIOE 599 Thesis Research credit: 0 to 16 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOE/599/**)**
Bioengineering graduate thesis research. Approved for S/U grading only. May be repeated.

BIOL - BIOLOGY

BIOL Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/BIOL/)

Courses

BIOL 599 Thesis Research credit: 0 to 16 Hours. **(**https://courses.illinois.edu/schedule/terms/BIOL/599/**)**
Approved for S/U grading only. May be repeated.

BSE - BIOMEDICAL SCIENCES AND ENGINEERING

BSE Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/BSE/)

Courses

BSE 600 Global One Health credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BSE/600/)
Same as VCM 547. See VCM 547.

BSE 612 Foundations: Molecules to Populations credit: 13 Hours. (https://courses.illinois.edu/schedule/terms/BSE/612/)
This course, which covers the fundamental elements of medical science, serves as a baseline for the rest of the medical school curriculum. Topics to be covered include foundational anatomy, cell biology, histology, physiology, integration of engineering science, systems, microbiology, pharmacology, genetics, and behavioral science, concepts of populations, social behavior, chronic disease, health care team, patient safety, statistics, big data, Patient-Centered Medical Home, palliative care, quality, compensation, and mobile health technologies. No graduate credit. 13 professional hours. Approved for S/U grading only. May be repeated up to 13 hours in the same terms, to a maximum of 39 credit hours in separate terms, with approval from the Student Progress and Promotions Committee. Prerequisite: Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

BSE 631 Cardiovascular credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BSE/631/)
Topics include ischemic heart Dx, cardiomyopathy/CHF, aortic stenosis, atrial fibrillation, peripheral vascular disease, pediatric ASD. No graduate credit. 4 professional hours. Approved for S/U grading only. May be repeated in separate semesters for a total of 12 credit hours with approval from the Student Progress and Promotions Committee. Prerequisite: Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

BSE 632 Respiratory credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BSE/632/)
Topics include asthma -- peds, COPD, Pulmonary Fibrosis, Respiratory failure, pulmonary vasculitis. No graduate credit. 3 professional hours. Approved for S/U grading only. May be repeated in separate semesters for a total of 9 credit hours with approval from the Student Progress and Promotions Committee. Prerequisite: Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

BSE 633 Renal credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BSE/633/)
Topics include UTI with pyelonephritis, urinary obstruction-BPH, acute renal failure-toxic, chronic renal failure-DM, polycystic renal disease-peds. No graduate credit. 3 professional hours. Approved for S/U grading only. May be repeated in separate semesters for a total of 9 credit hours with approval from the Student Progress and Promotions Committee. Prerequisite: Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

BSE 634 Clinical Neuroscience credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/BSE/634/)
Topics include neurovascular disorders, seizures, brain injury, dementia, tumors of the brain, disorders involving neuroinflammation, psychotic disorders, affective disorders, anxiety disorders, as well as disorders of the peripheral nervous system and neuromuscular junction. No graduate credit. 5 professional hours. Approved for S/U grading only. May be repeated in separate semesters, for a total of 15 credit hours with approval from the Student Progress and Promotions Committee. Prerequisite: Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

BSE 635 Musculoskeletal credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BSE/635/)
Topics include primary inflammatory diseases such as rheumatoid arthritis, lupus, polymyalgia rheumatica and associated disorders, degenerative diseases of the joints such as osteoarthritis, primary diseases of muscle, primary diseases of bone such as osteoporosis and osteogenesis imperfecta as well as mechanical trauma to bone leading to fracture. No graduate credit. 4 professional hours. Approved for S/U grading only. May be repeated in separate semesters for a total of 12 credit hours with approval from the Student Progress and Promotions Committee. Prerequisite: Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

BSE 636 Digestion, Nutrition, & Metabolism credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/BSE/636/)
Topics include malabsorption syndrome, vitamin D deficiency, G6PD deficiency, TPN, obesity, GERD with stricture/Barretts, Crohn's disease, peptic ulcer disease with hemorrhage, chronic diarrhea, pyloric stenosis – peds hepatitis C, and colonic polyposis. No graduate credit. 1 to 5 professional hours. Approved for S/U grading only. May be repeated in separate semesters for a total of 15 credit hours with approval from the Student Progress and Promotions Committee. Available for honors grade. Prerequisite: Participation in ongoing study of the digestive system. Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

BSE 638 Endocrine, Genitourinary, & Women's Health credit: 1 to 10 Hours. (https://courses.illinois.edu/schedule/terms/BSE/638/)
Topics include diabetes – type II, ketoacidosis, hypothyroidism, hyperthyroidism, adrenal insufficiency, Cushing's syndrome, diabetes insipidus, hypogonadism, erectile dysfunction, testicular torsion, infertility, sexual orientation, BPH, dysmenorrhea, menorrhagia, polycystic ovarian disease, cervical dysplasia, menopause – vasomotor, pelvic pain, normal delivery, breach, multiple gestation, medical illness of pregnancy – diabetes, and placenta previa. No graduate credit. 1 to 10 professional hours. Approved for S/U grading only. May be repeated in separate semesters for a total of 30 credit hours with approval from the Student Progress and Promotions Committee. Available for honors grade. Prerequisite: Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

BSE 642 Hematology, Oncology, Infection, and Immunity credit: 1 to 6 Hours. (https://courses.illinois.edu/schedule/terms/BSE/642/)
Topics include lung cancer, colon cancer, breast cancer, renal cancer, prostate cancer, pancreatic cancer, iron deficiency anemia, sickle cell anemia, lymphoma- non-Hodgkin, acute myelocytic leukemia, chronic lymphocytic leukemia, idiopathic thrombocytopenia, pneumonia, sepsis UTI – pyelonephritis, cellulitis, HIV anaphylaxis, allergic dermatitis, and myocarditis encephalitis. No graduate credit. 1 to 6 professional hours. Approved for S/U grading only. May be repeated in separate semesters for a total of 24 credit hours with approval from the Student Progress and Promotions Committee. Available for honors grade. Prerequisite: Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

BSE 644 Multisystem Conditions credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BSE/644/)
The Multisystem Conditions course is a required course for students in Phase 1 of the Carle Illinois College of Medicine Curriculum. In this course, students work in small groups to approach complex diseases and conditions they may see in the clinical environment. No graduate credit. 4 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 12 hours. Prerequisite: Restricted to students enrolled in Phase 1 of the Carle Illinois College of Medicine curriculum.

BSE 645 Synthesis & Summary credit: 6 Hours. (https://courses.illinois.edu/schedule/terms/BSE/645/)
This course will review critical concepts in the areas of Behavioral Science, Biochemistry, Cells and Tissues, Human Development and Genetics, Microbiology, Immunology, Pathology, and Pharmacology, Population Health. The course will be organized around the major organ systems: Blood and Lymphoreticular System, Cardiovascular, Endocrine, Gastrointestinal, Hematology and Oncology, Musculoskeletal, Neurology, Psychiatry, Renal, Reproductive, Respiratory, Skin and Subcutaneous Tissue. No graduate credit. 6 professional hours. Approved for S/U grading only. Prerequisite: This course is restricted to Carle Illinois College of Medicine Students.

BSE 646 Synthesis & Summary - Phase 2 credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/BSE/646/)
An optional elective for students who are at the end of Phase 2 in the Carle Illinois College of Medicine curriculum. Designed to be student-centered. During the course, you will review how the basic science disciplines fit together, identify personal content weaknesses and work to deepen your understanding, create a Step 2 study strategy, and prepare for Step 2 in a manner that values wellness as well as growth. No graduate credit. 0 to 4 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 8 hours. Prerequisite: Restricted to students enrolled in Phase 2 or 3 of the Carle Illinois College of Medicine curriculum.

BSE 650 Global Studies/Service Learning Elective credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/BSE/650/)
This course will engage the student in interdisciplinary studies or projects and demonstrate understanding of complex global events and processes of globalization. Students will learn about issues and problems in health care from a global perspective. No graduate credit. 1 to 4 professional hours. Approved for S/U grading only. May be repeated to a maximum of 28 hours. Prerequisite: This course is restricted to Carle Illinois College of Medicine students.

BSE 655 Research Elective credit: 1 to 16 Hours. (https://courses.illinois.edu/schedule/terms/BSE/655/)
The goal of this course is to introduce the students to the foundations of selected multi-disciplinary research in medical/engineering field. Students will learn about the purpose for research; identifying researchable issues; finding, evaluating, and using sources effectively; recognizing methods associated with different types of data and disciplines; and writing a literature review. No graduate credit. 1 to 16 professional hours. Approved for S/U grading only. May be repeated up to 16 hours in the same semester, to a maximum of 64 hours in separate semesters. Prerequisite: This course is restricted to Carle Illinois College of Medicine students.

BSE 660 Self-Designed Study credit: 1 to 16 Hours. (https://courses.illinois.edu/schedule/terms/BSE/660/)
Students will develop skills and gain experience working collaboratively with other professional through a self-designed study. Develop a self-guided study when students have an interest in an intellectual issue that is best studied through an integrative approach based in multiple academic disciplines. This course will introduce the student to a selected multi-disciplinary study or project in the medical/engineering field, addresses appropriate methodology, provides opportunities for advanced level research or other creative projects, and culminates in an integrative experience. It must be arranged between the student and an individual faculty member or external collaborator, and subsequently approved by the dean of Academic Affairs. No graduate credit. 1 to 16 professional hours. Approved for S/U grading only. May be repeated up to 16 hours in the same semester to a maximum of 32 hours over separate semesters. Prerequisite: This course is restricted to Carle Illinois College of Medicine students.

BSE 665 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/BSE/665/)
Subject offerings of new and developing areas of knowledge in medicine intended to augment the existing curriculum. No graduate credit. 1 to 4 professional hours. Approved for S/U grading only. May be repeated to a maximum of 16 hours in the same or subsequent semesters. Prerequisite: This course is restricted to Carle Illinois College of Medicine students.

BSE 666 Academic Progress I (Longitudinal) credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/BSE/666/)
Provides students with an opportunity to demonstrate core medical skills. The course includes assessment of students' understanding of clinical skills, professionalism, anatomy, and medical knowledge. Areas covered in the course include: cardiovascular, respiratory, renal, neurology, musculoskeletal, digestive, nutrition, metabolism, endocrine, genitourinary, oncology, hematology, infection, and immunity. No graduate credit. 0 professional hours. Approved for S/U grading only. May be repeated in separate semesters. Prerequisite: Restricted to Carle Illinois College of Medicine students.

BSE 680 Innovation, Design, Engineering and Analysis Projects (Longitudinal) credit: 0 to 6 Hours. (https://courses.illinois.edu/schedule/terms/BSE/680/)
Innovation, Design, Engineering and Analysis Projects (IDEA) is a required course for students in Phase 2 of the Carle Illinois College of Medicine curriculum. In this course, students work independently and in small groups to solve challenges they are presented with in the clinical environment. No graduate credit. 0 to 6 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 15 hours. Available for honor grades. Prerequisite: Restricted to students enrolled in Phase 2 of the Carle Illinois College of Medicine curriculum.

BSE 685 Medicine - Capstone Project (Longitudinal) credit: 2 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BSE/685/**)**
Selecting one of the clinical challenges investigated during the Innovation, Design, Engineering and Analysis Projects (Longitudinal), students will work to potentially translate new approaches, technologies, and treatments in healthcare. No graduate credit. 2 to 4 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 12 professional hours. Prerequisite: Restricted to students enrolled in Phase 3 of the Carle Illinois College of Medicine curriculum.

BSE 686 Medicine - Data Science Project (Longitudinal) credit: 2 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BSE/686/**)**
Develop skills in data science for health care through the Data Science Project. Identify an exciting data-driven question, find data sources to address the question, and access and utilize those data to improve clinical care. Students will interact with databases, utilize tools for analyzing clinical or molecular data, and learn about the immense potential of medical data science while familiarizing themselves with the issues of human subject's protection and privacy regulations around data. No graduate credit. 2 to 4 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 12 hours. Prerequisite: Restricted to students enrolled in Phase 3 of the Carle Illinois College of Medicine curriculum.

BSE 690 Research credit: 1 to 8 Hours. **(**https://courses.illinois.edu/schedule/terms/BSE/690/**)**
Carle Illinois students are encouraged to participate in research in order to enhance their scientific reasoning, and fulfill the college's mission of developing "Physician Innovators". This course will allow students to engage in a broad spectrum of research experiences. Students will work closely with a research mentor at the University of Illinois at Urbana-Champaign to develop their ideas and generate a list of research outcomes. No graduate credit. 1 to 8 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 16 hours. Prerequisite: Students must be in Phase 2 or Phase 3 of the curriculum. This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

BSE 700 Innovations in Problem Based Learning credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BSE/700/**)**
This elective will provide students multiple opportunities to identify compassionate innovation through problem-based learning facilitation. The students will learn how to facilitate a PBL session and how to identify moments in cases where compassionate innovation can be furthered. This will be done through creating additional probes or tasks in the cases to be used by future facilitators. Students will also have the opportunity to create notes and evaluations on first year students. These notes/evaluation will be reviewed by CIMED facilitators. The overall goal of this is not only to improve cases for current PBL students, but to assist students participating in the elective in ideation and entrepreneurship. This will help students as they create IDEA projects in the clerkships as well as preparing them for Capstone and potentially Data Science projects. Based on student interest, certain areas of this elective may be emphasized to achieve student goals. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: Students must be in Phase 2 or Phase 3 of the curriculum. This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

BSE 701 Introduction to Telemedicine credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/BSE/701/**)**
This introduction to telemedicine will help students understand the role of telemedicine in various contexts such as in primary care, for underserved or rural patients, during times of crisis (disasters, pandemics) and more. Considerations include benefits & limitations, tools & technology, patient interactions & follow-up, insurance considerations, legal and regulatory issues, and research. Students will have an opportunity to research an area of telemedicine and present what they have learned. This could be new uses of telemedicine, new tools, policy/legal considerations, expanding the reach of telemedicine, or any other issue related to telemedicine. Outputs could include a literature review, program plan, roadmap, white paper or other presentation medium. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Restricted to students enrolled in the Carle Illinois College of Medicine.

BSE 702 Medical Spanish credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/BSE/702/**)**
Carle Illinois College of Medicine strives to support physicians who want to serve diverse populations. To that end, students may enroll in a 2-week medical Spanish course. This hybrid online course allows students to increase their proficiency in Spanish, while also practicing with a standardized patient. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Restricted to students enrolled in the Carle Illinois College of Medicine.

BSE 703 Medical Informatics credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/BSE/703/**)**
A detailed overview of biomedical and health informatics for medical students. The course provides up-to-date details on the informatics field, which includes: electronic health records, data standards and interoperability, clinical decision support, healthcare data analytics, population health, patient engagement, and telemedicine. It also describes and sets the context for new technologies, such as SMART on FHIR, machine learning, artificial intelligence, and wearables. No graduate credit. 2 professional hours. Approved for S/U grading only. Available for honors grades. Prerequisite: Restricted to students enrolled in the Carle Illinois College of Medicine.

BSE 704 Medicine in Literature credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/BSE/704/**)**
The medical encounter between patients and physicians has been represented in literary texts such as poems, short stories and novels for centuries. In this elective, students will be given the opportunity to reflect on the medical experience through an analysis of literary texts from various time periods and cultural contexts. Particular attention will be paid to the difference in perspective by patients, physicians and other actors in the healthcare setting. Our reading of literature will be complemented by texts from the field of narrative medicine, which uses the tools of literary analysis and close reading to understand patients' histories and fine-tunes awareness of the cultural and social determinants of health. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Restricted to students enrolled in the Carle Illinois College of Medicine.

BSE 705 Race in Medicine credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BSE/705/**)**
This elective provides an opportunity to explore the topics of unconscious bias, history of race in medicine and effects on systemic racism in medicine. The goal is to give time to grow in personal insight and development in this area to progress to become a compassionate and unbiased health care provider. Progress towards this goal will be made through the personal journey of completing a 21 day equity challenge and reflection paper, participation in online discussion boards, and group projects looking at the history and current state of racism and social determinants of health in medicine. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: Restricted to students enrolled in the Carle Illinois college of Medicine curriculum. The course is only available during the Discovery Learning timeframe.

BSE 706 Literature Review in Pathology credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BSE/706/**)**
Pathology is a multidisciplinary science that connects theory (basic sciences) with practice (clinical sciences). This elective provides students with opportunities to explore the role of pathology in medical education. This course might be of particular interest to those who are generally interested in medical education and/or pathology as a future specialty. No graduate credit. 4 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 8 hours. Prerequisite: Restricted to students enrolled at the Carle Illinois College of Medicine.

BSE 710 Computational Genomics credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/BSE/710/**)**
The first week of this elective is an intensive course for scientists and clinicians covers the basics of computational genomics, while integrating the latest technologies and computational methodologies. University of Illinois faculty and Mayo Clinic scientists teach lectures and lead hands-on lab exercises in a variety of subject areas including genome sequencing and assembly, polymorphism and variant analysis, epigenomics, and systems biology. The second week is an in-depth independent study that focuses on a project using the skills from the first week. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: This course is restricted to students enrolled in the Carle Illinois College of Medicine.

BSE 711 Climate Aware Physicians credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/BSE/711/**)**
Medical students should learn how to practice medicine in the context of the current health impacts of climate change. Throughout the U.S. and globally, climate change contributes to increasing morbidity and mortality, including heat illness, respiratory and cardiovascular disease from air pollution, vector and water borne diseases, food and water insecurity, mental stress, and injuries. We highlight health threats, policies, and actions for physicians, engineering/medical researchers, and medical students. No graduate credit. 2 professional hours. Approved for S/U grading only. Available for honor grades. Prerequisite: Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

BSE 720 Advanced Anatomy credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BSE/720/**)**
Provides a focused concentration on gross anatomy via literature review and intensive cadaver dissection related to the student's specific clinical interest. Topics will emphasize clinical conditions that have clear anatomic correlates. Key topics will include the 3D relationships of gross anatomical structures, foundational anatomical knowledge required to interpret results of different imaging modalities, and the application of anatomical knowledge in carrying out surgical, diagnostic, or therapeutic clinical procedures. No graduate credit. 4 professional hours. Approved for S/U grading only. Available for honors grades. Prerequisite: Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

BSE 730 Introduction to Deep Learning on Healthcare Data credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/BSE/730/**)**
Covers deep learning methods, healthcare data and applications using deep learning methods. Includes activities such as online lectures or video lectures, programming labs, literature review, and individual or group presentations. The overall goal is to understand basic data science workflow for healthcare data such as electronic health records, clinical notes, and medical images, to learn basic deep learning models, and to learn the structure of data science projects. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Experience with Python programming, basic machine learning, and Jupyter notebooks. Restricted to students enrolled in the Carle Illinois College of Medicine curriculum.

BSE 790 Understanding the Response to the COVID-19 Pandemic credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/BSE/790/**)**
This course is designed to help students apply the principles of virology, immunology, public health, data science and population Medicine in evaluating the current public health policy responses to the COVID-19 pandemic. Since the learning activities will focus on current events and daily topics, they will be altered and refined to align with unfolding circumstances and policy decisions.The learning activities will provide students with a model foundation of competency and confidence which they would need to serve on a local, community health advisory board and provide expertise in support of the design of a coordinated response to mitigate the impact of a Covid-19 outbreak on patient health, societal well-being, business continuity and economic durability. The competency foundation will include: 1. an understanding of viral biology, host defense and infectious disease dynamics. 2. the ability to gather, understand and intelligently apply biostatistical and epidemiological data in designing practical solutions. 3. an appreciation of the different: a. political, demographic, educational, attitudinal, behavioral, socioeconomic, and cultural factors, along with the inherent disparities and preferences that impact health risk and community compliance to public health recommendations b. needs and constraints of local business owners c. barriers to public participation and communication. No graduate credit. 1 professional hour. Approved for S/U grading only. Prerequisite: Restricted to Carle Illinois professional students only.

BIOP - BIOPHYSICS

BIOP Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/BIOP/)

Courses

BIOP 401 Introduction to Biophysics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BIOP/401/)
Topics include equilibrium thermodynamics, kinetics, and quantum mechanics with applications to biological and chemical systems. 3 undergraduate hours. 3 graduate hours. Prerequisite: MCB 354 or MCB 450, or equivalent, or consent of instructor.

BIOP 419 Brain, Behavior & Info Process credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BIOP/419/)
Same as MCB 419 and NEUR 419. See MCB 419.

BIOP 432 Photosynthesis credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BIOP/432/)
Same as CPSC 489 and IB 421. See IB 421.

BIOP 550 Biomolecular Physics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BIOP/550/)
Same as MCB 550 and PHYS 550. See PHYS 550.

BIOP 576 Computational Chemical Biology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BIOP/576/)
Same as CHEM 576 and CSE 576. See CHEM 576.

BIOP 581 Lab Rotation I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/BIOP/581/)
Laboratory research methods; familiarization of first-year graduate students with experimental methods used in research in Biophysics and Quantitative Biology. Required of all first-year students majoring in Biophysics and Quantitative Biology. First five weeks of fall term. 2 graduate hours. No professional credit. Prerequisite: First-year graduate status and consent of department; concurrent registration in BIOP 582 and BIOP 583.

BIOP 582 Lab Rotation II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/BIOP/582/)
Laboratory research methods; familiarization of first-year graduate students with experimental methods used in research in Biophysics and Quantitative Biology. Required of all first-year students majoring in Biophysics and Quantitative Biology. Second five weeks of fall term. 2 graduate hours. No professional credit. Prerequisite: First-year graduate status and consent of department; concurrent registration in BIOP 581 and BIOP 583.

BIOP 583 Lab Rotation III credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/BIOP/583/)
Laboratory research methods; familiarization of first-year graduate students with experimental methods used in research in Biophysics and Quantitative Biology. Required of all first-year students majoring in Biophysics and Quantitative Biology. Meets last five weeks of the fall term. 2 graduate hours. No professional credit. Prerequisite: First-year graduate status and consent of department; concurrent registration in BIOP 581 and BIOP 582.

BIOP 586 Special Topics in Biophysics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/BIOP/586/)
Advanced course/tutorials on topics of interest in biophysics, such as electrophysiology, radiation biology, bioenergetics, protein structure, or the physics of muscular contraction. May be repeated. Prerequisite: Consent of instructor.

BIOP 590 Individual Topics credit: 2 to 10 Hours. (https://courses.illinois.edu/schedule/terms/BIOP/590/)
For graduate students wishing to study individual problems or topics not assigned in other courses. May be repeated. Prerequisite: Consent of department.

BIOP 595 Biophysics Seminars credit: 1 to 2 Hours. (https://courses.illinois.edu/schedule/terms/BIOP/595/)
Survey of literature in one area of biophysics, with special emphasis on student reports. 1 to 2 graduate hours. No professional credit. Approved for S/U grading only. May be repeated. Prerequisite: Graduate standing in Biophysics and Quantitative Biology.

BIOP 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/BIOP/599/)
Research may be conducted in any area under investigation in a faculty laboratory, subject to the approval of the faculty member concerned and the department in which the research is to be done. Approved for S/U grading only. May be repeated.

BCS - BOSNIAN-CROATIAN-SERBIAN

BCS Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/BCS/)

Courses

BCS 101 First Year Bosnian-Croatian-Serbian I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BCS/101/)
Oral and written work on pronunciation, grammar, and vocabulary. For students with no previous study of Bosnian, Croatian or Serbian.

BCS 102 First Year Bosnian-Croatian-Serbian II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BCS/102/)
Continuation of BCS 101. Prerequisite: BCS 101 or equivalent proficiency.

BCS 115 South Slavic Cultures credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BCS/115/)
Exploration of South Slavic cultures in the historically rich and complex region sometimes referred to as "the Balkans," focusing particularly on those groups found within the successor states of the former Yugoslavia. Critical look at the traditional view of the region as the crossroads or the bridge between East and West, and at the term Balkanization which has become a pejorative term used to characterize fragmented, and self-defeating social systems.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West
Social Beh Sci - Soc Sci

BCS 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/BCS/199/)
May be repeated.

BCS 201 Second Year Bosnian-Croatian-Serbian I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BCS/201/)
Completion of grammar; written and oral exercises aimed at active command of the language. Prerequisite: BCS 102 or equivalent proficiency.

BCS 202 Second Year Bosnian-Croatian-Serbian II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BCS/202/)
Selected readings in Bosnian, Croatian, or Serbian literature and culture. Prerequisite: BCS 201 or equivalent proficiency.

BCS 215 Yugoslavia and After credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BCS/215/)
Exploration of the effect of traumatic events, shifting cultural narratives, and social transformations on the construction of collective identities in Bosnia, Croatia and Serbia in the 20th and 21st centuries. Students will read historical and sociological works as well as fiction and poetry.
This course satisfies the General Education Criteria for:
Cultural Studies - Western

BCS 301 Third Year Bosnian-Croatian-Serbian I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BCS/301/)
Analysis of the sound system and grammar of the contemporary Bosnian, Croatian, Serbian languages. Prerequisite: Knowledge of another Slavic language or consent of instructor.

BCS 302 Third Year Bosnian-Croatian-Serbian II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BCS/302/)
Reading and analysis of selected texts. Prerequisite: BCS 301 or consent of instructor.

BCOG - BRAIN AND COGNITIVE SCIENCE

BCOG Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/BCOG/)

Courses

BCOG 100 Introduction to the Brain and Cognitive Science credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BCOG/100/)
Introduction to the study of mind, brain, and behavior. The course will cover how we study the mind and brain from a cognitive science perspective. The course will include topics in sensation, perception, learning, memory, thinking, artificial intelligence, animal cognition, and the development of the mind and brain.

BCOG 200 Introduction to Programming for the Brain and Cognitive Sciences credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BCOG/200/)
Introduction to computer programming concepts and their application to the study of brain and cognitive sciences. The course will teach basic programming concepts in Python, and introduce applications to experiment and game design, data analysis, computational modeling, and simulations.

BCOG 301 Intelligence and the Brain credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BCOG/301/)
An introduction to the scientific study of human intelligence, with particular emphasis on modern research in cognitive neuroscience. For centuries, the nature of human intelligence has motivated considerable research and debate: What does it mean for humans to be intelligent? What mental abilities does intelligence refer to? How are these abilities shaped by the environment, cultivated through experience, and represented in the human brain? This course addresses these questions through the lens of modern research in psychology, psychometrics, and cognitive neuroscience. Students will investigate the nature and mechanisms of human intelligence from basic, clinical, and applied disciplines.

BCOG 458 Advances in Brain and Cognitive Science credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BCOG/458/)
An in-depth, integrative overview of the major themes in the study of Cognitive Science, including cognition as computation, the relation between mind and brain, computability and the role of heuristics in "solving" unsolvable problems, and the logical/mathematical foundations of these themes. Specific topics covered include inverse optics and vision; induction and reasoning; learnability and language; philosophy of minds and brains; evolution; artificial intelligence and computational modeling; information theory; knowledge representation. The emphasis throughout is on the interrelations among these topics as examples of important but fundamentally unsolvable problems. Same as PHIL 458. 3 undergraduate hours. No graduate credit. Prerequisite: One of PSYC 224, PSYC 248, PHIL, 202, PHIL 270, or consent of instructor.

BCOG 492 Capstone Undergraduate Research credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BCOG/492/)
Capstone experience for undergraduate students doing advanced research in brain and cognitive sciences. Provides in-depth background knowledge of their research, and teaches students to make effective oral and written presentations of their findings. 3 undergraduate hours. No graduate credit. May be repeated in separate semesters for a maximum of 6 undergraduate hours. The fall offering of the course will focus on identifying a research question and writing a comprehensive review of the literature bearing on the research question. The spring offering of the course will focus on writing the empirical results of the experiment/study and writing a discussion of the results, placing the study findings in the context of the literature. Prerequisite: Senior standing in Brain and Cognitive Sciences, and consent of instructor. Students must arrange to do a research project with a faculty member. Restricted to Brain & Cognitive Science majors.

BULG - BULGARIAN

BULG Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/BULG/)

Courses

BULG 481 Structure of Modern Bulgarian credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BULG/481/)
Analysis of the sound system and grammar of the contemporary Bulgarian language. 3 undergraduate hours. 3 graduate hours. Prerequisite: RUSS 302 or equivalent.

BULG 482 Readings in Bulgarian Lit credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/BULG/482/)
Reading, analysis, and discussion of selected excerpts from Bulgarian literature, scientific prose, and the press. 3 undergraduate hours. 3 or 4 graduate hours. May be repeated if topics vary. Prerequisite: BULG 481 or consent of instructor.

BUS - BUSINESS

BUS Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/BUS/)

Courses

BUS 101 Professional Responsibility and Business credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BUS/101/)
Introduces business students to professional responsibility. Develops the concept of professional responsibility within a personal and interpersonal context. Continues by expanding the concept to encompass the firm and explore the global corporate context. Introduces business majors and career paths and provides an understanding of ethical decision-making. Encourages the development of a professional identity and skills, preparing students to represent the College and the University with integrity and confidence in their careers. Prerequisite: First Semester Freshman, Intercollegiate and Off-Campus Transfer Students.

BUS 115 Freshman Gies Scholar Seminar credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/BUS/115/)
Introduction to business and an overview of the role of the Gies College of Business and the University of Illinois in providing opportunities for undergraduates to prepare to become business leaders. Introduction to the Gies Scholar Program, a leadership program for approximately 40 incoming freshmen in Gies College of Business. Students will begin to work as a team to use leadership in service to all undergraduates in Gies College of Business. Credit is not given for BUS 120 and BUS 115. Prerequisite: First-year student in the Gies Scholar Program.

BUS 116 Intercultural Learning in Business credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/BUS/116/)
Introduction to global learning in business to prepare undergraduate Gies Scholar students to become global business leaders. Restricted to first-year students in the Gies Scholars Program, a leadership program for selected students in the Gies College of Business. Students will work with teams from global universities to solve business problems and when possible, will participate in a short-term study abroad immersion trip. Prerequisite: Restricted to first-year students in the Gies Scholars Program.

BUS 199 Undergraduate Open Seminar credit: 0 to 5 Hours. (https://courses.illinois.edu/schedule/terms/BUS/199/)
Approved for both letter and S/U grading. May be repeated.

BUS 201 Business Dynamics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BUS/201/)
Introduces College of Business sophomores to the primary functional areas of business and how each functional area relates to comprise a business system. Students will engage in a dynamic simulation to develop an understanding of the interdependencies between the functional areas. The course will also highlight and continue to develop the teamwork and leadership skills required of successful managers. Prerequisite: Sophomore standing; BUS 101.

BUS 215 Sophomore Gies Scholar Seminar credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/BUS/215/)
Required for all Gies Scholar sophomores. The course structure is divided into four focused learning modules: Negotiations, Intercultural Communications, Disruption, and Project Management. Prerequisite: Second-year student in the Gies Scholar Program.

BUS 299 BUS Internship credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/BUS/299/)
Accommodates students who must be registered for a course at the University while completing an internship, either because the internship is unpaid and the company requires registration, or because of visa requirements. Only internships in the College of Business will be considered. Approved for S/U grading only.

BUS 301 Business in Action credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BUS/301/)
Introduces students to the complexities of business by working on a real organizational problem with an actual client. Students will work with a client to identify, analyze, and present recommendations to solve an organizational problem. Requires students to apply problem-solving skills to uncertain situations as well as build and manage a professional team. Prerequisite: BUS 201-Business Dynamics.

BUS 302 Principles of Professional Responsibility credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/BUS/302/)
Examines in depth a number of the multi-dimensional attributes required to advance understanding of professional responsibility in the context of an ever-changing business environment, focusing on principles for addressing dilemmas that regularly arise in professional life in the work of business. Explores connections between academic integrity while in school and professional responsibility in later work life. Builds on BUS 101 and provides a breadth and depth of that body of knowledge that will enable highly successful students in BUS 302 to be considered for the role of section leaders in BUS 101. Aspiring section leaders in BUS 101 must have excelled in BUS to be considered for the position. May be repeated in separate terms to a maximum of 4 hours if there are significant curriculum changes to BUS 101. Prerequisite: BUS 101; by application and interview. Restricted to section leaders of BUS 101.

BUS 315 Junior Gies Scholar Seminar credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/BUS/315/)
Focuses on expanding students' knowledge about higher education and the academy through the depth and breadth of University of Illinois faculty expertise. Each week, an invited faculty member will give a brief presentation on their research or area of expertise and lead an interactive discussion session with the students. Prerequisite: Third-year student in the Gies Scholar Program.

BUS 399 Business Study Abroad credit: 0 to 18 Hours. (https://courses.illinois.edu/schedule/terms/BUS/399/)
Upon prior written approval of the College of Business' Office of Undergraduate Affairs, a student may earn up to 18 credit hours per term undertaking a study and/or research project in international business at accredited foreign institutions or approved overseas programs. Final determination of appropriate credit will be made upon completion of the work done abroad. While absent from the Urbana-Champaign campus, the student must continue to pay all fees required by the University of Illinois to retain continuity of enrollment and to allow the time spent away from this campus to count toward residency. Approved for Letter and S/U grading. May be repeated to a maximum of 18 hours per term and 36 hours total. Prerequisite: One academic year, or one semester in the case of transfer students, in residence at UIUC, good academic standing, completion of at least thirty semester hours toward the bachelor's degree, and prior approval of course work by the College of Business' Office of Undergraduate Affairs. Some programs have additional requirements.

BUS 401 Global Business Perspectives credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BUS/401/)
Designed to provide Gies seniors with a semester-long experience that prepares them to become informed global citizens, ready to lead a life on purpose. The course objectives are threefold: a) to help students make sense of the complicated and ambiguous globalized world we live in; b) to provide students with the tools to re-frame problems and to create team-based, alternative solutions to complex issues facing firms, industries, and societies; and c) to guide students on their continued journey of self-reflection and discovery. Students will be challenged to increase their holistic understanding of countries around the world (geography, history, culture, etc.), as well as to learn how complex, interdependent global forces (e.g., economic, environmental, political, technological) function and are influenced by ethical choices of individuals and organizations. 3 undergraduate hours. No graduate credit. Credit is not be given for BADM 380 if taken concurrently or subsequently to BUS 401. Prerequisite: BUS 301-Business Dynamics.

BUS 402 Project Management in Action credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BUS/402/)
Complementary course to the Gies core course BUS 301. In this course, students learn principles of leadership, mentorship and project management and put them in practice in real-time as they oversee multiple student teams each working on client-based projects in BUS 301. Students lead and mentor the team leaders for each of their teams and guide the teams through project scoping, client management, research & analysis and final recommendation formation. 3 undergraduate hours. No graduate credit. May be repeated up to 6 undergraduate hours. Prerequisite: BUS 301 or experience with IBC or similar project focused organizations.

BUS 415 Senior Gies Scholar Seminar credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/BUS/415/)
A capstone leadership course for the Senior Gies Scholar class. It is meant to provide tangible leadership lessons through a variety of medium, including: (1) speeches and discussions by successful professionals in the business world and academia; (2) review and discussion amongst the class members on specifically-identified leadership topics; and (3) self-reflection on these topics and an assessment of how the student will plan to incorporate the learnings into their own leadership style. 1 undergraduate hour. No graduate credit. Prerequisite: Fourth-year student in the Gies Scholar Program.

BADM - BUSINESS ADMINISTRATION

BADM Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/BADM/)

Courses

BADM 199 Undergraduate Open Seminar credit: 1 to 5 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/199/**)**
May be repeated.

BADM 205 Business Location Decisions credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/205/**)**
Same as GEOG 205. See GEOG 205.

BADM 210 Business Analytics I credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/210/**)**
An introduction to basic knowledge of statistics, distributions, and linear regressions in a business setting Students will be able to perform and understand the use of basic statistical methods in generating inferences and modeling including hypothesis testing and multivariate regression. The course will introduce the concepts of a data life cycle, data visualization, and data summarization. Students will learn how to identify, describe and frame business opportunities through evidence-based storytelling and hands-on learning using spreadsheets and data visualization tools.

BADM 211 Business Analytics II credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/211/**)**
Builds on the foundation from the Business Analytics I (BADM 210), synthesizes concepts through hands-on application and project-based learning. Focuses on data acquisition, organization, analysis and visualization in a business setting. Expanding on the use of statistics in generating basic inferences to predictive modeling Identify opportunities for improving business decisions using data, conduct relevant analysis of the gathered and cleaned data, and finally, interpret and present analysis outcomes to decision makers. Using statistical tools and software applications to identify business problems, acquire relevant data, and generate analytic solutions using advanced analytics techniques and tools for generating insights. Introduces the students to analyzing, learning, and prediction using advanced analytics techniques and tools for generating business insights. This course will provide a practical introduction to various techniques regarding clustering, text mining, classification and decision trees, and time series analysis. Finally, the course will introduce advanced and emerging topics in predictive analytics. Prerequisite: BADM 210; CS 105 or equivalent.

BADM 261 Technology & Mgmt Seminar credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/BADM/261/**)**
Current topics in technology and management presented by senior executives from a wide range of industries. Executives discuss challenges they confront and approaches taken in execution of their respective businesses. Format encourages dialogue and discussions between executives and students. Same as ENG 261. Credit is not given toward technical electives in the College of Engineering nor business electives in the College of Business, nor toward the T&M Minor.

BADM 275 Fundamentals of Operations Management credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/275/**)**
Operations Management is about developing, producing, and delivering goods and services that meet and exceed customer expectations. In this course, students will be introduced to decision making frameworks and techniques for effectively and efficiently managing operations through coordinated efforts across different organizations in a supply chain and across multiple areas within an organization. These multiple areas could be consumer analytics, research and development, finance, engineering, marketing, human resource management, sourcing, information systems, logistics, and accounting.

BADM 300 The Legal Environment of Bus credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/300/**)**
Introduction to law and the legal system, litigation, contracts, business organizations, intellectual property, employment law and governmental regulation of business.

BADM 301 Summary of Business Law credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/301/**)**
Basic principles of the private law of business including the law of contracts, agency, and business organizations; a brief introduction to the law of sales, negotiable instruments, security devices, and property. Credit is not given for both BADM 301 and BADM 403. Course is not open to students in the College of Business.

BADM 303 Principles of Public Policy credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/303/**)**
Same as ACCY 321, ACE 321, and PS 321. See PS 321.

BADM 310 Mgmt and Organizational Beh credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/310/**)**
General analysis of management and organizational behavior from a systems point of view, including classical organizational theory and management, organizational behavior, and management science; environmental forces; planning, organizing, and control processes; motivation, incentives, leadership, communication, and interpersonal relations; and discussion of production and decision-making and mathematical models.

BADM 311 Leading Individuals and Teams credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/311/**)**
Understanding the behavior of employees in work organizations; particular attention to the motivation of individuals to join and perform in organizations and to employee satisfaction with elements of the work environment; and emphasis on various management strategies to modify employee motivation and satisfaction. Prerequisite: BADM 310.

BADM 312 Designing and Managing Orgs credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/312/**)**
Understanding of complex organizations; particular attention to ways of dividing work, achieving coordination, and issues connected with change and adaptation. Prerequisite: BADM 310.

BADM 313 Strategic Human Resource Management credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/313/**)**
Studies concepts and methods used by the staff personnel unit in building and maintaining an effective work force in an industrial organization; development of ability to design the personnel subsystem within the firm and to deal effectively with problems encountered in such areas as recruitment, selection, training, and wage and salary administration; and considerable emphasis on case analysis, role playing, and research. Prerequisite: BADM 310.

BADM 314 Leading Negotiations credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/314/)
Aims to advance students' ability to negotiate formal and informal business agreements and resolve conflicts effectively. Because leaders depend on others to accomplish goals, leaders need to be skilled negotiators to generate solution that are acceptable, valuable, and able to be implemented. Students will engage in a series of negotiations that provide practice and impart a framework for planning for, conducting, and analyzing negotiations. Restricted to College of Business students and Business Minor students. Restricted to students with Junior or Senior class standing.

BADM 320 Principles of Marketing credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/320/)
Emphasizes the concepts of planning, organization, control, and decision making as they are applied in the management of the marketing function. Provides an overview of aspects of the marketing discipline.

BADM 321 Principles of Retailing credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/321/)
Gives a general analysis of the structure of retailing emphasizing the retailing environment and operating efficiencies; includes patronage behavior, merchandise control, pricing, promotion, location, and vendor relations; and gives special attention to emerging trends in retailing. Prerequisite: BADM 320.

BADM 322 Marketing Research credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/322/)
Focuses on the techniques and methods of marketing research; emphasizes primarily survey research and experimental design; and offers students the opportunity to apply techniques to real-world situations. Additional fees may apply. See Class Schedule. Prerequisite: BADM 320.

BADM 323 Marketing Communications credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/323/)
Introduces the student to the topic of marketing communications and promotion management. Topics covered include: advertising, sales promotion, point-of-purchase communications, interactive marketing, and event sponsorships. Prerequisite: BADM 320.

BADM 324 Purchasing and Supply Mgmnt credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/324/)
Examines the analysis, planning, and forms of organization that are associated with the buying functions in business. Major focus on the principal issues involved in the procurement of raw materials, components, equipment, operating supplies, and services. Also treats the unique aspects of institutional and government purchasing. Case problems constitute a major vehicle of instruction. Prerequisite: Credit or concurrent enrollment in BADM 320.

BADM 325 Consumer Behavior credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/325/)
Studies the factors affecting customer behavior in household and organizational markets and their relevance for marketing management planning and analysis; provides an overview of explanations of consumption differences anchored in socioeconomic, demographic, cultural, and psychological processes; and surveys buyer decision-making processes and their implications for marketing strategy. Prerequisite: BADM 320.

BADM 326 Pricing Strategy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/326/)
The role of pricing in contemporary marketing and major pricing decisions facing the firm; theoretical, economic, and practical methods and models for setting prices; pricing new products, initiating price changes, and responding to competitive pricing; the relationship of pricing objectives and strategies to the goals of the firm; and sealed bidding for contracts. Prerequisite: BADM 320.

BADM 327 Marketing to Business and Govt credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/327/)
Introduces the general area of industrial marketing; examines the nature of industrial markets especially as they compare to consumer markets and emphasizes such factors as the demand for industrial goods, marketing intelligence systems for industrial firms, marketing strategy in industrial markets, and analyses and control of industrial marketing programs; integrates important concepts from sales management and business logistics throughout the course; uses case studies. Prerequisite: BADM 320.

BADM 328 Advanced Sales Strategies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/328/)
Focuses on developing advanced sales techniques to help you succeed in the sales industry. These will be both strategic and tactical in nature and look at the various media platforms used today. It will include mock interviews, written sales proposals, and role-playing exercises that will facilitate application of effective sales techniques. Responsibilities, functions and skills necessary to be an effective sales manager are covered, including an evaluation of sales organizational structures, recruiting, selecting, testing, and training of salespeople. Related topics include compensation plans, controlling expenses, sales forecasting/projections, quotas, ethics, and motivation, among other sales topics. It will consist of lectures, assigned activities and role playing exercises, current materials / articles and information from sales / business / revenue development leaders with experience in sales management. You will also be exposed to industry professionals who will share their experiences with you.

BADM 329 New Product Development credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/329/)
Exposes student to business and marketing decisions in the context of new product development and marketing. Helps students learn how to use state-of-the-art management techniques to identify markets, develop new product ideas, measure customer benefits, and design profitable new products. Prerequisite: BADM 320.

BADM 330 Brand Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/330/)
Brand Management is an advanced Marketing elective that addresses the key issues of brand asset management faced by firms in the 21st century. Class discussions will focus on providing theoretical tools for uncovering and understanding the associations that consumers establish with their brands, for predicting the effects of these associations on brand-related judgments and behaviors, and for devising strategies for building strong brands Prerequisite: BADM 320.

BADM 331 Making Things credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/331/)
Making Things is a hands-on course in which interdisciplinary teams of business, design and engineering students conceptualize, design, prototype, manufacture and market a new product. To create these products, they use 3D design software and hardware. The course is held in the Illinois MakerLab. By participating in this course, students develop teamwork, design, manufacturing and marketing skills. Additional fees may apply. See Class Schedule. Prerequisite: Junior or Senior class standing required.

BADM 332 Sustainable Product Design & Marketing Plans I: Bottom-Up Immersion in Subsistence Marketplaces credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BADM/332/)
Focuses on sustainable product design and enterprise plan development; uses extreme resource constrained contexts, i.e., subsistence marketplaces, to learn about bottom-up immersion and design for any context; virtual immersion in subsistence contexts; emersion of principles for business, design, and engineering; idea generation and evaluation by groups of business, engineering, design and other students; optional international field trips. Prerequisite: Application process. Junior or senior class standing.

BADM 333 Sustainable Product Design & Marketing Plans II: Bottom-Up Enterprise & Marketing Innovation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BADM/333/)
Focuses on sustainable product design and marketing plan development; uses extreme resource constrained contexts, subsistence marketplaces, to learn about bottom-up enterprise and innovation for any context; project based course focusing on systematic approach for designing sustainable products and developing enterprise plans; covers concept generation and evaluation, detailed design, cost modeling, market-testing & prototyping, product innovation, and sustainable enterprise plan development for subsistence marketplaces or upward innovation for advanced economies. Prerequisite: BADM 332 or instructor approval. Junior or senior class standing.

BADM 334 Sustainable Marketing Enterprises credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/334/)
Understanding of the relationship between sustainable marketing/business practices, societal welfare and ecological systems; topics covered including sustainability in the areas of consumption and consumer behavior, product design, marketing research, value chains and communications; project to apply marketing and business concepts toward a business plan for organizations that captures economic, environmental and social sustainability. Prerequisite: Junior or Senior Class Standing.

BADM 335 Supply Chain Management Basics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/335/)
Course broadly exposes students to the basics of supply chain management. It concentrates on the basic concepts, terminology, techniques and tools in supply chain management. Introduces the main functions of supply chain management and its interface with marketing, finance, and information management. Studies the interactions among the logistics of manufacturing, inventory, and transportation. Students are introduced to mathematical modeling and computer simulations to optimize the performance of supply chains.

BADM 336 Modeling the Supply Chain credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/336/)
Course introduces students to supply chain modeling. It covers optimization and simulation modeling, value stream mapping, and the SCOR model for representation of supply chains. Models for strategic and tactical decision-making in supply chain design and operations will be considered. Presents examples of supply chain modeling in practice and integration of supply chain models with other business functions. Prerequisite: BADM 335.

BADM 337 Practicum in Supply Chain Mgt credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/337/)
This is the capstone course for the Supply Chain Management major. Students are required to work in teams to solve real-world supply chain management problems using the tools and techniques learned from their other classes. Students are required to present their progress and final reports to both the faculty and company sponsors. Also covers some basic elements of project management and a large case study.

BADM 338 Global Supply Chain Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/338/)
Due to intense global competition, companies increasingly realize the importance of global supply chain management, as they have become more involved with their cross-border suppliers and customers in order to meet customer expectations in a global marketplace. This course in 'global supply chain management' focuses on specialized topics arising in the context of procurement, operations, transportation, finance, and governance of relationships of multiple international buyer and supplier organizations.

BADM 340 Ethical Dilemmas of Business credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/340/)
Examines business decision making and the role ethics plays in that process. Analysis of how managers behave and whether ethical choices are knowingly made or only realized thereafter. The object is to increase awareness of the moral dimension of business activity.
This course satisfies the General Education Criteria for:
Advanced Composition

BADM 350 IT for Networked Organizations credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/350/)
Examines the information technology and its impact on modern organizations. Topics include: (1) IT, Internet Technologies, E-Commerce and business models, (2) organizing and modeling enterprise data, (3) Network protocol and architecture, (4) development of IT systems, and (5) IT management and organization design.

BADM 351 E-Business Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/351/)
Designed to provide current perspective about enterprise IT-applications and the management issues that such applications entail. Emphasis is on current developments that will be explored with lectures, case studies, and hands-on applications. May be repeated in separate terms.

BADM 352 Database Design and Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/352/)
Introduce the modern concepts, techniques and management practices when dealing with data and use of data in organizations. Topics include data modeling, database logical and physical designs, implementation, database administration and web-based database environment. Students will be involved in constructing a database and researching an advanced topic to solidify the learning.

BADM 353 Info Sys Analysis and Design credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/353/)
Methodologies and techniques used and deliverables created in developing large-scale information systems, including preliminary planning, feasibility analysis, design implementation, and post-implementation review of the system; a term-long project which familiarizes students with methodology and techniques is required.

BADM 354 Mgmt of Data Communications credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/354/)
Course stresses a top-down, business oriented approach to evaluating and selecting data communications technology. Students who successfully complete this course gain practical knowledge of network telecommunications technology including hardware and software. They learn enough to allow them to help design systems that include network components. Prerequisite: BADM 350.

BADM 355 Enterprise Software Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/355/)
Almost every professional who works in a field related to Information Technology requires an understanding of how enterprise projects and IT projects, in general, should be managed. Provides fundamental managerial skills for students who will work on IT projects. Covers different kinds of enterprise software applications - Enterprise Resource Planning Systems, Customer Relationship management systems and supply chain management IT systems. Students will get hands-on understanding through a term project and project-management software. Discusses approaches to estimate and manage costs, schedules and resources. Students get an understanding of real-world challenges through case studies throughout the course. May be repeated in subsequent terms. Prerequisite: BADM 350.

BADM 356 Data Science and Analytics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/356/)
In this course, you will learn not only data analytic techniques but also the managerial implications of competing with analytics. You will understand the managerial challenges of using data analytics to develop a strategic advantage through readings and case studies. You will learn techniques such as statistical inference, linear modeling, sentiment analytics, and data mining through hands-on exercises in R. R is an open source language that has grown in importance and usage in corporations. Finally, you will be able to present and interpret data through an understanding of data visualization techniques.

BADM 357 Digital Making Seminar credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/357/)
The third industrial revolution is upon us, and you have the ability to create functional products on your desktop, by using some inexpensive and accessible tools. This course will help you get trained on many of these tools and technologies, you will also experiment and make these objects. We will explore 3D scanning, modeling and printing to rapidly prototype products. We will experiment with open hardware, micro-controllers such as Arduinos, to explore the concept of the internet of things. We will also have guest lectures in design thinking, digital making and some stories from passionate makers from the community and beyond. Business students encouraged to apply, but all majors and all years welcome. Additional fees may apply. See Class Schedule.

BADM 359 Business Problem Formulation and Solution credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/359/)
This course prepares students to critically formulate and solve a range of real-world problems faced by business organizations. Addressing business problems is central to the professional services offered by management consultants across many fields (e.g., strategy, technology, market analysis, operations, supply chain, organization). The course employs a unique classroom model that combines faculty expertise with executive experience from the consulting industry, which allows students to benefit from hands-on experiential learning about business problems. Approved for Letter and S/U grading. Prerequisite: Sophomore or Junior standing required.

BADM 360 Digital Marketing credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/360/)
Designed to help you acquire a strong understanding of what is and how to develop a Digital Marketing strategy. We will be evaluating each step in the development of the strategy and getting hands on experience in the latest digital media platforms. You will be learning how to research brands, how to develop strategies, how to determine problems and solutions, how to evaluate information and how to present and defend your work.

BADM 361 Marketing Analytics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/361/)
The recent growth in structured and unstructured data combined with sophisticated techniques for leveraging these data for decision-making, creates huge opportunities for marketers. This course introduces key concepts in marketing analytics and shows how analytics can help solve real-world marketing problems. Covered topics include data scraping, text analysis, data visualization, machine learning, causal and predictive models. Each technique is implemented using "mini cases" in R programming with unique datasets from a variety of marketing contexts. Prerequisite: BADM 210 and BADM 211.

BADM 365 New Product Marketing credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/365/)
Exposes engineering students to the discipline of marketing and to business decision-making in the unique context of new product marketing decisions. Credit is not given for both BADM 365 and BADM 320.

BADM 366 Product Design and Development credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/366/)
Presents an overview of the product development process from concept generation to design manufacturing and project management. There is an emphasis on product definition, early concept development, visual reasoning and engineering graphics. Students work in cross disciplinary teams working through product development projects. Same as TMGT 366. Prerequisite: Admission to the Technology and Management Program.

BADM 367 Mgmt of Innov and Technology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/367/)
Course focuses on the strategic management of technology and innovation in organizations. It builds primarily on broad models of technological evolution and organizational change. Same as TMGT 367. Prerequisite: BADM 320 or concurrent enrollment in BADM 365.

BADM 374 Management Decision Models credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/374/)
Introduction to methods of operations research from an executive or managerial viewpoint, emphasizing formulation of business problems in quantitative terms; industrial applications of linear programming, dynamic programming, game theory, probability theory, queuing theory, and inventory theory. Prerequisite: ECON 203 or BADM 210.

BADM 375 Operations Strategy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/375/)
Students will learn how organizations can gain and sustain competitive advantage through their operations capabilities. The course content will cover manufacturing and service contexts across industries such as airline, consulting, entertainment, healthcare, hospitality, information technology, and retail. Cases and examples will be used to explore technologies such as blockchain and internet of things (IOT), issues such as supply chain risk and social responsibility, and business models such as alliances and sharing economy.

BADM 376 Enterprise Proc Integr & Dynm credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/376/)
Enterprise-level study of a business that focuses on the integration and management of many interrelated processes. The focus is on linkages between these business processes and the management of these linkages in a dynamic business environment. Prerequisite: BADM 375.

BADM 377 Project Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/377/)
In-depth treatment of management concepts, tools, and techniques that apply to the organization, planning, and control of projects; particular emphasis on analyzing needs, defining work, scheduling tasks, allocating resources; assessing costs, managing risks; tracking and evaluating performance; and building and leading teams.

BADM 378 Logistics Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/378/)
Treats the total flow of materials from their acquisition as basic or unprocessed supplies to delivery of the finished product, as well as the related counter-flows of information that both record and control material movement. Major topics include forecasting material requirements; transportation planning; order processing system; raw material, in-process and finished goods inventory management; packaging; in plant and field warehousing; location theory (space, time, and cost trade- offs); communications; and control.

BADM 379 Business Process Improvement credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/379/)
The survival and growth of any organization requires the continuous improvement of its processes. This course focuses on philosophies and tools for enhancing customer-defined value created through processes. Contemporary process improvement programs are emphasized along with conventional ideas - topics include Statistical Quality Control, Value Stream Mapping, Total Quality Management, and Six Sigma.

BADM 380 International Business credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/380/)
Introduces the field of international business and management. Examines the economic, political, and legal environments of international business. Analyzes differences in financial management, marketing, and management practices for firms doing business abroad.

BADM 381 Multinational Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/381/)
Examines critical issues facing managers who work in multinational firms. Designed to develop students' skills for working in a global business environment. Topics include foreign market entry strategies, global management of the functional areas of business, and management and control of multinational firms in the global marketplace.

BADM 382 International Marketing credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/382/)
Analyzes marketing strategy across national boundaries, the problems of marketing within foreign countries, and the coordination of global marketing programs. Includes problems faced by the exporter, licensor, joint venture, and multinational firm. The full range of market activities are discussed from a global perspective. Prerequisite: BADM 320.

BADM 383 Topics in International Business credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/383/)
Examines topics related to international business that are not covered in BADM 380, BADM 381, BADM 382, BADM 338. Possible topics include cross-cultural management issues, cross-border merger and acquisition activities, the historical context of global capitalism, doing business in emerging economies, global research and development efforts, and global strategic human resource management. May be repeated in the same or separate semesters to a maximum of 6 hours, if topics vary. Prerequisite: BADM 380.

BADM 394 Senior Research I credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/BADM/394/)
Research and readings course for students majoring in business administration. May be taken by students in the college honors program in partial fulfillment of the honors requirements. May be repeated in the same or separate terms for unlimited undergraduate hours. Not applicable to graduate or professional hours.

BADM 395 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/BADM/395/)
Special topics of interest to students majoring in Business Administration. May be repeated if topics vary. Not applicable to graduate or professional hours.

BADM 403 Corporate & Commercial Law credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BADM/403/)
Advanced discussion of corporate and commercial law, including topics tested on the CPA exam: agency, contracts, debtor-creditor relationships, governmental regulation of business and business organizations. 4 undergraduate hours. 4 graduate hours.

BADM 420 Advanced Marketing Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/420/)
Integrative study of methods and models for marketing decision-making; emphasizes the application of analytical tools and behavioral and quantitative models to marketing decision-making. Uses lectures, case studies and simulation exercises. 3 undergraduate hours. No graduate credit. Prerequisite: BADM 320.

BADM 436 International Business Immersion credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BADM/436/)
Same as ACE 436. See ACE 436.

BADM 438 Agri-food Strategic Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/438/)
Same as ACE 431. See ACE 431.

BADM 440 Business Applications of GIS credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/BADM/440/)
Same as GEOG 440. See GEOG 440.

BADM 445 Small Business Consulting credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BADM/445/)
Through guided experience, students identify and offer advice to local small business firms; exposes students, serving as consultants, to the wide variety of problems facing the smaller firm as well as enables them to apply current business methods to real problems. Students work in teams. 4 undergraduate hours. 4 graduate hours.

BADM 446 Entrepreneurship: New Venture Creation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BADM/446/)
Focuses on the opportunities, risks, and management problems involved in establishing and operating new ventures. Covers the steps included in starting a new venture, such as evaluating the opportunity, determining financial and operational requirements and resources, and deciding on the structure of the organization. Includes management issues faced by individual entrepreneurs. 4 undergraduate hours. 4 graduate hours.

BADM 447 Legal Issues in Entrepreneurship credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BADM/447/)
Addresses legal issues that entrepreneurs will deal with such as leaving your present employer, the right legal structure to adopt; sole proprietorship, partnership, LLC or corporation, implementing the new structure, protecting IP assets, financing the new business, running the new business, including contracts, sales, agency and employment law issues. Exit strategies for the business are also explored. 4 undergraduate hours. 4 graduate hours.

BADM 449 Business Policy and Strategy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/449/)
Analysis of policy formulation and implementation from a company-wide standpoint; emphasis on integration of knowledge and approaches across functional areas; both endogeneous and exogeneous factors which affect company policies; and the role of the firm in society. 3 undergraduate hours. No graduate credit.

BADM 451 E-com Apps & Web-based Systems credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/BADM/451/)
Provides students with technical skills for building web-based e-commerce applications using the Microsoft.NET framework as well as knowledge of web services. Topics include: ActiveServerPages.NET (ASP.NET), VisualBasic.NET (VB.NET), XML, web services, the Microsfot.NET framework. 3 undergraduate hours. 4 graduate hours. Prerequisite: BADM 350.

BADM 453 Business Intelligence credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/453/)
This advanced course examines recent developments in information technology for managerial decision support with an emphasis on Internet-based and mobile information technologies. Real-world cases will be used to discuss the application of these technologies to management information systems. 3 undergraduate hours. No graduate credit.

BADM 454 Enterprise Computing Mgmt credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/454/)
Aims to prepare students with programming skills for building and managing enterprise applications. Java is used as the language for implementation. C and C++ are also introduced briefly. General principles of computing are emphasized over specific languages. 3 undergraduate hours. No graduate hours. Prerequisite: BADM 350.

BADM 458 IT Governance credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/BADM/458/)
Provides students with a core body of knowledge concerning the state of development, research and business practice of IT governance on topics such as: managerial issues for the prevention of business frauds and threats; the key technology for IT governance for users and businesses; issues concerning integrity control, privacy, ethics, risk management, and reliability; best practices concerning regulatory compliance requirements; and enterprise information management issues, policies and practices. 3 undergraduate hours. 4 graduate hours. Prerequisite: BADM 350.

BADM 460 Business Process Modeling credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/460/)
Introduces the identification and analysis of various aspects of business processes. The course defines business processes and provides tools for designing and analyzing them. Same as TMGT 460. 3 undergraduate hours. No graduate credit. Prerequisite: BADM 367.

BADM 461 Tech, Eng, & Mgt Final Project credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/BADM/461/)
Course is the capstone interdisciplinary new product development project course for the Technology & Management Program. Students work in cross-functional teams (joint business and engineering teams) to solve new product development project problems provided by client firms. Because the client firms differ each year, so do the problems. Same as TMGT 461. 2 undergraduate hours. No graduate credit. May be repeated up to 4 hours. Prerequisite: BADM 366, BADM 367, BADM 460.

BADM 463 iVenture Accelerator Seminar I: Topics in Entrepreneurship credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/463/)
Designed for students actively engaged in learning through venturing, primarily students in the iVenture Accelerator, the educational accelerator for top student startups at Illinois. This highly collaborative course provides theory, context, and skills to enhance experiential learning-by-venturing. Topics include: feasibility analysis, business modeling, industry analysis, competitor analysis, ethical and legal foundations, corporate forms, building venture teams, growth financing, marketing for startups, intellectual property protection and commercialization, and planning for growth. 3 undergraduate hours. 3 graduate hours. May be repeated in separate terms to a maximum of 6 hours. Prerequisite: Restricted to students admitted to the iVenture Accelerator program.

BADM 464 iVenture Accelerator Seminar II: Topics in Entrepreneurship credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BADM/464/)
Designed for students actively engaged in learning through venturing, primarily students in the iVenture Accelerator. Alongside collaboratively planning and discussing the future of their ventures, we explore the interplay of venturing, entrepreneurial skills, and career decisions. Students conduct quarterly board meetings; develop personal boards of advisors; and learn from speakers who have built diverse, entrepreneurial careers. Topics include: venture management and governance, financing, team hiring and dynamics, and strategies for growth. 3 undergraduate hours. 3 graduate hours. May be repeated in separate terms to a maximum of 6 hours. Prerequisite: Restricted to students admitted to the iVenture Accelerator program.

BADM 501 Introduction to Business credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BADM/501/)
This course is designed to give students a broad-based introduction into managing businesses as a gateway to the rest of the specialized master's degree curriculum. 4 graduate hours. No professional credit.

BADM 502 Communicating with Data and Decision Making credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/BADM/502/)
Making decisions in organizations often require data, an approach that is increasingly becoming critical with proliferation of data. Data has to be understood for insights, to aid in decision making or presented to others to persuade. This course will introduce concepts and techniques to understand and communicate data for insights and decision-making. Topics include types of data, data visualization, descriptive statistics, understanding and representing variation, multiple variables, time series and maps. The course will follow a practice based approach. 2 graduate hours. No professional credit.

BADM 503 Classics in Business Administration credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/BADM/503/)
Graduate seminar. Presents foundational literature to introduce the theoretical origins of the different areas of Business Administration and explores the linkages among these areas. Outlines the impact of the foundational works on subsequent research. 2 graduate hours. No professional credit. Prerequisite: Ph.D. standing in BADM or consent of instructor.

BADM 504 Phil of Science and Bus Admin credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/BADM/504/)
Introduction to philosophy of science that focuses on the nature of discovering and justifying knowledge in the business disciplines. Specific issues of interest are the nature of scientific truth, validation of theories, prediction and explanation. Discusses applications to research in various business disciplines. Prerequisite: Ph.D. standing in BADM or consent of instructor.

BADM 507 Emp. Res. Methods in Bus. Adm. credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BADM/507/)
Research methodology for the study of administrative, industrial, and consumer behavior and organizations; Foundations of measurement - Construct definition, Domain delineation, Reliability, Dimensionality, and Validity, Reliability analysis, Exploratory and Confirmatory factor analysis; Alternative methods of data collection - laboratory experimentation, survey research design, and qualitative research. A completed individual research project involving the development of an entire method is formally presented in class and submitted as a paper. Prerequisite: Ph.D. standing in BADM or consent of instructor.

BADM 508 Leadership and Teams credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/BADM/508/)
Develops and integrates fundamental behavioral concepts and theory having administrative applications; initially focuses on the individual decision maker and ultimately includes interpersonal, organizational, and social structures and influences; and develops strategies and methods of research on behavioral applications in business.

BADM 509 Managing Organizations credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/BADM/509/)
Examines and analyzes the organization as a social system and the impact of its various components on work attitudes and behavior; topics include the development of organizational structures, organizational effectiveness, decision making and policy formulation, leadership, and change.

BADM 510 Founds of Organizational Behav credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BADM/510/)
Introduction to the principal theories and important empirical research in various disciplines that study organizations; in addition to examination of the subject matter content of various disciplines, students critically examine the capacities and limitations of the various fields to make contributions to the study of organizations. Same as PS 514, PSYC 553, and SOC 575. Prerequisite: Enrollment as a major in organizational sciences in a cooperating program or consent of instructor.

BADM 512 HR Management and Strategy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BADM/512/)
Same as LER 565. See LER 565.

BADM 513 Communication Strategy in Bus credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/BADM/513/)
Offers an introduction to communication, business presentation, and essential interpersonal skills, including message clarity, attentive listening, and constructive feedback for more effective cooperation, conflict management, teamwork and productivity. Covers communication concepts and skills that help heighten emotional intelligence and offer strategies for communicating effectively across cultural, generational and gender lines. 2 graduate hours. No professional credit. Prerequisite: For MSM majors only.

BADM 514 Managing Innovation credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/BADM/514/)
Provides a solid grounding to students interested in managing various aspects of the innovation process that facilitate the creation, synthesis, and organization of knowledge for the development of economically valued products, processes, and services within organizations. Covers both the analytic frameworks for understanding the innovation process as well as the strategic and organizational challenges involved in managing technological innovation. Specifically focuses on managerial actions that create the organizational environment in which new opportunities are identified and new business models are developed to create value. Prerequisite: BADM 508 or consent of the instructor.

BADM 515 Oral Comm for Business credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BADM/515/)
This class builds communication skills for the English language business environment for international students. It includes work on pronunciation deficits, but also units on broader communication topics, including social interaction skills, appropriate business language, interviewing, and presentations. The class incorporates workshops on specific scenarios such as making a sales pitch, delivering an annual report, handling the press, presenting a case study, communicating during a crisis, and communicating in specific contexts such as within technology, entrepreneur or venture capital fairs. 4 graduate hours. No professional credit. Prerequisite: MSTM students.

BADM 519 Seminar in Organizational Behavior and Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BADM/519/)
Seminar in topics of organizational behavior and organizational theory. Topics include: Seminar in Organizational Behavior (explores current and classic research in the field of organizational behavior); and Seminar in Organizational Theory (explores current and classic research in the field of Organizational Theory). 4 graduate hours. No professional credit. May be repeated in the same or separate terms to a maximum of 8 hours, if topics vary. Prerequisite: Ph.D. standing in BADM or consent of instructor.

BADM 520 Marketing Management credit: 2 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/520/**)**
Introduces concepts useful in understanding marketing systems and buyer behavior in addition to developing skills in making marketing decisions; the orientation is primarily managerial and uses examples from both business and non-business contexts.

BADM 521 Marketing Strategy credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/521/**)**
Formal analysis of strategy drawing on concepts from the theory of games, decision theory, value theory, and information theory; topics cover elements of game models, classes of decision problems, games against nature, modern utility theory, information theory, group decision making, statistical decision theory, and linear and nonlinear optimization.

BADM 522 Social Media Analytics credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/522/**)**
This course takes an in-depth look at social networks, social media platforms and online advertising to offer students an advantage in many positions involving marketing, consulting and brand management both on the buyer and seller side of social media. Students with an interest in entrepreneurship will also find the course useful as new businesses often rely on social media marketing. This course offers an overview of how marketing has (and has not) changed due to the rise of social media. It will equip students with the relevant knowledge, perspectives, and practical skills required to develop marketing strategies that leverage the opportunities inherent in social media and consumer-to-consumer social interactions for achieving business and marketing goals. The emphasis of this course is on understanding consumers' social interactions, the various social media channels available to marketers, how to build social marketing strategies, and how to track their effectiveness. Also, since social media is heavily technology-driven we will cover relevant related aspects in digital marketing more broadly, as well as emerging topics in electronic commerce, mobile marketing, and social media startups. 4 graduate hours. No professional credit. Credit is not given for BADM 522 and BADM 590 (31482) section SMA.

BADM 523 Consumer Behavior credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/523/**)**
Studies alternative models of buyer behavior; focuses attention on psychological, sociological, and economic factors including motivation, learning, attitudes, personality, reference groups, social stratification, demographics, life-styles, and cross-cultural differences and their impact on purchasing, consumption, and choice decisions.

BADM 524 Pricing Strategy and Tactics credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/524/**)**
Develops concepts and techniques for formulating and administering prices in a variety of business situations. Focuses on understanding the internal and external environment through relevant information acquisition and analysis for developing appropriate pricing strategies and tactics.

BADM 525 New Product Development credit: 2 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/525/**)**
The decisions on the firm's total market offer, including such topics as use of market analysis in making decisions on assortment, product development, pricing, packaging, branding, and sales forecasting; coordination of these decisions and actions with market communications, physical movement, production, finance, and the overall goals and policies of the firm; and emphasizes the use of analytic and research methods in making assortment and product decisions.

BADM 528 Promotional Strategy credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/528/**)**
Management orientation to promotional strategy for the medium and large size organization: includes analyses of the primary elements of the promotional function from both qualitative and quantitative perspectives emphasizing such factors as (1) selection among alternative promotional tools, (2) the promotional budgeting and allocation process, and (3) determination of appropriate messages and media schedules for given product/market situations. Explores widely used models in depth for strategic usefulness; emphasizes case analysis and contemporary situations.

BADM 529 Marketing Research credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/529/**)**
Examines the collection and analysis of information applied to marketing decisions; stresses quantitative methods including samplings, scalings, experimental design, forecasting, and multivariate procedures through the use of class projects on actual market research problems.

BADM 531 Survey Methods in Mkt Res credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/531/**)**
Analysis of survey methods in marketing with emphasis on sample design, data collection, and data processing; an advanced course in the methods required to design, implement, and evaluate a research project. Same as SOC 576.

BADM 532 Sustainable Product Design & Enterprise Plan Development - I: Bottom-Up Immersion & Design credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/532/**)**
Focuses on sustainable product design and enterprise plan development; uses extreme resource constrained contexts to learn about bottom-up immersion and design for any context; virtual immersion in subsistence contexts; emersion of principles for business, design, and engineering; idea generation and evaluation by groups of business, engineering, design and other students; optional international field trips. 4 graduate hours. No professional credit. Prerequisite: Application process.

BADM 533 Sustainable Product Design & Enterprise Plan Development - II: Bottom-Up Enterprise & Innovation credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/533/**)**
Focuses on sustainable product design and enterprise plan development; uses extreme resource constrained contexts to learn about bottom-up enterprise and innovation for any context; project based course focusing on systematic approach for designing sustainable products and developing enterprise plans; covers concept generation and evaluation, detailed design, cost modeling, market-testing & prototyping, product innovation, and sustainable enterprise plan development for subsistence marketplaces or upward innovation for advanced economies. 4 graduate hours. No professional credit. Prerequisite: BADM 532 or instructor approval.

BADM 535 Global Business credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/BADM/535/)
This course provides students with a clear conceptual understanding of the opportunities and challenges involved with international business transactions. Young managers face a diverse set of circumstances when they engage in cross-border business (trade and foreign direct investment) as opposed to purely domestic business: e.g., enhanced globalization forces, cross-national heterogeneity in institutions and cultures, increased competition from emerging economies, and - particularly germane for this course - altered strategic economic incentives. Accordingly, we will attempt to analyze these issues, make sense of the fundamental forces behind these dynamics, and understand their managerial implications. The class will focus then on the roots of International Business, and complement this focus with important practical implications and 'real-world' examples and cases - the ambition will always be to wed good theory with practice. 2 graduate hours. No professional credit. Prerequisite: MSM student or consent of instructor.

BADM 537 Advanced Topics in Marketing credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BADM/537/)
Seminar on topics associated with the development of marketing theory. Topics may vary from year to year, and include classics in marketing exchange, development, and thought as well as current research frontiers involving product usage, market definition, data base modeling, and pricing. May be repeated to a maximum of 8 hours. Students may take multiple topics under the course designation, but can only take each topic once for credit towards degree requirements. Prerequisite: Ph.D. standing in BADM or consent of instructor.

BADM 538 Res Sem in Consumer Behavior credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BADM/538/)
Advanced doctoral level seminar which critically examines the relevance of behavioral and social constructs for generating consumer behavior theories. It specifically discusses the need for, and procedures with which to modify behavioral/social processes. 4 graduate hours. No professional credit. May be repeated in separate terms to a maximum of 12 hours, if topics vary. Prerequisite: Ph.D. standing in BADM or consent of instructor.

BADM 539 Math Models in Marketing credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BADM/539/)
Seminar in model building as a tool for research in marketing. Application of the mathematics of optimization, dynamics, linear algebra and games to marketing topics including consumer choice, retailing, price promotions, advertising, personal selling, positioning, new product diffusion. Research project using marketing models required. Prerequisite: Ph.D. standing in BADM or consent of instructor.

BADM 540 Frontiers in Technology credit: 0 or 1 Hours. (https://courses.illinois.edu/schedule/terms/BADM/540/)
This course provides the opportunity to listen to, discuss, and present on ideas and technologies which are expected to affect our lives in the near future. Activities include seminars and professional development activities, corporate visits, and presentations by researchers who work on the cutting edge of technology. 0 or 1 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated in separate terms up to 2 credit hours. Prerequisite: MSTM students.

BADM 541 Economics of Organizations credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BADM/541/)
This course aims to help students to develop a deep understanding of how organizations work from an economic point of view and covers six prominent theories of organizations: (1) Behavioral Theory of the Firm; (2) Transaction Costs Theory; (3) Property Rights Theory; (4) Agency Theory; (5) Dynamic Resource-Based Theory; and (6) Game Theory. 4 graduate hours. No professional credit.

BADM 543 Technology Strategy credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/BADM/543/)
Technological change is a fundamental challenge and opportunity for business leaders in the modern economy. This course deals with concepts and analytical frameworks for strategizing and managing in an environment of technological upheaval and constant innovation. Broadly, students are exposed to ideas about how firms create value through new technologies, and how they in turn capture some of that value to make profits. Specific topics include sources and patterns of innovation, business models, first mover advantages, barriers to imitation, technology commercialization modes, network effects and standards competition, creative destruction and technological disruption, alliances and collaboration, and strategic renewal. The course aims to impart the strategic toolkits and skills required to manage dynamic technology-intensive businesses. 2 or 4 graduate hours. No professional credit.

BADM 544 Strategic Management credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/BADM/544/)
An integrative examination of executive-level decisions and policies that drive company survival and performance. Combines theoretical and practical learning through strategic management tools, frameworks, examples and case studies. Provides a top management view of companies and organizations that is essential learning for any leader. 2 or 4 graduate hours. No professional credit. Credit is not given for both BADM 544 and BADM 339. Prerequisite: BADM 509, BADM 520, and BADM 567, FIN 520, or equivalent.

BADM 545 Found of Strategy Research credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/BADM/545/)
Seminars on topics in the development of strategic management theory. Topics include: Classics in Strategic Management (explores the historical development of the foundational literature of strategic management); and Theory Development and Assessment in Strategic Management (focuses on the process of conducting and critiquing research in the field). May be repeated in the same or separate terms to a maximum of 4 hours. Students may take multiple topics under the course designation, but can only take each topic once for credit towards degree requirements. Prerequisite: Ph.D. standing in BADM or consent of instructor.

BADM 546 Strategy Content Research credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/BADM/546/)
Seminar covering the foundations of strategy content and formulation research. Topics include: Economic Theories in Strategic Management (including strategic management applications of industrial organization economics); and Economic Approaches to Strategic Management Research (including transaction costs, resource-based and property rights research). May be repeated in the same or separate terms to a maximum of 4 hours. Students may take multiple topics under the course designation, but can only take each topic once for credit towards degree requirements. Prerequisite: Ph.D. standing in BADM or consent of instructor.

BADM 547 Strategy Process Research credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/BADM/547/)
Seminar on research into strategy formulation and implementation processes. Topics include: Behavioral Theories in Strategic Management (theoretical and empirical research on complex organizations and their environments); and Behavioral Approaches to Strategic Management Research (behavioral research into strategy formulation and implementation processes). May be repeated in the same or separate terms to a maximum of 4 hours. Students may take multiple topics under the course designation, but can only take each topic once for credit towards degree requirements. Prerequisite: Ph.D. standing in BADM or consent of instructor.

BADM 548 Corp & Comp Strategy Research credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/548/**)**
Research seminars on topics in firm-level and business-level strategy. Topics include: Corporate Strategy (explores issues associated with the scope of the firm, corporate governance and value creation), and Competitive Strategy (focuses on strategic positioning, timing, competitive advantage and sustainability). May be repeated in the same or separate terms to a maximum of 4 hours. Students may take multiple topics under the course designation, but can only take each topic once for credit towards degree requirements. Prerequisite: Ph.D. standing in BADM or consent of instructor.

BADM 549 Current Strategy Research credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/549/**)**
Seminar on current theoretical and empirical research relating to emerging areas of knowledge in the strategic management field. Reflecting the emphasis of current research on strategic and organizational phenomena, topics vary from year to year. May be repeated in the same or separate terms to a maximum of 4 hours. Students may take multiple topics under the course designation, but can only take each topic once for credit towards degree requirements. Prerequisite: Ph.D. standing in BADM or consent of instructor.

BADM 550 Business Practicum credit: 0 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/550/**)**
Provides a unique opportunity to apply student's classroom knowledge, their skills and experiences in a real world setting. Each student should expect the experience to be as close to working in a business environment as the academic environment allows. Each team of students will work in a collaborative relationship with real businesses and organizations to solve real problems by developing implementable solutions. The instructor's expectation is that each student will provide professional quality work. 0 to 4 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated in separate terms up to 4 credit hours. Prerequisite: Restricted to MSTM, MSM, MS Business Analytics students.

BADM 551 Managing Intellectual Property credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/551/**)**
Knowledge assets - technologies, knowhow, creative works, reputations, talent, and customer relationships - are critical drivers of business today. Intellectual property (IP) of various types (patents, copyrights, trade secrets, trademarks, etc.) can confer valuable rights over these knowledge assets, which makes intellectual property strategy a vital skill in the modern manager's professional toolkit. This course provides an introduction to different IP types and an in-depth exploration of the strategic issues entailed in using (obtained, licensing and enforcing) IP rights in business. It examines how IP strategies can be used to support the company's overall strategy, and how the two can be better aligned. The end goal is to develop the business manager's vocabulary, understanding, and strategic thinking in dealing with intellectual property as tools for competitive business success. 2 graduate hours. No professional credit.

BADM 552 Legal Aspects of Mgt Decisions credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/552/**)**
The legal environment in which business decisions are made, including the legal system and the role of courts, government taxation and regulation of business, administrative law, antitrust law, labor law, and trends in the law affecting business policy.

BADM 553 Ethical Dilemmas in Business credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/553/**)**
Examines business decision making and the role ethics plays in that process. Analysis of how managers behave and whether ethical choices are knowingly made or only realized thereafter.

BADM 554 Enterprise Database Management credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/554/**)**
Databases are important because they play a critical role in today's business environment. Almost all modern organizations use database technologies to store and manage data in every functional area of business including its operations, finance, accounting, and marketing. By understanding data modeling and being able to query databases, you possess one of the most marketable skills to help a business better manage their data and discover new opportunities through better analytics. At the end of this course you will be able to (a) Understand and help articulate the data needs of the company (requirement analysis), (b) Conceptually model the relationship of the data (data modeling), (c) Query databases to meet business requirements, (d) Understand the principles of design of data warehouses, (e) Understand the alternatives to relational databases (no SQL) with reference to storing Big Data, and (f) Explain the benefits of distributed databases 4 graduate hours. No professional credit. Credit is not given for both BADM 554 and BADM 352.

BADM 555 Info Sys Development and Mgt credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/555/**)**
Addresses issues relevant to the development of large-scale information systems including systems concepts and thinking, systems development life cycle, objectives, methodology and deliverables in each phase, behavioral implications of systems development and integration information systems with business processes. Credit is not given for both BADM 555 and BADM 353.

BADM 556 Electronic Commerce credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/556/**)**
Graduate seminar in Electronic Commerce (EC), focusing on the integration of IT and business models. Topics include: (1) business-to-consumer EC; (2) business-to-business EC; (3) enterprise information management; (4) infrastructure development; (5) knowledge management; and (6) EC strategy.

BADM 557 Business Intelligence credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/557/**)**
This graduate level course provides a conceptual and practical overview of analytical tools, techniques, and practices used to support data-driven decision making in organizations. Topics include data visualization, machine learning techniques, and business intelligence programming languages or services. 4 graduate hours. No professional credit. Credit is not given for both BADM 557 and BADM 453.

BADM 559 Enterprise IT Governance credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/559/**)**
Addresses enterprise IT governance, with a focus on (1) IT governance strategy, including strategic mapping, IT portfolio management, and IT risks assessment; (2) IT control frameworks for organizing IT processes and defining management control objectives, and (9) Trustworthy information management.

BADM 560 IT Consulting Management credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/560/**)**
This course enables students to comprehend, explore and manage issues confronting management consultants. The course aims to reach a balance between consulting principles and information technology (IT) management. The course is structured around five objectives of understanding the management consulting life-cycle, consulting tools and techniques, IT valuation methods, IT governance, and emerging IT trends and their impact. Students will prepare the most prevalent types of consulting engagements, conduct case-orientated research and analysis, understand the consulting engagement life-cycle, innovation management, while exploring and debating materials from industry thought-leaders. 4 graduate hours. No professional credit. Prerequisite: MBA, MSTM and IT Minors/Concentrations.

BADM 562 Social Media Strategy credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/562/**)**
Managers in firms today must be equipped to deal with the new reality of a socially connected society. In this course, students will improve their analytical capabilities and understanding of the opportunities and challenges that social media, global collaboration and new ways of engaging customers pose for the firm. An emphasis will be placed on managerial decision making in the context of the social media phenomenon. 4 graduate hours. No professional credit. Prerequisite: Enrollment in the MBA, MSTM, or PMBA program or in the IT Graduate Minor/Concentration.

BADM 563 Operations Strategy credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/563/**)**
The main objective of this course is to examine how manufacturing and operations can be used as sources of competitive advantage. Some firms compete based on innovation and high-performing products. Others may rely on rapid delivery, flexibility to accommodate specific customer needs, or cost leadership. The capabilities that allow the pursuit of these strategies are usually the result of well formulated and executed operations strategies. This course illuminates the fundamental drivers that make the pursuit of these and other strategies possible 4 graduate hours. No professional credit. Prerequisite: Enrollment in the MBA or MSTM program, or the Supply Chain Management Concentration.

BADM 564 Business Process Improvement credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/564/**)**
The main objective of this course is to learn tools and techniques for process improvement that are commonly used today under organizational initiatives such as Lean Management and Six Sigma. Classes will consist of lecture-discussions and problem solving exercises, and demonstrations and practice of the use of software for statistical analyses. 4 graduate hours. No professional credit. Prerequisite: BADM 567, MBA 502 MSP, or consent of instructor.

BADM 565 Strategic Sourcing credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/565/**)**
This course aims to provide students with an understanding of the impact that sourcing and supply management have on the success and profitability of firms in today's business environment. We will look at some of the factors that need to be considered when making sourcing and supplier management decisions (make or buy, in-sourcing, and outsourcing; quality; quantity and inventory; prices; costs; supplier selection; supplier evaluation; globalization), and discuss the influence that sourcing and supply management have on other functional activities, such as product design, inventory management, etc. 4 graduate hours. No professional credit. Credit is not given for BADM 565 and BADM 590, Section STS.

BADM 566 Supply Chain Management credit: 2 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/566/**)**
Focuses on how to manage flows of products and services from raw material sources to final customers and associate flows of information. Helps students to develop a system view of measuring channel performance, integrating cross-functional activities, and coordinating processes across organizations.

BADM 567 Process Management credit: 2 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/567/**)**
Introductory course in decision-making problems in production; includes the theoretical foundations for production management as well as the applications of decision-making techniques to production problems in the firm; and considers production processes, plant layout, maintenance, scheduling, quality control, and production control in particular.

BADM 568 Planning and Control Systems credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/568/**)**
In-depth treatment of concepts involved in designing and implementing planning and control systems within the context of a dynamic environment; particular emphasis on the systematic use of information to maintain the efficient flow of materials, utilization of people and technology, coordination with suppliers, and communication with customers.

BADM 569 Res Topics in Operations Mgt credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/569/**)**
Current and classical literature in the area of Operations Management. The topics covered may vary from year to year and may include performance measures, inventory management, planning, scheduling, location, layout, product design, process design, and forecasting. 4 graduate hours. No professional credit. May be repeated in the same or separate terms. Prerequisite: Ph.D. standing in BADM or consent of instructor.

BADM 570 Power & Leadership in Orgs credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/570/**)**
Organizations are political systems, so leadership is a political task that raises practical, ethical, and personal challenges. This course aims to help students better understand power in organizations and to become more effective political actors in their professional careers. The course will address normative questions about power's legitimate purposes and the ethical constraints which should govern its use. We will also consider how the pursuit and attainment of power can affect people. In addition, the course will explore the nature of leadership and its relationship to power. Leadership, as we shall come to see in the course of the class, is an inherently ethical and personal concept. The course considers both realism and idealism, both "getting things done" and "doing the right thing." The course involves reading a large number of cases and attempting to learn from the experiences of successful and failed organizational politicians/leaders. We will also draw upon a large body of popular management literature and social scientific research which has directly addressed the phenomena of power and leadership in and around organizations. The course will be highly interactive and discussion-based. 4 graduate hours. No professional credit. Prerequisite: Enrollment in the MBA, PMBA, or MSTM program.

BADM 571 Digital Business & IT Strategy credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/BADM/571/**)**
This course is to discuss digital business management and IT strategy based on emerging digital technology developments. 2 graduate hours. No professional credit. Prerequisite: Restricted to students in MAS and MSTM programs.

BADM 572 Stat for Mgt Decision Making credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/BADM/572/)
The application of classical and modern statistics for business decision making. The level of the course assumes some prior knowledge of basic statistics as well as facility with elementary calculus.

BADM 573 Decision Analytics credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/BADM/573/)
Introduction to analytical approaches to decision making using statistical, probabilistic, and quantitative methods based on data and judgment. This course focuses on understanding of the decision analytic framework and applying practical hands-on skills and tools to business decisions under uncertainty. 2 or 4 graduate hours. No professional credit.

BADM 574 Simulation and Risk Analysis credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/BADM/574/)
This course provides quantitative tools for solution of management problems involving risk, competing objectives, and complex constraints. The course will provide hands-on experience with techniques for solving these problems, with a particular emphasis on models and methods that enable managers to proactively manage and mitigate risk, obtain insight, and support decision making. Models are illustrated with applications to operations management, finance, and marketing, with a particular emphasis on issues associated with project portfolio management. Hands-on modeling skills are developed using spreadsheet-based software tools. We will consider challenges that executives and organizations encounter when implementing these approaches, and demonstrate how mathematical models can improve on "seat of the pants" methods.

BADM 575 Supply Chain Analytics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BADM/575/)
The objective of the course is to introduce students to using data analytics for improving decision making in supply chains. With Globalization and digitization of supply chains a large volume of data is getting generated within supply chains. Being able to use the information in the data to improve supply chain functioning is critical to success for many organizations. In this course, students are introduced to data analytic methods such as statistical modeling and machine learning methods for organization, and analysis of large volume of different kind of data that relate to specific aspects of managing and organizing supply chain. This course follows a project based practical learning approach. The course is divided into several modules and students are required to analyze and present data and inferences with respect to these modules. 4 graduate hours. No professional credit. Credit is not given for BADM 575 and BADM 590 (31474) Section SCA.

BADM 576 Data Science and Analytics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BADM/576/)
In this course, you will learn not only data analytic techniques but also the managerial implications of competing with analytics. You will understand the managerial challenges of using data analytics to develop a strategic advantage through readings and case studies. You will learn techniques such as statistical inference, linear modeling, sentiment analytics, and data mining through hands-on exercises in R. R is an open source language that has grown in importance and usage in corporations. Finally, you will be able to present and interpret data through an understanding of data visualization techniques. 4 graduate hours. No professional credit.

BADM 577 Predictive Data Analytics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BADM/577/)
This course covers advanced techniques of data analytics, with an emphasis on the predictive perspective. This course provides both rationale and real-world applications of data analytics and is ideal for students seeking to extract insights from real data to support business decision-making. In particular, students will learn to: (1) mine, summarize and visualize data (2) formulate, identify, and design optimal procedure for prediction, forecast and inferential decision-making (3) uncover and quantify the influence of performance drivers with data (4) draw data-driven conclusions to create competitive advantage for businesses. 4 graduate hours. No professional credit. Credit is not given for BADM 577 and BADM 590 (47816), Section AN.

BADM 582 Multinational Management credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BADM/582/)
Examines critical issues facing managers who work in multinational firms. Designed to develop students' skills for working in a global business environment. Topics include foreign market entry strategies, global management of the functional areas of business, and management and control of multinational firms in the global marketplace.

BADM 583 Current Topics in Intl Bus credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BADM/583/)
Continuation of BADM 582. Examines topics related to management and integration of multinational firms not covered in BADM 582. Possible topics include foreign investment decisionmaking, global manufacturing and supply chain management, international joint ventures and strategic alliances, cross-border mergers, global R&D, and global strategic human resource management. May be repeated.

BADM 584 Global Marketing credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BADM/584/)
Analyzes marketing strategy across national boundaries, the problems of marketing within foreign countries, and the coordination of global marketing programs. Includes problems faced by the exporter, licensor, joint venture, and multinational firm. The full range of market activities are discussed from a global perspective.

BADM 586 Intl Comparative Management credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/BADM/586/)
Compares and contrasts different regional/national business systems and organizational practices including those from both developed and developing countries. Designed to advance students' global management knowledge and cross-cultural skills for functioning effectively in a transnational economy. Includes an optional overseas study trip to visit local companies and subsidiaries of multinational firms.

BADM 588 Business Practice Immersion credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/BADM/588/)
This course is designed to gain problem solving skills by working on a real project in a company. The project must have measurable goals. The course helps students gain valuable first hand experience in dealing with an organization, interacting with people, learning how different functions in an organization work, and refining time management and communication skills. 0 to 4 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated up to 4 hours in separate semesters. Prerequisite: Enrollment in MS Program in Business.

BADM 589 Project Management credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/BADM/589/)
Managing projects is a vital part of everyone's job in today's companies. This course aims to help you master the project management process. Central to this course is developing your understanding and ability to manage the technical dimensions of needs analysis, work breakdown, scheduling, resource allocation, risk management, and performance tracking and evaluation such that you can accomplish them while staying within the project's allocated time frame and cost. This course is also mindful of the sociocultural dimensions of the project management process, which include attributes of sound leadership, formation and management of impactful teams, and managing customer expectations. 2 OR 4 graduate hours. No professional credit.

BADM 590 Seminar in Business Admin credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/BADM/590/)
Special topics in the general area of business. Topics are selected by the instructor at the beginning of each term. Approved for letter and S/U grading. May be repeated if topics vary; unlimited credit hours for graduate and professional students.

BADM 591 Proseminar in Business Admin credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/BADM/591/)
Lectures in topics of current interest not covered by regular course offerings. Subjects are announced in the Class Schedule. Approved for letter and S/U grading. May be repeated in the same term and/or separate terms as topics vary; unlimited credit hours for graduate and professional students.

BADM 593 Research in Special Fields credit: 1 to 8 Hours. (https://courses.illinois.edu/schedule/terms/BADM/593/)
Approved for both letter and S/U grading.

BADM 594 Independent Study and Research credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/BADM/594/)
Directed reading and research. Approved for both letter and S/U grading. May be repeated in the same term and/or separate terms as topics vary; unlimited credit hours for graduate and professional students.

BADM 595 Business Fundamentals credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/BADM/595/)
Designed to provide a cohesive understanding of marketing from a managerial perspective. Students will learn how to develop a coherent and comprehensive marketing strategy for a product or service. Specifically, it provides the conceptual frameworks and tools necessary to create superior customer value, capture the value through appropriate pricing mechanisms, persuasively communicate and profitably deliver that value, and sustain both the value and the performance in the face of ever-changing customer needs and competitive offerings. Students examine companies by matching their internal strengths and weaknesses with opportunities and threats posed by their environments. Students learn to spot and evaluate opportunities for new ventures and examine the totality of a business proposal.

BADM 599 Dissertation Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/BADM/599/)
Required of all students writing doctoral dissertations in business administration; guidance in writing theses and seminar discussions of interim progress reports. Approved for S/U grading only. May be repeated in the same term and/or separate terms as topics vary; unlimited credit hours for graduate and professional students.

BTW - BUSINESS AND TECHNICAL WRITING

BTW Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/BTW/)

Courses

BTW 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/BTW/199/)
May be repeated.

BTW 220 Desktop Publishing and Design credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/BTW/220/)
Design and preparation of documents using desktop publishing technology. Students will learn and apply principles governing page design, style sheets, document layout, effective graphics, managing the design process, and usability testing. Students will create a portfolio of design projects.

BTW 250 Principles Bus Comm credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BTW/250/)
Teaches students to apply the principles of successful professional communication to workplace writing tasks. Students will also practice editing and supervising the writing of others. Assignments replicate typical business cases and situations, including a report that requires students to compile and interpret research. Credit is not given for both BTW 250 and either BTW 261 or BTW 263. Prerequisite: Sophomore standing and completion of campus Composition I requirement.
This course satisfies the General Education Criteria for:
Advanced Composition

BTW 261 Principles Tech Comm credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BTW/261/)
Teaches students to apply the principles of successful professional writing to a range of realistic cases in technical communication. Emphasizes flexible problem-solving skills and a clear style for communicating technical information to a range of readers. Assignments will include correspondence, instructions, proposals, and a technical report or similar project. Credit is not given for both BTW 261 and BTW 250 or BTW 263. Prerequisite: Sophomore standing and completion of campus Composition I requirement.
This course satisfies the General Education Criteria for:
Advanced Composition

BTW 263 Writing in the Disciplines credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BTW/263/)
Teaches students to apply principles of professional communication to the writing tasks typical of specific disciplines or professions. Assignments will vary, depending on the focus of the course, but will include a substantial report or project. Credit is not given for both BTW 263 and either BTW 250 or BTW 261. Prerequisite: Sophomore standing and completion of campus Composition I requirement.
This course satisfies the General Education Criteria for:
Advanced Composition

BTW 271 Persuasive Writing credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BTW/271/)
Students will study principles of persuasion as applied to writing and designing written communications for business and the professions. Included are ads, direct-mail campaigns, argumentative essays, proposals, and other types of writing designed to move readers to action. Prerequisite: Sophomore standing and completion of Composition I requirement.

BTW 272 Report Writing credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BTW/272/)
Personal direction in a report writing project which can be integrated with research in another course; study of report-writing principles and practices. Classes meet for the first month after which the student and the instructor arrange a conference schedule. Small group meetings are arranged for presentation of proposals, progress reports, and summary reports. Prerequisite: Sophomore standing and completion of campus Composition I requirement.

BTW 280 Global Business Communication credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/BTW/280/)
How do professionals working internationally negotiate, express disagreement, and maintain relationships? How do management strategies, marketing plans, and human resource decisions differ from one country to another? This class answers these questions and many more about culture, business, and writing. With a strong focus on written communication, this course focuses on current trends in international business management and an array of writing skills and activities to prepare students to succeed in international careers. Prerequisite: Completion of the campus Composition I requirement. Restricted to students with Sophomore, Junior, or Senior class standing.
This course satisfies the General Education Criteria for:
Advanced Composition

BTW 290 Individual Study credit: 0 to 3 Hours. (https://courses.illinois.edu/schedule/terms/BTW/290/)
Independent research with a chosen tutor leading to the writing of a formal report or preparation of some other type of major presentation of information. Enroll in BTW office, 294 English Building. Approved for both letter and S/U grading. May be repeated to a maximum of 6 hours. Prerequisite: Consent of instructor.

BTW 402 Descriptive English Grammar credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/BTW/402/)
Same as ENGL 402. See ENGL 402.

BTW 490 Special Topics Prof Writing credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/BTW/490/)
Study of the forms, situations, and social practices that define writing in particular disciplines or professions. Each class will focus on a specific topic such as science writing, writing in the environmental movement, legal writing, writing in the social sciences, public policy in the popular media, and so on. Assignments will vary with the topic. 3 undergraduate hours. 4 graduate hours. May be repeated to a maximum of 6 undergraduate hours or 8 graduate hours. Prerequisite: Junior standing.

BDI - BUSINESS DATA & INNOVATION

BDI Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/BDI/)

Courses

BDI 199 Undergraduate Open Seminar credit: 1 to 5 Hours. **(**https://courses.illinois.edu/schedule/terms/BDI/199/**)**
Individual investigations or research projects selected by the students, subject to approval by the selected faculty member and the executive officer of the Department. May be repeated in the same or separate terms to a maximum of 5 hours, if topics vary.

BDI 475 Introduction to Data Analytics Applications in Business credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/BDI/475/**)**
Introduces the role, methods, and implications of data analytics in business. Building on prior coursework on the fundamentals of analytics and related statistical analyses, this course provides students the opportunity to apply related theoretical and practical principles to a variety of business scenarios. After completing this course, students should (1) have a foundational understanding of the role of data analytics in business and (2) be able to apply this knowledge to real-world clients, business decisions, etc. This course will provide you the opportunity to develop and improve (1) written and oral communication skills in the form of interpersonal interaction, discussion, reports/presentations, etc., (2) knowledge of the use of spreadsheets, Python, and other analytics tools in performing common business analytics and decision-modeling, and (3) knowledge of data visualization software used for analytics-related exploration, hypothesis testing, and results-based organization and communication. Cases, class discussion, and other projects emphasize the importance of independent thinking, group processes, and communication for professional business practice. 3 undergraduate hours. No graduate credit.

BDI 513 Data Storytelling credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/BDI/513/**)**
Once a researcher or a practitioner has completed the analyses of their data, they may assume that it is a simple process to communicate their findings to relevant stakeholders, but this is almost always an incorrect assumption. Proper data communication and storytelling begins even before data are analyzed and there are proven strategies to better connect the story behind and from the data to relevant stakeholders, especially within the context of business practice. This course will focus on helping students better position themselves to successfully tell the persuasive story flowing from their data. 4 graduate hours. No professional credit. Prerequisite: Enrollment in a graduate degree program or consent of the department.

BDI 593 Special Research Problems credit: 1 to 8 Hours. **(**https://courses.illinois.edu/schedule/terms/BDI/593/**)**
Individual investigations or research projects selected by the students, subject to approval by the graduate adviser and the executive officer of the Department. 1 to 8 graduate hours. No professional credit. May be repeated in the same or separate terms to a maximum of 8 hours, if topics vary. Prerequisite: Enrollment in graduate degree program.

CHP - CAMPUS HONORS PROGRAM

CHP Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/CHP/)

Courses

CHP 199 Special Topics credit: 1 to 6 Hours. **(**https://courses.illinois.edu/schedule/terms/CHP/199/**)**
Special topics each term. Additional fees may apply. See Class Schedule. May be repeated up to 6 hours, if topics vary. At least one (1) semester of enrollment is required for residents of the Honors Living-Learning Community. Prerequisite: For Campus Honors Program and/or James Scholar students.

CHP 395 Interdisciplinary Seminar credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/CHP/395/**)**
Seminar on interdisciplinary topics in the natural sciences, social sciences, humanities, and arts. Open to Chancellor's Scholars and other honors students. Additional fees may apply. See Class Schedule. May be repeated to a maximum of 6 hours if topics vary. Prerequisite: Junior standing in the Campus Honors Program.

CHP 396 Interdisciplinary Seminar ACP credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/CHP/396/**)**
Course is identical to CHP 395 except for the additional writing component. May be repeated to a maximum of 6 hours. Prerequisite: Junior standing in or permission of the Campus Honors Program. Completion of campus Composition I general education requirement.
This course satisfies the General Education Criteria for:
Advanced Composition

CATL - CATALAN

CATL Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/CATL/)

Courses

CATL 401 Intensive Catalan Language credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CATL/401/)
Intensive introduction to the Catalan language, appropriate for students familiar with another Romance language; emphasizes acquisition of the four basic skills, listening, speaking, writing, and reading, in order to achieve competence in the language. 3 undergraduate hours. 3 graduate hours. Prerequisite: Basic reading knowledge of another Romance language is helpful but not absolutely necessary.

CATL 402 Studies in Catalan Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CATL/402/)
Studies selected aspects of Catalan literature; taught in Catalan. Topics will be selected from among the major chronological periods and genres of Catalan literature; such as 20th century novel, Ramon Llull and Ausias March. The intention is to offer the student an in-depth view instead of an introductory overview. 3 undergraduate hours. 3 graduate hours. May be repeated to a maximum of 6 hours if topics vary. Prerequisite: CATL 401 or equivalent.

CDB - CELL AND DEVELOPMENTAL BIOLOGY

CDB Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/CDB/)

Courses

CDB 590 Individual Topics credit: 1 to 16 Hours. **(**https://courses.illinois.edu/schedule/terms/CDB/590/**)**
Individual topics in research and/or reading for graduate students, to be conducted under the supervision of faculty members in cell and structural biology; designed to allow students to become more familiar with specialized fields of study prior to committing themselves to a specific area for their graduate degree. Approved for S/U grading only. May be repeated. Prerequisite: Consent of instructor.

CDB 595 Graduate Sem Cell Devel Biol credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/CDB/595/**)**
Invited speakers, faculty, and student presentations and discussions on current research topics. Approved for both letter and S/U grading. May be repeated to a maximum of 8 hours. Prerequisite: MCB 400; or consent of instructor.

CDB 599 Thesis Research credit: 0 to 16 Hours. **(**https://courses.illinois.edu/schedule/terms/CDB/599/**)**
Research on the thesis and preparation of the thesis. Course Information:Approved for S/U grading only. May be repeated to a maximum of 16 hours. Summer: 0 to 8 hours. (Summer session may be repeated to a maximum of 8 hours.).

CAS - CENTER FOR ADVANCED STUDY

CAS Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/CAS/)

Courses

CAS 587 Advanced Study: Special Topics credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CAS/587/**)**
Course is an upper-level graduate course in multi-disciplinary studies with topic material that will vary term to term. 4 graduate hours. No professional credit.

CHBE - CHEMICAL AND BIOMOLECULAR ENGINEERING

CHBE Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/CHBE/)

Courses

CHBE 101 Hidden World of Engineering credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/101/)
Tells the stories of everyday objects: bathtubs, pop cans and screws. These simple objects shape our lives, yet are engineering masterpieces. To unveil this hidden world the course uses a humanistic approach. Designed to appeal to all majors, it uses human stories - filled with failures and triumphs - to reveal the methods of engineers. The course enchants with tales of ancient steel making, today's pop cans, huge stone monuments, and salt. The course will change how a student looks at his or her world. Several sessions focus on women engineers and the environment.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences

CHBE 121 CHBE Profession credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/CHBE/121/)
Lectures and problems on the history and scope of chemical engineering endeavors; decisions and criteria for process development and plant design. Approved for S/U grading only. Prerequisite: CHEM 102 or CHEM 202.

CHBE 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/199/)
Approved for letter and S/U grading. May be repeated.

CHBE 202 Cooperative Education Practice credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/202/)
Same as CHEM 293. See CHEM 293.

CHBE 210 CHBE Internship credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/210/)
Full-time practice of chemical science in an off-campus industrial setting or research laboratory environment. Summary report required. Approved for S/U grading. May be repeated. Prerequisite: Completion of freshman year or equivalent, or consent of Director of Cooperative Education in Chemical and Biomolecular Engineering.

CHBE 221 Principles of CHE credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/221/)
Lectures and problems on material and energy balances. Prerequisite: CHEM 104 or CHEM 204; credit or concurrent registration in CS 101.

CHBE 297 Individual Study Sophomores credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/297/)
Individual study of problems related to Chemical and Biomolecular Engineering. May be repeated to a maximum of 6 hours. Prerequisite: Sophomore standing and consent of instructor.

CHBE 321 Thermodynamics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/321/)
Fundamental concepts and the laws of thermodynamics; the first and second law applications to phase equilibrium and chemical equilibrium and other applications in the Chemical and Biomolecular Engineering profession. Prerequisite: CHBE 221 and MATH 241.

CHBE 397 Individual Study for Juniors credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/397/)
Individual study of problems related to Chemical and Biomolecular Engineering. May be repeated to a maximum of 6 hours. Prerequisite: Junior standing and consent of instructor.

CHBE 421 Momentum and Heat Transfer credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/421/)
Introduction to fluid statics and dynamics; dimensional analysis; design of flow systems; introduction to heat transfer; conduction, convection, and radiation. 4 undergraduate hours. 4 graduate hours. Credit is not given for both CHBE 421 AND ABE 341. Prerequisite: CHBE 221 and MATH 241.

CHBE 422 Mass Transfer Operations credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/422/)
Introduction to mass transfer processes and design methods for separation equipment. 4 undergraduate hours. 4 graduate hours. Prerequisite: CHBE 321 and CHBE 421.

CHBE 424 Chemical Reaction Engineering credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/424/)
Chemical kinetics; chemical reactor design; the interrelationship between transport, thermodynamics, and chemical reaction in open and closed systems. 3 undergraduate hours. 3 graduate hours. Prerequisite: Credit or registration in CHBE 422.

CHBE 430 Unit Operations Laboratory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/430/)
Experiments and computation in fluid mechanics, heat transfer, mass transfer, and chemical reaction engineering. Exercises in effective Chemical and Biomolecular Engineering communications. 4 undergraduate hours. 4 graduate hours. Prerequisite: CHBE 422; credit or concurrent registration in CHBE 424; senior standing in Chemical and Biomolecular Engineering.

CHBE 431 Process Design credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/431/)
Capstone design course where students apply principles from previous courses to the design of complete chemical process systems. Topics include: techniques used in the synthesis and analysis of chemical processes, process simulation and optimization, effective communication in a chemical process engineering environment. 4 undergraduate hours. 4 graduate hours. Prerequisite: CHBE 422; credit or concurrent registration in CHBE 424.
This course satisfies the General Education Criteria for:
Advanced Composition

CHBE 440 Process Control and Dynamics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/440/)
Techniques used in the analysis of process dynamics and in the design of process control systems. Laplace transforms, stability analysis, and frequency response methods. 3 undergraduate hours. 3 graduate hours. Prerequisite: CHBE 421; MATH 284 OR MATH 285 OR MATH 286; CS 101. Restricted to students with senior standing in Chemical and Biomolecular Engineering.

CHBE 451 Transport Phenomena credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/451/)
Unifying treatment of physical rate processes with particular emphasis on the formulation and solution of typical boundary value problems associated with heat, mass, and momentum transport. 3 undergraduate hours. 3 graduate hours. Prerequisite: CHBE 421; MATH 285.

CHBE 452 Chemical Kinetics & Catalysis credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/452/)
Problems in chemical kinetics; techniques for the prediction and measurement of rates of reactions; homogeneous and heterogeneous catalysis chain reactions. 3 undergraduate hours. 3 graduate hours. Prerequisite: CHEM 442 or CHBE 321.

CHBE 453 Electrochemical Engineering credit: 2 or 3 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/453/)
Fundamentals of analysis, design, and optimization of electrochemical systems. 2 or 3 undergraduate hours. 2 or 3 graduate hours. Prerequisite: Senior standing in physical science or engineering.

CHBE 454 CHBE Projects credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/454/)
Laboratory; development of an individual project. 2 undergraduate hours. 2 graduate hours. Prerequisite: Senior standing in Chemical and Biomolecular Engineering.

CHBE 455 Polymers Synthesis and Industrial Applications credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/455/)
Explores the fundamentals of polymer production by providing a broad overview of several topics within the field. Students will gain an appreciation of the relationships between polymer composition, synthesis, and processing, all of which ultimately determine bulk polymer properties. 3 undergraduate hours. No graduate credit. Credit is not given for both CHBE 455 and MSE 457.

CHBE 456 Polymer Science & Engineering credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/456/)
Fundamentals of polymer science and engineering: polymerization mechanisms, kinetics, and processes; physical chemistry and characterization of polymers; polymer rheology, mechanical properties, and processing. 3 undergraduate hours. 3 graduate hours. Credit is not given for both CHBE 456 and MSE 450. Prerequisite: CHBE 321; credit or concurrent registration in CHBE 421; CHEM 444.

CHBE 457 Microelectronics Processing credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/457/)
Introductory survey of chemical processing principles applied to microelectronic fabrication. Key concepts originate from chemical kinetics; thermodynamics; mass and energy balances; transport of mass, momentum and heat; and process synthesis and integration. 3 undergraduate hours. 3 graduate hours. Prerequisite: Junior or senior standing in Chemical and Biomolecular Engineering, Electrical and Computer Engineering, or Materials Science and Computer Engineering.

CHBE 458 Synthetic Nanomaterials credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/458/)
Study of the concepts related to the fundamentals and practical methods for the preparation of nanostructured materials. Classical nucleation and growth, interfacial science, crystal structures, and characterization techniques are among some of the topics covered. The emphasis will be placed on the processing controls of size, shape (dot, wire, and two-dimensional materials), facet, composition, and hierarchical structure. Students will also be exposed to related current topics, including the applications of nanoparticles in energy, sustainability, and biotechnology. 3 undergraduate hours. No graduate credit. Prerequisite: CHEM 102 and CHEM 104 or equivalents.

CHBE 471 Biochemical Engineering credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/471/)
Applications of chemical engineering principles to biological processes. Topics include enzyme mechanisms and kinetics, bioreactor design, cellular growth and metabolism, fermentation, and bioseparations. 3 undergraduate hours. 4 graduate hours. Prerequisite: Junior, senior, or graduate standing, or consent of instructor.

CHBE 472 Techniques in Biomolecular Eng credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/472/)
Engineering principles that underlie many of the powerful tools in biotechnology and how scientific discoveries and engineering approaches are used in current industrial applications. Physical principles that govern self-organization and repair in biological systems; tools developed to characterize, manipulate, and quantify biomolecules; use of analytical tools and genetic manipulation in modern bioengineering and biotechnology applications. 3 undergraduate hours. 4 graduate hours. Prerequisite: CHEM 202, CHEM 203, CHEM 204 or equivalent; MATH 220 or MATH 221; PHYS 211, PHYS 214 or equivalent; MCB 450.

CHBE 473 Biomolecular Engineering credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/473/)
Fundamental principles of biomolecular engineering and its applications in pharmaceutical, agriculture, chemical and food industries. Topics include gene discovery, rational design, directed evolution, pathway engineering, and functional genomics and proteomics. 3 undergraduate hours. 4 graduate hours.

CHBE 474 Metabolic Engineering credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/474/)
Introduction to the principles and methodology of metabolic engineering. Experimental and mathematical techniques for the quantitative description, modeling, control, and design of metabolic pathways. 3 undergraduate hours. 4 graduate hours. Prerequisite: MATH 225 and MATH 285.

CHBE 475 Tissue Engineering credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/475/)
Principles and practices of Chemical Engineering will be applied to the topic of tissue engineering. Topics include: methods for employing selected cells, biomaterial scaffolds, soluble regulators or their genes, and mechanical loading and culture conditions for regenerative repair of tissues and organs in vitro and in vivo; understanding intrinsic wound healing processes; quantifying cell behaviors/phenotypes; regulatory compliance and clinical translation. 3 undergraduate hours. 3 graduate hours. Prerequisites: CHBE 421 and CHBE 422, or consent of instructor.

CHBE 476 Biotransport credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/476/)
Investigates the critical roles the transports of mass, energy and momentum play in the function of living systems at varied levels (e.g., cells , tissues, and organs) and time scales. Transport phenomena are also central to the design and operation of devices for biological research, imaging, biochemical processes, and therapeutic interventions including drug delivery, gene therapy and tissue engineering. Students will explore conservation laws of mass, energy, and momentum to mathematically describe cell and molecular biology, immunology, physiology and biomedical engineering systems. 3 undergraduate hours. No graduate credit. Prerequisites: CHBE 421 and CHBE 422 or consent of instructor.

CHBE 478 Bioenergy Technology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/478/)
Introduction to emerging bioenergy technologies including: world energy consumption and greenhouse gas concerns; fundamental biochemistry of biomass conversion; structural chemistry of lignocelluloses; pretreatment of biomass; enzymatic deconstruction; bioethanol production and fermentation; metabolic engineering for improved biofuels production; feedstock development; industrial fermentation and fermentor design; economics of bioethanol; alternative biofuels, including biodiesel, syngas, Fischer-Tropsch diesel, butanol, ABE fermentation and biohydrogen; anaerobic microbiology; and the biorefinery concept. 3 undergraduate hours. No graduate credit. Prerequisites: CHBE 321; MCB 450.

CHBE 494 Special Topics credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/494/)
Study of topics in chemical engineering; content varies from term to term. Typical topics include optimization, chemical kinetics, phase equilibrium, biochemical engineering, kinetic theory, and transport properties. 1 to 3 undergraduate hours. 1 to 3 graduate hours. May be repeated. Prerequisite: Senior standing in Chemical and Biomolecular Engineering or consent of instructor.

CHBE 496 Undergraduate Research Abroad credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/496/)
Study assist in research under faculty supervision at a location outside of the United States. Topic and type of assistance vary. 1 to 3 undergraduate hours. No graduate credit. May be repeated in separate terms up to 6 hours. Research credit hours in the course are included under department limits for maximum hours of research/independent study credit allowed toward degree requirements. Prerequisite: Evidence of adequate preparation for such study; consent of faculty member supervising the work (who will have examined the proposed research plan); and approval of the department. Not available to freshman.

CHBE 497 Individual Study for Seniors credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/497/)
Individual study of problems related to Chemical and Biomolecular Engineering. 1 to 3 undergraduate hours. No graduate credit. May be repeated to a maximum of 6 hours. Prerequisite: Senior standing and consent of instructor.

CHBE 499 Senior Thesis credit: 1 to 6 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/499/)
Limited in general to seniors in the curriculum in chemical and biomolecular engineering. Any others must have the consent of the head of the department. Each student taking the course must register in a minimum of 5 hours either in one term or divided over two terms. A maximum registration of 10 hours in two terms is permitted. 1 to 6 undergraduate hours. No graduate credit. In order to receive credit, a thesis must be presented by each student registered in CHBE 499.

CHBE 510 Graduate CHBE Internship credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/510/)
Full-time practice of chemical engineering in an off-campus industrial setting or research laboratory environment. Summary report required. Students must have received internship offer prior to enrolling in this course. 0 graduate hours. No professional credit. Approved for S/U grading only. May be repeated if student is selected for additional work terms. Prerequisite: Graduate standing only.

CHBE 521 Applied Mathematics in CHBE credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/521/)
Development of mathematical models and a survey of modern mathematical methods currently used in the solution of chemical and biomolecular engineering problems; topics include the application of vectors and matrices, partial differential equations, numerical analysis, and methods of optimization in Chemical and Biomolecular Engineering. Prerequisite: Consent of instructor.

CHBE 522 Fluid Dynamics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/522/)
Basic concepts in fluid dynamics with special emphasis on topics of interest to chemical and biomolecular engineers. Derivation of the Navier-Stokes equations; solutions for creeping flow, perfect fluids, and boundary layers; non-Newtonian fluids; turbulence. Prerequisite: Consent of instructor.

CHBE 523 Heat and Mass Transfer credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/523/)
Principles of transfer operations developed in terms of physical rate processes; boundary layer heat and mass transfer, phase changes, and separation processes. Prerequisite: Consent of instructor.

CHBE 525 Statistical Thermodynamics for Chemical Engineers credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/525/)
Fundamentals and applications of both macroscopic thermodynamics and statistical mechanics. The formalism of statistical mechanics is introduced, in particular the development and calculation of partition functions, as well as its connections to thermodynamic equations of state and material properties. These concepts will be applied to problems relevant to chemical engineering, such as solution theory, electrolytes, adsorption, non-equilibrium thermodynamics, chemical reactions, molecular simulation, and dispersive interactions. 3 graduate hours. No professional credit. Prerequisite: CHBE 321. Graduate standing required.

CHBE 551 Chemical Kinetics & Catalysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/551/)
Rates and mechanisms of chemical reactions, treatment of data, steady state and unsteady behavior predictions of mechanisms, prediction of rate constants and activation barriers. Introduction to catalysis. Catalysis by solvents, metals, organometallics, acids, enzymes, semiconductors. Same as CHEM 582. Prerequisite: An undergraduate course in chemical kinetics.

CHBE 553 Surface Chemistry credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/553/)
Introduction to the behavior of molecules adsorbed on solid surfaces; the structure of surfaces and adsorbate layers. The bonding of molecules to surfaces; adsorbate phase transitions; trapping and sticking of molecules on surfaces. An introduction to surface reactions; kinetics of surface reactions. A review of principles of chemical reactivity; reactivity trends on surfaces; prediction of rates and mechanisms of reactions on metals, semiconductors, and insulators. Same as CHEM 586. Prerequisite: CHEM 444.

CHBE 565 CHBE Seminar credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/CHBE/565/)
Required of all graduate students whose major is Chemical and Biomolecular Engineering. 1 graduate hour. No professional credit. Approved for S/U grading only. May be repeated. Prerequisite: CHBE 422.

CHBE 571 Bioinformatics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/571/)
Same as ANSC 543, MCB 571, and STAT 530. Prerequisite: MATH 225; MATH 241 and MATH 461.

CHBE 572 Metabolic Systems Engineering credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/572/)
Prerequisite: MATH 225; MATH 241, and 285; or consent of instructor.

CHBE 580 Lab Techs in Bioinformatics credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/580/)
Prerequisite: MCB 150 and MCB 151; or consent of instructor.

CHBE 593 Individual Study credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/593/)
Study under the supervision of a staff member in areas not covered in established course offerings. Approved for both letter and S/U grading. Prerequisite: Consent of the staff member under whom the study is to be made.

CHBE 594 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/594/)
Various advanced topics; generally taken during the second year of graduate study. Typical topics include turbulence, hydrodynamic instability, process dynamics, interfacial phenomena, reactor design, cellular bioengineering, properties of matter at high pressure, and phase transitions. May be repeated. Prerequisite: Consent of instructor.

CHBE 597 Special Problems credit: 2 to 16 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/597/)
Individual work on problem-oriented projects not included in theses. This could be research, engineering design, or professional work in chemical and biomolecular engineering which has educational values. The work must be done under the supervision of a staff member with the approval of the department head. Research topics will vary semester to semester and instructor to instructor. 2 to 16 graduate hours. No professional credit. May be repeated.

CHBE 598 Research Seminar credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/598/)
Discussion of recent developments of importance to different areas of chemical and biomolecular engineering research. The course is divided into a number of sections, and subject matter differs from section to section and from time to time. Approved for S/U grading only. May be repeated. Prerequisite: Consent of instructor.

CHBE 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/CHBE/599/)
Candidates for the master's degree who elect research are required to write a thesis. A thesis is always required for the Doctor of Philosophy. Not all candidates for thesis work necessarily are accepted. Any student whose major is in another department must receive permission from the head of the Department of Chemical and Biomolecular Engineering to register in this course. Approved for S/U grading only.

CHEM - CHEMISTRY

CHEM Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/CHEM/)

Courses

CHEM 101 Introductory Chemistry credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/101/)
Introduction to the basic concepts and language of chemistry; lectures, discussions, and lab. Preparatory chemistry course for students who require additional background before enrolling in CHEM 102. This course has been approved for graduation credit for all students in the College of LAS. Students in other colleges should check with their college office. Additional fees may apply. See Class Schedule. Prerequisite: 2.5 years of high school mathematics, or credit or concurrent registration in MATH 112.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences

CHEM 102 General Chemistry I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/102/)
For students who have some prior knowledge of chemistry. Principles governing atomic structure, bonding, states of matter, stoichiometry, and chemical equilibrium. Credit is not given for both CHEM 102 and CHEM 202. CHEM 102 and CHEM 103 are approved for General Education credit only as a sequence. Both courses must be completed to receive Natural Science and Technology credit. Prerequisite: Credit in or exemption from MATH 112; one year of high school chemistry or equivalent. All students enrolled in CHEM 102 should also enroll in CHEM 103.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences

CHEM 103 General Chemistry Lab I credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/CHEM/103/)
Laboratory studies to accompany CHEM 102. Additional fees may apply. See Class Schedule. Credit is not given for both CHEM 103 and CHEM 203. CHEM 102 and CHEM 103 are approved for General Education credit only as a sequence. Both courses must be completed to receive Natural Science and Technology credit. Prerequisite: Credit or concurrent registration in CHEM 102 is required.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences

CHEM 104 General Chemistry II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/104/)
Lecture and discussions. Chemistry of materials, including organic and biological substances, chemical energetics and equilibrium, chemical kinetics, and electrochemistry. Credit is not given for both CHEM 104 and CHEM 204. Prerequisite: CHEM 102 or CHEM 202 or advanced placement credit for one semester of college-level chemistry.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences

CHEM 105 General Chemistry Lab II credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/CHEM/105/)
Laboratory studies to accompany CHEM 104. Additional fees may apply. See Class Schedule. Credit is not given for both CHEM 105 and CHEM 205. Prerequisite: CHEM 102 and CHEM 103; credit or concurrent registration in CHEM 104 is required.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences

CHEM 108 Chemistry, Everyday Phenomena credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/108/)
Laboratory-based work in which students will evaluate products (such as antacids), synthesize materials (such as soap), and gain a better understanding of forensic chemistry. Additional fees may apply. See Class Schedule. Credit in CHEM 108 does not count toward Chemistry requirements for students in the Specialized Curriculum in Chemistry, the Science and Letters Chemistry major, the Chemistry Teaching Option, or the Chemistry minor; however the course may be taken by students in any of these groups for general education hours. Prerequisite: Credit or concurrent registration in MATH 112.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences

CHEM 123 Teaching Elementary & Middle School Chemistry credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/123/)
Inquiry-based, hands-on study of chemistry for prospective elementary and middle school teachers. Next Generation Science Standards are emphasized. Credit is not given toward the hours of chemistry required for chemistry and related majors. Prerequisite: Preference given to students in Elementary Education.

CHEM 150 First Semester Success in Chemistry credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/CHEM/150/)
The first in a set of two courses for first-year students in Chemistry majors. It focuses on helping students to develop a sense of community in Chemistry, acquire the study tools and skills needed to succeed in college-level STEM courses, and identify resources to begin exploring career options. The course emphasizes discussion, group-based activities, short reflective writings, and attendance at campus events (career fairs) and workshops (developing a resume, getting started in research). Prerequisite: Concurrent enrollment in one of CHEM 101, CHEM 102, CHEM 202, or CHEM 222. Restricted to freshmen Chemistry (BS & BSLAS) majors only.

CHEM 152 College Success in Chemistry credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/CHEM/152/)
The second in a set of two courses designed for Chemistry majors at the freshman level. The course strengthens the link between the Chemistry curriculum and students' interests and individual needs by: (1) Using students' interests as the starting and focal points to guide the content of the course, (2) Creating a supportive and communicative learning environment by using peer mentoring and the structure of a scientific research group as cornerstones in the curricular design, and (3) Emphasizing individual experiences and anticipating the needs of the students by helping them plan their course curricula, developing academic and research skills, while encouraging them to engage in authentic scientific research as undergraduates. Students will participate in a series of programs and activities, including guest lectures from alumni and professors, and skill lectures on reading and assessing scientific literature, oral presentations, scientific writing, career planning and networking, and finding a research group and carrying out effective undergraduate research. Students will be assigned to an undergraduate peer mentor and will attend group meetings, literature reviews, and special topics debates on science and public policy. CHEM 152 is a required course for BS chemistry majors and an optional course for BSLAS chemistry majors. Prerequisite: CHEM 150. Restricted to Specialized Chemistry (BS) and Chemistry (BSLAS) majors only; for first-year students only (except transfer students).

CHEM 197 Individual Study Freshman credit: 1 to 2 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/197/)
Individual study of problems related to chemistry or research not necessarily leading to a senior thesis. May be repeated in separate terms to a maximum of 4 hours. A maximum of 2 hours may be used toward the major. A maximum of 18 hours of CHEM 197, CHEM 297, CHEM 397, CHEM 497 and/or CHEM 499 may be used toward the degree. Prerequisite: Chemistry faculty approval required to register.

CHEM 199 Undergraduate Open Seminar credit: 0 to 5 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/199/)
Approved for letter and S/U grading. May be repeated.

CHEM 202 Accelerated Chemistry I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/202/)
Lectures and discussions. Beginning chemistry course for students in the chemical sciences and others with strong high school chemistry and mathematics preparation. Chemical calculations, structure, bonding and equilibrium. Credit is not given for both CHEM 202 and CHEM 102. Prerequisite: Credit or concurrent registration in MATH 220 or MATH 221; concurrent registration in CHEM 203.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences

CHEM 203 Accelerated Chemistry Lab I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/203/)
Companion laboratory course to CHEM 202. Comprehensive skills-oriented approach to learning laboratory technique and safety. Additional fees may apply. See Class Schedule. Students may receive no more than two credit hours for both this course and CHEM 103. Prerequisite: Concurrent registration or credit in CHEM 202 or consent of instructor.

CHEM 204 Accelerated Chemistry II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/204/)
Continuation of CHEM 202. Lectures and discussions. Emphasizes chemical thermodynamics, equilibrium, chemical kinetics, and coordination chemistry. Prerequisite: CHEM 202 and/or CHEM 203 and concurrent registration in CHEM 205, or consent of instructor.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences

CHEM 205 Accelerated Chemistry Lab II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/205/)
Laboratory and discussion. Includes experiments in qualitative analysis, inorganic synthesis, and kinetics as well as an individual project. Additional fees may apply. See Class Schedule. Credit is not given for both CHEM 205 and CHEM 223. Prerequisite: Concurrent registration in CHEM 204 or consent of department.

CHEM 222 Quantitative Analysis Lecture credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/222/)
Fundamentals of quantitative analysis, chemical equilibrium and kinetics. This lecture course is intended to accompany CHEM 223. Students with credit in CHEM 222 can receive credit for CHEM 203. Prerequisite: CHEM 104 and CHEM 105 or equivalent.

CHEM 223 Quantitative Analysis Lab credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/223/)
Laboratory course covers the fundamentals of quantitative analysis, equilibrium and kinetics. Additional fees may apply. See Class Schedule. Credit is not given for both CHEM 223 and CHEM 205. Prerequisite: Credit or concurrent registration in CHEM 222.

CHEM 232 Elementary Organic Chemistry I credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/232/)
Presents structural and mechanistic chemistry with emphasis on applications of this material to closely related areas. For students in agricultural, nutritional and biological sciences, as well as premedical, predental, and preveterinary programs. One-term survey course; may be followed by CHEM 332. Credit is not given for both CHEM 232 and CHEM 236. 3 hours of credit is an option for those not registered in a discussion-recitation section. 4 hours of credit requires registration in a discussion-recitation section and a live lecture or an online section. Prerequisite: CHEM 104 and CHEM 105, or CHEM 204.

CHEM 233 Elementary Organic Chem Lab I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/233/)
Basic laboratory techniques in organic chemistry are presented with emphasis on the separation, isolation, and purification of organic compounds. For students in agricultural science, dairy technology, food technology, nutrition, dietetics, premedical, predental, and preveterinary programs. Additional fees may apply. See Class Schedule. Credit is not given for both CHEM 233 and CHEM 237. Prerequisite: Credit or concurrent registration in CHEM 232.

CHEM 236 Fundamental Organic Chem I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/236/)
Fundamental structural, synthetic, and mechanistic organic chemistry is presented. For students whose major is chemistry or for those in the specialized curricula in chemistry or chemical engineering. The first term of a two-term integrated sequence (to be followed by CHEM 436). This lecture course is intended to accompany CHEM 237. Credit is not given for both CHEM 236 and CHEM 232. Prerequisite: Completion of CHEM 104 with a B- or higher, or completion of CHEM 204, or completion of CHEM 222 and 223.

CHEM 237 Structure and Synthesis credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/237/)
Laboratory course introduces synthesis and the basic techniques for the separation, isolation and purification of organic and inorganic compounds. Additional fees may apply. See Class Schedule. Credit is not given for both CHEM 237 and CHEM 233. Prerequisite: Credit or concurrent registration in CHEM 236.

CHEM 293 Cooperative Education Practice credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/293/)
Off-campus cooperative practice of chemistry or chemical engineering in industrial or governmental facilities. Each chemistry or chemical engineering student participating in cooperative education must register for CHEM 293 for each off-campus term. Same as CHBE 202. Approved for S/U grading only. Prerequisite: Acceptance into the School of Chemical Sciences Cooperative Education Program.

CHEM 295 Chemistry Internship credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/295/)
Full-time practice of chemical science in an off-campus industrial setting or research laboratory environment. Summary report required. Approved for S/U grading only. May be repeated. Prerequisite: Completion of freshman year or equivalent, or consent of Director of Cooperative Education in Chemistry.

CHEM 297 Individual Study Sophomore credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/297/)
Individual study of problems related to chemistry or research not necessarily leading to a senior thesis. May be repeated in separate terms. A maximum of 6 hours may be used toward the major. A maximum of 18 hours of CHEM 197, CHEM 297, CHEM 397, CHEM 497 and/or CHEM 499 may be used toward the degree. Prerequisite: Chemistry faculty approval required to register.

CHEM 312 Inorganic Chemistry credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/312/)
Basic chemical bonding in molecules, introduction to symmetry, chemistry of the main group elements, coordination chemistry of the transition elements, organometallic chemistry, solid state chemistry, bioinorganic chemistry, chemistry of the lanthanide and actinide elements. Prerequisite: CHEM 232 or CHEM 236.

CHEM 315 Instrumental Chem Systems Lab credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/315/)
Laboratory course emphasizes the application of modern instrumental techniques for characterizing the kinetic behavior and equilibrium properties of chemical systems. Prerequisite: Either CHEM 237 or both CHEM 223 and CHEM 233.

CHEM 317 Inorganic Chemistry Lab credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/317/)
Emphasizes modern techniques for the synthesis, purification, and characterization of inorganic and organometallic compounds. There are three components to the course: lectures on laboratory methodology and reporting, laboratory experiments, and report writing. The final third of the course is dedicated to special individualized projects. Additional fees may apply. See Class Schedule. Prerequisite: CHEM 312; completion of campus Composition I general education requirement.
This course satisfies the General Education Criteria for:
Advanced Composition

CHEM 332 Elementary Organic Chem II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/332/)
Continuation of CHEM 232 focuses on advanced organic chemistry synthesis, mechanisms, and history, and its applications to peptide and protein sciences, carbohydrate chemistry, and DNA structure, repair and enzymatic processes. Credit is not given for both CHEM 332 and CHEM 436. This course should not be taken by students who have completed CHEM 236. Prerequisite: CHEM 232 and CHEM 233.

CHEM 360 Chemistry of the Environment credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/360/)
Study of the chemistry of the atmosphere, the chemistry of soil and minerals in the Earth's crust, chemistry of natural waters, agricultural chemicals and organic pollutants, and topics related to energy use. Prerequisite: One year of general chemistry (CHEM 102-105 or CHEM 202-205) and one semester of organic chemistry (CHEM 232 or CHEM 236). The organic chemistry class may be taken concurrently with CHEM 360.

CHEM 397 Individual Study Junior credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/397/)
Individual study of problems related to chemistry or research not necessarily leading to a senior thesis. May be repeated in separate terms. A maximum of 6 hours may be used toward the major. A maximum of 18 hours of CHEM 197, CHEM 297, CHEM 397, CHEM 497 and/or CHEM 499 may be used toward the degree. Prerequisite: Chemistry faculty approval required to register.

CHEM 420 Instrumental Characterization credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/420/)
Lecture course covers the fundamentals of instrumental characterization including: nuclear magnetic resonance spectroscopy, potentiometry, voltammetry, atomic and molecular spectroscopy, mass spectrometry, and gas and liquid chromatography. 2 undergraduate hours. 2 graduate hours. Prerequisite: CHEM 440; or credit or concurrent registration in CHEM 442; or consent of the instructor.

CHEM 436 Fundamental Organic Chem II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/436/)
Course is the second term of a two-term integrated sequence and should be taken the term following enrollment in CHEM 236. 3 undergraduate hours. 3 graduate hours. Credit is not given for both CHEM 436 and CHEM 332. Prerequisite: CHEM 236 and CHEM 237; or CHEM 232 and CHEM 233 with consent of instructor.

CHEM 437 Organic Chemistry Lab credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/437/)
Laboratory experiments in organic chemistry with emphasis on synthesis, purification and spectroscopic identification of organic compounds. Additional fees may apply. See Class Schedule. 3 undergraduate hours. 3 graduate hours. Prerequisite: CHEM 233 or CHEM 237 and credit or concurrent registration in CHEM 332 or CHEM 436.
This course satisfies the General Education Criteria for:
Advanced Composition

CHEM 438 Advanced Organic Chemistry credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/438/)
Advanced topics in structure, synthesis and reactions of organic chemistry. Lecture only course. 3 undergraduate hours. 3 graduate hours. Prerequisite: CHEM 332 or CHEM 436.

CHEM 440 Physical Chemistry Principles credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/440/)
One-term course in physical chemistry emphasizing topics most important to students in the biological and agricultural sciences. Not open to students in the specialized curricula in chemistry and chemical engineering. Laboratory experience in this area provided by CHEM 315 to be taken preferably after CHEM 440. Same as BIOC 440. 4 undergraduate hours. 4 graduate hours. Prerequisite: Completion of either CHEM 104 or CHEM 204, completion of either PHYS 102 or 212, and completion of MATH 241 or equivalent calculus including partial derivatives.

CHEM 442 Physical Chemistry I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/442/)
Lectures and problems focusing on microscopic properties. CHEM 442 and CHEM 444 constitute a year-long study of chemical principles. CHEM 442 focuses on quantum chemistry, atomic and molecular structure, spectroscopy and dynamics. 4 undergraduate hours. 4 graduate hours. Credit is not given for both CHEM 442 and PHYS 485. Prerequisite: CHEM 204 or CHEM 222; MATH 225, 257, or 415, and a minimal knowledge of differential equations, or equivalent; and PHYS 211, PHYS 212, and PHYS 214 or equivalent.

CHEM 444 Physical Chemistry II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/444/)
Continuation of CHEM 442, focusing on thermodynamics, statistical mechanics and kinetics from single molecules to the bulk, in gases and in the condensed phase. 4 undergraduate hours. 4 graduate hours. Credit is not given for CHEM 444 and MSE 401 or PHYS 427. Prerequisite: CHEM 442.

CHEM 445 Physical Principles Lab I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/445/)
Laboratory course featuring experiments of interest to chemists and biochemists. Examples of experiments may include, but are not limited to, electron paramagnetic resonance (EPR) spectroscopy; Fourier-transform infrared (FT-IR) spectroscopy; X-ray diffraction; differential scanning calorimetry (DSC); 1D and 2D Fourier-transform nuclear magnetic resonance (FT-NMR) spectroscopy; and computational quantum chemistry (QM). This course provides hands-on experience with instrumental and computational techniques that are frequently used in both industrial and academic research and will be of interest to students proposing to carry out work in any area of chemistry and in related disciplines. 2 undergraduate hours. 2 graduate hours. Prerequisite: Credit for or concurrent registration in CHEM 440, CHEM 442 or CHEM 472 (same as BIOC 446 or MCB 446) or consent of instructor.

CHEM 447 Physical Principles Lab II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/447/)
Laboratory course featuring experiments of interest to chemists and biochemists. Examples of experiments may include, but are not limited to, molecular mechanics/molecular dynamics (MM/MD) simulations of proteins; Raman spectroscopy; low-energy electron diffraction (LEED); bomb calorimetry; nuclear magnetic resonance imaging (MRI), and enzyme kinetics and inhibition. This course provides hands-on experience with instrumental and computational techniques that are frequently used in both industrial and academic research and will be of interest to students proposing to carry out work in any area of chemistry and in related disciplines. 2 undergraduate hours. 2 graduate hours. Prerequisite: Credit for or concurrent registration in CHEM 440 or CHEM 442 or consent of instructor.

CHEM 450 Astrochemistry credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/450/)
Covers the foundations of astrochemistry, a young field at the intersection between chemistry and astronomy. Topics to be discussed include the interstellar medium, atomic and molecular physics, interstellar chemistry, molecular astronomy, and unresolved enigmas in the field. Same as ASTR 450. 4 undergraduate hours. 4 graduate hours. Prerequisite: CHEM 442 and CHEM 444, or PHYS 427 and PHYS 486, or equivalent experience in quantum mechanics, thermodynamics, and statistical mechanics.

CHEM 451 Astrochemistry Laboratory credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/451/)
An active, hands-on introduction to observational astrochemistry, laboratory astrochemistry and theoretical astrochemistry. Activities will include astronomical observations of interstellar molecules at the Observatory, spectroscopy of molecules in the laboratory, quantum chemical calculations and simulations of molecular spectra, and modeling of interstellar chemistry. Same as ASTR 451. 3 or 4 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CHEM 450.

CHEM 460 Green Chemistry credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/460/)
This course seeks to reduce the environmental consequences of the chemical industry. It includes modifying engineering practices, the development of new catalytic processes, modification of existing chemical processes, and bioremediation. 3 undergraduate hours. 4 graduate hours. Prerequisite: CHEM 312, CHEM 332, CHEM 360, or consent of instructor.

CHEM 472 Physical Biochemistry credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/472/)
Same as MCB 446 and BIOC 446. See BIOC 446.

CHEM 474 Drug Discovery & Development credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/474/)
Lecture course on fundamentals of drug discovery and development. Topics include case studies of top-selling, mechanistically diverse drugs, chemistry of drug contraindications, structural biology of drug targets, mechanisms of drug resistance, and drug metabolism and toxicity. 3 undergraduate hours. 3 graduate hours. Prerequisite: CHEM 332 or CHEM 436; and MCB 354 or MCB 450, or consent of instructor.

CHEM 480 Polymer Chemistry credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/480/)
Same as MSE 457. See MSE 457.

CHEM 482 Polymer Physics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/482/)
Same as MSE 458. See MSE 458.

CHEM 483 Solid State Structural Anlys credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/483/)
Lectures and laboratory on various aspects of X-ray diffraction studies of solids; topics include the properties of crystals, symmetry, diffraction techniques, data collection methods, and the determination and refinement of crystal structures. 4 undergraduate hours. 4 graduate hours. Prerequisite: CHEM 442 or consent of instructor.

CHEM 488 Surfaces and Colloids credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/488/)
Same as MSE 480. See MSE 480.

CHEM 492 Special Topics in Chemistry credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/492/)
Open to advanced undergraduates and graduate students. Deals with subjects not ordinarily covered by regularly scheduled courses. 1 to 3 undergraduate hours. 1 to 3 graduate hours. Approved for letter and S/U grading. Prerequisite: Credit or concurrent registration in any 400-level course in chemistry.

CHEM 494 Lab Safety Fundamentals credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/CHEM/494/)
Same as MSE 492. See MSE 492.

CHEM 495 Teaching Secondary Chemistry credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/495/)
Intended for undergraduates working toward certification to teach high school chemistry and graduate students working towards a Master's degree in the Teaching of Chemistry. Course aims to provide future teachers with hands-on experience in conducting laboratory experiments, demonstrations, and teaching strategies. 4 undergraduate hours. 4 graduate hours. Course does not count toward the eleven advanced hours in chemistry required in the specialized curriculum, nor does it apply to coursework required for the Ph.D. in Chemistry. Prerequisite: Undergraduate background in general chemistry and credit or concurrent enrollment in CI 403.

CHEM 496 Undergraduate Research Abroad credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/496/)
Students assist in research under faculty supervision at a location outside of the United States. Topics and type of assistance vary. 1 to 4 undergraduate hours. No graduate credit. May be repeated in separate terms up to 6 hours. Prerequisite: Evidence of adequate preparation for such study; consent of faculty member supervising the work (who will have examined the proposed research plan); and approval of the department. Not available to freshman.

CHEM 497 Individual Study Senior credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/497/)
Individual study of problems related to chemistry or research not necessarily leading to a senior thesis. Course Information:1 to 3 undergraduate hours. No graduate credit. May be repeated in separate terms. A maximum of 6 hours may be used toward the major. A maximum of 18 hours of CHEM 197, CHEM 297, CHEM 397, CHEM 497 and/or CHEM 499 may be used toward the degree. Prerequisite: Chemistry faculty approval required to register.

CHEM 499 Senior Thesis credit: 2 to 6 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/499/)
Research with thesis, under the direction of a senior staff member in chemistry. Normally the student takes two terms of CHEM 499 in the senior year. 2 to 6 undergraduate hours. No graduate credit. May be repeated up to 10 hours in separate terms. CHEM 499 is recommended for all those who plan to do research and graduate study and it is a prerequisite for graduation with distinction in chemistry. In the term preceding their initial enrollment, those interested in taking the course should consult with their advisers and with the graduate adviser for the area of interest in which they plan to work. A maximum of 10 hours may be counted toward graduation and a thesis must be presented for credit to be received.

CHEM 512 Advanced Inorganic Chemistry credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/512/)
Descriptive chemistry of the main group and transition elements, reactions and reaction mechanisms of inorganic systems, and electronic structure of inorganic molecules and solids. Prerequisite: CHEM 312 or approval of instructor.

CHEM 515 Inorganic Chemistry Seminar credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/CHEM/515/)
Required of all Chemistry graduate students whose area is inorganic chemistry. Prerequisite: Enrollment is allowed only by second-year graduate students who are presenting their Ph.D. literature seminar during that semester. Undergraduate students are not eligible to enroll in this course.

CHEM 516 Physical Inorganic Chemistry credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/516/)
Includes group theory and use of physical methods to provide information about the geometry, electronic structures, and reactivity of inorganic compounds in solution; emphasizes NMR and ESR. Prerequisite: CHEM 444.

CHEM 517 Advanced Inorganic Chem Lab credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/517/)
Specialized laboratory techniques; more difficult inorganic syntheses. Prerequisite: Credit or concurrent registration in one of the lecture courses in inorganic chemistry in the 500 series.

CHEM 518 Topics in Inorganic Chemistry credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/518/)
Advanced course dealing with a subject not ordinarily covered by regularly scheduled courses, such as organometallic chemistry, advanced ligand field theory and molecular orbital theory of inorganic compounds, kinetics and mechanisms of inorganic reactions, etc. May be repeated. Prerequisite: CHEM 516 or consent of instructor.

CHEM 520 Advanced Analytical Chemistry credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/520/)
Treatment of the basic issues of importance in modern analytical chemistry. Topics include basic chemical and measurement concepts, measurement instrumentation and techniques, and principles, tools, and applications in spectroscopy, electrochemistry, separations, sensors, mass spectroscopy and surface characterization. Prerequisite: CHEM 315, CHEM 420, and CHEM 444.

CHEM 522 Experimental Spectroscopy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/522/)
Principles and applications of spectroscopic measurements and instrumentation. Atomic and molecular absorption, emission, fluorescence, and scattering, emphasizing physical interpretation of experimental data. Prerequisite: General physics and chemistry equivalent to a major in physical sciences for a bachelor's degree.

CHEM 524 Electrochemical Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/524/)
Structure of the metal solution interface. Electrochemical and physical methods for probing metal/solution interface. Electroanalysis. Principles of electrochemical instrumentation for electroanalysis. Electrode materials. Electrochemical surface science and electrocatalysis. Prerequisite: General physics and chemistry equivalent to a major for a bachelor's degree.

CHEM 525 Analytical Chemistry Seminar credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/CHEM/525/)
Required of all Chemistry graduate students whose area is analytical chemistry. Prerequisite: Enrollment is allowed only by second-year graduate students who are presenting their Ph.D. literature seminar during that semester. Undergraduate students are not eligible to enroll in this course.

CHEM 530 Structure and Spectroscopy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/530/)
Advanced survey of structure determination in organic chemistry with emphasis on NMR, IR, UV and mass spectroscopy. Prerequisite: CHEM 332 or CHEM 436.

CHEM 532 Physical Organic Chemistry credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/532/)
Advanced survey of physical organic chemistry. The emphasis is on structure and bonding in organic compounds; scope of reaction mechanisms, including reactive intermediates and how these mechanisms and intermediates are studied; and writing reasonable organic reaction mechanisms. Prerequisite: CHEM 332 or CHEM 436 and one year of physical chemistry.

CHEM 534 Advanced Organic Synthesis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/534/)
Advanced survey of organic chemistry with emphasis on synthesis of organic compounds. Course content includes survey of important synthetic reactions, construction of fundamental subunits and illustrations of strategy and synthetic analysis. Prerequisite: CHEM 332 or CHEM 436.

CHEM 535 Organic Chemistry Seminar credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/CHEM/535/)
Required of all Chemistry graduate students whose area is organic chemistry. Prerequisite: Enrollment is allowed only by second-year graduate students who are presenting their Ph.D. literature seminar during that semester. Undergraduate students are not eligible to enroll in this course.

CHEM 536 Organic Chemistry Research credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/CHEM/536/)
Lecture course on research techniques in organic chemistry. Approved for letter and S/U grading. Prerequisite: Consent of instructor.

CHEM 538 Topics in Organic Chemistry credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/538/)
Advanced course dealing with subject matter not ordinarily covered by regularly scheduled courses, such as natural product synthesis and biosynthesis, organic photochemistry, chemistry of special families of organic compounds, etc. May be repeated. Prerequisite: CHEM 532 and CHEM 534, both of which may be taken concurrently.

CHEM 540 Quantum Mechanics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/540/)
The sequence, CHEM 540 and CHEM 542, is designed to give seniors and graduate students a unified treatment of quantum mechanics and spectroscopy on an advanced level. CHEM 540 covers the principles of formalism of quantum mechanics, as well as the solution of the Schrodinger equation for models and simple chemical systems. Prerequisite: CHEM 442 or equivalent.

CHEM 542 Quantum Mech and Spectroscopy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/542/)
Continuation of CHEM 540. Focusing on molecular spectroscopy, nonlinear spectroscopy, kinetics and application of quantum mechanics to dissipative systems. Prerequisite: CHEM 540.

CHEM 544 Statistical Thermodynamics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/544/)
Fundamentals of thermodynamics and statistical mechanics, covering equilibria, thermodynamic transforms, phase transitions, ensembles and non-equilibrium statistical mechanics, from single molecules to complex biological systems. Prerequisite: CHEM 442 and CHEM 444, or equivalent.

CHEM 545 Physical Chemistry Seminar credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/CHEM/545/)
Required of all Chemistry graduate students whose area is physical chemistry. Prerequisite: Enrollment is allowed only by second-year graduate students who are presenting their Ph.D. literature seminar during that semester. Undergraduate students are not eligible to enroll in this course.

CHEM 546 Advanced Statistical Mechanics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/546/)
Fundamentals of equilibrium statistical mechanics with selected applications to interacting classical fluids: dense gases, solutions, liquids, plasmas, and ionic solutions; introduction to nonequilibrium statistical mechanics and linear response theory. Prerequisite: CHEM 540 and CHEM 544, or equivalent, or consent of instructor.

CHEM 548 Molecular Electronic Structure credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/548/)
Theoretical basis of the electronic structure of atoms and molecules; molecular orbital concepts and self-consistent field theory; angular momentum and the full rotation group; electron correlation effects; and applications to electronic spectroscopy of organic molecules, detailed descriptions of chemical reactions, and molecular properties. Prerequisite: CHEM 540.

CHEM 550 Advanced Quantum Dynamics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/550/)
The quantum mechanical and semi-classical description of time-dependent processes, including discussions of the time-dependent Schrodinger equation, approximations, interaction of matter with radiation, wave packets, elastic and inelastic scattering, and relaxation phenomena. Prerequisite: Concurrent registration in CHEM 540 or consent of instructor.

CHEM 570 Concepts in Chemical Biology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/570/)
An overview of the concepts and methods utilized in research at the interface of chemistry and biology, and their application to contemporary problems in biological chemistry. Specific topics covered include, but are not limited to, chemical genetics, bioconjugation reactions, combinatorial chemistry, high-throughput screening, identifying biological targets of small-molecule compounds, combinatorial biosynthesis, sequence-specific DNA-binding compounds, activity-based protein profiling, anti-cancer agents, targeted therapeutics, phage display, and yeast-hybrid systems. Prerequisite: One year (two semesters) of undergraduate organic chemistry is required. One semester of undergraduate biochemistry or molecular biology is preferred.

CHEM 571 Chemical Biology Laboratory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/571/)
Laboratory course in advanced state-of-the-art experimental techniques used to investigate problems at the interface of chemistry and biology. Specific topics include, but are not limited to, solid-phase peptide synthesis, native chemical ligation and expressed protein ligation, protein expression and analysis, enzyme kinetics and inhibition, high-throughput screening, various methods for examining biomolecular interactions, radiolabeling, mammalian cell biology, fluorescence microscopy, and flow cytometry. Prerequisite: One year (two semesters) of undergraduate organic chemistry is required. One semester of undergraduate biochemistry or molecular biology is preferred.

CHEM 572 Enzyme Reaction Mechanisms credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/572/)
Introduction to the catalytic strategies used by enzymes for accelerating chemical reactions using a combination of kinetics, enzymology, and structural information. Application of gene databases to infer evolutionary relationships among catalytic mechanisms. Same as MCB 553. Prerequisite: Two semesters of undergraduate organic chemistry (CHEM 232 or CHEM 236 and CHEM 332 or CHEM 436) or consent of instructor.

CHEM 575 Chemical Biology Seminar credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/CHEM/575/)
Required of all Chemistry graduate students whose area is chemical biology. Prerequisite: Enrollment is allowed only by second-year graduate students who are presenting their Ph.D. literature seminar during that semester. Undergraduate students are not eligible to enroll in this course.

CHEM 576 Computational Chemical Biology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHEM/576/)
Hands-on introduction to the simulation of biological molecules and bioinformatics. Topics included the principles of molecular modeling, molecular dynamics and monte carlo simulations, structure prediction in the context of structural and functional genomics, and the assembly of integrated biological systems. Course counts towards the CSE option. Same as BIOP 576 and CSE 576. 4 graduate hours. No professional credit. Prerequisite: One semester of undergraduate biochemistry and statistical thermodynamics or consent of instructor. Recommended: proficiency in Matlab and CS 101 or equivalent.

CHEM 582 Chemical Kinetics & Catalysis credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CHEM/582/**)**
Same as CHBE 551. See CHBE 551.

CHEM 584 Introduction to Materials Chem credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CHEM/584/**)**
Processing of ceramics, metals, polymers, and semiconductors, both traditional and advanced, and their mechanical, electrical, magnetic, optical and thermal properties.

CHEM 585 Materials Chemistry Seminar credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/CHEM/585/**)**
Required of all Chemistry graduate students whose area is materials chemistry. Prerequisite: Enrollment is allowed only by second-year graduate students who are presenting their Ph.D. literature seminar during that semester. Undergraduate students are not eligible to enroll in this course.

CHEM 586 Surface Chemistry credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CHEM/586/**)**
Same as CHBE 553. See CHBE 553.

CHEM 588 Physical Methods Mat Chem credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CHEM/588/**)**
Includes physical techniques for characterization in materials chemistry, including thermal analysis, electron microscopy, microprobe analysis and electron spectroscopies, adsorption and surface area measurements, and X-ray powder diffraction.

CHEM 590 Special Topics in Chemistry credit: 1 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CHEM/590/**)**
Designed for students majoring or minoring in chemistry who wish to undertake individual studies of a non-research nature under the direction of a faculty member of the department. Approved for both letter and S/U grading. Prerequisite: Consent of instructor and written approval of department head. Staff for the course is the same as for CHEM 599.

CHEM 591 Introductory Professional Development for Chemists credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/CHEM/591/**)**
Covers topics to prepare Chemistry graduate students for all aspects of graduate culture. The topics include how to be an effective TA, cultural competence and awareness that enable effective professional interactions with diverse scientists, understanding ethics in research, and becoming savvy in non-technical skills essential to graduate school success such as program management, conflict resolution, time management, and understanding resources available for acute or chronic mental health challenges. This course also sets the departmental expectations for appropriate professional conduct. This course is required for all Chemistry graduate students in the Fall of their first year. 1 graduate hour. No professional credit. Approved for S/U grading only. Prerequisite: Restricted to first-year graduate students in Chemistry.

CHEM 592 Preparing Graduate Fellowships credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/CHEM/592/**)**
Assists first- and second-year graduate students as well as a selected few senior undergraduate students in their efforts to obtain external grants and fellowships. Using the National Science Foundation (NSF) Graduate Research Fellowship Program (GRFP) as an example, the course provides the students with general information and guidance about preparing grant applications. Each student will prepare a complete application package, which can be submitted to the NSF GRFP at the end of the course, although such submission is optional. 1 graduate hour. No professional credit. Approved for S/U grading only. Prerequisite: For first- and second-year graduate students in Chemistry. Some senior undergraduate Chemistry majors who have high GPA and research experience in faculty laboratories may enroll with the instructor's approval.

CHEM 593 Advanced Professional Development for Chemists credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/CHEM/593/**)**
Follows up on CHEM 591 and covers advanced non-technical topics to prepare graduate students for their last years of graduate study as well as their careers beyond graduate school. Topics include professional development plans, resilience in graduate school, mental health, professional behavior in a diverse work environment, recognizing strengths and weaknesses, all forms of harassment, and implicit bias. This course also continues setting the departmental expectations for appropriate professional conduct. The course is required for all Chemistry graduate students in the Spring of their third year. 1 graduate hour. No professional credit. Approved for S/U grading only. Credit does not count towards the required 20 hours of course credit required for obtaining a Ph.D. in Chemistry. Credit does not count towards earning 32 hours of course credit for the Master of Science in Chemistry without Thesis option, or the 20 hours of course credit for the Master of Science in Chemistry with Thesis option. Prerequisite: Restricted to third-year graduate students in Chemistry.

CHEM 599 Thesis Research credit: 0 to 16 Hours. **(**https://courses.illinois.edu/schedule/terms/CHEM/599/**)**
Candidates for the master's degree who elect research are required to present a thesis. A thesis is always required of students working toward the degree of Doctor of Philosophy. Not all candidates for thesis work necessarily are accepted. Any student whose major is in a department other than chemistry or chemical engineering must receive permission from the head of the Department of Chemistry to register in this course. Approved for S/U grading only. May be repeated in separate terms. During Summer terms, this course can only be taken for 0 to 8 hours.

CHIN - CHINESE

CHIN Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/CHIN/)

Courses

CHIN 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/CHIN/199/)
May be repeated.

CHIN 201 Elementary Chinese I credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/CHIN/201/)
Introduction to Mandarin Chinese, including basic skills in speaking, reading, and writing. Not open to students with a background in Chinese language.

CHIN 202 Elementary Chinese II credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/CHIN/202/)
Continuation of CHIN 201. Prerequisite: CHIN 201.

CHIN 203 Intermediate Chinese I credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/CHIN/203/)
First term of second year of the Chinese language, including drill for more advanced conversational fluency; introduction to a greater variety of styles and levels of discourse and usage; and increasing study of the written language and more formal grammar. Prerequisite: CHIN 202 or equivalent.

CHIN 204 Intermediate Chinese II credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/CHIN/204/)
Continuation of CHIN 203. Concentration on ability to engage in fluent discourse, on comprehensive grammatical knowledge, and on ability to read ordinary simple text in Chinese. Prerequisite: CHIN 203 or equivalent.

CHIN 241 Chinese Reading and Writing credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHIN/241/)
Students with a basic background in spoken Mandarin will help develop their ability to read and write Chinese characters. This course fulfills the language requirement for those programs with a two-term sequence. Successful completion of CHIN 241 and CHIN 242 fulfills the Liberal Arts and Science foreign language requirement. Credit is not given for both this course and CHIN 201 or CHIN 202. Prerequisite: CHIN 222, or speaking proficiency as determined by placement test.

CHIN 242 Chinese Reading and Writing credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHIN/242/)
Continuation of CHIN 241. This course fulfills the foreign language requirement for those programs with a three- or four-term requirement. Credit is not given for both this course and CHIN 203 or CHIN 204. Prerequisite: CHIN 241, or proficiency as determined by placement test.

CHIN 305 Advanced Chinese I credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/CHIN/305/)
An advanced-level course that emphasizes rapid reading, vocabulary acquisition, and newspaper reading. Prerequisite: CHIN 204 or CHIN 242.

CHIN 306 Advanced Chinese II credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/CHIN/306/)
Continuation of CHIN 305. This course fulfills the language requirement for the undergraduate major in Chinese. Prerequisite: CHIN 305.

CHIN 407 Intro to Classical Chinese credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CHIN/407/)
Introduction to the classical literary language, style, and structural patterns as shown in well-known literary, philosophical, and historical texts. Approaching these texts through modern Chinese translation, students will not only absorb rich intellectual contents but also grasp essential differences between traditional literary Chinese and modern Chinese in various aspects, ranging from script form to vocabulary and sentence structures. 3 undergraduate hours. 4 graduate hours. Prerequisite: CHIN 202 or equivalent.

CHIN 408 Readings in Literary Chinese credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CHIN/408/)
Readings in texts selected from the Confucian classics and other literary, philosophical, and historical texts. Attention is given to linguistic patterns and philosophical concepts and to problems of translation. 3 undergraduate hours. 4 graduate hours. Prerequisite: CHIN 407 or equivalent.

CHIN 409 Social Science Rdgs Chinese credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CHIN/409/)
Reading and translation of selected Chinese texts in the social sciences with emphasis on specialized terminology and prose style. 3 undergraduate hours. 4 graduate hours. May be repeated to a maximum of 9 undergraduate hours, or 12 graduate hours. Prerequisite: Three years of modern Chinese.

CHIN 440 Fourth-Year Chinese I credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CHIN/440/)
The focus of this course is on reading and discussing modern and pre-modern Chinese literary selections in Chinese. Students continue to develop dictionary, literary and writing skills begun at the advanced (305-306) levels. 3 undergraduate hours. 4 graduate hours. Prerequisite: CHIN 306 or equivalent.

CHIN 441 Fourth-Year Chinese II credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CHIN/441/)
Continuation of CHIN 440. 3 undergraduate hours. 4 graduate hours. Prerequisite: CHIN 440 or equivalent.

CHIN 490 Readings in Chinese Lit credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CHIN/490/)
Guided readings in Chinese literature in the vernacular with regular individual conferences and a paper. 3 undergraduate hours. 4 graduate hours. May be repeated to a maximum of 6 undergraduate hours or 8 graduate hours. Prerequisite: Reading knowledge of Chinese and consent of instructor.

CHIN 499 Study Abroad credit: 0 to 18 Hours. (https://courses.illinois.edu/schedule/terms/CHIN/499/)
Lectures, seminars, and practical work in Chinese language, literature, and civilization and in other academic areas appropriate to the student's course of study. 0 to 18 undergraduate hours. 0 graduate hours. Approved for S/U grading only. May be repeated to a maximum of 32 hours per academic year. Prerequisite: Junior standing and a GPA of 2.5.

CEE - CIVIL AND ENVIRON ENGINEERING

CEE Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/CEE/)

Courses

CEE 190 Project-Based Introduction to CEE credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/190/)
Allows freshmen to explore topics in Civil and Environmental Engineering through a project-based learning format. The course also develops competencies in critical skills such as technical writing in CEE, data management and computation, and design thinking in a collaborative team environment. Credit is not given for both CEE 190 and CEE 195.

CEE 198 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/198/)
Subject offerings of new and developing areas of knowledge in civil and environmental engineering intended to augment the existing curriculum. Approved for Letter and S/U grading. May be repeated up to 6 hours in the same semester and to a maximum of 9 hours in separate semesters, if topics vary. See Class Schedule or departmental course information for topics and prerequisites.

CEE 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/CEE/199/)
May be repeated.

CEE 201 Systems Engrg & Economics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CEE/201/)
Introduction to the formulation and solution of civil engineering problems. Major topics: engineering economy, mathematical modeling, and optimization. Application of techniques, including classical optimization, linear and nonlinear programming, network theory, critical path methods, simulation, decision theory, and dynamic programming to a variety of civil engineering problems. Credit is not given for both CEE 201 and IE 310. Prerequisite: MATH 231; CS 101; credit or concurrent registration in MATH 225 or MATH 415 or MATH 257.

CEE 202 Engineering Risk & Uncertainty credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CEE/202/)
Identification and modeling of non-deterministic problems in civil engineering design and decision making. Development of stochastic concepts and simulation models, and their relevance to real design and decision problems in various areas of civil engineering. Credit is not given for both CEE 202 and IE 300. Prerequisite: Credit in CS 101; Credit or concurrent registration in MATH 241.

CEE 300 Behavior of Materials credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/300/)
Macroscopic mechanical behavior in terms of phenomena at the nanometer and micrometer levels for the three types of engineering materials (metals, ceramics, and polymers) with emphasis on specific materials used in civil engineering -- steel, rocks, clay, portland cement concrete, asphaltic concrete, and wood. Same as TAM 324. Credit is not given for both CEE 300 and either ME 330 or MSE 280. Prerequisite: Completion of Composition I general education requirement; CHEM 104; TAM 251.
This course satisfies the General Education Criteria for:
Advanced Composition

CEE 310 Transportation Engineering credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CEE/310/)
Design, planning, operation, management, and maintenance of transportation systems; integrated multi-modal transportation systems (highways, air, rail, etc.); layout of highways, airports, and railroads with traffic flow models, capacity analysis, and safety. Design of facilities and systems with life cycle costing procedures and criteria for optimization. Prerequisite: TAM 251; credit or concurrent registration in CEE 202.

CEE 320 Construction Engineering credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CEE/320/)
Construction engineering processes: contracting and bonding, planning and scheduling, estimating and project control, productivity models, and construction econometrics. Prerequisite: CEE 201; credit or concurrent registration in CS 101 and CEE 202.

CEE 330 Environmental Engineering credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CEE/330/)
Sources, characteristics, transport, and effects of air and water contaminants; biological, chemical, and physical processes in water; atmospheric structure and composition; unit operations for air and water quality control; solid waste management; environmental quality standards. Prerequisite: CHEM 104 or CHEM 204.

CEE 340 Energy and Global Environment credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CEE/340/)
Introduction to evaluating multiple impacts of engineering decisions. Topics include mass and chemical balances; effects of engineered systems on local and global environment, health, and risk; economic, consumer, and social considerations; provision of conventional and renewable energy; and future projections. Design projects emphasize making appropriate decisions by quantifying total impact and evaluating social environment. Approved for both letter and S/U grading. Prerequisite: PHYS 211; PHYS 213; CEE 201 or IE 310; CEE 202, IE 300, or STAT 200; or permission of instructor. CEE students only.

CEE 350 Water Resources Engineering credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CEE/350/)
Quantitative aspects of water in the earth's environment and its engineering implications, including design and analysis of systems directly concerned with use and control of water; quantitative introduction to hydrology, hydraulic engineering, and water resources planning. Prerequisite: CEE 202; credit or concurrent registration in CEE 201.

CEE 360 Structural Engineering credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CEE/360/)
Analysis, behavior, and design of trusses and framed structures under static loads; member forces in trusses, shear and moment diagrams, deflections, simple applications of the force method and slope-deflection; computer applications. Prerequisite: TAM 251.

CEE 380 Geotechnical Engineering credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CEE/380/)
Classification of soils, compaction in the laboratory and in the field, soil exploration, boring and sampling, permeability of soils, one-dimensional settlement analyses, strength of soil, and foundations. Prerequisite: TAM 251.

CEE 398 Special Topics credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/398/)
Subject offerings of new and developing areas of knowledge in civil and environmental engineering intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. Approved for letter and S/U grading. May be repeated in the same or separate terms if topics vary.

CEE 401 Concrete Materials credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/401/)
Examination of the influence of constituent materials (cements, water, aggregates and admixtures) on the properties of fresh and hardened concrete, concrete mix design, handling and placement of concrete, and behavior of concrete under various types of loading and environment. Laboratory exercises utilize standard concrete test methods. Field trips are held during some scheduled laboratory sessions. 4 undergraduate hours. 4 graduate hours. Prerequisite: CEE 300.

CEE 405 Asphalt Materials I credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/405/)
Properties and control testing of bituminous materials, aggregates for bituminous mixtures, and analysis and design of asphalt concrete and liquid asphalt cold mixtures; structural properties of bituminous mixes; surface treatment design; recycling of mixtures. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CEE 310.

CEE 406 Pavement Design I credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/406/)
Analysis, behavior, performance, and structural design of highway flexible and rigid pavements; climate factors, drainage, traffic loading analysis, and life cycle cost analysis. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CEE 310.

CEE 407 Airport Design credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/407/)
Basic principles of airport facilities design to include aircraft operational characteristics, noise, site selection, land use compatibility, operational area, ground access and egress, terminals, ground service areas, airport capacity, and special types of airports. 3 undergraduate hours. 3 or 4 graduate hours.

CEE 408 Railroad Transportation Engrg credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/408/)
Principles and analysis of railroad transportation efficiency, economics, energy, and engineering; effect on production and markets. Railroad infrastructure; locomotive and rolling stock design, function, and operation. Computation of train speed, power, and acceleration requirements; railway traffic control and signaling. Quantitative analytical tools for rail-transportation decision-making and optimization. Field trip to observe railroad infrastructure, equipment and operations. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CEE 310.

CEE 409 Railroad Track Engineering credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/409/)
Railroad track engineering concepts including track component and system design, construction, evaluation, maintenance, load distribution, and wheel-rail interaction. Design and analysis tools for railroad track engineering and maintenance. Field trip to observe railroad track system and components. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CEE 310.

CEE 410 Railway Signaling & Control credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/410/)
Railway traffic control and signaling systems; train performance and scheduling tools; analysis of temporal and spatial separation of trains for safety and efficiency; train movement authority and operating rules, track circuit and wireless train position monitoring technology; interlocking design; railroad capacity modeling tools; economic analysis of traffic control system design, optimization, and selection. Field trip to observe signal system infrastructure and railway traffic operations control center. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CEE 310.

CEE 411 RR Project Design & Constr credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/411/)
Critical elements in the development and planning of railroad construction projects; project economic justification; route alternative analysis procedures; cost estimation; site civil design; computer-aided track design; surveying; construction management; construction procedures for typical railroad projects. Design project covering a typical railroad capital construction projects. Field trip to observe the construction of a railroad capital project. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CEE 310.

CEE 412 High-Speed Rail Engineering credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/412/)
Development, engineering, design and construction of high-speed rail (HSR) passenger transport systems with particular emphasis on the unique engineering elements of HSR technology. Key elements of HSR systems and subsystems including: core systems (trains, power, signal, communication and control), track system and civil infrastructure (earthwork, bridges, viaducts and tunnels). Also covered are basic design and construction of HSR stations and rolling stock maintenance facilities. 3 undergraduate hours. 4 graduate hours.

CEE 415 Geometric Design of Roads credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/415/)
Highway classification; analysis of factors in developing a transportation facility; highway geometrics design and safety standards; roadway design element; human factors in roadway design; roadway location principles; intersection, interchange, and ramp design; drainage factors. 4 undergraduate hours. 4 graduate hours. Prerequisite: CEE 310.

CEE 416 Traffic Capacity Analysis credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/416/)
Fundamentals of traffic engineering; analysis of traffic stream characteristics; capacity of urban and rural highways; design and analysis of traffic signals and intersections; traffic control; traffic impact studies; traffic accidents. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CEE 310.

CEE 417 Urban Transportation Planning credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/417/)
Same as UP 430. See UP 430.

CEE 418 Public Transportation Systems credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/418/)
Transit systems basics, demand issues, design standards, economic and sustainability implications. Transit service planning for shuttle, corridor, and network systems, hybrid hierarchical systems, paratransit and demand-responsive services. Management of transit systems, fleet operations, and crew scheduling. Operational issues, vehicle movement, headway and schedule control. 3 undergraduate hours. 4 graduate hours. Prerequisite: CEE 310 or equivalent.

CEE 420 Construction Productivity credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/420/)
Application of scientific principles to the measurement and forecasting of productivity in construction engineering. Conceptual and mathematical formulation of labor, equipment, and material factors affecting productivity. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CEE 320.

CEE 421 Construction Planning credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/421/)
Project definition; scheduling and control models; material, labor, and equipment allocation; optimal schedules; project organization; documentation and reporting systems; management and control. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CEE 320.

CEE 422 Construction Cost Analysis credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/422/)
Application of scientific principles to costs and estimates of costs in construction engineering; concepts and statistical measurements of the factors involved in direct costs, general overhead costs, cost markups, and profits; the fundamentals of cost recording for construction cost accounts and cost controls. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CEE 320.

CEE 424 Sustainable Const Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/424/)
Identification of cutting edge sustainable construction materials, technologies, and project management strategies for use in the construction industry and evaluation of their potential to reduce the negative environmental impacts of construction activity. Examination of the current LEED for New Construction rating system, and case study analysis of highly successful recent "green construction projects" through student team assignments and presentations. Preparation for the LEED Green Associate professional licensing exam. 4 undergraduate hours. 4 graduate hours. Prerequisite: CEE 320; two of CEE 420, CEE 421, or CEE 422.

CEE 430 Ecological Quality Engineering credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CEE/430/)
Characteristics of rivers and lakes which affect the management of domestic and industrial wastewaters; chemical hazards assessment, surveillance and biomonitoring, and review of regulations governing effluents. 2 undergraduate hours. 2 graduate hours. Prerequisite: CEE 330.

CEE 432 Stream Ecology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/432/)
Description of physical, chemical, and biological characteristics in streams and rivers including an integrated treatment of the environmental factors affecting the composition and distribution of biota; emphasizes the application of ecological principles in aquatic ecosystem protection and management. Same as IB 450. 3 undergraduate hours. 3 or 4 graduate hours.

CEE 433 Water Technology and Policy credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/433/)
This course will cover technical and social concepts of water and wastewater treatment; water resources; water law, policy, and economics; and water in integrated systems. Emphasis will be on the intersection between engineering and policy. Communication is an important element of this course: engineers will learn to "speak" policy via writing assignments, multimedia presentation, and briefings. Course activities include lecture, discussion, presentations, and field trips. 3 undergraduate hours. 4 graduate hours. Prerequisite: CEE 340 or CEE 350.

CEE 434 Environmental Systems I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CEE/434/)
Introduction to the concepts and applications of environmental systems analysis. Application of mathematical programming and modeling to the design, planning, and management of engineered environmental systems, regional environmental systems, and environmental policy. Economic analysis, including benefit-cost analysis and management strategies. Concepts of tradeoff, non-inferior sets, single- and multi-objective optimization. Practical application to case studies to convey an understanding of the complexity and data collection challenges of actual design practice. 3 undergraduate hours. 3 graduate hours. Prerequisite: CEE 201 and CEE 330.

CEE 435 Public Health Engineering credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/435/)
Aimed at building a next generation of engineers who are able to incorporate the principles of public health in all engineering designs. The course starts with the basic principles of epidemiology (types, methods, models and limitations). Next, the course covers various modes of environmental toxicity and the models to represent these modes. The course then covers infectious diseases, various models to represent their spread, the effect of environmental factors and the role of public health in breaking the chain of infection. The course also discusses environmental, social and behavioral factors in public health (e.g. environmental tobacco smoke including E-vaping) in the prevalence of chronic diseases. Finally, we cover the topics on public health risk assessment and management. In every aspect of the topic, the role of engineering in solving the problems of public health is explored and emphasized. 3 undergraduate hours. 4 graduate hours. Prerequisite: CEE 330.

CEE 437 Water Quality Engineering credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CEE/437/)
Fundamental theory underlying the unit processes utilized in the treatment of water for domestic and industrial usage, and in the treatment of domestic and industrial wastewaters. 3 undergraduate hours. 3 graduate hours. Prerequisite: CEE 330; credit or concurrent registration in TAM 335.

CEE 438 Science & Environmental Policy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CEE/438/)
Environmental treaties, the role of science and scientists in managing the national and global environment, effective science communication, scientific assessments, and the use of quantitative tools to inform policy decisions. 3 undergraduate hours. 3 graduate hours. Prerequisite: CEE 202 or IE 300, STAT 400, or equivalent introductory probability and statistics course. Senior and Graduate students.

CEE 440 Fate Cleanup Environ Pollutant credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/440/)
Investigation of the regulatory and technical issues affecting solid and hazardous waste management, with an emphasis on the principles governing the transport, fate, and remediation of solid and hazardous waste in the subsurface, including advection, dispersion, sorption, interphase mass transfer, and transformation reactions. 4 undergraduate hours. 4 graduate hours. Prerequisite: CEE 330.

CEE 442 Environmental Engineering Principles, Physical credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/442/)
Analysis of the physical principles which form the basis of many water and air quality-control operations; sedimentation, filtration, inertial separations, flocculation, mixing, and principles of reactor design; energy flows, thermal pollution, earth's energy balance. 4 undergraduate hours. 4 graduate hours. Prerequisite: CEE 437.

CEE 443 Env Eng Principles, Chemical credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/443/)
Application of principles of chemical equilibrium and chemical kinetics to air and water quality. Thermodynamics, kinetics, acid-base chemistry, complexation, precipitation, dissolution, and oxidation-reduction. Applications. 4 undergraduate hours. 4 graduate hours. Prerequisite: CEE 437.

CEE 444 Env Eng Principles, Biological credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/444/)
Application of principles of biochemistry and microbiology to air and water quality, wastes, and their engineering management; biological mediated changes in water and in domestic and industrial wastewater. 4 undergraduate hours. 4 graduate hours. Prerequisite: CEE 443.

CEE 446 Air Quality Engineering credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/446/)
Description and application of chemical and physical principles related to air pollutants, aerosol mechanics, attenuation of light in the atmosphere, air quality regulation, generation of air pollutants, methods to remove gaseous and particulate pollutants from gas streams, and atmospheric dispersion. 4 undergraduate hours. 4 graduate hours. Prerequisite: CEE 330; credit or concurrent registration in TAM 335.

CEE 447 Atmospheric Chemistry credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/447/)
Same as ATMS 420. See ATMS 420.

CEE 449 Environmental Engineering Lab credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CEE/449/)
Traditional analysis tools and techniques in analysis, control, and design of natural and engineered environmental systems including air, water, wastewater, solid and hazardous waste, and ecological systems. 3 undergraduate hours. 3 graduate hours. Prerequisite: CEE 437 or CEE 446.

CEE 450 Surface Hydrology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CEE/450/)
Descriptive and quantitative hydrology dealing with the distribution, circulation, and storage of water on the earth's surface; principles of hydrologic processes; methods of analysis and their applications to engineering and environmental problems. 3 undergraduate hours. 3 graduate hours. Prerequisite: CEE 350.

CEE 451 Environmental Fluid Mechanics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CEE/451/)
Incompressible fluid mechanics with particular emphasis on topics in analysis and applications in civil engineering areas; principles of continuity, momentum and energy, kinematics of flow and stream functions, potential flow, laminar motion, turbulence, and boundary-layer theory. 3 undergraduate hours. 3 graduate hours. Prerequisite: TAM 335.

CEE 452 Hydraulic Analysis and Design credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CEE/452/)
Hydraulic analysis and design of engineering systems: closed conduits and pipe networks; hydraulic structures, including spillways, stilling basins, and embankment seepage; selection and installation of hydraulic machinery. 3 undergraduate hours. 3 graduate hours. Prerequisite: TAM 335.

CEE 453 Urban Hydrology and Hydraulics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/453/)
Hydraulic analysis and design of urban, highway, airport, and small rural watershed drainage problems; discussion of overland and drainage channel flows; hydraulics of storm-drain systems and culverts; determination of design flow; runoff for highways, airports, and urban areas; design of drainage gutters, channels, sewer networks, and culverts. 4 undergraduate hours. 4 graduate hours. Prerequisite: CEE 350.

CEE 457 Groundwater credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CEE/457/)
Physical properties of groundwater and aquifers, principles and fundamental equations of porous media flow and mass transport, well hydraulics and pumping test analysis, role of groundwater in the hydrologic cycle, groundwater quality and contamination. 3 undergraduate hours. 3 graduate hours. Prerequisite: CEE 350 and TAM 335.

CEE 458 Water Resources Field Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/458/)
Scientific principles of measurement technologies and protocols used for water-resources measurements and experimental design of field-scale water-resources and environmental studies. Planning field studies; instruments and protocols for surface-water, and water-quality sampling; description of data quality. One-half-day laboratory field trips to streamflow monitoring stations and groundwater monitoring wells nearby. 4 undergraduate hours. 4 graduate hours. Prerequisite: CEE 350.

CEE 460 Steel Structures I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CEE/460/)
Introduction to the design of metal structures; behavior of members and their connections; theoretical, experimental, and practical bases for proportioning members and their connections. 3 undergraduate hours. No graduate credit. Prerequisite: CEE 360.

CEE 461 Reinforced Concrete I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CEE/461/)
Strength, behavior, and design of reinforced concrete members subjected to moments, shear, and axial forces; emphasis on the influence of the material properties on behavior. 3 undergraduate hours. No graduate credit. Prerequisite: CEE 360.

CEE 462 Steel Structures II credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/462/)
Metal members under combined loads; connections, welded and bolted; moment-resistant connections; plate girders, conventional behavior, and tension field action. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CEE 460.

CEE 463 Reinforced Concrete II credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/463/)
Strength, behavior, and design of indeterminate reinforced concrete structures, with primary emphasis on slab systems; emphasis on the strength of slabs and on the available methods of design of slabs spanning in two directions, with or without supporting beams. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CEE 461.

CEE 465 Design of Structural Systems credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CEE/465/)
Examination of the whole structural design process including definition of functional requirements, selection of structural scheme, formulation of design criteria, preliminary and computer-aided proportioning, and analysis of response, cost, and value. 3 undergraduate hours. No graduate credit. Prerequisite: Credit in either CEE 460 or CEE 461 with concurrent registration in the other.

CEE 467 Masonry Structures credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/467/)
Analysis, design, and construction of masonry structures. Mechanical properties of clay and concrete masonry units, mortar, and grout. Compressive, tensile, flexural, and shear behavior of masonry structural components. Strength and behavior of unreinforced bearing walls. Detailed design of reinforced masonry beams, columns, structural walls with and without openings, and complete lateral-force resisting building systems. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CEE 461.

CEE 468 Prestressed Concrete credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/468/)
Strength, behavior, and design of prestressed reinforced concrete members and structures, with primary emphasis on pretensioned, precast construction; emphasis on the necessary coordination between design and construction techniques in prestressing. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CEE 461.

CEE 469 Wood Structures credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/469/)
Mechanical properties of wood, stress grades, and working stresses; effects of strength-reducing characteristics, moisture content, and duration of loading and causes of wood deterioration; glued-laminated timber and plywood; behavior and design of connections, beams, and beam-columns; design of buildings and bridges; other structural applications: trusses, rigid frames, arches, and pole-type buildings; prismatic plates and hyperbolic paraboloids. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CEE 460 or CEE 461.

CEE 470 Structural Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/470/)
Direct stiffness method of structural analysis; fundamentals and algorithms; numerical analysis of plane trusses, grids and frames; virtual work and energy principles; finite element method for plane stress and plane strain. 4 undergraduate hours. 4 graduate hours. Credit is not given for both CEE 470 and ME 471. Prerequisite: CEE 360.

CEE 471 Structural Mechanics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/471/)
Beams under lateral load and thrust; beams on elastic foundations; virtual work and energy principles; principles of solid mechanics, stress and strain in three dimensions; static stability theory; torsion; computational methods. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: MATH 285 and TAM 251.

CEE 472 Structural Dynamics I credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/472/)
Analysis of the dynamic response of structures and structural components to transient loads and foundation excitation; single-degree-of-freedom and multi-degree-of-freedom systems; response spectrum concepts; simple inelastic structural systems; systems with distributed mass and flexibility. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CEE 360, MATH 285, and TAM 212.

CEE 473 Wind Effects on Structures credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/473/)
This course treats fundamental aspects of wind engineering – defined here as the salient characteristics of the wind and its effects on the built and natural environment. Students are expected to understand the behavior of wind relevant to wind engineering, the mechanisms for induced loading from wind, and associated structural responses. Specific topics include prediction of wind speeds for structural design, the atmospheric boundary layer, bluff-body aerodynamics, dynamic analysis, use of wind tunnels, wind loading on low-rise and high-rise buildings, wind loading on bridges, windstorm damage and risk. As the wind is a stochastic process, simulation of large data sets of wind speed, wind-induced pressure, and structural responses are required. Treatment of wind engineering topics for structural design for wind in codes and standards such as those in ASCE 7 are discussed. Field work is required as part of the course. 4 undergraduate hours. 4 graduate hours. Prerequisite: CEE 202 or STAT 400, TAM 335, and CEE 360.

CEE 483 Soil Mechanics and Behavior credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/483/)
Composition and structure of soil; water flow and hydraulic properties; stress in soil; compressibility behavior and properties of soils; consolidation and settlement analysis; shear strength of soils; compaction and unsaturated soils; experimental measurements. 4 undergraduate hours. 4 graduate hours. Prerequisite: CEE 380.

CEE 484 Applied Soil Mechanics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/484/)
Application of soil mechanics to earth pressures and retaining walls, stability of slopes, foundations for structures, excavations; construction considerations; instrumentation. 3 or 4 undergraduate hours. 4 graduate hours. Prerequisite: Credit or Concurrent registration in CEE 483.

CEE 490 Computer Methods credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/490/)
Computer methods and their programming for solving common types of differential equations arising in civil and environmental engineering (hyperbolic, parabolic, and elliptic equations, with emphasis on prototypical cases, such as the convection-diffusion equation, as well as Laplace's / Poisson's equation). Exposure to state-of-the-art open-source numerical methods libraries. The course enables students in civil and environmental engineering to develop high-performance and high-purpose codes in these open-source frameworks for their research problems in an efficient way. 3 undergraduate hours. 4 graduate hours. Prerequisite: CEE 360 and TAM 335.

CEE 491 Decision and Risk Analysis credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/491/)
Development of modern statistical decision theory and risk analysis, and application of these concepts in civil engineering design and decision making; Bayesian statistical decision theory, decision tree, utility concepts, and multi-objective decision problems; modeling and analysis of uncertainties, practical risk evaluation, and formulation of risk-based design criteria, risk benefit trade-offs, and optimal decisions. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CEE 202.

CEE 493 Sustainable Design Eng Tech credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/493/)
Quantitative sustainable design (QSD) and how to navigate engineering decision-making. Economic (life cycle costing, techno-economic assessment) and environmental (life cycle assessment, LCA) sustainability assessments, and how to link these tools to design decisions under uncertainty. Design of engineered technologies individually and in teams, with special attention to water infrastructure and bioenergy production. Semester-long design project that includes components from two of the following three CEE sub-disciplines: environmental, hydraulic, geotechnical. 4 undergraduate hours. 4 graduate hours. Prerequisite: CEE 340 or Graduate Standing.

CEE 495 Professional Practice credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/CEE/495/)
Series of lectures by outstanding authorities on the practice of civil engineering and its relations to economics, sociology, and other fields of human endeavor. 0 undergraduate hours. 0 graduate hours. Approved for S/U grading only.

CEE 497 Independent Study credit: 1 to 16 Hours. (https://courses.illinois.edu/schedule/terms/CEE/497/)
Individual investigations or studies of any phase of civil engineering selected by the student and approved by the department. 1 to 4 undergraduate hours. 1 to 16 graduate hours. May be repeated. Prerequisite: Consent of instructor.

CEE 498 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/498/)
Subject offerings of new and developing areas of knowledge in civil and environmental engineering intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated in the same or separate terms if topics vary.

CEE 501 Constr Matls Characterization credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/501/)
Laboratory methods such as thermal analysis, optical microscopy, scanning electron microscopy, and x-ray diffraction used to characterize civil engineering materials. Theoretical background, calculation methods, models, underlying assumptions, and operation of the instrument are examined for each method. Prerequisite: CEE 300; one of CEE 401, CEE 405, CEE 483.

CEE 502 Advanced Cement Chemistry credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/502/)
Advanced topics in chemistry of portland cement, chemistry and microstructure of cements, chemical reactions that lead to hardening, chemistry and microstructure of hydrated cements, effects of chemical and mineral admixtures, and chemical issues involved in the engineering behavior of the cements. Prerequisite: CEE 401.

CEE 503 Constr Matls Deterioration credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/503/)
Fundamental processes for deterioration mechanisms of infrastructure materials: corrosion of metals including thermodynamics, kinetics, passivity and rate measurements; degradation of cement-based materials including freezing and thawing, ASR, sulfate attack, fire attack and steel reinforcement corrosion; degradation of organic materials including photo-oxidation and ageing. A research literature review exercise related to material degradation. Prerequisite: CEE 401 or CEE 405.

CEE 504 Infrastructure NDE Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/504/)
Fundamental bases and methodologies of non-destructive evaluation (NDE) techniques for infrastructure materials: methods for steel including ultrasound, radiography, eddy-current and magnetic-particles; methods for concrete including sounding, semi-destructive, ultrasound, seismic, impact-echo, impulse-response, ground-penetrating radar, infrared-thermography, and nuclear; planning and carrying out NDE structural investigations. Weekly laboratory sessions, a research paper, and an associated presentation related to NDE required. Prerequisite: CEE 401 or CEE 405.

CEE 506 Pavement Design II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/506/)
Development of layered elastic and plate theory models for area analysis of pavement systems; performance prediction of flexible and rigid pavements; characterization of aircraft traffic; design of airfield pavement systems; construction material fatigue and failure criteria (strength theory and fracture mechanics); industrial floor and reinforced concrete slab design; climatic factors. Prerequisite: CEE 406.

CEE 507 Repair of Civil Infrastructure credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/507/)
Science related to material decay and testing methodology of high quality civil infrastructure including transportation systems, structures, and underground sewers and pipelines. Methods for condition assessment and approaches for selecting compatible materials to be used in repair. Specific emphasis on material interfaces which impact the quality of adhesion, structural load transfer, sealing performance and durability relative to surface preparation. Case studies illustrating the application of sound engineering practice. Includes a field trip to Allerton Park and course project based on local infrastructure problems. 4 graduate hours. No professional credit. Prerequisite: CEE 401.

CEE 508 Pavement Evaluation and Rehab credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/508/)
Concepts and procedures for condition survey assessment; pavement evaluation by nondestructive testing and data analysis (roughness, friction, structural capacity, internal flaws, and thickness measurements): destructive testing, maintenance strategies, rehabilitation techniques of pavement systems for highways and airfields, cost analysis, preservation techniques. Prerequisite: CEE 406.

CEE 509 Transportation Soils credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/509/)
Occurrence and properties of surficial soils, soil classification systems, soil variability; subgrade evaluation procedures, repeated loading behavior of soils; soil compaction and field control; soil moisture, soil temperature, and frost action; soil trafficability and subgrade stability for transportation facility engineering. Prerequisite: CEE 483.

CEE 511 Railway Terminal Design and Operations credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/511/)
Geometric design, operations planning and optimization of terminal facilities required for the railway network to function as an efficient freight transportation system. Design of classification yards, intermodal facilities and bulk terminals, and organization of these facilities into an optimal freight transportation network. Horizontal yard track layout and turnout configurations; railcar rolling resistance, speed control and vertical profile design and simulation; railcar distribution, locomotive and crew assignment models. Design project covering a typical railroad terminal development. 4 graduate hours. No professional credit. Prerequisite: CEE 408 or CEE 409 or CEE 411.

CEE 512 Logistics Systems Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/512/)
Planning, design and operations of complex logistics systems: logistics costs; production, transportation and distribution systems; lot-sizing; traveling salesman problem (TSP) and vehicle routing problem (VRP); transshipments; facility location problem; supply chain management and inventory control; order instability; analytical methods and practical solution techniques. Prerequisite: CEE 310 and IE 310.

CEE 515 Traffic Flow Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/515/)
Fundamentals of traffic flow, traffic flow characteristics, statistical distributions of traffic flow parameter, traffic stream models, car following models, continuum follow models, shock wave analysis, queuing analysis, traffic flow models for intersections, network flow models and control, traffic simulation. Prerequisite: CEE 416 and knowledge of probability and statistics.

CEE 517 Traffic Signal Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/517/)
Theory and application of concepts in traffic signal systems control, signal timing design, signal cabinet components, signal controllers, traffic signal theory and control, vehicle detection technologies, communication methods, interconnected rail-highway crossing signals, signal coordination, and signal systems network. Field trips to observe or utilize equipment in the Traffic Operations Lab (TOL) in ATREL or similar facilities. Prerequisite: CEE 416.

CEE 524 Construction Law credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/524/)
Legal aspects of the construction process and the potential liability that engineers can incur through the design, and post-construction processes. Organization and operation of the American court system, contact formation, defenses, remedies, and typical areas of dispute, and design services contracts, torts, product liability, agency, business organizations, intellectual property, and risk managements. Mock trial of a recent construction-related case with the class serving as plaintiffs and defendants. Prerequisite: CEE 420, CEE 421, and CEE 422.

CEE 525 Construction Case Studies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/525/)
Case studies of bridges, tunnels, buildings, transportation systems, heavy industrial construction, waterways, and marine structures in the context of construction engineering and management. Research, a team-oriented term project, presentations, and discussions in studio-style format. Prerequisite: Two of CEE 420, CEE 421, and CEE 422.

CEE 526 Construction Optimization credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/526/)
Optimizing construction project decisions during the planning and construction phases including the optimization of bid decisions; contractor and material supplier selection; site layout planning; tradeoffs among construction time, cost and quality; repetitive construction scheduling; resource allocation and leveling; and building sustainability. 4 graduate hours. No professional credit. Prerequisite: One of CEE 420, CEE 421 or CEE 422.

CEE 527 Constr Conflict Resolution credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/527/)
Basic theories and applications of dispute avoidance and resolution techniques in the construction industry. Mechanisms to promote collaborative environments and resolve disputes in construction projects; the different steps in the Dispute Resolution Ladder and the main features of a conflict management plan; case studies of practical applications of disputes avoidance and resolution techniques in the construction industry throughout the world. Prerequisite: One of CEE 420, CEE 421, CEE 422.

CEE 528 Construction Data Modeling credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/528/)
State-of-the-art research and literature in the construction data modeling domain. Fundamental techniques of construction data modeling; existing construction data representation approaches and specifications for the architecture, engineering, and construction domain; building information models; capabilities and limitation of data process models and representation approaches and techniques. Prerequisite: Two of CEE 420, CEE 421, CEE 422.

CEE 534 Surface Water Quality Modeling credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/534/)
Mathematical modeling of the movement and fate of pollutants and other substances in streams, lakes, and other natural water bodies. Development of one-, two-, and three-dimensional differential conservation equations, one-, two-, and three-dimensional steady-state and transient solutions. Finite difference, finite element, and finite particle methods. Lagrangian and Eulerian formulations, diffusion and dispersion tensors, numerical dispersion, and solution stability. Kinetic relationships describing important physical, chemical, and biochemical water constituent transformation phenomena. Field or laboratory experiment in model calibration and verification. Prerequisite: MATH 285, CEE 442, and CEE 451.

CEE 535 Environmental Systems II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/535/)
Fundamental concepts of uncertainty, risk, and reliability applied to environmental and water resources decision making. Chance constraints, Markov and Monte Carlo modeling, geostatistics, unconditional and conditional simulation, genetic algorithms, neural networks, simulated annealing, and a review of relevant portions of basic probability and statistical theory. Many techniques are applied to a real-world environmental decision making problem initially developed in CEE 434. Prerequisite: CEE 202 and CEE 434.

CEE 537 Water Quality Control Proc I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/537/)
Theory and basic design of processes used in water and wastewater treatment, including adsorption, ion exchange, chemical oxidation and reduction, disinfection, sedimentation, filtration, coagulation, flocculation, and chemical precipitation. Prerequisite: Credit or concurrent registration in CEE 442 and CEE 443.

CEE 538 Water Quality Control Proc II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/538/)
Theory and its application for design and operation of processes used in water and wastewater treatment; emphasis is on biological treatment processes and related processes for gas transfer, sludge dewatering, sludge disposal, and solids separations. Prerequisite: CEE 442 and CEE 443; credit or concurrent registration in CEE 444.

CEE 540 Remediation Design credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/540/)
Evaluation and design of alternative treatment processes for hazardous waste sites contaminated with organic or metal wastes. Group design project due at the end of the term. Prerequisite: CEE 440.

CEE 543 Env Organic Chemistry credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/543/)
Molecular-scale processes that control the fate of organic contaminants in natural environments and engineered treatment systems, including partitioning between environmental phases (water, air, organic, and biological phases), sorption onto solids (soils, sediments, aerosol particles), and transformation reactions (chemical, photochemical, and biochemical). Emphasis on quantitative approaches for predicting contaminant fate using thermodynamic principles and molecular property descriptors. Prerequisite: CEE 443 or NRES 490.

CEE 544 Advanced Surface Science credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/544/)
The overall goal of this course is to provide an in-depth knowledge of surface science principles. The specific goals are to elaborate the classical theories, to identify their limitations from a fundamental level, and to provide the state-of-the-art extensions of classical theories, and alternative approaches based on recent literature. The course also seeks to provide students with state-of-the-art experimental approaches, and to provide a link between surface science and the student's research project or other interests, which is pursued through literature discussion in presentations and term paper. 4 graduate hours. No professional credit. Prerequisite: CEE 442.

CEE 545 Aerosol Sampling and Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/545/)
Principles of sampling for particles and gases in the field of air pollution; instrumental techniques relevant to the design of sampling systems used in process control, ambient air monitoring, and laboratory experiments; methods of sample analysis and their limitations. Same as ATMS 535. Prerequisite: CEE 446 and MATH 285.

CEE 546 Air Quality Control credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/546/)
Application of principles describing the generation, separation, and removal of air contaminants from gas streams generated by stationary sources. Typically includes local field trips to observe applications of the air quality control devices. Prerequisite: CEE 442 and CEE 446.

CEE 548 Scientific Writing in CEE credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CEE/548/)
Advanced writing course covering topics specific to scientific writing, with emphasis on proposals, manuscripts, and peer review. Prerequisite: CEE 444, CEE 599.

CEE 550 Hydroclimatology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/550/)
Application of deterministic and probabilistic concepts to simulate and analyze hydrologic systems; discussion of the theory and application of linear and nonlinear, lumped, and distributed systems techniques in modeling the various phases of the hydrologic cycle. Prerequisite: CEE 450.

CEE 551 Open-Channel Hydraulics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/551/)
Advanced hydraulics of free surface flow in rivers and open channels; discussion of theory, analytical and numerical solution techniques, and their applications to gradually and rapidly varied nonuniform flows, unsteady flow, and flow in open-channel networks. Prerequisite: CEE 451.

CEE 552 River Basin Management credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/552/)
Multidisciplinary knowledge (hydrology, economics, systems engineering, etc.) and methodological skills (optimization, simulation, etc.) for river basic management. River basin characterization-natural and social features; water availability assessment based on hydrology, infrastructure, and policy; environmental flow requirements; water demand management and microeconomics theory; integrated river basic management modeling. Prerequisite: CEE 350 and CEE 434.

CEE 553 River Morphodynamics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/553/)
River morphology and characteristics of river sediment. Response of alluvial and bedrock rivers to changes in sediment supply, hydrology, and tectonics. Numerical modeling of river morphodynamics in gravel and sand bed rivers and deltas. Same as GEOL 573. Prerequisite: TAM 335.

CEE 554 Hydrologic Variability credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/554/)
Advanced quantitative treatment of catchment hydrology, focusing on analysis of observed hydrologic and hydroclimatic variability, and their interpretation in terms of the underlying processes. Concepts of heterogeneity and variability, scale and scaling, process change and process interactions will be emphasized. Theoretical foundations of hydrologic applications, such as flood estimation, water balance analyses, hydrologic modeling and associated scale problems will be discussed in sufficient detail to prepare students to undertake advanced research and professional practice. Prerequisite: CEE 450.

CEE 555 Mixing in Environmental Flows credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/555/)
Physical processes involved in transport of pollutants by water; turbulent diffusion and longitudinal dispersion in rivers, pipes, lakes, and the ocean; diffusion in turbulent jets, buoyant jets, and plumes. Prerequisite: MATH 285 and TAM 335.

CEE 557 Groundwater Modeling credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/557/)
Theory and application of numerical methods, finite differences and finite element, for solving the equations of groundwater flow and solute transport; transport of chemically reacting solutes; model calibration and verification. Prerequisite: CEE 457 and MATH 285.

CEE 559 Sediment Transport credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/559/)
Physical processes of transportation and deposition of sediment particles in liquid bodies with particular emphasis on fluvial sediment problems; sediment in desilting basins; reservoirs and delta formation; erosion; stable channel design; river morphology. Prerequisite: CEE 551.

CEE 560 Steel Structures III credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/560/)
Theories of ultimate behavior of metal structural members with emphasis on buckling and stability of members and frames; theory of torsion applied to beam torsion, lateral-torsional buckling, curved beams with emphasis on design criteria; post-buckling strength of plates and post-buckling versus column behavior. Prerequisite: CEE 462.

CEE 561 Reinforced Concrete III credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/561/)
Behavior of reinforced concrete members, including the relationships between behavior and building code requirements. Prerequisite: CEE 463.

CEE 562 Highway Bridge Design credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/562/)
This course introduces current practices in highway bridge design. It provides students with the background to understand the American Association of State Highway and Transportation Officials (AASHTO) code. The course covers topics related the behavior, analysis, and design of bridge superstructure and substructure systems under various bridge loads. The course specifically addresses highway bridge types constructed using reinforced concrete, prestressed concrete, and steel. In addition, the course gets the students familiar with state-of-art methodologies adopted for bridge seismic retrofitting. 4 graduate hours. No professional credit. This class will meet twice a week for 80 minutes per class. Prerequisite: CEE 460, CEE 461, CEE 472.

CEE 570 Finite Element Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/570/)
Theory and application of the finite element method; stiffness matrices for triangular, quadrilateral, and isoparametric elements; two- and three-dimensional elements; algorithms necessary for the assembly and solution; direct stress and plate bending problems for static, nonlinear buckling and dynamic load conditions; displacement, hybrid, and mixed models together with their origin in variational methods. Same as CSE 551. Prerequisite: CEE 471 or TAM 551.

CEE 571 Computational Plates & Shells credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/571/)
Classical and first-order shear deformable plate and shell models: assumptions, applicability, valid boundary conditions, analytical solutions; finite element methods for plates and shells: convergence, instabilities, shear and membrane locking, mixed methods for plates and shells; implementation and verification of finite elements for plates and shells; buckling of plates and shells; boundary layer effects; introduction to high order hierarchical plates and shell models and to isogeometric analysis of shells. Same as CSE 554. 4 graduate hours. No professional credit. Prerequisite: CEE 471 or TAM 551. Credit or current registration in CEE 570 Finite Element Methods or ME 471 Finite Element Analysis.

CEE 572 Earthquake Engineering credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/572/)
Source mechanisms, stress waves, and site response of earthquake shaking; effect on the built environment; nature of earthquake actions on structures; fundamental structural response characteristics of stiffness, strength, and ductility; representation of the earthquake input in static and dynamic structural analysis; modeling of steel and concrete structures under earthquake effects; outputs for safety assessment; comprehensive source-to-design actions project. Prerequisite: CEE 472.

CEE 573 Structural Dynamics II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/573/)
Advanced concepts in structural dynamics and fundamentals of experimental structural dynamics. Modern system theory; data acquisition and analysis; digital signal processing; experimental model analysis theory and implementation; random vibration concepts; system identification; structural health monitoring and damage detection; pseudo-dynamic testing and model-based simulation; smart structures technology (e.g., smart sensors; passive, active, and semi-active control). Prerequisite: CEE 472.

CEE 574 Probabilistic Loads and Design credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/574/)
Application of probabilistic methods in describing and defining loads on structures with emphasis on the random fluctuation in time and space. Random vibration methods and applications to dynamic response of structures under wind and earthquake loads. Computer simulation of structural loads and responses. Probability-based safety criteria and review of current methods of selection of design loads and load combinations. Prerequisite: CEE 202 and CEE 472.

CEE 575 Fracture and Fatigue credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/575/)
Fatigue and fracture behavior of metallic structures and connections; fatigue and fracture mechanics theory; generation and use of laboratory data; background and application of international testing and assessment standards. Same as AE 521. Prerequisite: One of CEE 471, TAM 451, TAM 551.

CEE 576 Nonlinear Finite Elements credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/576/)
Nonlinear formulations in solid mechanics and nonlinear equation solving strategies; finite deformation (hyperelasticity) elastostatics and elastodynamics, semi-discrete weighted residual formulations, implicit and explicit time-stepping algorithms and stability analysis; theory of mixed finite element methods, strain-projection methods, and stabilized methods; mixed methods for nonlinear coupled-field problems. Same as CSE 552. Prerequisite: CEE 471 or TAM 445; CEE 470 or ME 471.

CEE 577 Computational Inelasticity credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/577/)
Theoretical foundations of inelasticity and advanced nonlinear material modeling techniques; constitutive models for inelastic response of metals, polymers, granular materials, biomaterials. Phenomenological models of viscoelasticity, viscoplasticity, elastoplasticity, porous plasticity and cyclic plasticity. Small-strain and finite-strain numerical implementation and code development. Same as CSE 553. Prerequisite: CEE 471 or TAM 551; CEE 570 or ME 471.

CEE 578 Structural Design Optimization credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/578/)
Covers the fundamental theory, classic numerical methods, modern techniques, and practical applications of structural optimization to engineering design problems, such as large-scale civil structures and mechanical systems. We will also introduce the modern topology optimization methods together with the application to material and structural systems. Students will also be introduced with rapid prototyping and 3D printing techniques. Also features a project, which will use those state-of-the-art techniques and methods, as well as practical design optimization problems from various engineering industries. 4 graduate hours. No professional credit. Prerequisite: CEE 470.

CEE 580 Excavation and Support Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/580/)
Classical and modern earth pressure theories and their experimental justification; pressures and bases for design of retaining walls, bracing of open cuts, anchored bulkheads, cofferdams, tunnels, and culverts. Prerequisite: Credit or concurrent registration in CEE 484.

CEE 581 Dams, Embankments, and Slopes credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/581/)
Fundamentals of static and seismic slope stability and shear strength; seepage in composite sections and anisotropic materials; methods of stability analyses; mechanism of failure of natural and man-made slopes; compaction; field observations. 4 graduate hours. No professional credit. Prerequisite: CEE 483 - Applied Soil Mechanics.

CEE 582 Consolidation of Clays credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/582/)
Elastic solutions relevant to soil mechanics; permeability; general application of Terzaghi's theory of one-dimensional consolidation; advances in consolidation theories; mechanism of volume change; delayed and secondary compressibility and creep; theory of three-dimensional consolidation and solutions; radial flow and design of sand drains; analysis and control of settlement. Prerequisite: CEE 483.

CEE 583 Shear Strength of Soils credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/583/)
Physico-chemical properties of soils; fabric and structure of soil; mechanism of shearing resistance; residual shear strength of overconsolidated clays and clay shales; long-term shear strength of overconsolidated clays; Hvorslev shear strength parameters; undrained shear strength of clays. Prerequisite: CEE 483.

CEE 585 Deep Foundations credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/585/)
Ultimate capacities and load-deflection of piles and drilled shafts subjected to compressive loads, tensile loads, and lateral loads; effects of duration of load, soil-structure interaction; two- and three-dimensional analysis of pile groups with closely-spaced piles; effects of installation; inspection of deep foundations and full-scale field tests. Prerequisite: CEE 484.

CEE 586 Rock Mechanics and Behavior credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/586/)
Rock classification, stress and strain, elastic and inelastic deformation, failure criteria, rock-fluid interaction, poroelasticity, fluid flow in rock, thermal effect on rock deformation, geo-energy applications. 4 graduate hours. No professional credit. Prerequisite: CEE 483 and TAM 451.

CEE 587 Applied Rock Mechanics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/587/)
Application of rock mechanics to engineering problems; shear strength of rock masses; dynamic and static stability of rock slopes; deformability of rock masses; design of pressure tunnel linings and dam foundations; controlled blasting and blasting vibrations; tunnel support; machine tunneling; design and construction of large underground openings; field instrumentation. Prerequisite: CEE 586.

CEE 588 Geotechnical Earthquake Engrg credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/588/)
Seismic hazard analysis, cyclic response of soils and rock; wave propagation through soil and local site effects; liquefaction and post liquefaction behavior, seismic soil-structure of foundations and underground structures, seismic design of retaining walls, underground structures and tunnels. Construction and machine vibrations. Blasting. Prerequisite: CEE 472 and CEE 483.

CEE 589 Computational Geomechanics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/589/)
Numerical modeling, multi-phase domain equations, constitutive modeling of soils and rock, continuum and discrete element modeling. Upper and lower bound limit analysis methods. Simulation of soil-structure interaction problems and construction activities. Prerequisite: CEE 483. Recommended: one of AE 420, CEE 470, CSE 451, or ME 471.

CEE 590 Geotechnical Field Measurement credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/590/)
Discussion of observational method in geotechnical engineering. Historical, theoretical, experimental, and empirical development of in-situ tests and instrumentation in geotechnical engineering. Practical applications and limitation of field testing devices and instruments. Interpretation of test results and measurements for geotechnical site characterization. Discussion of data acquisition systems and data management. Introduction of emerging technologies in field testing and instrumentation. Prerequisite: CEE 483 and CEE 484.

CEE 591 Reliability Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/591/)
Introduction to applied probability theory and random processes, Bayesian analysis of model uncertainties. Formulation of reliability for components and systems. Exact solutions for special cases. Approximate solutions by second-moments, first- and second-order reliability methods (FORM and SORM), the response surface method, simulation methods including importance sampling techniques. Reliability-based optimal design and probabilistic design codes. Time- and space-variant reliability formulations. 4 graduate hours. No professional credit. Prerequisite: CEE 491.

CEE 592 Sustainable Urban Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/592/)
Fundamental concepts of sustainability and resilience in urban systems, including the complex interactions among human, engineered, and natural systems. Project-based format, focusing on real-world problems solicited from government agencies, industry, and non-governmental organizations in one or more partnering cities. Students work in multidisciplinary teams with faculty advisors from multiple departments and colleges. Same as NRES 592 and UP 576. Prerequisite: One of ATMS 421, CEE 491, NRES 439, UP 456, UP 480, or equivalent course related to sustainable urban systems; and one of NRES 454, UP 418, GEOG 480, or equivalent course related to geographic information systems (GIS).

CEE 593 Tunneling in Soil and Rock credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CEE/593/)
History of development of tunneling design and methods. Relationship of geology on anticipated ground response to tunneling. Study of tunneling methods unique to tunnels in soil, tunnels in rock, caverns in soils and caverns in rock. Analysis approaches for tunnels in soils and rock. Geotechnical Baselines report and other risk allocation tools for tunnel construction. Case histories of tunneling projects. 4 graduate hours. No professional credit. The course lectures will be scheduled for twice a week for 80 minutes each class during a 16 week semester. Prerequisite: CEE 483 required. Credit or concurrent enrollment in CEE 484 is required.

CEE 595 Seminar credit: 0 to 1 Hours. (https://courses.illinois.edu/schedule/terms/CEE/595/)
Discussion of current topics in civil and environmental engineering and related fields by staff, students, and visiting lecturers. Approved for S/U grading only. May be repeated.

CEE 597 Independent Study credit: 1 to 16 Hours. (https://courses.illinois.edu/schedule/terms/CEE/597/)
Individual investigations or studies of any phase of civil engineering selected by the student and approved by the adviser and the staff member who will supervise the investigation. May be repeated. Prerequisite: Consent of instructor.

CEE 598 Special Topics credit: 1 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CEE/598/**)**
Subject offerings of new and developing areas of knowledge in civil and environmental engineering intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. May be repeated in the same or separate terms if topics vary.

CEE 599 Thesis Research credit: 0 to 16 Hours. **(**https://courses.illinois.edu/schedule/terms/CEE/599/**)**
Approved for S/U grading only. May be repeated.

CLCV - CLASSICAL CIVILIZATION

CLCV Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/CLCV/)

Courses

CLCV 100 Vocabulary Building from Greek and Latin Roots credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/100/)
Study of the Greek and Latin roots of English and vocabulary building. Analysis of Greek and Latin roots, prefixes, and suffixes in variety of disciplines and fields (humanities, social sciences, mathematics, science, politics).

CLCV 102 Medical Terms-GRK & LAT Roots credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/102/)
Introduction to the study of Greek and Latin medical terms in various medical fields and to the linguistic patterns governing the combination of various roots through practical application of usage.

CLCV 111 Mythology of Greece and Rome credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/111/)
Study of the major myths of Greece and Rome and their impact upon later art, music, and literature. Credit is not given for both CLCV 111 and CLCV 115.

CLCV 114 Introduction to Greek Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/114/)
Studies the social and cultural life in Greece during the classical period.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

CLCV 115 Mythology of Greece and Rome credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/115/)
Studies the major myths of Greece and Rome and their impact upon later art, music, and literature. Shares two hours of lecture with CLCV 111; additional hour of lecture-discussion for a closer analysis of topics. Credit is not given for both CLCV 115 and CLCV 111.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

CLCV 116 The Roman Achievement credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/116/)
Introduces Roman civilization through the study of the social and cultural life of ancient Rome.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

CLCV 120 The Classical Tradition credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/120/)
Survey of the Greco-Roman tradition from late antiquity to the present. Examination of pagan culture in medieval Christianity and Islam, the literary tradition of the Troy tale, the rediscovery of Greek texts and the Florentine Renaissance, classical allusions in Shakespeare and Milton, the political foundation of the U.S. constitution, and the persistence of the classical tradition in contemporary American popular culture.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

CLCV 131 Classical Archaeology, Greece credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/131/)
Introduction to the archaeology of ancient Greece and the Aegean world.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

CLCV 132 Class Archaeology, Rome-Italy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/132/)
Introduction to the archaeology of Italy and Rome to the fall of the Roman Empire.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

CLCV 133 Archaeology of Israel credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/133/)
Exploration of the archaeology and history of the Near East with a specific focus on the development of Israel. Cultures of the Near East adapted to a rapidly changing world by pioneering the world's earliest innovations in agriculture, urbanism, bronze technology, and writing. We will investigate the Near Eastern background of the Israelites and their neighbors from the beginnings of agriculture during the "Neolithic Revolution", to the formation of the world's first cities in the Bronze Age, to the archaeological remnants of the Hebrew Bible. We will investigate the ramifications of wave after wave of military conflict and how this has shaped the Middle East, including the Babylonian Exile, the conquests of Alexander the Great, and the Jewish Revolts against the Romans.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

CLCV 160 Ancient Greek & Roman Religion credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/160/)
Study of Greek and Roman Paganism and the rise of Christianity within that context. Readings are confined to ancient sources in English translation. Same as REL 160.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

CLCV 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/199/)
Approved for both letter and S/U grading. May be repeated.

CLCV 203 Ancient Philosophy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/203/)
Same as PHIL 203. See PHIL 203.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil

CLCV 206 Classical Allusions in Cinema credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/206/)
Examination of hundreds of contemporary films containing allusions to Greco-Roman antiquity. From the Matrix to Napoleon Dynamite, today's films often mention an ancient character, story or art object. These motifs are conscious and often essential to the theme of the film. We examine this interesting phenomenon by discussing film segments in class, reading about the history of the classical tradition in popular culture, and finally, forming into groups and examining specific types of films. Same as CWL 206. Prerequisite: CLCV 111 or CLCV 115 or consent of instructor.

CLCV 217 Greek Art credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/217/)
Same as ARTH 215. See ARTH 215.

CLCV 220 Origins of Western Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/220/)
Origins and development of selected major genres in Western literature, emphasizing the relationship between classical representatives and their modern successors. Same as CWL 220. May be repeated as topic varies.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

CLCV 221 Odysseus and Other Heroes credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/221/)
Study of the heroes of ancient epics in relation to the cultures in which they were produced, taking Homer's Odyssey as the point of departure and including near eastern heroes such as Gilgamesh, as well as female heroes such as Helen and Penelope; focuses on the epic and tragic tradition of ancient heroes and their successors. Same as CWL 263. Prerequisite: Sophomore standing or consent of instructor.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

CLCV 222 Introduction to Greek and Roman Theater credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/222/)
Survey of Greek and Roman theater; analysis of scripts, productions, and theatrical artifacts as reflections of ancient politics, social climate, gender roles and religious beliefs. Same as CWL 264 and THEA 210. Prerequisite: Completion of the Composition I requirement.
This course satisfies the General Education Criteria for:
Advanced Composition
Humanities - Lit Arts
Cultural Studies - Western

CLCV 223 Myth,History,Fiction,Tradition credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/223/)
A unique examination of several legendary figures from Greco-Roman antiquity. Employing the disciplines of mythology, historiography, and the study of popular culture, the student develops a synchronic, multi-millennial understanding of such men and women as Achilles, Medea, Alexander the Great, and Cleopatra by studying primary ancient, medieval, Renaissance, and modern sources from such diverse perspectives as those of epic, lyric, and dramatic poetry, scientific and romantic biography, political propaganda, painting, popular fiction, and documentary television, as well as feature film.
This course satisfies the General Education Criteria for:
Cultural Studies - Western

CLCV 224 American Race and Ethnicity in the Classical Tradition credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/224/)
Survey of American minority cultures and the reception of Greco-Roman culture in literature, film, and politics, with brief units of historical concentration on ancient slavery and proto-racism, Harvard's Indian College, early African-American poets, novelists, educators, and classicists, the Greco-Roman heritage of the Ku Klu Klan, and Civil Rights Movement leaders like Martin Luther King, Jr., Huey P. Newton, and Eldridge Cleaver. Other highlights include Derek Walcott's Caribbean/Homeric Omeros, Erin Gruwell's mixed-race Freedom Writers, and Spike Lee's Chi-Raq.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - US Minority

CLCV 225 Greco-Roman Demo, Econ, Cult credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/225/)
Greco-Roman Democracies, Economic Policies, and Cultures: Examines the ancient city-states of Athens and Rome; the creation, development and demise of their democratic governments, the relationship between their democracies and militarized empires as well as their economics and fiscal policies; and how these influenced or were represented by their cultural products - including literature, architecture, sculpture, and coinage. Examines the influence of Greco-Roman culture and political institutions on late-medieval and neo-Roman Renaissance city-states, as well as on the foundation of the United States.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

CLCV 230 Ancient Engineering credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/230/)
Technologies are the result of compounded science – years, decades, and centuries of experimentation, entrepreneurship, and incremental successes. For example, prehistoric smiths first recognized that ores could be reduced to copper metal, and thousands of years later, innovators realized that this same metal could conduct electricity. Both inventions revolutionized society in their time, and continue to impact us every day. In this course, we will not only study ancient technologies and paleoscience, but will employ state-of-the-art materials science laboratory techniques to study artifacts recovered from archaeological excavations. By engaging directly with the materials of the past, we will generate knowledge rooted in historical sciences, while gaining an appreciation of the social processes underlying the very design principles that are still used by engineers today.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences
Cultural Studies - Western

CLCV 231 Development of Ancient Cities credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/231/)
Monuments, archaeological remains, and histories illustrating the development of the earliest states and urban centers of the Ancient Mediterranean, including Athens, Rome, Carthage, and Jerusalem. Same as ARTH 217 and JS 231. Prerequisite: Sophomore standing or consent of instructor.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

CLCV 232 Ancient Greek Sanctuaries credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/232/)
Survey of the archaeological remains of ancient Greek sanctuaries and their importance to ancient society and religion. Same as ARTH 218, and REL 232. Prerequisite: Sophomore standing or consent of instructor.

CLCV 240 Gender & Sexuality in Greco-Roman Antiquity credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/240/)
Study of gender and sexuality in Greco-Roman antiquity. Readings from ancient texts in English translation across a wide range of genres, including epic and lyric poetry, tragedy and comedy, love elegy, epigram, prose fiction, oratory, historiography, biological and medical writing, philosophy; art and material culture; select readings from scholarship. Same as CWL 262 and GWS 240.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

CLCV 250 Sports and Society in Greece and Rome credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/250/)
Introduces the role of sports in ancient Greek and Roman society. We will cover the period from roughly 3000 B.C.E. to the sixth century C.E., from the Bronze Age to the rise of Christianity and the decline of Greek and Roman sanctuaries. Because sports touched the lives of almost everyone in ancient Greece and Rome, we will also have a chance to study the full and vibrant diversity of ancient Mediterranean societies in terms of gender, race, class, and numerous other factors that have historically received less attention than they deserve in scholarship and in the classroom.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

CLCV 323 The Comic Imagination credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/323/)
Study of Greek and Roman comedies in their historical context, with attention to formal elements, stylistic features, aspects of performance and central themes and ideas. Same as CWL 322 and THEA 323. Prerequisite: Sophomore standing or consent of the instructor.
This course satisfies the General Education Criteria for:
Advanced Composition
Humanities - Lit Arts
Cultural Studies - Western

CLCV 410 Ancient Egyptian & Greek Arch credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/410/)
Same as ARCH 410. See ARCH 410.

CLCV 411 Ancient Roman Architecture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/411/)
Same as ARCH 411. See ARCH 411.

CLCV 415 Classical Rhetorics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/415/)
Same as CMN 415 and MDVL 415. See CMN 415.

CLCV 430 History of Translation credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/430/)
Same as CWL 430, ENGL 486, GER 405, SLAV 430, SPAN 436, and TRST 431. See SLAV 430.

CLCV 440 Roman Republic to 44 B C credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/440/)
Same as HIST 440. See HIST 440.

CLCV 443 The Archaeology of Greece credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/443/)
Monuments, material remains, and sculpture and other arts illustrating the development of Greek civilization to 323 B.C. Same as ARTH 415. 3 undergraduate hours. 3 graduate hours. Prerequisite: A course in ancient history, art, or language, or consent of instructor.

CLCV 444 The Archaeology of Italy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/444/)
Monuments, material remains, and sculpture and other arts illustrating the development of Greco-Roman and other ancient Italian civilizations to 330 A. D. Same as ARTH 416. 3 undergraduate hours. 3 graduate hours. Prerequisite: A course in ancient history, art, or language, or consent of instructor.

CLCV 450 Classics Internship credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/450/)
Provides college credit for a student's internship experience in a field directly related to Classics (including but not limited to any related fields to Classical Civilization, Classical/Mediterranean Archaeology, Classical Languages, site analysis of Study Abroad related to Greece/Italy). Students are required to find their own internship opportunity as well as a faculty supervisor during the term in which they are enrolled for the course. 1 to 4 undergraduate hours. No graduate credit. Approved for Letter and S/U grading. May be repeated in separate terms to a maximum of 6 credits. Prerequisite: At least 2 courses in Classics or consent of faculty supervisor and the Director of Undergraduate Studies. Restricted to Classics Majors.

CLCV 490 Topics in Classical Literature credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/490/)
Study of selected topics in Greek and Latin literature in translation; content is variable. Same as CWL 490. 3 or 4 undergraduate hours. 3 or 4 graduate hours. May be repeated. Prerequisite: A 200-level classical civilization course or consent of instructor.

CLCV 491 Topics Classic Arch & Civ credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/491/)
Study of selected topics; variable content. 3 or 4 undergraduate hours. 3 or 4 graduate hours. May be repeated. Prerequisite: Consent of instructor.

CLCV 492 Senior Thesis credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/492/)
Thesis and honors; for candidates for departmental distinction in classical civilization and for other seniors. 2 to 4 undergraduate hours. No graduate credit. Prerequisite: Senior standing and consent of Classics Honors Program.

CLCV 493 Independent Reading credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/493/)
Reading in selected fields in consultation with the instructor. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated up to 8 hours if topics vary. Prerequisite: 9 hours of CLCV classes. For majors and minors only.

CLCV 515 Seminar in Ancient Art credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/515/)
Same as ARTH 515. See ARTH 515.

CLCV 520 Seminar in Class Archaeology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/520/)
Problems in classical archaeology. Various topics in all fields of classical archaeology such as ancient topography, agricultural practices, ancient industries and crafts, and trade patterns as documented by pottery, will be offered in separate terms. Same as ARTH 520. May be repeated to a maximum of 12 hours. Prerequisite: Graduate standing in Classics, Art History, Anthropology, Architecture, or History, or consent of instructor.

CLCV 550 Intro to Teaching of Classics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CLCV/550/)
An introduction, designed for Classics Teaching Assistants, to teaching ancient Greek, Latin, and Classical Civilization courses. Prerequisite: Appointment as a Teaching Assistant in Classics or consent of instructor.

CLE - CLINICAL SCIENCES AND ENGINEERING

CLE Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/CLE/)

Courses

CLE 610 Faith, Medicine, and End-of-Life Care credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/610/)
Helps students to develop their skills in taking a spiritual history and addressing issues relating to faith; skills in end-of-life care; and understanding of whole person care. No graduate credit. 2 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 4 hours. Prerequisite: Restricted to students enrolled in the Carle Illinois Doctor of Medicine (MD) program.

CLE 613 Introduction to Clinical Practice (Longitudinal) credit: 0 to 6 Hours. (https://courses.illinois.edu/schedule/terms/CLE/613/)
Examines and exposes to the fundamentals of clinical work including office support with basic history, vitals, understanding the team, communicating with patients, observing health care roles and processes. Additionally, this course addresses concepts of history and physical assessment, includes H&P, preoperative assessment, routine physicals. No graduate credit. 0 to 6 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 12 hours. Available for honors grade. Prerequisite: Restricted to students enrolled in the Carle Illinois College of Medicine.

CLE 631 Clinical Elective credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CLE/631/)
This course will expose the students to a clinical specialty to learn more about treatment of disorders, lifestyle of the physicians and the experiences of the patients. Students will learn about interpersonal communication skills, gain a deeper understanding of the environment in which medical devices are used, observe therapeutic treatment in real time, and strengthen the clinical skills. No graduate credit. 1 to 4 professional hours. Approved for S/U grading only. May be repeated up to 16 hours in the same semester to a maximum of 40 hours over separate semesters. Prerequisite: This course is restricted to Carle Illinois College of Medicine students.

CLE 635 COVID Clinical Clerkship Make-Up credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/635/)
The clinical clerkship make-ups are a two-week rotation. This course allows students whose clerkships were disrupted by COVID-19 to further explore a specialty. No graduate credit. 2 professional hours. Approved for S/U grading only. May be repeated in same semester to a maximum of 4 hours. Prerequisite: Restricted to students enrolled in the Carle Illinois College of Medicine.

CLE 640 Family Medicine Clerkship credit: 1 to 10 Hours. (https://courses.illinois.edu/schedule/terms/CLE/640/)
This longitudinal clerkship provides an exciting opportunity for students to have clinical experiences within their own student clinic, as well as ambulatory practices in disciplines such as psychiatry, pediatrics, and family medicine. Students will learn the core skills and knowledge essential to the practice of primary care: diagnosis and treatment of common outpatient complaints, management of chronic medical conditions, and strategies for health promotion and disease prevention. No graduate credit. 1 to 10 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 10 hours. Available for honors grade. Prerequisite: This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 645 Internal Medicine Clerkship credit: 10 Hours. (https://courses.illinois.edu/schedule/terms/CLE/645/)
The medicine clerkship is a ten-week rotation. This clerkship emphasizes the integration and application of pathophysiology to the diagnosis and management of patients in addition to the skills of history-taking, physical examination, and case presentation. The course is an apprenticeship focusing on the bedside care of patients. Students work closely with house staff members and ward attendings making daily rounds, admitting new patients, and caring for them with the team. No graduate credit. 10 professional hours. Approved for S/U grading only. Available for honor grades. Prerequisite: This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 650 Neurology Clerkship credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/CLE/650/)
The neurology clerkship is a four-week introduction to clinical neurology, the specialty of medicine devoted to patients with diseases of the nervous system. The clerkship emphasizes the basic clinical methods of bedside neurology: Based on the history and examination, students develop skills at neuroanatomical localization and clinical reasoning. Students learn to interpret clinical findings, develop a differential diagnosis, and formulate a plan of evaluation. No graduate credit. 5 professional hours. Approved for S/U grading only. Available for honor grades. Prerequisite: This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 655 Psychiatry Clerkship credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/CLE/655/)
The Psychiatry Clerkship is a four week rotation. All students evaluate and follow patients on inpatient and outpatient services, participating in their patients' care with close attending and resident supervision. The acquisition of clinical skills is emphasized: conducting an interview to obtain a psychiatric history and mental status examination; organizing, recording, and presenting the findings to generate a differential diagnosis; and formulating a treatment plan in accordance with the biopsychosocial model. No graduate credit. 5 professional hours. Approved for S/U grading only. Available for honor grades. Prerequisite: This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 660 Obstetrics & Gynecology Clerkship credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/CLE/660/)
The obstetrics and gynecology clerkship is a five-week rotation. The main objective is to familiarize students with the signs and symptoms of normal and abnormal reproductive function and to teach the basic examinations in obstetrics and gynecology. The course will emphasize and reinforce skills for taking an appropriate history, performing a physical and pelvic examination, formulating a differential diagnosis as well as a treatment plan, and properly managing patients. No graduate credit. 5 professional hours. Approved for S/U grading only. Available for honor grades. Prerequisite: This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 665 Pediatrics Clerkship credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/CLE/665/)
The Pediatrics Clerkship is a five week rotation. The rotation is divided between inpatient and outpatient experiences. The emphasis is on learning to care for children and families in a variety of patient care settings and developing the clinical skills, diagnostic reasoning, and basic management strategies core to the practice of pediatrics. Attending physicians emphasize normal child development as well as the role illness plays in the lives of children and families. No graduate credit. 5 professional hours. Approved for S/U grading only. Available for honor grades. Prerequisite: This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 667 Academic Progress II credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/CLE/667/)
Students will be given an opportunity to demonstrate core medical skills through objective structured clinical examinations. This will include history taking, physical examinations, interpreting common test results, entering orders and prescriptions, giving oral presentations and collaborating as part of an interprofessional team. No graduate credit. 0 professional hours. Approved for S/U grading only. May be repeated, students may repeat this course, with approval from Carle Illinois Academic & Student Affairs. Prerequisite: Restricted to Carle Illinois College of Medicine Phase II or III students.

CLE 670 Surgery Clerkship credit: 10 Hours. (https://courses.illinois.edu/schedule/terms/CLE/670/)
The Surgery Clerkship is a ten-week rotation. The clerkship is designed to provide clinical experience that improves skills in overall patient care as students apply their knowledge of the basic sciences and expand their knowledge base through exposure to the wide variety of patients and procedures that fall into the realm of general surgery. Students become a valued member of the team as they assume responsibility for the overall care of their patients preoperatively and postoperatively and assist in the operating room. No graduate credit. 10 professional hours. Approved for S/U grading only. Available for honor grades. Prerequisite: This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 675 Adult Reconstruction - Hip and Knee credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CLE/675/)
The student will be involved in the daily activities of caring for patients with hip and knee degenerative conditions, as well as potential hip or knee injuries such as hip fractures or periprosthetic fracture. The student will work 1:1 with primary faculty in both clinic and the OR. In clinic, the student will have increasing autonomy to perform history and physical exams on this adult population as appropriate. This begins with shadowing and builds to independent H&P taking with evaluation of pertinent studies. The OR experience begins with scrubbing and shadowing, but will go on to include patient positioning, assisting with draping, application of dressings, and other activities the faculty feels appropriate based on the student knowledge and performance. No graduate credit. 4 professional hours. Approved for S/U grading only. May be repeated in separate terms up to a maximum 8 hours. Prerequisite: Completion of Phase 1 and OR Orientation class. Restricted to students enrolled in Phase 2 or Phase 3 of the Carle Illinois College of Medicine curriculum.

CLE 680 Family Medicine Continuity Clinic credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/CLE/680/)
The Family Medicine Clinic is a required course for students in Phase 2 of the Carle Illinois College of Medicine curriculum. The Family Medicine Clinic is structured to prioritize longitudinal relationships for continuous management of chronic disease. With graduated responsibility, medical students perform the functions of a primary care physician for their patient panel. Students are assigned to the clinic one evening per week. No graduate credit. 1 to 3 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 8 hours. Prerequisite: Family Medicine Clerkship. Restricted to students enrolled in Phase 2 of the Carle Illinois College of Medicine curriculum.

CLE 681 General Surgery Sub-Internship credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CLE/681/)
Carle Illinois students are required to complete at least one Sub-Internship rotation during their fourth year. In the General Surgery Sub-Internship, students will work with faculty in advanced clinical application of their medical knowledge gained from their core surgery clerkship. No graduate credit. 4 professional hours. Approved for S/U grading only. May be repeated to a maximum of 8 hours. Prerequisite: Successful completion of the Carle Illinois core clinical clerkships. Restricted to students enrolled in Phase 3 of the Carle Illinois College of Medicine curriculum.

CLE 683 Pediatrics Sub-Internship credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CLE/683/)
The four-week sub-internship in Pediatrics provides Phase 3 students supervised responsibility for patient care in general pediatric inpatient, pediatric intensive care, and neonatal intensive care. Each sub-intern will gain an awareness of the advanced knowledge, skills, values and attitudes the hospitalists/intensivists and ER physicians strive to acquire and maintain throughout their professional lives. No graduate credit. 4 professional hours. Approved for S/U grading only. May be repeated for a maximum of 8 hours. Prerequisite: Completion of Carle Illinois core clerkships. Restricted to students enrolled in Phase 2 or 3 of the Carle Illinois College of Medicine curriculum.

CLE 684 Internal Medicine Sub-Internship credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CLE/684/**)**
Carle Illinois students are required to complete at least one Sub-Internship rotation during their fourth year. In the Internal Medicine Sub-Internship, students will work with faculty in advanced clinical application of their medical knowledge gained from their core Medicine clerkship. No graduate credit. 4 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 8 hours. Prerequisite: Restricted to students enrolled in Phase 3 of the Carle Illinois College of Medicine curriculum.

CLE 685 Anesthesiology Sub-Internship credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CLE/685/**)**
Provides a more in-depth experience and preparation for the knowledge and procedures performed when working with patients who require sedation anesthesia and pain management for various reasons. Anesthesia fellowships typically encompass experiences in perioperative/periprocedural locations. This experience will thus aim to provide the student with exposure to these areas where anesthesiologists typically work. It will be an opportunity to build trust with providers over the four weeks so that they may possibly recommend the student for future work in this field. The experience will teach the student how to interact with patients undergoing anesthesia, allowing practice in communicating treatment plans, and discussing concerns with the patients undergoing such procedures. Additionally, it will be a chance for the student to gain more experience in some of the more advanced skill sets required for work in these fields. No graduate credit. 4 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 8 hours. Prerequisite: Successful complete of all Carle Illinois Core Clerkships. Restricted to students enrolled in Phase 2 or Phase 3 of the Carle Illinois College of Medicine.

CLE 686 Neurology Sub-Internship credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CLE/686/**)**
Illustrates the advanced responsibilities and activities that students are expected to demonstrate and participate as an integral member of a neurology team during this advanced clinical rotation. The overall goal for the Neurology Sub-Internship is to give further depth exposure to neurology, with the goal of treating the student on this rotation as more like a resident. Students will conduct further, in depth on EEGs, imaging interpretation, and differential diagnosis. This experience is to provide students with advanced clinical skills necessary for their future role as a resident and be exposed to activities that continue their development according to the Core Entrustable Professional Activities (EPAs) for entering Residency related to Neurology. No graduate credit. 4 professional hours. Approved for S/U grading only. May be repeated in separate terms to a maximum of 8 hours. Prerequisite: Restricted to students enrolled in Phase 2 or Phase 3 of the Carle Illinois College of Medicine curriculum.

CLE 687 Obstetrics and Gynecology Sub-Internship credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CLE/687/**)**
Illustrates the advanced responsibilities and activities that students are expected to demonstrate and participate as an integral member of an Obstetrics and Gynecology team during this advanced clinical rotation. The overall goal for the Obstetrics and Gynecology Sub-Internship is to give further depth exposure to obstetrics, with the goal of treating the student on this rotation as more of a resident, carrying more patients. Further in depth on differential diagnosis, treatment options, and fetal heart monitor interpretation. This experience is to provide students with advanced clinical skills necessary for their future role as a resident and be exposed to activities that continue their development according to the Core Entrustable Professional Activities (EPAs) for entering Residency related to Obstetrics and Gynecology. No graduate credit. 4 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 8 hours. Prerequisite: Restricted to students enrolled in Phase 2 or Phase 3 of the Carle Illinois College of Medicine curriculum.

CLE 690 Clinical Research credit: 1 to 8 Hours. **(**https://courses.illinois.edu/schedule/terms/CLE/690/**)**
Carle Illinois students are encouraged to participate in research in order to enhance their scientific reasoning, and fulfill the college's mission of developing "Physician Innovators". This course will allow students to engage in a broad spectrum of research experiences. Students will work closely with a research mentor at the University of Illinois at Urbana-Champaign to develop their ideas and generate a list of research outcomes. No graduate credit. 1 to 8 professional hours. Approved for S/U grading only. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Restricted to students enrolled in the Carle Illinois College of Medicine.

CLE 691 Translational Research credit: 1 to 8 Hours. **(**https://courses.illinois.edu/schedule/terms/CLE/691/**)**
Carle Illinois students are encouraged to participate in research in order to enhance their scientific reasoning, and fulfill the college's mission of developing "Physician Innovators". This course will allow students to engage in a broad spectrum of research experiences. The research will be translational in nature. Students will work closely with a research mentor at the University of Illinois at Urbana-Champaign to develop their ideas and generate a list of research outcomes. No graduate credit. 1 to 8 professional hours. Approved for S/U grading only. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Restricted to students enrolled in the Carle Illinois College of Medicine.

CLE 692 Immersion in Clinical Practice - Phase 2 credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/CLE/692/**)**
Provide students and clinicians a chance to meet, in a non-classroom environment, to discuss in topics that impact clinical practice. Examples of these topics include: Domestic Violence, Burnout, Cultural Competence, and Legal Issues in Medicine. Students will be given readings, websites, and videos prior to each session. In addition,students will write brief essays on these topics based on their experience during their clerkships and other electives. Each session, over a dinner, will last approximately two hours. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Students must be in Phase 2 of the curriculum. This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 693 Self-designed Clinical Elective credit: 1 to 16 Hours. (https://courses.illinois.edu/schedule/terms/CLE/693/)
This elective will allow students to develop clinical skills and gain clinical experience under close supervision of clinical faculty through modifying a standing clinical elective to better match their interests or customize a clinical experience. It must be arranged between the student and an individual faculty member or external collaborator, and subsequently approved by the Assistant Dean for Curriculum. No graduate credit. 1 to 16 professional hours. Approved for S/U grading only. May be repeated up to 16 hours in the same semester to a maximum of 32 hours over separate semesters. Prerequisite: This course is restricted to Carle Illinois College of Medicine students.

CLE 702 Anesthesiology credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/702/)
The student will be introduced to various anesthesia techniques, including management of the patient's airway. The student will gain experience in administration of anesthetic drugs, management of critical life functions such as hemodynamics monitoring, blood and fluid therapy and acute pain management (both postoperatively and in Obstetrics). A pre-test will be given to assess student's existing knowledge of anesthesia and other clinical material. This will help the student understand the scope of study during the rotation. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Surgery Clerkship. Restricted to students enrolled in the MD program at Carle Illinois College of Medicine. Students must be in Phase 2 or Phase 3 of the curriculum.

CLE 704 Dermatology credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/704/)
The student is exposed to the private and clinical practice of general dermatology and is instructed in diagnosis and treatment. Emphasis is placed on the care of the patient and the student is expected to function as a member of the office team. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Students must be in Phase 2 or Phase 3 of the curriculum. Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 706 Emergency Medicine credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CLE/706/)
This elective is to provide exposure to the specialty of emergency medicine. The student will gain experience through the process of assessing a patient by history taking, physical exam and diagnostics. By the end of the 4 week elective the student should be able to obtain a complaint based history with review of system, complete a physical exam and start to formulate a differential diagnosis based upon the chief complaint. Stress will be placed on the development of the differential diagnosis. The experience will include learning appropriate laboratory and radiographic testing as well as treatment options for illnesses/disease that most commonly present to the emergency department. The student will commonly get exposure to patients with chest pain, abdominal pain, neurological disorders, undifferentiated malaise, early pregnancy complaints, STI, sepsis and trauma. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: Internal Medicine or Surgery Clerkship. Restricted to students enrolled in Phase 2 or Phase 3 of the Carle Illinois Curriculum.

CLE 713 Palliative Care – Introduction credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/713/)
Healthcare providers must be able to provide compassionate patient-centered care that optimizes well-being and alleviates suffering. Students will gain experiences caring for patients with advanced, chronic, and progressive illness that may be facing high symptom burden, complex treatment decisions, or may be near the end of life. The student will gain experience in the sub-specialty of Palliative Care through seeing patients on the inpatient consult services, outpatient primary palliative care clinic, embedded sub-specialty clinics, nursing home visits, and home visits. Student will participate in interdisciplinary rounds and work in a multidisciplinary team to optimize patient care. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Internal Medicine Clerkship. Restricted to students enrolled in Phase 2 or Phase 3 of the Carle Illinois curriculum.

CLE 714 Ambulatory Cardiology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CLE/714/)
The student will be exposed to the outpatient management of common cardiovascular disorders including coronary artery disease, valvular heart disease, vascular disease, heart failure, and atrial fibrillation as well as to the work-up of common referrals in an ambulatory setting such as chest pain, shortness of breath, edema, palpitations, dizziness, syncope, abnormal ECG, and preoperative risk assessment. The student will also learn basic ECG interpretation and have the opportunity to observe stress testing, nuclear imaging, and echocardiography. The goal is that the student develops his or her history taking and physical exam skills as it relates to the cardiovascular system by integrating the basic sciences with the art of medicine. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: Restricted Carle Illinois students in Phase 2 or Phase 3 of the curriculum.

CLE 715 Adult Intensive Care credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CLE/715/)
The goal of this elective is to expand the student’s knowledge and understanding of intensive care issues affecting hospitalized patients, primarily focusing on appropriate diagnostic and therapeutic interventions and to provide the opportunity for the student to assume a more primary role in the responsibility of directing care of a patient in a team setting. Inherent in this experience is an opportunity for in-depth learning in the areas of professionalism and systems-based practice. The elective will encompass the learning of integrative skills, procedures and how to handle basic clinical scenarios including codes. The student will partner with their attending to develop the diagnostic and therapeutic plans for his or her patients, the student will engage in a formative experience designed to prepare him/her for the future care of patients in critical care. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: Internal Medicine Clerkship, General Surgery Clerkship, or Neurology Clerkship. Restricted to students enrolled in Carle Illinois College of Medicine. Students must be in Phase 2 or Phase 3 of the curriculum.

CLE 716 Hematology/Oncology credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/716/)
The goal of this elective to serve as an introduction to the internal medicine subspecialty of hematology and oncology. In the outpatient setting, the students will be exposed to various hematological and oncological conditions which are managed primarily as an outpatient and exposure to infusion center etc. where chemotherapy is administered. They will be asked to attend tumor board conferences whenever possible to understand the multidisciplinary management of an oncological problem. They will also get some inpatient experience where they will be introduced to management of oncological complications when patients present to the hospital. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Restricted to students enrolled in Phase 2 or 3 of the Carle Illinois College of Medicine curriculum.

CLE 717 Infectious Disease credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/717/)
The goal of this elective is to give students exposure to the field of infectious disease, including differential diagnosis, treatment options, and management strategies. Students should be able to manage 1-2 patients and independently devise plans for new consults. No graduate credit. 2 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 12 hours. Prerequisite: Carle Illinois Internal Medicine core clerkship. Restricted to students enrolled in Phase 2 or Phase 3 of the Carle Illinois College of Medicine.

CLE 730 Clinical Genetics credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/730/)
This elective course introduces medical students to the diverse practice of clinical genetics. The focus is on basic and applied genetics, genetic risk assessment, and genetic counseling as they relate to prevention, diagnosis, treatment, and management of disease. The course will serve as the basis for the healthcare professional to holistically integrate genetic/genomics, epigenetics, and scientific concepts into personalized health care. No graduate credit. 2 professional hours. Approved for S/U grading only. May be repeated for a maximum of 4 hours. Prerequisite: Completion of Internal Medicine Clerkship, Pediatric Clerkship, or Family Medicine Clerkship. Restricted to students enrolled in Phase 2 or Phase 3 of the Carle Illinois College of Medicine curriculum.

CLE 732 Neurosurgery I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/732/)
Designed to provide an introduction into different subspecialties of neurosurgery. It forms the basis for a strong foundation of knowledge of neurological diseases and how they are managed both surgically and non-surgically. Students will be immersed in day-to-day service, functioning essentially as a supervised intern, while working closely with our cohesive group of mid-level providers and attendings in the inpatient, outpatient and operating room settings. The goal of this neurosurgery elective is designed to familiarize students with the essential elements of neurosurgical evaluation and care so that they are able to provide exceptional frontline management. No graduate credit. 2 professional hours. Approved for S/U grading only. Available for honors grades. Prerequisite: Restricted to students enrolled in the MD program at Carle Illinois College of Medicine who are in Phase 2 or 3 of the curriculum.

CLE 733 Neurosurgery II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CLE/733/)
Designed to provide an in-depth experience into different subspecialties of neurosurgery. It builds on the the foundation of knowledge of neurological diseases and how they are managed both surgically and non-surgically from CLE 732. Students will be immersed in day-to-day service, functioning essentially as a supervised intern, while working closely with our cohesive group of mid-level providers and attendings in the inpatient, outpatient and operating room settings. Students will be responsible for composing an oral presentation on a patient encountered during their elective and research assignment assigned by faculty of neurosurgery. No graduate credit. 4 professional hours. Approved for S/U grading only. Available for honors grades. Prerequisite: CLE 732: Neurosurgery I. Restricted to students enrolled in the MD program at Carle Illinois College of Medicine who are in Phase 2 or 3 of the curriculum.

CLE 736 Urogynecology credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/736/)
This elective is for students interested in pursuing the field of obstetrics and gynecology who seek deeper knowledge and responsibility in the field of urogynecology. This will provide students a more complete experience in the clinical practice of urogynecology, surgery, urodynamics and clinical assessment of pelvic floor disorders. No graduate credit. 2 professional hours. Approved for S/U grading only. May be repeated to a maximum of 12 hours.

CLE 737 Gynecologic Oncology credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/737/)
This elective is for students interested in the field of Obstetrics and Gynecology and/or medical surgical oncology. The experience is for students who seek deeper knowledge and responsibility in the field of gynecologic oncology. The rotation will provide the student with a complete exposure to the clinical practice of gynecologic oncology. Students will perform initial workup and evaluation and staging of patients presenting with malignancy. Working with a provider, they will determine candidacy for surgery and assist with surgical procedures. Students will also follow patients during recovery and surveillance. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Successful completion of CLE 660. Restricted to students enrolled in Phase 2 or Phase 3 of the Carle Illinois College of Medicine curriculum.

CLE 738 Reproductive Medicine credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/738/)
This rotation is designed for the Phase 3 medical student who is well versed in Obstetrics and Gynecology and is possibly interested in pursuing a residency in OB/GYN. Activities will revolve around the workup of the infertile couple and the monitoring and management and treatment of reproductive problems. Time will be spent in the office setting, with office ultrasounds, consultations as well as management of ovulation induction cycles and monitoring of ovarian hyperstimulation for IVF. Observation of IVF procedures and assisting in other surgeries would be expected. Additional time in the andrology and IVF labs observing may be available. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Successful completion of Phase 2 clerkships. Restricted to students enrolled in Phase 2 or 3 of the Carle Illinois College of Medicine.

CLE 739 Advanced Obstetrics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CLE/739/)
This rotation is designed for the Phase 3 medical student who is well versed in Obstetrics and Gynecology and is possibly interested in pursuing a residency in OB/GYN. Activities will revolve around the work up of pregnancy and pregnancy-related complications. Time will be spent on Labor and Delivery, Antepartum, the Outpatient Maternal Fetal Medicine clinic, and the Outpatient Midwifery Clinic. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: Successful completion of all Phase 2 clerkships. Restricted to students enrolled in Phase 3 of the Carle Illinois College of Medicine curriculum.

CLE 740 Introduction to Ophthalmology credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/740/)
This 2-week course will serve as an introduction to Ophthalmology. During this rotation, students will gain a better understanding of the structure and function of the human eye, including an introduction to tools and testing for proper diagnosis and treatments. Students will also start learning about various ocular diseases including co-management of ocular and systemic diseases. This will also include understanding when and why to refer to other specialties. This course will be split between Optometry 25% and Ophthalmology 75%. This elective will culminate with a brief oral presentation to the preceptor on one idea to improve the field or one case that stuck with them. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Family Medicine Clerkship. Restricted to students enrolled in Phase 3 of the Carle Illinois College of Medicine.

CLE 741 Advanced Ophthalmology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CLE/741/)
This 4-week course give students a deep dive into the field of Ophthalmology. This includes a deeper understanding of the structure and function of the human eye including both common and uncommon disease states. Students will be given instruction on how to use tools for diagnosing common diseases. After diagnosis, students will create and propose a treatment plan, including possible referrals, to their preceptor. This course will be split between optometry 25 % and ophthalmology 75%. This elective differs from the introduction to Ophthalmology as it provides more autonomy in examining patients and in assisting with procedures such as cataract retain or lid surgery. In addition, this course will culminate in a brief (15 minute) research presentation on an area of interest in Ophthalmology or a current case. No graduate credit. 4 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 8 hours.

CLE 742 Plastic and Reconstructive Surgery credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CLE/742/)
Each four-week rotation will consist of familiarization with general plastic and reconstructive surgery. Emphasis will depend upon the current office and surgical case load. The student will assist in all facets of the practice and have an opportunity to view a wide range of cosmetic plastic surgery. The clinical and surgical experience will provide a solid foundation for innovative ideas in plastic and reconstructive surgery. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: Surgery Clerkship. Restricted to students in Phase 2 or Phase 3 of the Carle Illinois College of Medicine curriculum.

CLE 743 Orthopedic Trauma credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CLE/743/)
An advanced clinical elective focusing on the management of patients sustaining major orthopedic injuries and their sequelae. Students will be involved in all aspects of the continuum of care, including initial emergency management, non-operative and surgical treatment of injuries, inpatient care, and the outpatient management of patients sustaining fractures and dislocations of the extremities and pelvis. Students will work with faculty daily and are expected to have direct participation in all activities. The application of basic science foundations in anatomy, cell biology/systems physiology, and fundamental biomechanical principles will be emphasized as they relate to the treatment of fractures and optimizing fracture healing. Students may, with approval of faculty director, create a proposed innovated solution to an orthopedic trauma situation. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: Surgery Core Clerkship. Restricted to students enrolled in Phase 2 or 3 of the Carle Illinois College of Medicine.

CLE 744 Oral & Maxillofacial Surgery I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/744/)
Provides exposure to the field of Oral & Maxillofacial surgery. Students will gain experience in the full scope of this surgical specialty including traditional outpatient ambulatory surgery, craniomaxillofacial trauma, orthognathic/reconstructive surgery, cleft lip and palate surgery, and maxillofacial oncology. The student will gain experience in head and neck surgical anatomy, imaging, and principles of management of these subspecialty areas. Additionally, students will gain exposure in the application of technology to these clinical problems such as the role virtual surgical planning. No graduate credit. 2 professional hours. Approved for S/U grading only. Available for honors grading. Prerequisite: CLE 670: Surgery Clerkship. Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 745 Oral & Maxillofacial Surgery II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CLE/745/)
Provides exposure to the field of Oral & Maxillofacial surgery. Students will gain experience in the full scope of this surgical specialty including traditional outpatient ambulatory surgery, craniomaxillofacial trauma, orthognathic/reconstructive surgery, cleft lip and palate surgery, and maxillofacial oncology. The student will gain experience in head and neck surgical anatomy, imaging, and principles of management of these subspecialty areas. This advanced course will allow for increased involvement in the day to day management of patients in the clinic, emergency room, in-patient setting, and the operating room. No graduate credit. 4 professional hours. Approved for S/U grading only. Available for honors grading. Prerequisite: CLE 670: Surgery Clerkship. Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 746 Otolaryngology - ENT credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/746/)
This elective is designed for the student seriously considering a career in otolaryngology or seeking a deeper knowledge of ENT. Emphasis on diagnosis and treatment of common head and neck disorders. Students will experience ENT patients in ambulatory, surgery, and in-patient settings. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Family Med and OR Orientation. Restricted to students enrolled in the MD program at Carle Illinois College of Medicine in Phase 2 or Phase 3 of the curriculum.

CLE 748 Surgical Pathophysiology credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CLE/748/**)**
Underlying modern diagnosis and treatment of complex surgical disease is a fascinating and complex pathophysiology. In the context of current practitioner training, it has become challenging to address these fundamental concepts in detail that is sufficient to initiate long-term interest in the scientific underpinnings of surgical science. This rotation allows student a 'deep dive' into the underlying physiology and medical history of modern diagnosis and treatment. Students will meet surgical patients, whose disease will initiate investigations of the historical and basic science underpinnings of modern surgical care. Potential areas of investigation may include classic medical physiology such as the treatment of hyperkalemia in a surgical patient with particular attention to the associated cellular processes and electrophysiology, the mechanisms of non-cytotoxic systemic cancer therapy such as immunotherapy and gene or protein directed therapy or the physiology of systemic inflammatory response and the (largely failed) attempts to intervene in that pathologic process on the cellular level. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: Students must be in Phase 2 or Phase 3 of the curriculum. This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 750 Developmental Pediatrics credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/CLE/750/**)**
This clinical rotation is designed to provide a student with a comprehensive preview of the commonplace developmental and behavioral problems experienced by up to 15% of children in our community. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Restricted to students in Phase 2 or Phase 3 of the Carle Illinois College of Medicine curriculum.

CLE 751 Neonatal Intensive Care credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/CLE/751/**)**
The student enrolled in this elective will be exposed to caring for neonates in the Carle Neonatal Intensive Care Unit (NICU). Students will participate and present in daily rounds, attend deliveries, and assist with procedures. Students will learn basic principles of neonatal care, as well as the diagnosis and management of common neonatal pathology. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Restricted to students in Phase 2 or Phase 3 of the Carle Illinois College of Medicine curriculum.

CLE 752 Pediatric Pulmonology & Sleep Medicine credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CLE/752/**)**
The goals of the Pediatric Pulmonology & Pediatric Sleep Medicine elective rotation are to delve into common pediatric pulmonary and sleep diagnoses (asthma, cystic fibrosis, insomnia, snoring) and become familiar with less common conditions. Students will learn to further develop the differential diagnosis and use it to generate a plan of care. In addition, pharmacology, physiology, radiographic imaging, pulmonary function testing, and polysomnography will be discussed as they relate to the various pulmonary and sleep diagnoses. No graduate credit. 4 professional hours. Approved for S/U grading only. May be repeated in separate terms up to a maximum 8 hours. Prerequisite: Restricted to students enrolled in Phase 2 or 3 or the Carle Illinois Curriculum.

CLE 764 Physical Medicine and Rehabilitation credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/CLE/764/**)**
Provide students with an introduction to in-patient physical medicine and rehabilitation. Students will consult with patients in the hospital for possible admission, admit the patient, perform a history and physical, and round daily with attending physicians. Student will learn about different types of care provided through the physical medicine and rehabilitation service including: Rehabilitation, electrodiagnosis, general outpatient and musculoskeletal rehabilitation, and non-healing wound care rehab. Students will have an opportunity to work with a physician, to determine the goals and objectives of patient rehabilitation. Students will have the opportunity to observe and interact with other rehabilitation team members including physical and occupational therapists, speech-language pathologists, rehabilitation social work, case management, nutrition, and psychology. Outpatients are seen for musculoskeletal problems. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Family Medicine. This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 771 Addiction Medicine credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/CLE/771/**)**
This unique elective offers students direct access to the rapidly developing field of addiction medicine. Students will take part in direct patient care at an outpatient addiction specialty clinic with a multidisciplinary team of providers. They will also have the opportunity to attend a drug court in Champaign County and participate in a needle exchange program through the Champaign County Public Health Department. On satisfactory completion, students will have gained a better understanding of the evidence-based treatment options of individuals living with substance use disorders. They will also have firsthand experience combating one of the greatest challenges facing modern medicine - the opioid epidemic. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 773 Radiation Oncology credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/CLE/773/**)**
Radiotherapy is an integral part modern multidisciplinary cancer care. This clinical elective is designed to introduce students to the field of Radiation Oncology and use of radiotherapy. We will provide direct experience with evaluation and management of patients with malignant disease, as well as occasional benign conditions regarding radiotherapy. Students will learn epidemiology, pathophysiology, and staging of cancer patients, and then utilize evidence-based approaches for their treatment. This will include opportunities to learn basic information about radiobiology and physics to inform their understanding of radiotherapy planning and treatment delivery. Students will augment direct patient care interactions with attendance of multidisciplinary tumor conferences with other oncologic specialties, as well as departmental quality assurance rounds. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Medicine Core Clerkship. Restricted to students enrolled in Phase 2 or 3 of Carle Illinois College of Medicine.

CLE 774 Simulated Clinical Ultrasound credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/774/)
The Simulated Ultrasound elective enables students to develop skills related to clinical ultrasound. Utilizing a SonoSim and the associated online modules, students will have the opportunity to enhance their understanding of this imaging tool, and prepare for clinical environments that could benefit from point-of-care ultrasound. Students will learn ultrasound principles and acquisition skills through an online self-paced module. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Restricted to students enrolled in the Carle Illinois College of Medicine.

CLE 775 Point of Care Ultrasound credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CLE/775/)
The Clinical Ultrasound elective enables students to explore specialties where point-of-care ultrasound can be utilized. Students will learn ultrasound principles and acquisition skills through an online self-paced module. Students will further learn through observing sonographers, providing students with opportunity to refine their skills through observation and questions. Students will work with attending providers (up to four) in different inpatient specialties to assess and care for patients, identifying cases where ultrasound imaging may be useful. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: Restricted to students in Phase 2 or Phase 3 of the Carle Illinois curriculum.

CLE 776 Diagnostic Radiology and Non-Cardiac Nuclear Medicine credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/776/)
Students will observe both acquisition and interpretation of diagnostic exams.These will include, but are not limited to, plain film, fluoroscopy, computerized axial tomography and magnetic resonance imaging. In addition, the student will observe both ultrasonography and nuclear medicine procedures including ultrasound of thyroid and abdominal structures. Nuclear Medicine interpretations will include bone scans, thyroid scans, PET/CT. Students will review films correlated to their clinical experiences and future residency plans, read assigned material dealing with basic diagnostic and fundamental radiology, and attend conferences related to the imaging service. Students will observe invasive diagnostic procedures occurring in the Imaging Department. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Student must be in Phase 2 or Phase 3 of the curriculum. This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 777 Vascular and Interventional Radiology credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/777/)
Students will observe and work with the Vascular and Interventional radiology team at Carle foundation Hospital. Students will observe and participate in clinical management of patient with a disease and pathophysiology involving the entire human body and all organ systems. Student will learn basic imaging principles and how they are applied to the management and treatment of disease with special attention to minimally invasive, imaging guided techniques. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Students must be in Phase 2 or Phase 3 of the curriculum. This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 778 Imaging in Critical Care credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/778/)
This elective focuses on remote learning of imaging in the ICU. The primary focus will be interpretation of chest x-ray and chest CT. This starting point will allow students to pursue individual learning goals regarding critical care such as infectious disease, pulmonology, cardiology, and physics. Students will be given a chance to “follow” the patients through their time in the ICU by viewing their images and all other records. This will allow students to become facile with the electronic medical record system. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Family Medicine Clerkship. Restricted to students in Phase 2 or Phase 3 of the Carle Illinois College of Medicine curriculum.

CLE 779 Bariatric Surgery credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CLE/779/)
The goal of this rotation is to recognize the importance of obesity as a disease and the strong impact it has in patients’health, also to describe the management of obesity and understand the pathophysiology of obesity. It will mainly focus on the pre-op assessment of bariatric patients by a multidisciplinary team, surgical procedures to treat obesity as well as the postoperative care of bariatric patients. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: Students must be in Phase 2 or Phase 3 of the curriculum. This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 780 Hand Surgery credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/780/)
The student participating in this elective will gain initial exposure to Orthopedic Hand Surgery both in the clinic setting and in the operating room. The student will work 1:1 with the faculty in the operating room and clinic in the care of Hand Surgery patients. This elective can be tailored to the individual student’s needs, interest, and educational level. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Surgery Clerkship. Student must be in Phase 2 or Phase 3 of the curriculum. This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 781 Vascular Surgery credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CLE/781/)
This rotation seeks to expose the medical student to the specifics of evaluation and diagnosis of surgical vascular disease, and surgical interventions for vascular disease. Students will be involved and evaluate patients in both the inpatient and outpatient settings. Emphasis will be placed on history, physical and diagnostic results, a rich discussion of noninvasive vascular studies including venous duplex, arterial doppler, and arterial duplex, as well as advanced imaging results. The student will participate in the operating room and scrub into cases to assist with the surgical team. This rotation is designed to expose and educate medical students about the breath of vascular surgery interventions and develop an understanding of a global assessment of a patient with vascular disease. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: General Surgery Clerkship. Students must be in Phase 2 or Phase 3 of the curriculum. This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 782 Rural Surgery credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CLE/782/)
The rotation in Rural surgery is designed to provide the student with exposure to the practice of general surgery in a rural setting at a smaller community hospital. The practice includes the evaluation and management of common general surgical conditions as well as significant exposure to flexible endoscopy – both EGD and colonoscopy. The students will be responsible for seeing new consults, writing a history and physical note, and presenting them to the preceptor. They will round on our patients daily. They will assist in all procedures. Additionally, the student will be exposed to the unique environment of a small community hospital, including the decision-making process regarding types of procedures which can be effectively completed versus those which require transfer. During this rotation, student will work one-on-one with the faculty preceptor and be provided with graded responsibility. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: Surgery Clerkship. Restricted to students in Phase 2 or Phase 3 in the Carle Illinois curriculum.

CLE 783 Colon and Rectal Surgery credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CLE/783/)
This is an advanced surgical elective focused on surgical disorders of the lower gastrointestinal tract. Students will become part of our team as we care for inpatients and outpatients with colon, rectal, and anal disorders. The student will have the opportunity to evaluate patients in the hospital, office, endoscopy suite, operating theater, and participate in several multidisciplinary conferences. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: Surgery Clerkship. Restricted to students in Phase 2 or Phase 3 in the Carle Illinois curriculum.

CLE 784 Pediatric Surgery credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/784/)
Pediatric surgeons care for children (birth to age 18) with surgical concerns. These can be either congenital problems (birth defects such as anorectal malformations, Hirschprungs disease, intestinal atresias, etc) or acquired conditions that present during childhood (pyloric stenosis, hernias, appendicitis). Care is provided in both the inpatient and outpatient settings and involves both planned and emergent procedures. The student will participate in the operating room, scrubbing into cases to assist with the surgical team. Students will be active participants in both inpatient and outpatient care and will also have 1 on 1 lectures to learn about surgical care and common pediatric surgical conditions. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Surgery Clerkship. Restricted to Carle Illinois College of Medicine students. Students must be in Phase 2 or Phase 3 of the curriculum.

CLE 786 Introduction to Urology credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/786/)
Participation in the outpatient and inpatient management of urological problems. These include urological neoplasms (prostate, bladder, renal, and testicular), urinary calculi, and management of urinary incontinence. The student will actively examine patients in the office and assist with surgery. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Students must be in Phase 2 or Phase 3 of the curriculum. This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 793 Quality Improvement & Patient Safety credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/793/)
In this elective, students will gain experience with the various aspects of health care quality and patient safety. This could include participation in continuous quality improvement plans (CQI), literature reviews to inform hospital practice, policy and protocol development, and collaborating with health care administrators to respond to community health issues. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Restricted to students enrolled in the Carle Illinois College of Medicine.

CLE 794 Values in the Physician-Patient Relationship credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CLE/794/)
Constant changes in healthcare settings, coupled with rapid advancements in technology, lead to increasingly complicated ethical dilemmas: Who decides what—patients, doctors, or family members—and on what basis? Should patients' autonomy always be respected, or can physicians act paternalistically towards their patients? What are the ends and norms of the medical profession and how are they determined? Can physicians deviate from these ends and norms and refuse to provide treatment, for example, for conscientious reasons? In this course, we will attempt to answer these (and other) pressing normative questions. In doing so, we will attain an understanding of the complicated network of values at play in the physician-patient relationship. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Restricted to students enrolled in Phase 2 or 3 of the Carle Illinois College of Medicine.

CLE 799 Advanced Clinical Electives credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CLE/799/)
Phase 2 and Phase 3 students are eligible to participate in short-term elective opportunities that can enhance their medical education. These electives include clinical opportunities, away rotations, away electives, clinical rotations, and visiting opportunities. Each elective is offered by participating host institutions in the U.S. and around the world. Elective opportunities are available in teaching hospitals, community clinics, and urban or rural sites and are open to clinical or final-year students, as determined by the host institution. No graduate credit. 0 to 4 professional hours. Approved for S/U grading only. May be repeated up to 20 hours in the same semester if topics vary, and separate semesters to a maximum of 32 hours. Prerequisite: Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CIC - COMMITTEE ON INST COOPERATION

CIC Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/CIC/)

Courses

CIC 390 CIC Intercampus Reg credit: 0 to 18 Hours. **(**https://courses.illinois.edu/schedule/terms/CIC/390/**)**

CIC 500 CIC Traveling Scholar credit: 0 to 20 Hours. **(**https://courses.illinois.edu/schedule/terms/CIC/500/**)**
For students participating in the Traveling Scholar Program. 0 to 20 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated.

CMN - COMMUNICATION

CMN Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/CMN/)

Courses

CMN 101 Public Speaking credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CMN/101/)
Preparation and presentation of short informative and persuasive speeches; emphasis on the selection and organization of material, methods of securing interest and attention, and the elements of delivery. Credit is not given for both CMN 101 and either CMN 111 or CMN 112.

CMN 102 Introduction to Communication credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CMN/102/)
Provides students with an overview of the major areas of study across the diverse field of Communication. Attention is given to the study of argumentation, persuasion, mediated communication effects, rhetoric, face-to-face communication with family, friends, and romantic partners, social support, nonverbal and verbal communication, group communication, health communication, organizational communication, race and communication, sports and communication, and common research methods in the field.
This course satisfies the General Education Criteria for:
Social Beh Sci - Beh Sci

CMN 111 Oral & Written Comm I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CMN/111/)
Principles and practice in communication; stress on fundamentals of critical thinking in writing and speaking. The campus Composition I general education requirement is fulfilled by this course in conjunction with CMN 112. Credit is not given for both CMN 111 + CMN 112, and other courses that fulfill the Composition I requirement (such as RHET 101+RHET 102, RHET 105, ESL 115); Credit is also not given for both CMN 111+ CMN 112, and CMN 101. CMN 111+ CMN 112 cannot be taken by students who have completed the campus Composition I general education requirement.
This course satisfies the General Education Criteria for:
Composition I

CMN 112 Oral & Written Comm II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CMN/112/)
Continuation of Oral & Written Comm I; stress on deliberation and fundamentals of communication and public argument through speaking and writing. The campus Composition I general education requirement is fulfilled by this course in conjunction with CMN 111. Credit is not given for both CMN 111+CMN 112 and other courses that fulfill the Composition I requirement (such as RHET 101+ RHET 102; RHET 105; ESL 115); Credit is also not given for both CMN 111+ CMN 112 and CMN 101. CMN 111+ CMN 112 may not be taken by students who have completed the campus Composition I general education requirement.
Prerequisite: CMN 111.
This course satisfies the General Education Criteria for:
Composition I

CMN 199 Undergraduate Open Seminar credit: 0 to 5 Hours. (https://courses.illinois.edu/schedule/terms/CMN/199/)
May be repeated to a maximum of 6 hours.

CMN 204 Internship in Teaching Comm credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CMN/204/)
Supervised experience in assisting in the teaching of an undergraduate course in communication; practice in preparing and presenting brief lectures, conducting activities within class, and assisting students outside of class. Prerequisite: Junior standing, cumulative 3.0 grade-point average, 3.5 grade-point average in Communication coursework, recommendation from an instructor, and approval by application.

CMN 210 Public Comm in Everyday Life credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CMN/210/)
Introduces concepts useful for the critical analysis of public communication in everyday life. Drawing on communication theory and practice, especially theories of rhetoric, the course investigates techniques of persuasion, offers tools for critical analysis of public discourse, and considers the political and ethical implications of various forms of public communication.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

CMN 211 Business and Professional Communication credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CMN/211/)
Focus on relevant theory and research on communication strategies and skills vital to diverse business and professional contexts. Topics include personal branding and self-marketing; job interviewing basics; business ethics; business writing; networking; professional etiquette and behaviors; and business presentations. Activities include presentations, written assignments, and practice interviews. Prerequisite: CMN 101.

CMN 212 Intro to Organizational Comm credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CMN/212/)
Considers major theories, research questions, and approaches to organizational communication.

CMN 213 Small Group Communication credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CMN/213/)
Considers major theories, processes, and practical measures contributing to effective communication in small group and team contexts.

CMN 214 Organizational Communication & Diversity credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CMN/214/)
A focus on the knowledge, skills, and abilities needed for students to understand and address various components of diversity in organizations. This class is designed to give students an environment to discuss diverse perspectives related to organizations. Thus, this course will explore such areas as power, gender, race, social class, sexuality, ability and age. The relationship between these areas to organizational communication concepts such as, assimilation & socialization, power, culture, employee conflict and relationships will be explored. Students do not need to have any prior knowledge of organizational communication in order to benefit from this course. Students will draw from their personal and familial organizational socialization experiences to learn about the role of culture in organizations.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

CMN 215 Interviewing: The Art and Science of Effective Questioning credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CMN/215/)
Questioning is fundamental to human communication. The process for questioning in a structured, purposeful way is called interviewing, which is both an art and a social science. Students will learn theoretical principles related to major types of interviews and apply this knowledge through practice as both interviewer and interviewee, leading to competency in employment and informational interviews. Additionally, they will learn to be a critical observer of interviews taking place in the public sphere. Credit is not given for both CMN 115 and CMN 215. Prerequisite: CMN 101 or CMN 111 and CMN 112.

CMN 220 Communicating Public Policy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CMN/220/)
Study of the nature of policy-oriented communication; analysis and formulation of positions on issues of professional, personal, or public interest; design and presentation of public policy messages addressed to varying tasks and audiences, with special emphasis on advanced writing skills. Prerequisite: Completion of campus Composition I general education requirement.
This course satisfies the General Education Criteria for:
Advanced Composition

CMN 230 Intro to Interpersonal Comm credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CMN/230/)
Study of communication theory and its application to interpersonal relationships; extensive discussion of problems of conflict and misunderstanding in personal affairs to facilitate the development of knowledge, insights, and skills in the processes of face-to-face interaction.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

CMN 231 Communication and Conflict credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CMN/231/)
Examines how people experience and manage conflict in both private and public settings. Units focus on conflict in interpersonal, small group, and organizational contexts.
This course satisfies the General Education Criteria for:
Social Beh Sci - Beh Sci

CMN 232 Intro to Intercultural Comm credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CMN/232/)
Introduction to the study of intercultural communication in a variety of contexts, including domestic and international; examines theory and research to explain what happens when people from different cultural and linguistic backgrounds interact. Requires students to think critically about the ways in which "taken-for-granted" ways of thinking, acting, and interacting are culturally specific.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West
Social Beh Sci - Soc Sci

CMN 250 Social Movement Communication credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CMN/250/)
Examines the communication strategies of social movements, concentrating on the types of messages that social movements create (including rhetorical messaging, social protest, grassroots organizing, fundraising, and media outreach). Focuses on the communication of major 19th, 20th, and 21st century social protest movements, including movements for civil rights, environmentalism, women's rights, and others. Emphasizes the functions of communication for identity formation, promulgation, and social change. Provides knowledge and tools for the analysis and production of messages.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

CMN 260 Intro to Health Communication credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CMN/260/)
Introduces theory and research on communication in health and illness contexts. Explores how messages from media, interpersonal, and organizational sources affect health beliefs and behaviors.
This course satisfies the General Education Criteria for:
Social Beh Sci - Beh Sci
Cultural Studies - Western

CMN 275 Media, Money and Power credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CMN/275/)
Describes the political economy of the media in the U.S. Acquaints students with a core understanding of how the media system operates, and with what effects, in a capitalist society. Examines the role of advertising, public relations, corporate concentration, and government regulation upon news reporting, entertainment, culture, and participatory democracy. Also examines issues related to the Internet, globalization, and public broadcasting.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

CMN 277 Introduction to Mediated Communication credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CMN/277/)
Survey of the history, structure, forms, and social effects of the American mass media, with significant focus on study of how media shape perceptions of people of color and other stigmatized groups.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - US Minority

CMN 280 Comm Technology & Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CMN/280/)
Introduction to theory and research on both old and new communication technologies; focus will be on how these technological systems develop and are used, and what implications of these systems have for culture and society.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

CMN 304 Communication Internship credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/CMN/304/)
Directed internship experience for Communication majors. Students must have consent of the Internship Coordinator. May be repeated in separate terms to a maximum of 6 hours.

CMN 310 The Rhetorical Tradition credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CMN/310/)
Survey of major trends in the development of rhetorical theory from Homer to the present.

CMN 312 Communicating for Innovation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CMN/312/)
This course challenges the notion that good ideas are produced by "lone geniuses." Surveying theories from organizational communication, we will explore the important role communication plays in fostering innovation and creativity in the workplace. Some topics discussed include: socialization, group decision-making, information sharing, positive workplace environments, the role of communication technologies, and social networks. Students will analyze real-world cases and participate in class activities designed to demonstrate innovation processes in action.

CMN 320 Comm Controversy Public Policy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CMN/320/)
Examines how public policy shapes American life, by providing an advanced analysis of the controversies, discourses and effects of public policy with a focus on sustainability issues. Explores the American landscape, energy sources, environment, food systems, political process, and government lobbying rules and reform. Provides in-depth analysis of the definitions and histories of public policy and the tensions between public and private spheres that shape it. Develops a fundamental understanding of public versus private spheres; analyzes and critiques how public policy shapes American historical and cultural landscapes; increases skillfulness in oral and written analysis of controversies, institutions, political and economic power brokers, and social norms. Prerequisite: CMN 220 or consent of instructor.

CMN 321 Strategies of Persuasion credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CMN/321/)
Studies of powerful instances of public persuasion; students examine key means of public influence.

CMN 323 Argumentation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CMN/323/)
Study of the theory of argument, e.g., evidence, reasoning, and construction of briefs; practice in formal and informal forms of debate and public discourse on current public questions. Prerequisite: CMN 101.

CMN 324 Rhetorical Performance Styles credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CMN/324/)
Examines the role of performance in rhetoric from the earliest ages of great oratory to the present day. Students will learn the terminology and mechanics of physical and vocal delivery, explore various time periods considered to have rich traditions of rhetorical performance, and analyze the techniques and rhetorical styles of different periods in the history of rhetoric. Students will create their own performances using the rhetorical techniques of practices ranging from ancient Greek oratory to TED Talks. Credit is not given for CMN 324 if credit for CMN 396 has been given.

CMN 325 Politics and the Media credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CMN/325/)
Same as MACS 322 and PS 312. See PS 312.

CMN 326 Mass Media and the Audience credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CMN/326/)
Presents information on how to conceptualize audiences, mass media use, and reception of media messages. Also examines the character of the audience experience, uses and gratifications of mass media, social cognition, and studies of audiences as interpretive communities.

CMN 330 War Rhetoric in Theatre and Film credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CMN/330/)
Uses theatre and film as a framework for examining why war rhetoric plays such a significant part in Western culture. Students will analyze texts from stage and screen to explore the question of how war rhetoric shapes our perceptions about the world and about ourselves. Focuses on specific eras of Western theatre and film to investigate how pro-war and anti-war messages are negotiated in these media in ways that reflect cultural attitudes toward war. Credit is not given for CMN 330 if credit for CMN 396: War Rhetoric in Theatre and Film has been given.

CMN 336 Family Communication credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CMN/336/)
Examines the nature and functions of communication in various family configurations (e.g. nuclear families, single-parent families, stepfamilies); discusses both problematic interaction patterns and links between family interaction and strong families.

CMN 338 Relationships and Technologies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CMN/338/)
Examines the uses, functions, and effects of communication technologies in personal relationships (e.g., friendships, dating relationships, families). Emphasis on contemporary and emerging modes of communication with some consideration of historical and enduring modes of interaction.

CMN 340 Visual Politics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CMN/340/)
Explores the role of visual images in U.S. culture, paying special attention to the ways that images function persuasively as political communication. Provides tools for analyzing historical and contemporary images and artifacts, such as photographs, prints, paintings, advertisements, and memorials. Emphasis on how visual images are used for remembering and memorializing; confronting and resisting; consuming and commodifying; governing and authorizing; and visualizing and informing.

CMN 345 Visual Media Effects credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CMN/345/)
Provides an introduction to visual media effects in communication, and is intended for students with little or no experience with visual aspects of communication. Focuses on social scientific approaches to understanding visual media effects and theories of visual communication.

CMN 354 Freedom of Speech credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CMN/354/)
Examination of the nature and variety of responses to value questions concerning communication; includes a survey of the evolution of and current controversies in freedom of speech.

CMN 357 Intro to Conversation Analysis credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CMN/357/)
Same as LING 357. See LING 357.

CMN 361 Storytelling as Oral Communication credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CMN/361/)
Explores the role of traditional oral narrative in contemporary social life. Examines some major genres: folktales, family stories, personal growth narratives, professional autobiographical presentations, TED talks. Each of these genres will be examined in terms of content, context in a larger community of discourse, and performance demands. In addition, students will create and perform their own stories representing these genres.

CMN 368 Sexual Communication credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CMN/368/)
Describes sex as a fundamental activity in the development and maintenance of human relationships. Communication about sex happens in a variety of interpersonal, group, organizational, and mediated contexts. Explores the many ways in which sexual communication intersects our personal, relational, cultural, and institutional norms and values. Topics will include social norms about sexual communication, sexual harassment, family communication about sex, sexual health education, doctor-patient communication about sex, and sex in the media and in advertising. Theory and research on communication processes will be used to elaborate how talk about sex can achieve multiple goals.

CMN 370 Political Economy of Communication credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CMN/370/)
Addresses significant contemporary social issues from the perspective of the political economy of communication. Issues may include, but are not limited to, the influence of money on political communication, the role of the media in American attitudes toward racial inequalities, or the politics of science reporting. This course will feature a number of recent books on social problems in the United States that have a communication twist. Class-time will be focused on discussing the books. Prerequisite: Junior or senior standing required.

CMN 375 Popular Media and Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CMN/375/)
Using the critical lens of theories on race, class, gender, and sexuality, this class will investigate the complicated relations among popular media and culture, including how our everyday life and attitudes are thought to be shaped by the media, and how cultural systems can be said to inform the media. By exploring a wide range of media (e.g., film, television, music, the internet, and computer games), students will investigate the national, political, and personal dimensions of popular media and the varied ways in which media construct, reflect and intersect with specific cultural systems, identities, and classifications. May be repeated in separate terms to a maximum of 6 hours.

CMN 377 Propaganda and Modern Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CMN/377/)
Traces the social, economic, and political underpinnings of propaganda and public relations. Examines the rise of corporate propaganda in the early 20th century and explores how these strategies were adapted by a wide range of social and political actors. The second part of the course discusses the above issues from contemporary perspectives. The role of WWI, WWII, and the more recent Iraqi war, in solidifying the role of government and commercial propaganda in society and the frequently blurry distinctions between government propaganda and commercial public relations will also be discussed. The relationship between propaganda, PR and the mass media will constitute a constant site of inquiry. This course focuses on theory, especially critical theory.

CMN 390 Individual Study credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/CMN/390/)
Individual investigation of special problems. May be repeated to a maximum of 6 hours. Prerequisite: Twelve hours of communication coursework; a grade-point average of 3.25; and consent of head of department.

CMN 396 Special Topics in Comm credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CMN/396/)
Special topics in communication not treated in regularly scheduled courses. See Class Schedule for current topics. May be repeated as topics vary.

CMN 410 Workplace Comm Technology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CMN/410/)
Focuses on how communication technologies are designed, implemented, adopted, and used within and across organizations. Reviews a broad array of theories used to conceptualize technology in the workplace. Emphasis on how theory may be used to understand applications such as knowledge management, telecommuting, distributed work, and virtual organizations. Further focus on analyzing real-world cases to develop skills necessary for working in contemporary organizations. 3 undergraduate hours. 4 graduate hours.

CMN 411 Organizational Comm Assessment credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CMN/411/)
Organizational communication theory applied to the assessment of communication practices in organizations; systematic procedures for diagnosing communication problems and facilitating effective communication in organizations. Extensive use of case studies. 3 undergraduate hours. 4 graduate hours. Prerequisite: CMN 212.

CMN 412 Adv Organizational Comm credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CMN/412/)
Advanced study of theory and research in organizational communication; considers such topics as communication networks, superior-subordinate communications, task-related and social information processing, and communicating with the external environment. 3 undergraduate hours. 4 graduate hours. Prerequisite: CMN 212.

CMN 413 Adv Small Group Communication credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CMN/413/)
Advanced study of theory, research, techniques, and training methods in interviewing and group discussion; emphasis on empirical research findings concerning communication processes in face-to-face groups. 3 undergraduate hours. 4 graduate hours.

CMN 415 Classical Rhetorics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CMN/415/)
Survey of the contributions to the theory and practice of rhetoric from Homer to the Renaissance. Same as CLCV 415 and MDVL 415. 3 undergraduate hours. 4 graduate hours.

CMN 416 Early Modern Rhetorics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CMN/416/)
Significant developments in European rhetorical theory from 1500 to the 20th Century. 3 undergraduate hours. 4 graduate hours.

CMN 417 Contemporary Rhetorics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CMN/417/)
Major contributors to rhetorical theory from I.A. Richards to the present. 3 undergraduate hours. 4 graduate hours.

CMN 421 Persuasion Theory & Research credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CMN/421/)
Survey of major theories of persuasion, research on factors influencing persuasive effectiveness, and application to problems of persuasive discourse. 3 undergraduate hours. 4 graduate hours.

CMN 423 Rhetorical Criticism credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CMN/423/)
Methods of interpreting and judging persuasive discourse with emphasis on political speaking and writing; extensive practice in criticism of rhetorical texts. 3 undergraduate hours. 4 graduate hours.

CMN 424 Campaigning to Win credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CMN/424/)
Using a case study approach to illustrate how campaigns attempt to persuade and mobilize voters, students learn how to plan and manage effective political campaigns. Same as PS 411. 3 undergraduate hours. 4 graduate hours.

CMN 427 Children and the Media credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CMN/427/)
Examines the role of the mass media in the lives of children. Focuses on how developmental differences influence how children process and respond to the media. Topics include media violence, media advertising, stereotypes in the media, and educational content. 3 undergraduate hours. 4 graduate hours.

CMN 429 Race and the Mass Media credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CMN/429/)
Presents an overview of racial stereotypes in the mass media and the effects of stereotypical imagery on viewers. Discussion of the structural and social origins of stereotypic media from multiple perspectives focusing on published scholarship that systematically assesses the content and effects of racial representations from a social scientific perspective. Intersections between race, ethnicity, class, and gender also will be explored. 3 undergraduate hours. 4 graduate hours.

CMN 432 Gender Communication credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CMN/432/)
Study of interactive relationships between gender and communication in contemporary American society. Examines how gender identity and expression are influenced by race, ethnicity, culture, age, ability, class, faith and other social characteristics. Explores how communication in social contexts creates and perpetuates gender roles. Same as GWS 432. 3 undergraduate hours. 4 graduate hours.

CMN 435 Adv Interpersonal Comm credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CMN/435/)
Study of the major processes involved in an individual's adjustment to the communication situations of everyday life; emphasis on the development of interpersonal competency and orientations, social perception, interpersonal sentiment and hostility, trust, and the social context as factors influencing the understanding and evaluation of interpersonal messages. 3 undergraduate hours. 4 graduate hours. Prerequisite: CMN 230 or consent of instructor.

CMN 437 Comm in Personal Relationships credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CMN/437/)
Examines theories of communication within personal relationships, including family, friendship, and romantic associations. Specific topics include relationship development, conflict, power, self-disclosure, and relational uncertainty. 3 undergraduate hours. 4 graduate hours.

CMN 450 Topics in Public Communication credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CMN/450/)
Explores topics in public communication not treated in regularly scheduled courses, with special attention to the ways that public communication unfolds in concrete rhetorical situations and moments in time; see Class Schedule for current topics. 3 undergraduate hours. 4 graduate hours. May be repeated as topics vary to a maximum of 12 undergraduate hours or 16 graduate hours.

CMN 462 Interpersonal Health Comm credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CMN/462/)
Examines the role of communication in the management of mental and physical health. Focuses on topics such as communication and illness identity, health and interpersonal relationships, health care provider-patient interactions, impacts of technology on health communication, and health education and prevention efforts. 3 undergraduate hours. 4 graduate hours.

CMN 463 Organizational Health Comm credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CMN/463/)
Focuses on organizational issues shaping communication between providers, patients, and consumers of health care and information, including background on financing personal medical services; organizations, professions, and their interrelationships involved in providing medical services; theorizing communication and organization in personal medical services; and communication between organizations and the public on health issues. Topics include managed care, professional communication, the hospital as a unique communication site, ethics in health communication, direct-to-consumer drug advertising, and health crisis communication. 3 undergraduate hours. 4 graduate hours.

CMN 464 Health Communication Campaigns credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CMN/464/)
Focuses on the theoretical principles behind designing, implementing, and evaluating a health communication campaign. Students will be exposed to campaigns pertaining to alcohol abuse, illicit drug use, organ donation, safe sex, tobacco use, among others. The first part of the course reviews theories used in health communication campaigns, derived from the disciplines of communication, social psychology, and public health. The second part of the course focuses on designing campaigns and creating messages as well as evaluating the effects of those campaigns and messages. 3 undergraduate hours. 4 graduate hours.

CMN 465 Social Marketing credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CMN/465/)
Social marketing offers a revolutionary approach to solving a wide range of societal problems. Social marketing applies traditional marketing principles and techniques to the challenges and rewards of influencing positive public behavior. This course is designed to give students a thorough orientation to key marketing concepts and their application to a range of communication issues with an emphasis on promoting community engagement, environmental conservation, financial literacy, health promotion, and injury prevention. Throughout the semester, attention is given to several behavior change models employed to guide current social marketing campaigns as well as a focus on the ten steps for developing, implementing, and evaluating a campaign. Students will acquire practical skills in designing a campaign as well as an appreciation for the role of behavior change models in social marketing. Same as CHLH 465. 3 undergraduate hours. 4 graduate hours.

CMN 467 Communication & Health Equity credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CMN/467/)
Explores the role that communication plays as both a potential contributor to existing health inequalities and a means of helping to reduce them. Drawing on theories and research from communication, public health, and related social science disciplines, the course reviews relevant academic literature and utilizes media and policy examples to engage with key topics, such as communication inequalities and public discourse surrounding inequality and social determinants of health. 3 undergraduate hours. 4 graduate hours. Prerequisite: Junior standing or above.

CMN 476 Commercialism and the Public credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CMN/476/)
Explores the influences of advertising and commercialism and their role in defining our political culture, social institutions, and personal lives. Through readings, written reflection, visual presentations, and class discussions, the course explores a wide range of advertising and consumer issues and discusses how consumers negotiate these forces. The first part of the course is devoted to a historical overview; discussing the risk and evolving nature of advertising throughout the 20th century. Having established a historical framework, the course offers six contemporary topics to be discussed in the remainder of the semester. Topics may include, but not be limited to: the commercial mass media; the public relations industry; gender in advertising; commercialization of childhood; the commercialization of medicine and science; contemporary consumer society; advertising in schools; and food, advertising, and body image. 3 undergraduate hours. 4 graduate hours.

CMN 491 Honors Individual Study credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CMN/491/)
Individual investigation of special problems. 2 undergraduate hours. No graduate credit. May be repeated to a maximum of 4 undergraduate hours. Prerequisite: Twelve hours of communication; a grade-point average of 3.50; and consent of head of department.

CMN 493 Honors Senior Thesis credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CMN/493/)
Individual study leading to a thesis for honors in the Department of Communication. 2 undergraduate hours. No graduate credit. May be repeated to a maximum of 4 undergraduate hours. Prerequisite: Senior standing; a grade-point average of 3.50; and consent of head of department.

CMN 496 Adv Topics in Communication credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CMN/496/)
Advanced topics in communication not treated in regularly scheduled courses; see Class Schedule for current topics. 3 undergraduate hours. 4 graduate hours. May be repeated as topics vary.

CMN 501 Intro to Health Communication credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CMN/501/)
Introduction to theory and research on communication in health and illness contexts, focusing on how messages from interpersonal, organizational, cultural and media sources affect health beliefs and behaviors. Some topics to be explored include: the theoretical foundations underlying differences in the ways individuals communicate about health, health campaign strategies and organizational influences on health and strategies for generating successful or beneficial health-related communication (as well as recognize problematic communicative trends).

CMN 502 Health Comm Research Methods I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CMN/502/)
Introduction to social scientific methods for research on health communication and health outcomes. These methods may be used either to build general (theoretical) knowledge about communication or to aid in design and evaluation of actual messages and campaigns. Spring terms only. Prerequisite: Only for students enrolled in the MS in Health Communication degree program.

CMN 503 Health Comm Research MethodsII credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CMN/503/)
Focuses on analytic strategy in both qualitative and quantitative analysis. Complements and expands upon the social scientific methods for collecting data introduced in CMN 502. Prerequisite: CMN 502 strongly recommended.

CMN 504 Health & Family Communication credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CMN/504/)
Exploration of current perspectives on the interplay between family communication processes and health-related issues. Using theoretical foundations such as systems theory, communication privacy management theory, narrative theory and family communication patterns theory, students will explore the ways that family members communicate about health, cope with health-related problems, and influence one another's health-related behaviors.

CMN 505 Provider-Patient Communication credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CMN/505/)
Study of theoretical bases for understanding social interactions in health care settings focusing on three general areas: (a) communication and identity, (b) health and personal relationships, and (c) health care provider-patient interaction.

CMN 506 Health Informatics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CMN/506/)
Explores: (1) contexts of health informatics applications; (2) reciprocal relationships among people, activities, and health informatics applications; and (3) consequences surrounding the design, implementation, and use of health informatics applications. Course content includes: an introduction to health informatics and associated theoretical perspectives; health information as a strategic resource; provider health informatics applications; the e-health movement and consumer health informatics applications; and the intersection of health informatics with current challenges in health care.

CMN 507 Hlth Comm Orgs Profs & Policy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CMN/507/)
Study of the organizational features of the U.S. health care systems, generating a comprehensive image of the context in which communication between patients and providers, health care consumers and organizations, and public health care messages are sent, received, exchanged, interpreted, and circulated. Offered Fall terms only. Prerequisite: Only for students enrolled in the MS in Health Communications degree program.

CMN 508 Successful Health Campaigns credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CMN/508/)
Introduction to theoretical frameworks, research, and applications of health campaigns. Literature from contributing disciplines will be reviewed (e.g., advertising, communication, marketing, public health, political science, psychology and sociology) and key aspects of campaign development will be discussed (e.g., formative research, audience segmentation, message tailoring and evaluation). Offered Spring terms only. Prerequisite: Only for students enrolled in the MS in Health Communication degree program.

CMN 509 Soc Mkting & Health Behavior credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CMN/509/)
Orientation to the discipline of social marketing with some application to a range of problems, emphasizing issues with a health context. Topics will include audience research, segmentation strategies, communication channels, and the marketing mix. Students will acquire practical skills in audience research and learn about the design, implementation, and evaluation of health intervention initiatives that use social marketing. Offered Spring terms only. Prerequisite: Only for students enrolled in the MS in Health Communication degree program.

CMN 529 Seminar Communication Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CMN/529/)
Special topics in communication theory and research. May be repeated to a maximum of 16 hours. Prerequisite: Consent of instructor.

CMN 530 Family Communication Theory credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CMN/530/**)**
Graduate seminar that examines theory and research on the development of families, communication in various types of families and family relationships, and current issues that affect family communication.

CMN 538 Seminar Rhetorical Theory credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CMN/538/**)**
Study of special topics in the history of rhetorical theory. May be repeated to a maximum of 16 hours.

CMN 550 Intro to Comm Grad Study credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/CMN/550/**)**
Orientation to discipline of Communication and too departmental research areas. Discusses disciplinary norms, research ethics/IRB, academic writing, and professional conduct. Advice on choosing areas of research, identifying suitable graduate advisor, time management, and career planning. Faculty visitors discuss their research and professional development topics. Approved for S/U grading only. Prerequisite: Communication graduate students only.

CMN 574 Communication Research Methods credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CMN/574/**)**
Introduction to content analysis, survey, and experimental research designs and quantitative and qualitative analysis in communication research.

CMN 575 Capstone Individual Study credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CMN/575/**)**
Provides capstone experience for students in the MS in Health Communication degree program.

CMN 595 Special Problems credit: 1 to 12 Hours. **(**https://courses.illinois.edu/schedule/terms/CMN/595/**)**
Individual investigation of special projects not included in theses. May be repeated in separate terms. Open to master's candidates for a maximum of 4 graduate hours and to doctoral candidates for a maximum of 12 graduate hours. Prerequisite: Consent from head of department.

CMN 599 Thesis Research credit: 0 to 16 Hours. **(**https://courses.illinois.edu/schedule/terms/CMN/599/**)**
Approved for S/U grading only. May be repeated.

CHLH - COMMUNITY HEALTH

CHLH Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/CHLH/)

Courses

CHLH 100 Contemporary Health credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/100/)
Examines concepts of health and health promotion in contemporary society with emphasis on a healthy lifestyle for individuals and groups. Topics include self care, health insurance, exercise, nutrition and weight control, sexuality, contraception, tobacco, alcohol, cardiovascular health, infectious diseases, and cancer.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

CHLH 101 Introduction to Public Health credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/101/)
Introduction to the nation's public health system; includes an overview of the basic concepts and core functions of public health practice, the scope of applications, and the variety of service organizations (both public and private) that shape public health.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

CHLH 110 Intro to the Health Sciences credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/110/)
This elective course provides students with a general overview of the day to day job requirements and responsibilities of variety of allied healthcare professionals and how they interact with other members of the healthcare team. Students will also learn about the wide variety of practice settings available along the continuum of care. Through the course, students will learn basic medical terminology, concepts and skills in preparation for internships and graduate school. Same as KIN 110.

CHLH 125 Orientation KIN & Comm Health credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/CHLH/125/)
Serves as an introduction to the Kinesiology and Community Health Department and provides an overview of the Kinesiology and Community Health curricula, areas of study, and opportunities available for careers in the field. Enrollment required for Community Health freshmen and transfer students. Credit is not given for both CHLH 125 and KIN 125.

CHLH 126 Campus Acquaintance Rape Education credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/126/)
Provides a semester-long introduction to the field of sexual violence prevention education, with a focus on intersectional prevention programming within institutions of higher education. Students will examine individual, relationship, community, and societal factors that contribute to the prevalence of sexual violence and will explore primary, secondary, and tertiary strategies for sexual violence prevention utilizing a public health approach. Additionally, students will develop practical skills for leading peer workshops for the FYCARE (First Year Campus Acquaintance Rape Education) program. Prerequisite: Majority of seats held for freshman-sophomore status until first day of classes.

CHLH 127 Peer Facilitation for Alcohol Prevention credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/127/)
As a pervasive and influential part of the American college experience, alcohol can serve many purposes for students. By redefining alcohol use and misuse, reframing the perspective of behavior change, and transforming social norms, this course will help you develop the skills to promote individual, interpersonal, and community-level behavior change. This course explores the use of peer facilitation as a tool for health promotion at the University of Illinois at Urbana-Champaign campus. Prerequisite: Restricted to students with Freshman, Sophomore, or Junior class standing.

CHLH 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/199/)
Approved for letter and S/U grading. May be repeated up to a maximum of 10 hours.

CHLH 200 Mental Health credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/200/)
Introduction to the science of mental health and illness including personality development, the genesis and manifestations of mental illness, and the maintenance of mental health; taught with an emphasis on the preventive and medical aspects of mental health.

CHLH 201 Public Health Research Methods credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/201/)
This course is designed to provide students with an introduction to the basic principles and concepts underlying research methods on public health. Topics include conceptualization, measurement, research design, sampling, evaluation, data sources and ethics. The students will be exposed to a wide range of quantitative, and mixed methods.

CHLH 203 Introduction to Health Technology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/203/)
Introduces the topic of health technology and provide an opportunity for students to explore the potential benefits and risks associated with new technologies. Students will learn about how technology can be used to improve people's health and support healthier communities, how technology is transforming health care, and how technology can be used to bridge social determinants of health and health inequalities. Students will be introduced to the field of human-centered design which focuses the design on understanding users' needs, and human factors which draws on the understanding of human capabilities to create easy to use applications and devices. Students will also learn the basics about behavioral theories and research methods relevant to creating effective health technology interventions.

CHLH 206 Human Sexuality credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/206/)
Emphasizes the behavioral aspects of human sexuality. Topics include: birth control; prenatal care, pregnancy and childbirth; sex roles; premarital sex; lifestyles; marriage and divorce.

CHLH 210 Community Health Organizations credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/210/)
Overview of institutions and agencies which provide health information, education, services, and care. Includes historical foundations, constituencies, organizational goals and structure, funding and expenditures, modes of service delivery, political and ethical issues.

CHLH 243 Drug Use and Abuse credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/243/)
Introduction to the biological, psychological, pharmacological, and legal aspects of drug use and abuse; surveys community and university resources concerned with drug use and abuse; emphasizes personal and social actions for responsible drug use.

CHLH 244 Health Statistics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/244/)
Introduction to biostatistics. Students learn concepts necessary to understand statistical inference as applied to health issues.
This course satisfies the General Education Criteria for:
Quantitative Reasoning I

CHLH 250 Health Care Systems credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/250/)
Overview of the major issues confronting health care systems from a macro perspective. Identification and analysis of the functions, major participants and trends in health care systems in the United States and abroad. Attention on current and emerging issues having implications for health care systems in industrialized nations.

CHLH 260 Introduction to Medical Ethics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/260/)
Course stresses normative bioethics: decisions about what is ethical behavior in a variety of real and practical issues. Analysis of medical ethical cases at the individual, community and wider national and international levels will be addressed. Approved for both letter and S/U grading.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil

CHLH 274 Introduction to Epidemiology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/274/)
Basic concepts and methods of epidemiology; patterns of disease occurrence; applications of epidemiology to health education, health services administration and planning, health policy, and environmental health.

CHLH 304 Foundations of Health Behavior credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/304/)
Examination of the application of the social and behavioral sciences to health and health behavior. Psychological, social psychological, and sociological approaches to health behavior are analyzed. Topics covered include development of health attitudes and behaviors, perceptions of health and illness, methods of changing health behavior and patient-provider interaction. Prerequisite: CHLH 100, or consent of instructor; completion of the campus Composition I requirement.
This course satisfies the General Education Criteria for:
Social Beh Sci - Beh Sci
Advanced Composition

CHLH 314 Introduction to Aging credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/314/)
A multidisciplinary introduction to the study of aging; the social, psychological and physiological context of changing roles in later life; public and private policies that affect older people and their familis. Same as HDFS 314, RST 314, PSYC 314, and REHB 314.

CHLH 330 Disability in American Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/330/)
Same as REHB 330. See REHB 330.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

CHLH 336 Tomorrow's Environment credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/336/)
Same as CPSC 336 and ENVS 336. See CPSC 336.

CHLH 340 Health Promotion Practicum credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/340/)
Preparation and presentation of lifestyle workshops to campus community groups. Practica selected from one or more of the following topics: chemical education, sexuality, stress management or campus acquaintance rape education (CARE). Same as SOCW 350. Approved for both letter and S/U grading. May be repeated to a maximum of 6 hours. Prerequisite: Junior standing or consent of instructor.

CHLH 365 Civic Engagement in Wellness credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/365/)
Same as AHS 365, KIN 365, RST 365, and SHS 370. See KIN 365.

CHLH 380 Orientation to Internship credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/CHLH/380/)
Provides students with information concerning placement in internship. Topics include internship requirements; student responsibilities; preparation of resumes and cover letters; selecting an organization or site; interviewing; issues of professional development. Prerequisite: Junior standing.

CHLH 390 Honors credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/390/)
Same as KIN 390 and RST 390. See KIN 390.

CHLH 393 Special Projects credit: 2 or 3 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/393/)
Special projects in research and independent investigation in any phase of health, kinesiology, recreation, and related areas selected by the students. May be repeated to a maximum of 12 hours.

CHLH 402 Cancer Epidemiology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/402/)
Class on cancer epidemiology will address the investigation of the descriptive and analytic epidemiology of cancer. It will include information on the development of malignancy and characteristics of tumor cells. The investigation of the relationship between various risk and protective factors and the development of different types of cancer will be discussed in an epidemiologic context. The role of primary prevention and secondary prevention (screening) will also be covered. 3 undergraduate hours. 4 graduate hours. Prerequisite: Previous or concurrent class in epidemiology or consent of instructor. Junior standing or above.

CHLH 404 Gerontology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/404/)
Interdisciplinary approach to the study of aging and the aged from physiological, psychological, and social perspectives. Same as HDFS 404. 3 or 4 undergraduate hours. 3 or 4 graduate hours.

CHLH 405 Aging with Disability credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/405/)
Due to improvements in medical management, persons with disabilities are living longer lives. They, however, face new problems and impairments. This course will explore the psychological and physical changes persons with disabilities face as they age. In addition, the course examines the impact that aging with disability has on the US healthcare system, legislation and healthcare professionals. 3 undergraduate hours. 4 graduate hours.

CHLH 407 Disability, Culture & Society credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/407/)
Examines the cultural and social contexts of disability, their consequences for the experience and management of disability, and implications for cultural competence in disability-related research and practice. Same as ANTH 404, KIN 407, and REHB 407. 3 or 4 undergraduate hours. 3 or 4 graduate hours.

CHLH 409 Women's Health credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/409/)
Examines the culture of women in relationship to their health. Study is devoted to selected health care issues, developmental and physiological changes in the life cycle, health problems that affect women, and the maintenance of health. Same as GWS 409. 3 undergraduate hours. 3 graduate hours. Prerequisite: CHLH 100 or equivalent; or consent of instructor.

CHLH 410 Public Health Practice credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/410/)
Theory and practice of public health promotion as they relate to educational approaches in solving community health problems. 4 undergraduate hours. 4 graduate hours. Prerequisite: CHLH 210 or consent of instructor.

CHLH 415 International Health credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/415/)
Explores the various factors that impact the health of populations around the world. Political, cultural, social, environmental and other domains will be examined in relation to how they affect the health of residents of various countries. 3 or 4 undergraduate hours. 3 or 4 graduate hours.

CHLH 421 Health Data Analysis credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/421/)
Introduces health data analysis, sources and uses of health data, collection techniques and classification procedures, commonly used health indices, techniques of rate adjustment, graphic presentation of data as they relate to the planning, conducting, and evaluating of community health programs. 3 or 4 undergraduate hours. 3 or 4 graduate hours. Prerequisite: Quantitative Reasoning I course or equivalent.
This course satisfies the General Education Criteria for:
Quantitative Reasoning II

CHLH 429 Research Techniques credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/429/)
Study of the ethics of research, research literature, research designs, and health measurement techniques utilized in the public health sciences. Emphasizes developing skills in analyzing research and assessment of health behaviors, and problem identification and research design for individual student research projects. 4 undergraduate hours. 4 graduate hours. Prerequisite: CHLH 590, or SOC 485, or EPSY 480; or equivalent.

CHLH 439 Health Applications of GIS credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/439/)
Same as GEOG 439 and PATH 439. See PATH 439.

CHLH 441 Health Behavior and Technology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/441/)
To deepen understanding of how health technology can support health behaviors, this class investigates a) the psychological, interpersonal, and social processes that drive health behaviors and health technology use; b) current models of technology-mediated behavior change; and c) methods to examine the effects of health technology on health behaviors. 3 undergraduate hours. 4 graduate hours. Prerequisite: Graduate section is restricted to graduate students.

CHLH 444 LGBT Indiv, Fam & Community credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/444/)
Same as HDFS 444. See HDFS 444.

CHLH 448 Exercise & Health Psychology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/448/)
Same as KIN 448. See KIN 448.

CHLH 455 Health Services Financing credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/455/)
Examines major topics and emerging trends in health financing, including sources of revenue, public and private financing organizations, reimbursement and sources of revenue to health providers, and capital financing in the health care industry. 3 undergraduate hours. 3 graduate hours. Prerequisite: Junior standing.

CHLH 456 Organization of Health Care credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/456/)
Examines types and performance of health care organizations (e.g. , doctors' offices, clinics, hospitals, and nursing homes), networks of health services, evaluation of health care, and social policy issues relating to organizations in the U. S. health care system. 2 to 4 undergraduate hours. 2 to 4 graduate hours.

CHLH 457 Health Planning credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/457/)
Survey of the history and objectives of health planning as related to medical care delivery in the United States; methods of health, institutional and community planning; planning and marketing concepts and methods; analysis of consumer behavior, public policies, and private competitive forces. Same as SOCW 457. 3 undergraduate hours. 3 graduate hours. Prerequisite: CHLH 250 and junior standing.

CHLH 458 Health Administration credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/458/)
Examines management principles relative to health care institutions emphasizing goal setting, decision making, system analysis, organizational structure, conflict resolution, and leadership theories. 3 undergraduate hours. 3 graduate hours. Prerequisite: Senior or graduate standing, or consent of instructor.

CHLH 461 Environ Toxicology & Health credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/461/)
Same as ENVS 431 and IB 485. See IB 485.

CHLH 465 Social Marketing credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/465/)
Same as CMN 465. See CMN 465.

CHLH 469 Environmental Health credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/469/)
Appreciation of the concepts and mechanisms used to prevent or control environmental conditions that may lead to infectious or other environmentally induced diseases. Presents topics from a public health perspective that include air pollution, water supply management, waste management, radiation protection, food hygiene, occupational health and disaster management. Same as ENVS 469. 3 or 4 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CHLH 274 or equivalent.

CHLH 470 Technology, Health, and Aging credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/470/)
An undergrad/grad interdisciplinary course that is focused on technology, healthcare, and aging. It is a combination lecture/lab course wherein students learn design and evaluation tools, are part of a project development team, participate in transgenerational learning activities with older adults, and focus on technology design to support healthy aging. 3 undergraduate hours. 4 graduate hours. Prerequisite: Restricted to students with Junior or Senior class standing and Graduate students.

CHLH 473 Immigration, Health & Society credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/473/)
Same as LLS 473, SOC 473, and SOCW 473. See LLS 473.

CHLH 474 Principles of Epidemiology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/474/)
Investigation of descriptive epidemiologic techniques (comparisons of disease rates in different populations) and analytic study designs (case-control and cohort studies and randomized trials). Applications to and examples from invectious and chronic diseases are presented. Group exercises involving the investigation of epidemiologic problems and application of analytic epidemiologic techniques are performed. Same as ENVS 474 and PATH 474. 4 undergraduate hours. 4 graduate hours. Prerequisite: One statistics course.

CHLH 485 Community Health Internship credit: 8 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/485/)
Provides students with a supervised field experience in official, voluntary, and professional health agencies, and is designed to allow students to gain work experience in actual field situations. Students will work in University-approved health agencies and/or on course assignments that will prepare students for their future careers as health professionals. These experiences will be tailored for each student. The completion of the internship is a requirement for graduation for all Community Health students. 8 undergraduate hours. No graduate credit. Approved for S/U grading only. Prerequisite: Senior standing in Community Health. Restricted to Community Health major(s). Restricted to students with Senior class standing.

CHLH 494 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/494/)
Lecture course in topics of current interest; specific subject matter announced in the Class Schedule. 1 to 4 undergraduate hours. 1 to 4 graduate hours. Approved for Letter and S/U grading. May be repeated in same or separate semesters, if topics vary.

CHLH 501 Issues in Health Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/501/)
Analyzes current developments, trends, and controversies in health education with emphasis on developing student competencies for intervention planning, implementation and analyses; and examines issues affecting the health educator in various work settings, including patient care, public health, school health, and higher.

CHLH 510 Public Health Dev credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/510/)
Advanced study of the principles, practice and current issues of public health at the local, state, national and international levels, including the relationships between public health departments, voluntary health agencies, and other community organizations.

CHLH 517 Principle/Method Epidemiology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/517/)
Same as PATH 517. See PATH 517.

CHLH 527 Statistics in Epidemiology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/527/)
Description and application of quantitative issues and statistical techniques prominent in the analysis of classification data arising from epidemiologic cohort or case-control aetiologic studies; studies of preventive public health; and therapeutic clinical interventions. Practice using available computing software for implementation is stressed. Same as ENVS 527 and PATH 525. Prerequisite: CHLH 474 and minimum of two statistics courses covering multiple regression and correlation.

CHLH 530 Childhood Obesity I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/530/)
Same as FSHN 530, HDFS 551, KIN 530, NUTR 530, SOCW 570. See NUTR 530.

CHLH 531 Childhood Obesity II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/531/)
Same as FSHN 531, HDFS 552, KIN 531, NUTR 531, SOCW 571. See NUTR 531.

CHLH 540 Health Behavior: Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/540/)
Analysis of social science theories and perspectives that comprise the foundation of health education theory and practice. Includes development of a conceptual frame of reference for understanding, predicting, and facilitating change in health behaviors. Same as KIN 540. Prerequisite: Graduate standing.

CHLH 541 Health Disparities Over the Life Course credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/541/)
This course provides students with an understanding of how institutional, sociocultural, and individual factors contribute to racial/ethnic, socioeconomic, and sex health disparities over the life-course. A lifespan developmental approach is adopted to examine issues of health disparities in greater depth. 4 graduate hours. No professional credit. Prerequisite: Restricted to graduate students.

CHLH 545 Grant Writing for Health Professionals credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/545/)
This is a course for students who are interested in learning about the grant writing process. Primary topic areas will include the components of a grant application, grant announcements (FOA/RFA), specific aims and objectives writing, proposal narrative (significance, innovation and approach), budget justifications and grant review process. Various grant mechanisms of major funding agencies will be reviewed, including both federal (NIH, Fulbright, NSF, CDC, and NIDILRR) and private (Robert Wood Johnson Foundation, National Multiple Sclerosis Association, and Paralyzed Veterans of America Foundation). Students will complete two grant writing assignments (one NIH grant and one non-NIH grant) to gain hands-on experience with preparing successful grants. 4 graduate hours. No professional credit. Prerequisite: Restricted to Graduate Students.

CHLH 550 Health Policy: United States credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/550/)
Comprehensive analysis of the policy process in health care in the United States; systematic and critical review of health policy development, implementation, and evaluation; impact of government at all levels and the role of providers, industry, labor, and consumer in health policy. Prerequisite: Admission to graduate program in community health or the MBA Administration Program; CHLH 429; or consent of instructor.

CHLH 551 Health Administration Professionalism credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/CHLH/551/)
The overall goal of this course is to introduce students to concepts of professionalism and public service. These concepts will be utilized to directly prepare for the Applied Practice Experience and the Integrative Learning Experience. Both the Applied Practice Experience and Integrative Learning Experience are supervised and evaluated field experiences in healthcare settings of your choice. This seminar prepares students to formulate and identify meaningful practice experiences. Students will take this course twice during the first academic year of enrollment in the MSHA program. 1 graduate hour. No professional credit. May be repeated in separate semesters for a maximum of 2 hours. Required of all MSHA students during the first year of their program. Prerequisite: Restricted to Health Administration major(s).

CHLH 552 Health Economics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/552/)
Health policies and market forces impact the U.S. health care system in terms of access, cost, and quality. This course provides the perspective that economic reasoning is a valuable critical thinking approach to social science inquiry and demonstrates how this perspective helps students understand health care policy and market issues. This course examines health care delivery in the United States from an economic perspective. 4 graduate hours. No professional credit. Prerequisite: Restricted to Graduate Students. Restricted to Health Administration major(s).

CHLH 565 Teaching in the Professoriate credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/565/)
Same as KIN 565, RST 560, and SHS 565. See KIN 565.

CHLH 568 Computer Packages in Health Research credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/568/)
This introductory level class is designed to introduce students to SAS and STATA programming for the analysis of public health, clinical and biomedical data. Students will learn to perform basic data management and analysis tasks in SAS and STATA, the leading software packages in public health research. Students will use both programs to write programs for processing data and performing statistical analyses. The course is recommended for graduate students interested in pursuing careers in epidemiology, community health, and other fields that involve health data analysis. 2 graduate hours. 2 professional hours. Prerequisite: Restricted to graduate Public Health majors at Urbana-Champaign.

CHLH 569 Systematic Review and Meta-analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/569/)
The goals of this course are to: (1) Deepen understanding on the key concepts and essential methods in systematic review and meta-analysis though lectures and reading assignments; (2) Master basic skills on conducting systematic review and meta-analysis through hands-on exercises and projects; and (3) complete a publication-quality systematic review and/or meta-analysis of a student's own choice as the final project of this course. 4 graduate hours. 4 professional hours.

CHLH 570 Intro Public Hlth Practice credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/CHLH/570/)
An introduction to principles of public health practice, covering a range of topics including history of public health, determinants of health, structure and function of the public health system, ethics, and public health approaches to prevention and to improving population health. Approved for S/U grading only. Prerequisite: MPH student or consent of the instructor.

CHLH 572 Principles of Epidemiology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/572/)
Advanced course designed to provide an introduction to the fundamental concepts and principles of epidemiology and demonstrate their applicability in the field of public health. Emphasizes the use of epidemiologic data and research to a) describe the pattern of diseases in communities, and b) identify risk factors for diseases and for health disparities. Prerequisite: Completion or concurrent enrollment of basic statistics course is encouraged.

CHLH 573 Biostatistics in Public Health credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/573/)
Introduction to fundamental topics in biostatistics in public health, covering univariate and bivariate statistics as well as basic topics in multivariate analysis. Including practice in analyzing health data through computer laboratory sessions.

CHLH 575 Chronic Disease Prevention credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/575/)
Advanced course in population-based approaches to chronic disease prevention, with emphasis on policy and environmental strategies affecting lifestyle risk factors. Provides an understanding of common diseases, screen tests, community assessment, systematic evidence reviews, and evidence-based community interventions. Prerequisite: MPH students or consent of instructor.

CHLH 576 Analytical Epidemiology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/576/)
The aim of this advanced epidemiology course is to provide students in-depth coverage of the design of epidemiologic research studies and the analysis of epidemiologic data. This course will expand analytical, writing, and oral communication skills using in-class group exercises, take-home computer exercises, and a course project. 4 graduate hours. 4 professional hours. Prerequisite: CHLH 572 and CHLH 573 or equivalent. Restricted to graduate Public Health majors at Urbana-Champaign.

CHLH 577 Health Program Evaluation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/577/)
Use of research methods and theory for evaluation of initiatives and programs in public health and medical care. Emphasis on acquiring skills in evaluation and conducting evaluations whose results have impact on public health practice. Covers different theories and perspectives on health evaluation. Review of published evaluations used to illustrate research methods and practical issues in program evaluation. Prerequisite: MPH student or consent of instructor.

CHLH 578 Applied Epidemiology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/578/)
Advanced epidemiologic analysis of disease problems. Covers research designs including cohort, case-control, and intervention trials; methods of analysis including multivariate adjustment for confounding and description of effect modification; and application of statistical computer software with emphasis on chronic diseases. Same as PATH 520. Prerequisite: CHLH 474, PATH 517, or equivalent and advanced course work in statistics through multivariate analysis.

CHLH 579 Cultural Competence in Public Health credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/579/)
Cultural competence education increases public health professionals' cultural awareness, knowledge of self and others, communication skills, attitudes, and behaviors. This course will examine theoretical models in public health and explore community-based programs as they relate to cultural competence and health promotion. 4 graduate hours. No professional credit. Prerequisite: Restricted to MPH Graduate Students.

CHLH 580 Landscapes and Human Health credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/580/)
Same as GEOG 561 and LA 570. See LA 570.

CHLH 581 Professionalism in Public Health credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/CHLH/581/)
The overall goal of this course is to introduce MPH students to concepts of professionalism and public service. These concepts will be utilized to directly prepare for the MPH Applied Practice Experience and the MPH Integrative Learning Experience. Both the Applied Practice Experience and Integrative Learning Experience are supervised and evaluated field experiences in public health practice settings of your choice. This seminar prepares students to formulate and identify meaningful practice experiences. Students will take this course twice during the first academic year of enrollment in the MPH program. 1 graduate hour. No professional credit. May be repeated in separate semesters for a maximum of 2 hours. Required of all MPH students during the first year of their program. Prerequisite: Restricted to MPH students.

CHLH 582 Advanced Biostatistics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/582/)
The aim of this advanced course is to further develop students' skills in a broad range of statistical methods applied in the health sciences. Methods covered in this course will primarily focus on those used to analyze and interpret data collected from observational studies and clinical trials. The course will cover the following topics power & sample size calculations, descriptive statistic, general & generalized linear models, categorical data analysis, longitudinal data analysis, survival analysis. 4 graduate hours. 4 professional hours. Prerequisite: CHLH 573 & CHLH 568 or equivalent. Restricted to graduate Public Health majors at Urbana-Champaign.

CHLH 585 Community Health Internship credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/585/)
Observation, study, and practical work in student's area of specialization under supervision in professional field situations; student works for a minimum of 12 weeks in a University-approved agency or site. Prerequisite: CHLH 429, CHLH 474 and CHLH 510; or graduate standing in community health; or consent of the department.

CHLH 587 MPH Applied Practice Experience credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/587/)
Provides MPH students with planned, supervised and evaluated field experience in a public health practice setting where students will synthesize knowledge and skills acquired through the course of MPH study. Approved for letter and S/U grading. May be repeated up to 4 hours in separate terms. Prerequisite: Completion of all Core MPH Courses.

CHLH 589 MPH Integrative Learning Experience credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/589/)
Provides MPH students an opportunity to synthesize, integrate, and apply knowledge and skills acquired in MPH coursework, through work on a project relevant to public health practice. Generally offered for MPH students in their last semester of study in the MPH program. Prerequisite: MPH student.

CHLH 591 Seminar credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/CHLH/591/)
Lecture, discussions, and critiques on kinesiology and community health related subjects by faculty members and visiting professional leaders; presentation and criticism of student research. Approved for S/U grading only. May be repeated in subsequent terms as topics vary.

CHLH 593 Special Projects credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/593/)
Independent research on special projects. May be repeated to a maximum of 8 hours. Prerequisite: EPSY 480, KIN 501, and CHLH 540 or equivalent.

CHLH 594 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/594/)
Lecture course in topics of current interest; specific subject matter announced in the Class Schedule. May be repeated.

CHLH 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/CHLH/599/)
Preparation of theses in community health. Approved for S/U grading only. May be repeated to a maximum of 16 hours.

CWL - COMPARATIVE & WORLD LITERATURE

CWL Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/CWL/)

Courses

CWL 111 Bible as Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/111/)
Same as ENGL 114 and REL 101. See REL 101.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

CWL 112 Literature of Global Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/112/)
Same as ENGL 112. See ENGL 112.

CWL 114 Global Consciousness and Lit credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/114/)
Exploration of the cultural and historical roots of globalization and the development of global consciousness from ancient Greece to the present, as reflected primarily in literature, but also with reference to historiography, cartography, religion, art, politics, economics, and popular culture. Course materials including literary texts, articles, historical accounts, political tracts, films, and paintings focus on the mutual perception of, and historical relationships among Europe, the Arab world, Africa, Asia, and the Americas.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Non-West

CWL 117 Russ & E Euro Science Fiction credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/117/)
Same as SLAV 117. See SLAV 117.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

CWL 119 Literature of Fantasy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/119/)
Same as ENGL 119. See ENGL 119.

CWL 122 Russia and Black America credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/122/)
Same as RUSS 122. See RUSS 122.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

CWL 151 Cross-Cultural Thematics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/151/)
Explores a combination of western and non-western literature through the focus on a shared theme, exploring differences in treatment both within and among different cultures. Two such thematic focuses are offered in rotation; one on concepts of love and one on ways of writing about death. Both themes introduce students to a wide array of famous texts from different cultures and also offer some varied perspectives for their own inevitable thoughts on these major topics. May be repeated to a maximum of 6 hours if topics vary. Students may register in more than one section per term.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

CWL 189 Literatures of the Islamic World credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/189/)
Comparative, cross-cultural study of major literary and cultural works from the Islamic world, broadly defined, including pre-Islamic cultures and their interactions with Islamic civilization. All readings in English.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Non-West

CWL 190 Modern Asian and African Literatures credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/190/)
Comparative, cross-cultural study of major works from the postcolonial world. Topics may include pre-colonial cultures, the impact of colonialism, decolonization, modernization, and/or globalization. All readings in English.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Non-West

CWL 191 Freshman Honors Tutorial credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/191/)
Study of selected topics on an individually arranged basis. Open only to honors students or to Cohn Scholars and Associates. May be repeated one time. Prerequisite: Consent of departmental honors advisor.

CWL 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/CWL/199/)
Credit: 1 to 5 hours. Approved for both letter and S/U grading. May be repeated.

CWL 201 Comparative Lit Studies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/201/)
Introduction to various methods in comparative literary study, including genres, thematics, literary relations, literary movements, and interdisciplinary approaches.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

CWL 202 Literature and Ideas credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/202/)
Analysis of several important world-views in Western civilization (such as classical, Romantic, modern, and so forth), studied comparatively and in relation to selected figures in Western literature.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

CWL 204 US Border Literatures and Cultures credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/204/)
Exploration of the cultures, experiences, and conditions of people living on and around the borders of the United States. The syllabus will place particular emphasis on the US-Mexico borderlands, a space of interaction, exchange, and confrontation between diverse communities that traverse national, racial, and linguistic borders. We will examine this dynamic space through a varied array of cultural texts, including literature, film, journalism, and scholarship. Through these texts, students will gain a deepened understanding and appreciation of the Latinx and indigenous communities that live along, around, and across today's US-Mexico border. At the end of the semester, we will turn our attention briefly to the US-Canada border – and, in particular, to the political and cultural life of indigenous peoples living along and across the present-day US-Canada border.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

CWL 205 Islam & West Through Lit credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/205/)
Organized around major cultural/historical/religious topics presented in literature through Western and Islamic eyes, beginning with the Crusades and proceeding into the present. This course will examine stereotypes, fantasies, identifications and political opportunism promoted by the encounter between the West and the Islamic World. Prerequisite:CWL 241 and CWL 242 or one year of college literature.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

CWL 206 Classical Allusions in Cinema credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/206/)
Same as CLCV 206. See CLCV 206.

CWL 207 Indian Cinema in Context credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/207/)
Introduction to Indian mainstream (mainly Bollywood) cinema and its evolution through the last seven decades. Topics to be explored include, but not limited to, the relation between Indian society/culture and its cinematic representations, cinema's resistance to dominant nationalist and patriarchal ideologies, its interactions with the postcolonial nation-state of India, how globalization has changed the industry. All films will be screened with subtitles. No knowledge of Hindi or any other Indian language is required. Same as MACS 207.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Non-West

CWL 208 Cultures & Literatures of South Asia credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/208/)
Same as ASST 208, REL 208 and SAME 208. See REL 208.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Non-West

CWL 209 Jewish American and US Minority Literatures in Dialogue credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/209/)
Same as JS 209 and ENGL 222. See JS 209.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - US Minority

CWL 210 Introduction to Modern African Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/210/)
Same as AFST 210 and ENGL 211. See AFST 210.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Non-West

CWL 211 The Arab-Israeli Conflict credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/211/)
War has been a constant shadow over the lives of Israelis and Palestinians. We will examine the history of attitudes to war and peace in the region as presented through historical documents, memoirs, political statements, poetry, film and short stories. The course explores the plurality of voices and experiences of different political groups, genders, ethnicities, religions and communities. Same as JS 211 and SAME 211.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

CWL 212 Israeli Cinema and Television credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/212/)
Same as JS 212 and SAME 212. See JS 212.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

CWL 215 Madness, Myth, and Murder credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/215/)
Same as SCAN 215. See SCAN 215.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

CWL 216 Legends of King Arthur credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/216/)
Same as ENGL 216 and MDVL 216. See ENGL 216.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

CWL 217 Classical Chinese Lit credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/217/)
Same as EALC 207. See EALC 207.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Non-West

CWL 218 Survey of Ukrainian Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/218/)
Same as UKR 218. See UKR 218.

CWL 220 Origins of Western Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/220/)
Same as CLCV 220. See CLCV 220.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

CWL 221 Jewish Storytelling credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/221/)
Same as ENGL 223, JS 220, REL 220, and YDSH 220. See YDSH 220.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

CWL 223 The Qur'an (Koran) credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/223/)
Same as REL 223, SAME 223. See REL 223.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Non-West

CWL 224 German Literature in Trans credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/224/)
Same as GER 200. See GER 200.

CWL 225 Constr Afr and Carib Identity credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/225/)
Same as AFST 209, FR 240, and LAST 240. See FR 240.

CWL 226 Humanist Persp of Afro-Am Exp credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/226/)
Same as AFRO 224. See AFRO 224.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - US Minority

CWL 227 Golden Age of Russian Lit credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/227/)
Same as RUSS 220. See RUSS 220.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

CWL 230 Popular Cultures of Contemporary East Asia credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/230/)
Same as EALC 230. See EALC 230.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Non-West

CWL 240 Italy Middle Ages & Renaiss credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/240/)
Same as ITAL 240 and MDVL 240. See ITAL 240.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

CWL 241 Early Masterpieces of Western Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/241/)
Comparative study of major works of literature, philosophy and culture in the Western tradition from the ancient world to the Renaissance, from Homer and the Bible to Shakespeare and Cervantes. Emphasis on the works as representative of their historical and cultural period, as well as how these works create the cultural world we live in today. Prerequisite: Completion of campus Composition I general education requirement.
This course satisfies the General Education Criteria for:
Advanced Composition
Humanities - Lit Arts
Cultural Studies - Western

CWL 242 Modern Masterpieces of Western Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/242/)
Comparative study of major works of literature, philosophy and culture in the Western tradition from the Enlightenment to today, from Descartes and Voltaire to Dickinson and Calvino. Emphasis on the works as representative of their historical and cultural period, as well as how these works create the cultural world we live in today.
This course satisfies the General Education Criteria for:
Advanced Composition
Humanities - Lit Arts
Cultural Studies - Western

CWL 245 Survey of Polish Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/245/)
Same as POL 245. See POL 245.

CWL 249 Russian Lit and Revolution credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/249/)
Same as RUSS 225. See RUSS 225.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

CWL 250 Grimms' Fairy Tales - ACP credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/250/)
Same as ENGL 267 and GER 250. See GER 250.
This course satisfies the General Education Criteria for:
Advanced Composition
Humanities - Lit Arts
Cultural Studies - Western

CWL 251 Viking Mythology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/251/)
Same as MDVL 251, REL 251, and SCAN 251. See SCAN 251.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

CWL 252 Viking Sagas in Translation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/252/)
Same as MDVL 252 and SCAN 252. See SCAN 252.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

CWL 253 Medieval Literature and Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/253/)
Same as ENGL 202 and MDVL 201. See ENGL 202.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

CWL 254 Grimm's Fairy Tales in Context credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/254/)
Same as ENGL 266 and GER 251. See GER 251.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

CWL 255 Renaissance Literature and Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/255/)
Same as ENGL 204. See ENGL 204.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

CWL 257 Enlightenment Literature and Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/257/)
Same as ENGL 206. See ENGL 206.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

CWL 259 Early African American Literature and Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/259/)
Same as AFRO 259 and ENGL 259. See ENGL 259.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

CWL 260 Modern African American Literature and Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/260/)
Same as AFRO 260 and ENGL 260. See ENGL 260.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

CWL 262 Gender & Sexuality in Greco-Roman Antiquity credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/262/)
Same as CLCV 240 and GWS 240. See CLCV 240.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

CWL 263 Odysseus and Other Heroes credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/263/)
Same as CLCV 221. See CLCV 221.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

CWL 264 Introduction to Greek and Roman Theater credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/264/)
Same as CLCV 222 and THEA 210. See CLCV 222.
This course satisfies the General Education Criteria for:
Advanced Composition
Humanities - Lit Arts
Cultural Studies - Western

CWL 267 The Short Story credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/267/)
Same as ENGL 245. See ENGL 245.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

CWL 269 British, American, and Continental Fiction credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/269/)
Examination of important thematic and structural relationships - influences, parallels, and variations - among selected major works of the nineteenth and twentieth centuries; readings chosen from works of Bronte, Hardy, Lawrence, Woolf, James, Faulkner, Bellow, Oates, Dostoevsky, Tolstoy, Stendhal, Flaubert, Camus, Kafka, Mann, Hesse, Moravia, and Pavese. All works read in English. Same as ENGL 248.
Prerequisite: Completion of the Composition I requirement.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

CWL 271 The Holocaust in Context - ACP credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/271/)
Same as ENGL 268 and GER 260. See GER 260.
This course satisfies the General Education Criteria for:
Advanced Composition
Humanities - Lit Arts
Cultural Studies - Western

CWL 272 Sexuality and Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/272/)
Same as GER 270 and GWS 270. See GER 270.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

CWL 273 The Holocaust in Context credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/273/)
Same as ENGL 269, GER 261, and JS 261. See GER 261.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

CWL 275 Masterpieces of East Asian Lit credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/275/)
Same as EALC 275. See EALC 275.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Non-West

CWL 276 Asian Film Genres credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/276/)
Same as EALC 276 and ENGL 276. See ENGL 276.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Non-West

CWL 277 Slavic Literature Survey credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/277/)
Same as SLAV 277. See SLAV 277.

CWL 283 Jewish Sacred Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/283/)
Same as REL 283. See REL 283.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

CWL 284 Modern Jewish Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/284/)
Same as ENGL 284, JS 284, and REL 284. See JS 284.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

CWL 308 Chinese Popular Lit credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/308/)
Same as EALC 308. See EALC 308.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Non-West

CWL 311 Japan Lit in Translation I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/311/)
Same as EALC 305. See EALC 305.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Non-West

CWL 312 Japan Lit in Translation II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/312/)
Same as EALC 306. See EALC 306.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Non-West

CWL 317 Francophone Worlds credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/317/)
Same as FR 319. See FR 319.

CWL 320 Responses to the Holocaust credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/320/)
Course introduces a variety of Jewish and non-Jewish responses to the Holocaust created during and after the Second World War (from 1939). The discussion of Holocaust films, miniseries, memoirs, diaries, novels, short stories, poems, and other texts will focus on the unique contribution of those works to our understanding of the Holocaust. In addition, the works and their authors will be situated in their cultural and historical context. Taught in English translation. Same as ENGL 359, JS 320, REL 320, and YDSH 320.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

CWL 321 Russian Writers credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/321/)
Same as RUSS 320. See RUSS 320.

CWL 322 The Comic Imagination credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/322/)
Same as CLCV 323 and THEA 323. See CLCV 323.
This course satisfies the General Education Criteria for:
Advanced Composition
Humanities - Lit Arts
Cultural Studies - Western

CWL 323 Tolstoy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/323/)
Same as ENGL 323 and RUSS 323. See RUSS 323.

CWL 324 Dostoevsky credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/324/)
Same as ENGL 322 and RUSS 322. See RUSS 322.

CWL 325 Chekhov credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/325/)
Same as RUSS 325 and THEA 362. See RUSS 325.

CWL 328 Special Topics German Studies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/328/)
Same as GER 396. See GER 396.

CWL 335 Nabokov credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/335/)
Same as RUSS 335. See RUSS 335.

CWL 341 Love & Sex in Hebrew Lit credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/341/)
Love and Sex have been literary themes from the bible, through the modern ages and into the present day in Hebrew Literature. This course will examine the treatments of these themes in different historical periods, paying attention to external influences and literary forms such as poems, stories, films and novels. This course will consider treatments of the erotic, devotional, affectionate, romantic and sexual; including heterosexual and homosexual representations, as well as love of God and Israel. Same as JS 341, REL 340 and SAME 341. Prerequisite: Completion of Advanced Composition requirement or a prior college-level literature course is recommended.

CWL 350 South Asian Goddesses credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/350/)
Same as REL 350 and SAME 350. See REL 350.

CWL 376 Children and Youth Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/376/)
Same as EURO 376, GWS 376, and SCAN 376. See SCAN 376.

CWL 387 French & Comparative Cinema I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/387/)
Same as FR 387 and MACS 382. See FR 387.

CWL 389 French & Comparative Cinema II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/389/)
Same as FR 389 and MACS 383. See FR 389.

CWL 395 Special Topics Comp Lit I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/395/)
Presentation and discussion of subjects relating literature to other disciplines; topic varies. May be repeated to a maximum of 6 hours.

CWL 400 African Diasporic Thought in the Caribbean credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/400/)
Same as AFRO 400. See AFRO 400.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West

CWL 410 Modern African Fiction credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/410/)
Same as AFST 410, and ENGL 470. See AFST 410.

CWL 411 The Chinese Novel credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/411/)
Same as EALC 411. See EALC 411.

CWL 412 Mod Chinese Lit in Translation credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/412/)
Same as EALC 412. See EALC 412.

CWL 413 Dante credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/413/)
Same as ITAL 413 and MDVL 413. See ITAL 413.

CWL 414 Petrarch & Boccaccio credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/414/)
Same as ITAL 414 and MDVL 414. See ITAL 414.

CWL 415 Mod Japan Lit in Translation credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/415/)
Same as EALC 415. See EALC 415.

CWL 417 Topics in Medieval British and Irish Literature credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/417/)
Same as ENGL 412 and MDVL 410. See ENGL 412.

CWL 420 Masterpieces Renaiss Lit credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/420/)
Same as ITAL 420 and MDVL 420. See ITAL 420.

CWL 421 Jewish Life-Writing credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/421/)
Same as HIST 436, REL 420, SLAV 420, and YDSH 420. See YDSH 420.

CWL 430 History of Translation credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/430/)
Same as CLCV 430, ENGL 486, GER 405, SLAV 430, SPAN 436, and TRST 431. See SLAV 430.

CWL 434 Studies in Francophonie credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/434/)
Same as FR 479. See FR 479.

CWL 436 Problems of Polish Literature credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/436/)
Same as POL 446. See POL 446.

CWL 440 Russian Culture Studies credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/440/)
Same as RUSS 460. See RUSS 460.

CWL 441 Themes in Narrative credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/441/)
Analysis of literary themes and types in narratives of Western and non-Western literature (e.g., the hero, east and west, dream visions), emphasizing comparative perspectives. 3 undergraduate hours. 3 or 4 graduate hours. May be repeated to a maximum of 9 undergraduate hours or 12 graduate hours. Prerequisite: One year of college literature or consent of instructor.

CWL 444 Problems in Romanticism credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/444/)
Same as RUSS 444. See RUSS 444.

CWL 445 Problems in Realism credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/445/)
Same as RUSS 445. See RUSS 445.

CWL 450 Topics in Bodies and Genders credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CWL/450/)
How do gender, sexuality, and the body emerge through cultural representations and across artistic forms? How do literature, film, and the visual arts construct gender identities in various times and places? Topics and regions vary by semester and instructor. All readings in English. Same as GWS 450. 3 undergraduate hours. 3 graduate hours. May be repeated up to 6 hours maximum. Prerequisite: Consent of instructor.

CWL 451 International Film Genres and Auteurs credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/451/)
Advanced, in-depth study of either (a) cinematic genres, or (b) major film directors. Genres may include musicals, horror films, Westerns, melodrama, comedies, film noir. Auteurs will include major figures of world cinema whose influence over the medium is widespread, such as Hitchcock, Woody Allen, Vertov, Bergman. No foreign language knowledge required. 3 undergraduate hours. 4 graduate hours. May be repeated in the same or subsequent semesters to a maximum of 6 undergraduate hours or 8 graduate hours if topics vary. Prerequisite: One cinema course or consent of instructor.

CWL 453 Slavic Cultural Studies credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/453/)
Same as SLAV 452. See SLAV 452.

CWL 454 Topics in Israeli Lit &Culture credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/454/)
Seminar covering advanced topics in Israeli literature and culture. Same as JS 454 and SAME 454. 3 undergraduate hours. 4 graduate hours. May be repeated up to 6 undergraduate hours or 8 graduate hours in separate terms if topics vary. Prerequisite: One year of college literature or consent of instructor.

CWL 457 Russian Modernism credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/457/)
Same as RUSS 424. See RUSS 424.

CWL 461 Lit Genres and Forms credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/461/)
Structure and development of literary genres and forms in historical perspective (for instance, drama, parody and the grotesque, poetry, fables and fabulists, and modern fiction); essential international components and significant national variations of such genres and forms. Emphasis changes from term to term. 3 undergraduate hours. 3 or 4 graduate hours. May be repeated to a maximum of 9 undergraduate hours or 12 graduate hours. Prerequisite: One year of college literature or consent of instructor.

CWL 463 Modern Scandinavian Drama credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/463/)
Same as SCAN 463 and THEA 483. See SCAN 463.

CWL 466 Russia and the Other credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/466/)
Same as RUSS 461. See RUSS 461.

CWL 467 Japanese Cinema credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/467/)
Same as EALC 466 and MACS 466. See MACS 466.

CWL 470 Scandinavian Politics and Society credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/470/)
Same as EURO 470 and SCAN 470. See SCAN 470.

CWL 471 International Lit Relations credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/471/)
Study of specific relations between authors of different countries; influences of certain works, concepts, or tastes on another work, author, or country; and literary interaction between Eastern and Western cultures. Emphasis changes from term to term. 3 undergraduate hours. 3 or 4 graduate hours. May be repeated to a maximum of 9 undergraduate hours or 12 graduate hours. Prerequisite: One year of college literature or consent of instructor.

CWL 472 Kierkegaard and the Self credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/472/)
Same as PHIL 472, REL 472, and SCAN 472. See SCAN 472.

CWL 477 Post-Communist Fiction credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/477/)
Same as SLAV 477 and REES 477. See SLAV 477.

CWL 478 Classical Chinese Thought credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/478/)
Same as EALC 476 and HIST 425. See EALC 476.

CWL 481 Topics in Arabic Literature & Culture credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/481/)
Studies in Arabic literature and culture of various genres, periods, and regions. Graduate students are encouraged to read the texts in the original language. 3 undergraduate hours. 4 graduate hours. May be repeated in the same semester to a maximum of 6 undergraduate hours or 8 graduate hours if topics vary; May be repeated in separate semesters to a maximum of 12 undergraduate hours or 16 graduate hours if topics vary. Prerequisite: One year of college literature or consent of instructor.

CWL 490 Topics in Classical Literature credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/490/)
Same as CLCV 490. See CLCV 490.

CWL 493 Senior Thesis and Honors credit: 3 to 6 Hours. (https://courses.illinois.edu/schedule/terms/CWL/493/)
Independent research guided by tutor(s), leading to the writing of a comparative thesis. Intended primarily for candidates for honors in comparative literature, but open to other seniors. 3 to 6 undergraduate hours. No graduate credit. May be repeated to a maximum of 12 hours.

CWL 496 Special Topics in Comp Lit II credit: 3 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/496/)
Selected literary topics of international significance in relation to other cultural expressions. 3 undergraduate hours. 3 or 4 graduate hours. May be repeated to a maximum of 9 undergraduate or 12 graduate hours. Prerequisite: Consent of instructor.

CWL 501 Theory of Literature credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/501/)
Major issues of literary theory, critical approaches, and comparative research.

CWL 502 Methods of Comparative Lit credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/502/)
Problems and methods of cross-cultural literary studies, concentrating on the effects of historical encounters between different civilizations and on theoretical issues in comparing literatures across cultures. Prerequisite: Knowledge of two languages other than English or (with instructor's consent) advanced knowledge of one foreign language.

CWL 503 Historiography of Cinema credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/503/)
Same as ENGL 503 and MACS 503. See MACS 503.

CWL 504 Theories of Cinema credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/504/)
Same as ENGL 504 and MACS 504. See MACS 504.

CWL 511 Applied Literary Translation I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/511/)
Same as EALC 511, GER 511, SLAV 501, and TRST 501. See TRST 501.

CWL 512 Applied LiteraryTranslation II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/512/)
Same as EALC 512, GER 512, SLAV 502, and TRST 502. See TRST 502.

CWL 535 Nabokov credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/535/)
Same as RUSS 535. See RUSS 535.

CWL 551 Seminar Lit Movements credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/551/)
Investigation of the development and mutation of literary movements (classicism, romanticism, symbolism, etc.) through a study of critical texts and their reception in various countries. May be repeated to a maximum of 12 hours if topics vary.

CWL 552 Studies French & Comp Cinema credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/552/)
Same as FR 552. See FR 552.

CWL 561 Seminar Genres - Forms credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/561/)
Study of a form (the lyric, the novel, the drama, etc.) to discover its essential components in all the literatures studied and the significance of national variations. May be repeated to a maximum of 12 hours if topics vary.

CWL 562 Sem Spanish-American Lit credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/562/)
Same as SPAN 535. See SPAN 535.

CWL 571 Seminar in Literary Relations credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/571/)
Investigation of the impact of one literature upon another, or of some specific works upon others (the role of English literature in continental Europe, the influence of Russian novelists on French and German writers, etc.). May be repeated to a maximum of 12 hours if topics vary.

CWL 576 Methods in Slavic Grad Study credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/576/)
Same as SLAV 576. See SLAV 576.

CWL 578 Seminar 20thC French Lit credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/578/)
Same as FR 578. See FR 578.

CWL 581 Seminar Lit Themes credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/581/)
Study of a theme or type (the Faust myth, the romantic hero, etc.) to discover its essential components in all the literatures studied and the significance of national variations. The subject of the seminar varies each term. May be repeated to a maximum of 12 hours if topics vary.

CWL 582 Proseminar credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/582/)
Introduction to comparative literature as a discipline, history and philosophy of comparative literature, and training in practical professional skills, including conference presentations, grant writing, and course development. Prerequisite: Graduate standing.

CWL 586 Children and Youth Literature credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/586/)
Same as EURO 576, GWS 576, and SCAN 576. See SCAN 576.

CWL 593 Special Studies credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CWL/593/)

CWL 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/CWL/599/)
Intended for students engaged in writing a thesis as a partial requirement for the M.A. or Ph.D. degree in comparative literature. Approved for S/U grading only. May be repeated to a maximum of 8 graduate hours.

CB - COMPARATIVE BIOSCIENCES

CB Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/CB/)

Courses

CB 290 Independent Research credit: 1 to 10 Hours. (https://courses.illinois.edu/schedule/terms/CB/290/)
Supervised scholarly laboratory work and/or reading in fields selected in consultation with an appropriate faculty member. May be repeated to a maximum of 10 hours in separate terms. Prerequisite: Permission of the instructor.

CB 420 Stem Cell Journal Club credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/CB/420/)
This course will consist of a weekly journal club that will meet to discuss published journal articles related to stem cells. The focus will be primarily on clinical applications of stem cells, both adult and embryonic. Journal articles will be selected on a weekly basis to facilitate review of the most recent work in the field. Faculty, staff, post-doctoral fellows, and students from labs conducting stem cell research at the Veterinary School will attend and participate in the discussion. 1 undergraduate hour. 1 graduate hour. Approved for both letter and S/U grading. May be repeated in separate terms to a maximum of 2 undergraduate hours or 6 graduate hours.

CB 434 Pesticide Toxicology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CB/434/)
Same as ENVS 433 and IB 486. See IB 486.

CB 449 Basic Toxicology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CB/449/)
Same as CPSC 433, ENVS 480 and FSHN 480. See FSHN 480.

CB 467 Fund Phar Discovery & Dev credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CB/467/)
Examines fundamental aspects, practices and strategies utilized in the discovery and evaluation of pharmaceutical agents developed for human and animal use. The discovery, preclinical and clinical assessment of drugs is reviewed from both a chemical and biological perspective, in addition to the regulatory guidelines governing those activities and the required post-market surveillance. Also examines major ethical approaches and the strengths and limitation of various development strategies. 2 undergraduate hours. 2 graduate hours. Approved for both letter and S/U grading. Prerequisite: At least one semester of physiology (MCB 103, MCB 240, or equivalent), and biochemistry (MCB 354 or MCB 450 or equivalent) or consent of instructor.

CB 514 Neurotoxicology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CB/514/)
Examines toxic responses of the mammalian nervous system to xenobiotics (therapeutic agents, drugs of abuse, toxins, environmental and industrial chemicals) from the molecular and cellular levels to the behavioral level. Also covers neuroteratology, sensitive periods for neurotoxicity and the potential role of environmental factors/xenobiotics in the etiology of nervous system disorders. Same as ENVS 514 and PSYC 515. Prerequisite: Credit or concurrent registration in MCB 450 or equivalent.

CB 516 Reprod & Dev Toxicology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CB/516/)
Introduction to reproductive and developmental toxicology that examines causes and manifestations both of structural malformations and of functional deficits in mammals. Topics covered include interactions between external factors and developmental gene expression, the behavioral consequences of chemical exposure, identification and regulation of reproductive and developmental toxicants. Examples emphasize reproductive and developmental toxicants that are present in the human environment. Same as ENVS 516. Prerequisite: Consent of instructor.

CB 520 Models in Biomedical Research credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CB/520/)
Students enrolled in this course will review scientific literature pertaining to experimental models used in biomedical research, and will present selected papers to the class. faculty members who use these models in their research will attend student presentations and participates in the associated discussions. By the end of the course, student will be familiar with the uses, advantages and limits of key molecular, cellular and animal models used in a range of biomedical research fields. 2 graduate hours. 2 professional hours. May be repeated in separate terms if topics vary. Prerequisite: No prerequisites for graduate students enrolled in a Master of Science or PhD program in a biomedical field. Professional students must obtain the coordinator's authorization.

CB 533 Repro Physiology Lab Methods credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/CB/533/)
Same as ANSC 533 and MCB 533. See ANSC 533.

CB 540 Wildlife Ecosystem Health credit: 1 or 2 Hours. (https://courses.illinois.edu/schedule/terms/CB/540/)
Provides veterinary professional students and graduate students with an introduction to the use of medical reasoning and technology in the investigation of problems related to conservation biology and ecosystem health. The course is an interactive, video conference assisted seminar series, jointly hosted by the University Of Illinois College Of Veterinary Medicine, Loyola University Chicago Stritch School of Medicine, and the Chicago Zoological Society/Brookfield Zoo. Together, these institutions comprise the "Conservation Medicine Center of Chicago." Topics include the evolutionary origins of HIV/AIDS, the ecology of vector- borne diseases, global amphibian population declines, wildlife epidemiology and pathology, and the role of zoos in disease surveillance and management. Approved for S/U grading only.

CB 550 Detect/Anal Gene Transcripts credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CB/550/)
Gives participants the background information and hands-on experience in the methodologies necessary to utilize cloned genes for the detection and quantitation of specific mRNA transcripts in RNA extracted from tissue or cell culture samples. Methodologies covered will include: recombinant plasmid propagation, cDNA probe isolation and isotopic labeling, RNA isolation, Poly A+ mRNA selection, gel separation and transfer of RNA to a membrane (Northern blot), hybridization of specific gene probes to membrane bound RNA (Northern hybridization), detection and quantitation of hybridization signal. These basic methodologies are widely applicable to different experimental systems. They allow an investigator to monitor the effects of physiological manipulations, to animals or cultured cells, at the molecular level. Prerequisite: Consent of instructor.

CB 551 Ecotoxicology North Hemisphere credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/CB/551/)
Sources, environmental fate, and adverse effects of manmade and naturally-occurring chemicals on terrestrial and aquatic wildlife and ecological systems will be addressed. Historical and contemporary issues in wildlife health, including direct toxic effects and indirect effects of environmental contaminants will be examined. Focuses mainly on northern hemisphere with multiple examples from North America and Europe. Includes perspectives from academia, industry and public sector. Prerequisite: At least one semester of biology (IB 150 or equivalent), and biochemistry (MCB 354 or equivalent).

CB 552 Ethics in Toxicology credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/CB/552/)
Ethical issues in the practice of toxicological research collaboration, authorship and plagiarism, professional responsibility to subjects (both human and animal), whistle-blowing, codes of ethics, legal obligations. Case Studies.

CB 554 Systems Toxicology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CB/554/)
Provides an overview of the effects of chemicals and their mechanisms of action in a variety of organ systems. Topics include toxicology of the nervous, developmental, reproductive, thyroid, renal, hepatic, immune, pulmonary, and gastrointestinal systems. Prerequisite: Completion of a course in basic toxicology or consent of instructor.

CB 564 Comp Clinical Pharmacology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CB/564/)
Lecture-discussion of the clinical use in animals of human and veterinary drugs, including current literature review on pharmacodynamic species differences, novel indications, and contrast of therapeutic alternatives. Prerequisite: Graduate Veterinarian or consent of instructor.

CB 590 Seminar credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/CB/590/)
Required of all graduate students whose major is comparative biosciences.

CB 591 Biosciences Seminar Series credit: 0 to 1 Hours. (https://courses.illinois.edu/schedule/terms/CB/591/)
Review and discussion of selected topics. Students are required to participate in weekly discussions and present one formal seminar per year, on a topic approved by the instructor. Approved for S/U grading. May be repeated to a maximum of 4 hours. Prerequisite: Enrollment in CB graduate program or consent of instructor.

CB 592 Special Problems credit: 1 to 12 Hours. (https://courses.illinois.edu/schedule/terms/CB/592/)
Basic and applied study including orientation and research on pertinent initial and continuing problems in the student's area of interest. Prerequisite: Consent of instructor.

CB 594 Comparative Bioscience credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CB/594/)
To be used to designate a trial or experimental course for five or more students. It is designed to be a graduate course. A course can be taught under this designation two times within a two-year period and cannot be renewed as a CB 594 course. May be repeated to a maximum of 8 hours if topics vary. Prerequisite: Consent of instructor.

CB 596 Interdisciplinary Tox Sem credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/CB/596/)
Interdisciplinary seminar on topics within the area of toxicology; topics vary each term. Seminars are presented by faculty, visiting lecturers, and students based upon their study, research, and/or professional activities in the selected topic area. Same as ENVS 596 and PATH 596. May be repeated to a maximum of 8 hours if topics vary. Prerequisite: Consent of instructor.

CB 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/CB/599/)
Individual direction of research and thesis writing. Approved for S/U grading only. May be repeated.

CB 646 Advanced Therapeutics credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/CB/646/)
Designed as an elective offering for veterinary professional students and graduate students interested in clinical pharmacology. As an extension of core veterinary pharmacology modules in the veterinary professional curriculum, case and/or problem-based discussions will be used to highlight rational therapeutic decision-making and its evidence basis. Drug classes presented in core instruction will be reviewed and new drug classes will introduced in the context of case management discussions. 1 graduate hour. 1 professional hour. Approved for S/U grading only. May be repeated in separate terms to a maximum of 3 hours. Prerequisite: VM 607 or consent of instructor.

CB 692 Special Problems credit: 1 to 6 Hours. (https://courses.illinois.edu/schedule/terms/CB/692/)
Individual research on a special problem chosen in consultation with the instructor and department head. 1 to 6 graduate hours. 1 to 6 professional hours. Approved for both letter and S/U grading. May be repeated to a maximum of 6 hours. Prerequisite: Enrollment in veterinary medicine curriculum with grade-point average of 3.0 or above, or consent of instructor.

CSE - COMPUTATIONAL SCIENCE AND ENGINEERING

CSE Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/CSE/)

Courses

CSE 198 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/198/)
Subject offerings of new and developing areas of knowledge in computational science and engineering intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. May be repeated up to 6 hours in the same semester and to a maximum of 9 hours in separate semesters.

CSE 298 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/298/)
Subject offerings of new and developing areas of knowledge in computational science and engineering intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. May be repeated up to 6 hours in the same semester and up to 9 hours in separate semesters.

CSE 398 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/398/)
Subject offerings of new and developing areas of knowledge in computational science and engineering intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. May be repeated up to 6 hours in the same semester and up to 9 hours in separate semesters.

CSE 401 Numerical Analysis credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/401/)
Same as CS 450, ECE 491 and MATH 450. See CS 450.

CSE 402 Parallel Progrmg: Sci & Engrg credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/402/)
Same as CS 420 and ECE 492. See CS 420.

CSE 408 Applied Parallel Programming credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/408/)
Same as CS 483 and ECE 408. See ECE 408.

CSE 412 Numerical Thermo-Fluid Mechs credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/412/)
Same as ME 412. See ME 412.

CSE 414 Algorithms credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/414/)
Same as CS 473 and MATH 473. See CS 473.

CSE 422 Computer System Organization credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/422/)
Same as CS 433. See CS 433.

CSE 423 Operating Systems Design credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/423/)
Same as CS 423. See CS 423.

CSE 426 Software Engineering I credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/426/)
Same as CS 427. See CS 427.

CSE 427 Interactive Computer Graphics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/427/)
Same as CS 418. See CS 418.

CSE 428 Statistical Computing credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/428/)
Same as STAT 428. See STAT 428.

CSE 429 Software Engineering II credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/429/)
Same as CS 428. See CS 428.

CSE 440 Statistical Data Management credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/440/)
Same as STAT 440. See STAT 440.

CSE 441 Introduction to Optimization credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/441/)
Same as ECE 490. See ECE 490.

CSE 448 Advanced Data Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/448/)
Same as STAT 448. See STAT 448.

CSE 450 Computational Mechanics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/450/)
Same as TAM 470. See TAM 470.

CSE 451 Finite Element Analysis credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/451/)
Same as AE 420 and ME 471. See ME 471.

CSE 461 Computational Aerodynamics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/461/)
Same as AE 410. See AE 410.

CSE 485 Atomic Scale Simulations credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/485/)
Same as MSE 485 and PHYS 466. See MSE 485.

CSE 498 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/498/)
Subject offerings of new and developing areas of knowledge in computational science and engineering intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated for a maximum of 6 hours in the same semester and up to 9 hours in separate semesters.

CSE 505 Computational Bioengineering credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/505/)
Same as BIOE 505. See BIOE 505.

CSE 510 Numerical Methods for PDEs credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/510/)
Same as CS 555 and MATH 552. See CS 555.

CSE 511 Iterative & Multigrid Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/511/)
Same as CS 556. See CS 556.

CSE 512 Parallel Numerical Algorithms credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/512/)
Same as CS 554. See CS 554.

CSE 513 Topics in Numerical Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/513/)
Same as CS 558. See CS 558.

CSE 515 Algorithms credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/515/)
Same as CS 573. See CS 573.

CSE 517 Adv Finite Element Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/517/)
Same as TAM 574. See TAM 574.

CSE 521 Computer Architecture credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/521/)
Same as ECE 511. See ECE 511.

CSE 522 Parallel Computer Architecture credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/522/)
Same as CS 533. See CS 533.

CSE 525 Computational Statistics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/525/)
Same as STAT 525. See STAT 525.

CSE 527 Scientific Visualization credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/527/)
Same as CS 519. See CS 519.

CSE 529 Interact of Rad w/Matter II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/529/)
Same as NPRE 529. See NPRE 529.

CSE 530 Computational Electromagnetics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/530/)
Same as ECE 540. See ECE 540.

CSE 532 Numerical Circuit Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/532/)
Same as ECE 552. See ECE 552.

CSE 542 Statistical Learning credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/542/)
Same as ASRM 551 and STAT 542. See STAT 542.

CSE 543 Topics in Image Processing credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/543/)
Same as ECE 547. See ECE 547.

CSE 551 Finite Element Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/551/)
Same as CEE 570. See CEE 570.

CSE 552 Nonlinear Finite Elements credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/552/)
Same as CEE 576. See CEE 576.

CSE 553 Computational Inelasticity credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/553/)
Same as CEE 577. See CEE 577.

CSE 554 Computational Plates & Shells credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/554/)
Same as CEE 571. See CEE 571.

CSE 560 Computational Fluid Mechanics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/560/)
Same as TAM 570. See TAM 570.

CSE 566 Numerical Fluid Dynamics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/566/)
Same as ATMS 502. See ATMS 502.

CSE 576 Computational Chemical Biology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/576/)
Same as BIOP 576 and CHEM 576. See CHEM 576.

CSE 598 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CSE/598/)
Subject offerings of new and developing areas of knowledge in computational science and engineering intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. 1 to 4 graduate hours. 1 to 4 professional hours. Approved for Letter and S/U grading. May be repeated for a maximum of 6 hours in the same semester and up to 9 hours in separate semesters.

CS - COMPUTER SCIENCE

CS Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/CS/)

Courses

CS 100 Freshman Orientation credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/CS/100/)
Introduction to Computer Science as a field and career for computer science majors. Overview of the field and specific examples of problem areas and methods of solution.

CS 101 Intro Computing: Engrg & Sci credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CS/101/)
Fundamental principles, concepts, and methods of computing, with emphasis on applications in the physical sciences and engineering. Basic problem solving and programming techniques; fundamental algorithms and data structures; use of computers in solving engineering and scientific problems. Intended for engineering and science majors. Prerequisite: One of MATH 220 or MATH 221 or MATH 231 or MATH 241.
This course satisfies the General Education Criteria for:
Quantitative Reasoning II

CS 102 Little Bits to Big Ideas credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/102/)
Same as INFO 102. See INFO 102.

CS 105 Intro Computing: Non-Tech credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CS/105/)
Computing as an essential tool of academic and professional activities. Functions and interrelationships of computer system components: hardware, systems and applications software, and networks. Widely used application packages such as spreadsheets and databases. Concepts and practice of programming for the solution of simple problems in different application areas. Intended for non-science and non-engineering majors. Prerequisite: MATH 112.
This course satisfies the General Education Criteria for:
Quantitative Reasoning I

CS 107 Data Science Discovery credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/107/)
Same as IS 107 and STAT 107. See STAT 107.
This course satisfies the General Education Criteria for:
Quantitative Reasoning I

CS 124 Introduction to Computer Science I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CS/124/)
Basic concepts in computing and fundamental techniques for solving computational problems. Intended as a first course for computer science majors and others with a deep interest in computing. Credit is not given for both CS 124 and CS 125. Prerequisite: Three years of high school mathematics or MATH 112.
This course satisfies the General Education Criteria for:
Quantitative Reasoning I

CS 125 Introduction to Computer Science credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/125/)
Basic concepts in computing and fundamental techniques for solving computational problems. Intended as a first course for computer science majors and others with a deep interest in computing. Credit is not given for both CS 125 and CS 124. Prerequisite: Three years of high school mathematics or MATH 112.
This course satisfies the General Education Criteria for:
Quantitative Reasoning I

CS 126 Software Design Studio credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CS/126/)
Fundamental principles and techniques of software development. Design, documentation, testing, and debugging software, with a significant emphasis on code review. Credit is not given for both CS 242 and CS 126. Prerequisite: CS 125. For majors only.

CS 128 Introduction to Computer Science II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CS/128/)
Continuation of CS 124. More advanced concepts in computing and techniques and approaches for solving computational problems. Prerequisite: CS 124 or CS 125.
This course satisfies the General Education Criteria for:
Quantitative Reasoning II

CS 173 Discrete Structures credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CS/173/)
Discrete mathematical structures frequently encountered in the study of Computer Science. Sets, propositions, Boolean algebra, induction, recursion, relations, functions, and graphs. Credit is not given for both CS 173 and MATH 213. Prerequisite: One of CS 124, CS 125, ECE 220; one of MATH 220, MATH 221.

CS 196 Freshman Honors credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/CS/196/)
Offered for honors credit in conjunction with other 100-level computer science courses taken concurrently. A special examination may be required for admission to this course. May be repeated. Prerequisite: Concurrent registration in another 100-level computer science course (see Schedule).

CS 199 Undergraduate Open Seminar in Computer Science credit: 0 to 5 Hours. (https://courses.illinois.edu/schedule/terms/CS/199/)
Topics vary. Approved for Letter and S/U grading. May be repeated.

CS 210 Ethical & Professional Issues credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CS/210/)
Ethics for the computing profession. Ethical decision-making; licensing; intellectual property, freedom of information, and privacy. Credit is not given for both CS 210 and either CS 211 or ECE 316. Prerequisite: CS 225. Junior standing required.

CS 211 Ethical and Professional Conduct credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CS/211/)
Navigating the complex ethical and professional landscape of the computing professional: privacy, intellectual property, cybersecurity, and freedom of speech. Hands-on exercises, assignments, and discussions in which students analyze current events from perspectives in both philosophical and professional ethics. Writing professionally and technically in several writing assignments requiring peer review, workshops, and multiple rounds of editing and revising. Credit is not given for both CS 211 and CS 210 or ECE 316. Prerequisite: CS 225.
This course satisfies the General Education Criteria for:
Advanced Composition

CS 222 Software Design Lab credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/CS/222/)
Design and implementation of novel software solutions. Problem identification and definition; idea generation and evaluation; and software implementation, testing, and deployment. Emphasizes software development best practices—including framework selection, code review, documentation, appropriate library usage, project management, continuous integration and testing, and teamwork. Prerequisite: CS 128; credit or concurrent registration in CS 225. Restricted to majors in Computer Science undergraduate curricula only.

CS 225 Data Structures credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/225/)
Data abstractions: elementary data structures (lists, stacks, queues, and trees) and their implementation using an object-oriented programming language. Solutions to a variety of computational problems such as search on graphs and trees. Elementary analysis of algorithms. Credit is not given for CS 277 if credit for CS 225 has been earned. Prerequisite: CS 126 or CS 128 or ECE 220; One of CS 173, MATH 213, MATH 347, MATH 412 or MATH 413.
This course satisfies the General Education Criteria for:
Quantitative Reasoning II

CS 233 Computer Architecture credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/233/)
Fundamentals of computer architecture: digital logic design, working up from the logic gate level to understand the function of a simple computer; machine-level programming to understand implementation of high-level languages; performance models of modern computer architectures to enable performance optimization of software; hardware primitives for parallelism and security. Prerequisite: CS 125 or CS 128; CS 173 or MATH 213; credit or concurrent enrollment in CS 225.

CS 240 Introduction to Computer Systems credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CS/240/)
Basics of computer systems. Number representations, assembly/machine language, abstract models of processors (fetch/execute, memory hierarchy), processes/process control, simple memory management, file I/O and directories, network programming, usage of cloud services. Prerequisite: CS 225.

CS 241 System Programming credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/241/)
Basics of system programming, including POSIX processes, process control, inter-process communication, synchronization, signals, simple memory management, file I/O and directories, shell programming, socket network programming, RPC programming in distributed systems, basic security mechanisms, and standard tools for systems programming such as debugging tools. Credit is not given for both CS 241 and ECE 391. Prerequisite: CS 225 and CS 233.

CS 242 Programming Studio credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CS/242/)
Intensive programming lab intended to strengthen skills in programming. Prerequisite: CS 241.

CS 265 Innovation Illinois: From Accessible Design to Supercomputing Cultures credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CS/265/)
Same as IS 265 and MACS 265. See MACS 265.

CS 277 Algorithms and Data Structures for Data Science credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/277/)
Introduction to elementary concepts in algorithms and classical data structures with a focus on their applications in Data Science. Topics include algorithm analysis (ex: Big-O notation), elementary data structures (ex: lists, stacks, queues, trees, and graphs), basics of discrete algorithm design principles (ex: greedy, divide and conquer, dynamic programming), and discussion of discrete and continuous optimization. Credit is not given for CS 277 if credit for CS 225 is earned. Prerequisite: STAT 207; one of MATH 220, MATH 221, MATH 234. CS 277 cannot be taken concurrently with CS 225.

CS 296 Honors Course credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/CS/296/)
Group projects for honors credit in computer science. Sections of this course are offered in conjunction with other 200-level computer science courses taken concurrently. A special examination may be required for admission to this course. May be repeated. Prerequisite: Concurrent registration in another 200-level computer science course (see Schedule).

CS 307 Modeling and Learning in Data Science credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/307/)
Introduction to the use of classical approaches in data modeling and machine learning in the context of solving data-centric problems. A broad coverage of fundamental models is presented, including linear models, unsupervised learning, supervised learning, and deep learning. A significant emphasis is placed on the application of the models in Python and the interpretability of the results. Prerequisite: STAT 207; one of MATH 225, MATH 415, MATH 416, ASRM 406.

CS 357 Numerical Methods I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CS/357/)
Fundamentals of numerical methods for students in science and engineering; floating-point computation, systems of linear equations, approximation of functions and integrals, the single nonlinear equation, and the numerical solution of ordinary differential equations; various applications in science and engineering; programming exercises and use of high quality mathematical library routines. Same as MATH 357. Credit is not given for CS 357 if credit for CS 450 has been earned. (Counts for advanced hours in LAS). Prerequisite: One of CS 101, CS 105, CS 124, CS 125 or ECE 220; MATH 241; one of MATH 225, MATH 257, MATH 415, MATH 416 or ASRM 406.

CS 361 Probability & Statistics for Computer Science credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CS/361/)
Introduction to probability theory and statistics with applications to computer science. Topics include: visualizing datasets, summarizing data, basic descriptive statistics, conditional probability, independence, Bayes theorem, random variables, joint and conditional distributions, expectation, variance and covariance, central limit theorem. Markov inequality, Chebyshev inequality, law of large numbers, Markov chains, simulation, the PageRank algorithm, populations and sampling, sample mean, standard error, maximum likelihood estimation, Bayes estimation, hypothesis testing, confidence intervals, linear regression, principal component analysis, classification, and decision trees. Same as STAT 361. Credit is not given for both CS 361 and ECE 313. Prerequisite: MATH 220 or MATH 221; credit or concurrent registration in one of MATH 225, MATH 257, MATH 415, MATH 416 or ASRM 406. For majors only.

CS 374 Introduction to Algorithms & Models of Computation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/374/)
Analysis of algorithms, major paradigms of algorithm design including recursive algorithms, divide-and-conquer algorithms, dynamic programming, greedy algorithms, and graph algorithms. Formal models of computation including finite automata and Turing machines. Limitations of computation arising from fundamental notions of algorithm and from complexity-theoretic constraints. Reductions, undecidability and NP-completeness. Same as ECE 374. Prerequisite: One of CS 173, MATH 213; CS 225.

CS 397 Individual Study credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/CS/397/)
May be repeated. Prerequisite: Consent of instructor.

CS 398 Special Topics credit: 1 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CS/398/**)**
Subject offerings of new and developing areas of knowledge in computer science intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. May be repeated in the same or separate terms if topics vary.

CS 400 Accelerated Fundamentals of Computing I credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/CS/400/**)**
The first class in a sequence of two classes that introduces students to the basic concepts in computing with an emphasis on the fundamental techniques for solving computational problems. Topics include: core programming concepts (variables, data types, conditional expressions, loops, functions), basic data structures, searching and sorting algorithms, and data exploration and visualization. No prior programming experience is required. No undergraduate credit. 3 graduate hours. Prerequisite: Current enrollment in the Illinois Computing Accelerator for Non-specialists (iCAN) program or consent of instructor. Restricted to post-baccalaureate students with a non-computing background.

CS 401 Accelerated Fundamentals of Algorithms I credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/CS/401/**)**
The first class in a sequence of two classes that introduces students to the theoretical foundations of computer science. Topics include counting, sets, functions, decision trees, recursion, binary numbers, basic graph theory, depth first search and breadth first search, algorithms for computing shortest paths, data structures like stacks and queues, big O notation and asymptotic analysis, complexity classes like P and NP, and reductions. No undergraduate credit. 3 graduate hours. Prerequisite: Current enrollment in the Illinois Computing Accelerator for Non-specialists (iCAN) program or consent of instructor. Restricted to post- baccalaureate students with a non-computing background.

CS 402 Accelerated Fundamentals of Computing II credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/CS/402/**)**
Provides an accelerated introduction to class-based program design and the design of abstractions that support the design of reusable software and libraries. It reviews typical object-oriented concepts such as information hiding, encapsulation, polymorphism, inheritance, composition, and common design patterns. The course will also covers exception handling, database programming, and concurrent programming. No undergraduate credit. 3 graduate hours. Prerequisite: CS 400 or consent of instructor. Current enrollment in the Illinois Computing Accelerator for Non-specialists (iCAN) program or consent of instructor. Restricted to post-baccalaureate students with a non-computing background.

CS 403 Accelerated Fundamentals of Algorithms II credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/CS/403/**)**
The second class in a sequence of two classes that introduces students to the theoretical foundations of computer science. Topics include major paradigms of algorithm design divide and conquer, greedy, recursive, and dynamic programming; solving recurrences and analysis of divide and conquer algorithms; graph algorithms; formal models of computations like finite state automata and Turing machines; reductions. No undergraduate credit. 3 graduate hours. Prerequisite: CS 401 or consent of instructor. Current enrollment in the Illinois Computing Accelerator for Non-specialists (iCAN) program or consent of instructor. Restricted to post-baccalaureate students with a non-computing background.

CS 407 Cryptography credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CS/407/**)**
Same as ECE 407. See ECE 407.

CS 409 The Art of Web Programming credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CS/409/**)**
Client- and server-side technologies that enable modern Web applications. Topics include the building blocks of the Web (browsers, HTML, CSS, JavaScript) and data exchange (HTTP, AJAX, JSON, REST). Assignments expose students to full-stack web development, and JavaScript frameworks that scaffold MVC architectures and event-driven, asynchronous programming. The course culminates in a final project, where students work in teams to design and develop an original, database-backed web application. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 225.

CS 410 Text Information Systems credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CS/410/**)**
Theory, design, and implementation of text-based information systems. Text analysis, retrieval models (e.g., Boolean, vector space, probabilistic), text categorization, text filtering, clustering, retrieval system design and implementation, and applications to web information management. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 225.

CS 411 Database Systems credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CS/411/**)**
Examination of the logical organization of databases: the entity-relationship model; the hierarchical, network, and relational data models and their languages. Functional dependencies and normal forms. Design, implementation, and optimization of query languages; security and integrity; concurrency control, and distributed database systems. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 225.

CS 412 Introduction to Data Mining credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CS/412/**)**
Concepts, techniques, and systems of data warehousing and data mining. Design and implementation of data warehouse and on-line analytical processing (OLAP) systems; data mining concepts, methods, systems, implementations, and applications. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 225.

CS 413 Intro to Combinatorics credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CS/413/**)**
Same as MATH 413. See MATH 413.

CS 414 Multimedia Systems credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CS/414/**)**
Organization and structure of modern multimedia systems; audio and video encoding; quality of service concepts; scheduling algorithms for multimedia within OS and networks multimedia protocols over high-speed networks; synchronization schemes, user-interface design; multimedia teleservices. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 241 or ECE 391.

CS 416 Data Visualization credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CS/416/**)**
Elements of databases, computer graphics and perceptual psychology combined to utilize the human visual system to improve user understanding of large datasets. Topics include appropriate and effective selection and construction of charts, organization of dashboards, and design for user engagement and interaction. 3 undergraduate hours. 4 graduate hours. Prerequisite: CS 225.

CS 417 Virtual Reality credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/417/)
Provides both a deep understanding of the fundamentals of virtual reality (VR) and practical experience implementing VR systems. Topics covered include visual and audio display technology, tracking, human perception and psychophysics, building user interfaces for VR, and analyzing VR experiences. 3 undergraduate hours. 4 graduate hours. Prerequisite: CS 225.

CS 418 Interactive Computer Graphics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/418/)
Basic mathematical tools and computational techniques for modeling, rendering, and animating 3-D scenes. Same as CSE 427. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 225; One of MATH 225, MATH 257, MATH 415, MATH 416 or ASRM 406; MATH 241.

CS 419 Production Computer Graphics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/419/)
Advanced methods for representing, displaying, and rendering two-, three-, and four-dimensional scenes. General algebraic curves and surfaces, splines, Gaussian and bump-function representation, fractals, particle systems, constructive solid geometry methods, lighting models, radiosity, advanced ray-tracing methods, surface texturing animation techniques, data visualization methods. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 418.

CS 420 Parallel Progrmg: Sci & Engrg credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/420/)
Fundamental issues in design and development of parallel programs for various types of parallel computers. Various programming models according to both machine type and application area. Cost models, debugging, and performance evaluation of parallel programs with actual application examples. Same as CSE 402 and ECE 492. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 225.

CS 421 Programming Languages & Compilers credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/421/)
Structure of programming languages and their implementation. Basic language design principles; abstract data types; functional languages; type systems; object-oriented languages. Basics of lexing, parsing, syntax-directed translation, semantic analysis, and code generation. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 233 or CS 240; CS 374; one of MATH 225, MATH 257, MATH 415, MATH 416, ASRM 406.

CS 422 Programming Language Design credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/422/)
Exploration of major language design paradigms using imperative and functional programming as unifying themes. Tools include both practical language processor construction and theoretical models. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 421.

CS 423 Operating Systems Design credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/423/)
Organization and structure of modern operating systems and concurrent programming concepts. Deadlock, virtual memory, processor scheduling, and disk systems. Performance, security, and protection. Same as CSE 423. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 241 or ECE 391.

CS 424 Real-Time Systems credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/424/)
Supervisory control aspects of Cyber Physical Systems (CPS): fundamentals of reliability analysis, real-time scheduling, simple feedback control, software fault tolerance architecture, wireless networking and energy saving, principles of safety critical system engineering. Student groups design and demonstrate supervisory control architecture for a robot. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 241.

CS 425 Distributed Systems credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/425/)
Protocols, specification techniques, global states and their determination, reliable broadcast, transactions and commitment, security, and real-time systems. Same as ECE 428. 3 or 4 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 241 or ECE 391.

CS 426 Compiler Construction credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/426/)
Compiler structure, syntax analysis, syntax-directed translation, automatically constructed recognizers, semantic analysis, code generation, intermediate language, optimization techniques. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 421.

CS 427 Software Engineering I credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/427/)
Software process, analysis and design. Software development paradigms, system engineering, function-based analysis and design, and object-oriented analysis and design. Course will use team-projects for hands-on exercises. Same as CSE 426. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 241.

CS 428 Software Engineering II credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/428/)
Continuation of CS 427. Software development, management, and maintenance. Project and configuration management, collaborative development models, software quality assurance, interoperability domain engineering and software reuse, and software re-engineering. Same as CSE 429. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 427.

CS 429 Software Engineering II, ACP credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CS/429/)
Continuation of CS 427. Identical to CS 428 except for the additional writing component. See CS 428. 3 undergraduate hours. 3 graduate hours. Prerequisite: CS 427.
This course satisfies the General Education Criteria for:
Advanced Composition

CS 431 Embedded Systems credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/431/)
A survey of sampled data systems and embedded architecture; key concepts in common embedded system applications; signal processing and control; embedded microprocessor and device interface; time-critical I/O handling; data communications; real-time operating systems and techniques for the development and analysis of embedded real-time software; hands-on laboratory projects. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 241 or ECE 391.

CS 433 Computer System Organization credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/433/)
Computer hardware design and analysis and interface with software. Advanced processor design, including superscalar, out-of-order issue, branch prediction, and speculation. Memory hierarchy design, including advanced cache optimizations, main memory, and virtual memory. Principles of multiprocessor design, including shared-memory, cache coherence, synchronization, and consistency. Other advanced topics depending on time; e.g., GPUs and accelerators, warehouse computers and data centers, security. Same as CSE 422. 3 undergraduate hours. 4 graduate hours. Prerequisite: CS 233.

CS 434 Mobile Computing & Application credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/434/)
Same as ECE 434. See ECE 434.

CS 435 Cloud Networking credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/435/)
Provides a foundational view of computer networks with a focus on enabling modern large-scale cloud computing. The first part of this course studies the principles upon which the Internet and other networks are built, and how those principles translate into deployed protocols. The second part covers how those principles are applied in network infrastructure for modern clouds, enabling deployment of virtual networks on shared infrastructure, efficient transfer of big data and low latency communication, and federation of applications across countries and continents. 3 undergraduate hours. 4 graduate hours. Credit is not given for both CS 435 and CS 438/ECE 438. Prerequisite: One of CS 240, CS 241 or ECE 391.

CS 436 Computer Networking Laboratory credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/436/)
Design, application, analysis, and deployment of communication protocols and system software behind modern cloud/compute/network infrastructures. Students learn the internals of modern system infrastructures, including operating system networking kernels, cloud application service code, and firewall and router configuration. Students will gain experience with widely-used and production-grade code and systems, such as Cisco IOS, the Linux networking stack, and Amazon Web Services. This class links theory with practice to prepare students to confidently carry out tasks they will commonly encounter in industry, such as building an enterprise network, deploying a large-scale cloud service, or implementing a new network protocol. Same as ECE 435. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 241 or ECE 391.

CS 437 Topics in Internet of Things credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/437/)
Topics of networked embedded computing technology, known as the Internet of Things, in application, distributed, human-centric, or social contexts. The tight coupling between people, networking protocols, computing elements, and physical things in IoT systems presents unique challenges for data collection, processing in constrained computation and communication environments. Introduces general principles of IoT systems and protocol, offers broad foundations for IoT services, and allows specialization to pursue an in-depth understanding of selected IoT aspects or subtopics. 3 undergraduate hours. 4 graduate hours. May be repeated if topics vary. Credit towards a degree from multiple offerings of this course is not given if those offerings have significant overlap, as determined by the CS department. Prerequisite: CS 241. Additional prerequisites may be specified each term. See section information.

CS 438 Communication Networks credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/438/)
Layered architectures and the OSI Reference Model; design issues and protocols in the transport, network, and data link layers; architectures and control algorithms of local-area, point-to-point, and satellite networks; standards in networks access protocols; models of network interconnection; overview of networking and communication software. Same as ECE 438. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 241 or ECE 391; one of ECE 313, MATH 461, MATH 463.

CS 439 Wireless Networks credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/439/)
Same as ECE 439. See ECE 439.

CS 440 Artificial Intelligence credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/440/)
Major topics in and directions of research in artificial intelligence: basic problem solving techniques, knowledge representation and computer inference, machine learning, natural language understanding, computer vision, robotics, and societal impacts. Same as ECE 448. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 225.

CS 441 Applied Machine Learning credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/441/)
Techniques of machine learning to various signal problems: regression, including linear regression, multiple regression, regression forest and nearest neighbors regression; classification with various methods, including logistic regression, support vector machines, nearest neighbors, simple boosting and decision forests; clustering with various methods, including basic agglomerative clustering and k-means; resampling methods, including cross-validation and the bootstrap; model selection methods, including AIC, stepwise selection and the lasso; hidden Markov models; model estimation in the presence of missing variables; and neural networks, including deep networks. The course will focus on tool-oriented and problem-oriented exposition. Application areas include computer vision, natural language, interpreting accelerometer data, and understanding audio data. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 225 and CS 361.

CS 445 Computational Photography credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/445/)
Computer vision techniques to enhance, manipulate, and create media from photo collections, such as panoramic stitching, face morphing, texture synthesis, blending, and 3D reconstruction. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 225, MATH 225, and MATH 231.

CS 446 Machine Learning credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/446/)
Principles and applications of machine learning. Main paradigms and techniques, including discriminative and generative methods, reinforcement learning: linear regression, logistic regression, support vector machines, deep nets, structured methods, dimensionality reduction, k-means, Gaussian mixtures, expectation maximization, Markov decision processes, and Q-learning. Application areas such as natural language and text understanding, speech recognition, computer vision, data mining, and adaptive computer systems, among others. Same as ECE 449. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 225; One of MATH 225, MATH 257, MATH 415, MATH 416 or ASRM 406; One of CS 361, ECE 313, MATH 461 or STAT 400.

CS 447 Natural Language Processing credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CS/447/**)**
Part-of-speech tagging, parsing, semantic analysis and machine translation. Relevant linguistics concepts from morphology (word formation) and lexical semantics (the meaning of words) to syntax (sentence structure) and compositional semantics (the meaning of sentences). 3 undergraduate hours. 3 or 4 graduate hours. Credit is not given for both CS 447 and LING 406. Prerequisite: CS 374.

CS 448 Audio Computing Laboratory credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CS/448/**)**
Computational foundations of modern audio applications: theory of audio processing for implementation of applications such as room and 3D/virtual audio rendering, pitch manipulations and autotuning, denoising for communications and forensics, audio classification, music information retrieval based on audio, rudimentary speech recognition, speech and audio coding, applications of machine learning to audio scene recognition, audio restoration, missing data recovery, and many more. This will be a lab-like course in which students collectively implement a variety of core audio operations that are commonplace today. Students will be required to bring to class their laptops and headphones to participate in lab exercises. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 241 or ECE 391; one of MATH 225, MATH 257, MATH 415, MATH 416 or ASRM 406.

CS 450 Numerical Analysis credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CS/450/**)**
Linear system solvers, optimization techniques, interpolation and approximation of functions, solving systems of nonlinear equations, eigenvalue problems, least squares, and quadrature; numerical handling of ordinary and partial differential equations. Same as CSE 401, ECE 491, and MATH 450. 3 undergraduate hours. 3 or 4 graduate hours. Credit is not given for both CS 450 and CS 457. Prerequisite: One of CS 101 or CS 125; one of CS 357, MATH 257, MATH 415, or MATH 416; MATH 285.

CS 457 Numerical Methods II credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/CS/457/**)**
Continuation of CS 357. Orthogonalization methods for least squares, Krylov subspace methods, non-linear equations and optimization in multiple dimensions, initial and boundary value problems for ordinary and partial differential equations. 3 undergraduate hours. No graduate credit. Credit is not given for both CS 457 and CS 450. Prerequisite: CS 357.

CS 460 Security Laboratory credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CS/460/**)**
Operating systems security: access control, least privilege mechanism and malware techniques. Network security: firewalls, sniffing, tunnels, intrusion detection, AAA and worm structure. System security: forensics security architectures, and attack/defend exercises. Complements CS 461 via hands-on project. Same as ECE 419. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 461.

CS 461 Computer Security I credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CS/461/**)**
Fundamental principles of computer and communications security and information assurance: ethics, privacy, notions of threat, vulnerabilities, and risk in systems, information warfare, malicious software, data secrecy and integrity issues, network security, trusted computing, mandatory and discretionary access controls, certification and accreditation of systems against security standards. Security mechanisms: authentication, auditing, intrusion detection, access control, cryptography, security protocols, key distribution. Same as ECE 422. 4 undergraduate hours. 4 graduate hours. Prerequisite: CS 241 or ECE 391.

CS 463 Computer Security II credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CS/463/**)**
Program security, trusted base, privacy, anonymity, non-interference, information flow, confinement, advanced auditing, forensics, intrusion detection, key management and distribution, policy composition and analysis, formal approaches to specification and verification of secure systems and protocols, and topics in applied cryptography. Same as ECE 424. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 461. Recommended: CS 475.

CS 464 Topics in Societal and Ethical Impacts of Computer Technology credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/CS/464/**)**
Topics selected from key current areas of impact of computer technology on aspects of society and ethics such as: freedom versus the rule of law in cyberspace; social discourse; privacy; livelihoods and automation; fairness; security; political change; business models; technology divide. 3 undergraduate hours. No graduate credit. May be repeated if topics vary. Credit is not given towards a degree from multiple offerings of this course, if those offerings have significant overlap, as determined by the CS department. Prerequisite: CS 225. One of CS 210 or CS 211 or ECE 316 or PHIL 316. One of CS 361 or STAT 400 or STAT 200. Restricted to students with senior standing.

CS 465 User Interface Design credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CS/465/**)**
A project-focused course covering fundamental principles of user interface design, implementation, and evaluation. Small teams work on a term-long project that involves: analysis of the problem domain, user skills, and tasks; iterative prototyping of interfaces to address user needs; conducting several forms of evaluation such as cognitive walkthroughs and usability tests; implementation of the final prototype. Non-technical majors may enroll as non-programmers who participate in all aspects of the projects with the possible exception of implementation. 4 undergraduate hours. 4 graduate hours. Prerequisite: CS 225.

CS 466 Introduction to Bioinformatics credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CS/466/**)**
Algorithmic approaches in bioinformatics: (i) biological problems that can be solved computationally (e.g., discovering genes, and interactions among different genes and proteins); (ii) algorithmic techniques with wide applicability in solving these problems (e.g., dynamic programming and probabilistic methods); (iii) practical issues in translating the basic algorithmic ideas into accurate and efficient tools that biologists may use. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 225.

CS 467 Social Visualization credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CS/467/**)**
Visualizing social interaction in networked spaces: investigation of patterns in networked communications systems such as messaging (email, instant messaging), social networking sites and collaborative sites; social network theory and visualizations; exploration of how to move beyond existing visualization techniques; visualizing the network identity over compilations of online data. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 225.

CS 468 Tech and Advertising Campaigns credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/CS/468/**)**
Same as ADV 492. See ADV 492.

CS 473 Algorithms credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/473/)
Design and analysis techniques, approximation algorithms, randomized algorithms and amortized analysis, and advanced topics such as network flow, linear programming, and dynamic data structures, among others. Same as CSE 414 and MATH 473. 4 undergraduate hours. 4 graduate hours. Prerequisite: CS 374, and one of CS 361, MATH 461, or STAT 400.

CS 474 Logic in Computer Science credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/474/)
An introduction to mathematical logic from the perspective of computer science, emphasizing both computable aspects of logic, especially automated reasoning, as well as applications of logic to computer science in artificial intelligence, databases, formal methods, and theoretical computer science. Prepares students to use logic as a formal tool to solve problems in computer science and AI. Topics include: syntax, semantics and proofs for propositional and first order logic, the decidable logics and efficient realizations in terms of SAT/SMT solvers, decision and semi-decision procedures for first order logic and several first order logic theories, finite model theory and descriptive complexity. Additional topics include: connections between logic and machine learning, higher order logics, applications of logic to program verification, applications of logic in knowledge representation, proof complexity, modal and temporal logic, Courcelle's theorem and its applications in parameterized complexity, logic and its role in automatic program synthesis, connections between logic and database query languages. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 173, CS 225, CS 374.

CS 475 Formal Models of Computation credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/475/)
Finite automata and regular languages; pushdown automata and context-free languages; Turing machines and recursively enumerable sets; linear-bounded automata and context-sensitive languages; computability and the halting problem; undecidable problems; recursive functions; Chomsky hierarchy; computational complexity. Same as MATH 475. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 374.

CS 476 Program Verification credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/476/)
Formal methods for demonstrating correctness and other properties of programs. Invariant assertions; Hoare axiomatics; well-founded orderings for proving termination; structural induction; computational induction; data structures; parallel programs; overview of predicate calculus. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 225; CS 374 or MATH 414.

CS 477 Formal Software Development Methods credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/477/)
Mathematical models, languages, and methods for software specification, development, and verification. Same as ECE 478. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 225; CS 374 or MATH 414.

CS 481 Advanced Topics in Stochastic Processes & Applications credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/481/)
Same as IE 410. See IE 410.

CS 482 Simulation credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/482/)
Same as IE 413. See IE 413.

CS 483 Applied Parallel Programming credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/483/)
Same as CSE 408 and ECE 408. See ECE 408.

CS 484 Parallel Programming credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/484/)
Techniques for the programming of all classes of parallel computers and devices including shared memory and distributed memory multiprocessors, SIMD processors and co-processors, and special purpose devices. Key concepts in parallel programming such as reactive and transformational programming, speculation, speedup, isoefficiency, and load balancing. Synchronization primitives, libraries and languages for parallel programming such as OpenMP and MPI, performance monitoring, program tuning, analysis and programming of numerical and symbolic parallel algorithms. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 241.

CS 491 Seminar credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/491/)
Seminar on topics of current interest as announced in the Class Schedule. 0 to 4 undergraduate hours. 0 to 4 graduate hours. Approved for S/U grading only. May be repeated in the same or separate terms if topics vary to a maximum of 4 hours. Prerequisite: As specified for each topic offering, see Class Schedule or departmental course description.

CS 492 Senior Project I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CS/492/)
First part of a project course in computer science. Students work in teams to solve typical commercial or industrial problems. Work involves planning, design, and implementation. Extensive oral and written work is required both on-campus and possibly off-campus at sponsors' locations. CS 492 must be taken as a sequence with either CS 493 or CS 494. 3 undergraduate hours. No graduate credit. Credit is not given for both CS 492 and a project course in another engineering department for the same project. Prerequisite: For Computer Science majors with senior standing.

CS 493 Senior Project II, ACP credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CS/493/)
Continuation of CS 492. Identical to CS 494 except for an additional writing component. See CS 494. 3 undergraduate hours. No graduate credit. Credit is not given for both CS 493 and a project course in another engineering department for the same project. Prerequisite: CS 492.
This course satisfies the General Education Criteria for:
Advanced Composition

CS 494 Senior Project II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CS/494/)
Continuation of CS 492. 3 undergraduate hours. No graduate credit. Credit is not given for both CS 494 and a project course in another engineering department for the same project. Prerequisite: CS 492.

CS 497 CS Team Project credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/CS/497/)
Student teams work with CS faculty to complete a significant project requiring advanced knowledge of CS principles. Project topics vary. 1 to 3 undergraduate hours. No graduate credit. May be repeated in the same term up to 6 hours, if topics vary; may be repeated in separate terms. Prerequisite: For majors only; junior or senior standing required.

CS 498 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/498/)
Subject offerings of new and developing areas of knowledge in computer science intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated in the same or separate terms if topics vary.

CS 499 Senior Thesis credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CS/499/)
Research and thesis development experience in computer science under guidance of a faculty member. Literature search, oral presentation, analysis and implementation, paper preparation, and completion of a written thesis. 3 undergraduate hours. No graduate credit. May be repeated to a maximum of 6 hours. Prerequisite: Consent of instructor. This course satisfies the General Education Criteria for:
Advanced Composition

CS 500 Current Topics in Computing Education Research credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/500/)
Current research topics and theories in Computers and Education with an emphasis on learning theories such as constructivism, behaviorism, cognitivism, knowledge-in-pieces, test-potentiated learning, and transfer of learning. These theories will be applied to understanding how students learn computing topics such as programming and theoretical computing. These topics will be applied through the design of ethically responsible educational research studies. The course will culminate in students writing a research proposal or conference-style research paper based upon pilot data. 4 graduate hours. No professional credit. May be repeated if topics vary. Credit towards a degree from multiple offerings of this course is not given if those offerings have significant overlap, as determined by the CS department.

CS 508 Manycore Parallel Algorithms credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/508/)
Same as ECE 508. See ECE 508.

CS 510 Advanced Information Retrieval credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/510/)
Advanced concepts, models, and algorithms in information retrieval and major recent developments in the field, including historical milestones in information retrieval research, evaluation methodology, vector space retrieval model, probabilistic retrieval models, learning to rank algorithms, probabilistic topic models, information retrieval systems, text analytics, and topics of research frontiers in information retrieval. 4 graduate hours. No professional credit. Prerequisite: One of CS 410, CS 412, CS 446 or LING 406.

CS 511 Advanced Data Management credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/511/)
Advanced concepts in data management and information system design and implementation, and recent developments in the field. 1) Relational roots, objects and extensibility, query languages, data indexing, query processing, transaction processing, benchmarks, and 2) semi-structured data and unstructured data, information extraction, information integration, web search and mining, and other emerging directions in the field. Prerequisite: CS 411.

CS 512 Data Mining Principles credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/512/)
An advanced course on principles and algorithms of data mining. Data cleaning and integration; descriptive and predictive mining; mining frequent, sequential, and structured patterns; clustering, outlier analysis and fraud detection; stream data, web, text, and biomedical data mining; security and privacy in data mining; research frontiers. Prerequisite: CS 412.

CS 513 Theory & Practice of Data Cleaning credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/513/)
Same as IS 537. See IS 537.

CS 514 Advanced Topics in Network Science credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/514/)
We shall discuss classic and recent research in network analysis. Advanced topics include individual decision-making models, game theory, mechanism design, social choice, social signal design, diffusion of behavior on a network, choice architecture, network models, network mining algorithms and applications. 4 graduate hours. No professional credit. May be repeated if topics vary. Credit is not given towards a degree from multiple offerings of this course, if those offerings have significant overlap, as determined by the CS department. Prerequisite: CS 412, CS 446. Additional prerequisites or corequisites may be specified each term. See section information.

CS 519 Scientific Visualization credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/519/)
Visualization techniques useful in analysis of engineering and scientific data. Physical models; methods of computational science; two- and three-dimensional data types; visual representation schemes for scalar, vector, and tensor data; isosurface and volume visualization methods; visual monitoring; interactive steering. Same as CSE 527. Prerequisite: CS 418.

CS 521 Advanced Topics in Programming Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/521/)
Advanced topics in building and verifying software systems, selected from areas of current research such as: model checking and automated verification, testing and automated test generation, program synthesis, runtime verification, machine learning and its applications in the design of verified systems, formal analysis of machine learning algorithms, principles of programming languages and type systems. 4 graduate hours. No professional credit. May be repeated if topics vary. Credit is not given towards a degree from multiple offerings of this course if those offerings have significant overlap, as determined by the CS department. Prerequisite: CS 374, CS 421. Additional prerequisites or corequisites may be specified each term. See section information.

CS 522 Programming Language Semantics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/522/)
Theory of programming languages including functional programming, meta-circular interpreters, typed, untyped and polymorphic lambda-calculi, and denotational semantics. Prerequisite: CS 422 and CS 426.

CS 523 Advanced Operating Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/523/)
Advanced concepts in operating system design and coverage of recent research directions. Resource management for parallel and distributed systems. Interaction between operating system design and computer architectures. Process management, virtual memory, interprocess communication, context switching, parallel and distributed file system designs, persistent objects, process and data migration, load balancing, security, protection. Term projects. Prerequisite: CS 423, CS 425, and CS 433.

CS 524 Concurrent Progrmg Languages credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/524/)
Theory of concurrency and concurrent programming languages. Formal models of concurrent computation such as process algebras, nets, and actors; high level concurrent programming languages and their operational semantics; methods for reasoning about correctness and complexity of concurrent programs. Prerequisite: CS 422; CS 475 or CS 476.

CS 525 Advanced Distributed Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/525/)
Peer-to-peer systems, sensor networks, and fundamental theoretical distributed computing. Review of classical work in each area, and application of design methodologies to explore overlaps across them. Emphasis on protocol design, systems issues, and theory. Reading selections are roughly two-third classical to one-third contemporary. Students write critiques, make presentations, and create a conference paper in a systematic manner. Prerequisite: One of CS 423, CS 425, CS 438.

CS 526 Advanced Compiler Construction credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/526/)
Incremental and interactive compiling, error correction, code optimization, models of code generators. Prerequisite: CS 426.

CS 527 Topics in Software Engineering credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/527/)
Fault-tolerant software, software architecture, software patterns, multi-media software, and knowledge-based approaches to software engineering. Case studies. Prerequisite: CS 428 or CS 429.

CS 528 Obj-Oriented Progrmg & Design credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/528/)
Principles of object-oriented design; design patterns; use and design of frameworks; reflection, refractoring, use of unit tests as specifications. Prerequisite: CS 427.

CS 533 Parallel Computer Architecture credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/533/)
Theoretical aspects of parallel and pipeline computation; time and processor bounds on classes of computations; data alignment network speed and cost bounds; conflict-free access memories; overall computer system ideas. Same as CSE 522. Prerequisite: CS 433.

CS 534 Advanced Topics in Computer Architecture credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/534/)
Current topics in computer architecture, selected from areas of current research such as: energy efficiency, processing in memory, cloud computing, 3-D architectures, security and privacy, hardware and software resiliency, cross-stack design, heterogeneous platforms, approximate computing, mobile computing, machine learning accelerators, and novel computing technologies. 4 graduate hours. No professional credit. May be repeated, if topics vary. Credit is not given towards a degree from multiple offerings of this course, if those offerings have significant overlap, as determined by the CS department. Prerequisite: CS 433. Additional prerequisites or co-requisites may be specified each term. See Class Schedule information.

CS 536 Fault-Tolerant Dig Syst Design credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/536/)
Same as ECE 542. See ECE 542.

CS 537 Advanced Topics in Internet of Things (IoT) credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/537/)
Advanced topics in Internet of Things (IoT) algorithms, protocols, architectures, systems, and infrastructures, selected from areas of current research such as: IoT sensors representations and compression, streaming and caching of IoT data, IoT analytics and feature learning, IoT-edge-cloud computing infrastructures, resource optimization for multi-modal IoT systems, applications and human perception of IoT. Students will read and discuss recent research papers and conduct a semester-long research project. 4 graduate hours. No professional credit. May be repeated, if topics vary. Credit towards a degree from multiple offerings of this course is not given if those offerings have significant overlap, as determined by the CS department. Prerequisite: CS 425, CS 438. Additional prerequisites may be specified each term. See section information.

CS 538 Advanced Computer Networks credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/538/)
Advanced concepts in computer networks, including congestion control, quality of service, naming, routing, wireless networks, Internet architecture, measurement, network security, and selected recent research directions. Prerequisite: CS 438.

CS 539 Distributed Algorithms credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/539/)
Same as ECE 526. See ECE 526.

CS 540 Deep Learning Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/540/)
A rigorous mathematical course covering foundational analyses of the approximation, optimization, and generalization properties of Deep Neural Networks. Topics include: constructive and non-constructive approximations with one hidden layer; benefits of depth; optimization in the NTK regime; maximum margin optimization outside the NTK regime; Rademacher complexity, VC dimensino, and covering number bounds for ReLU networks. Evaluation is primarily based on homeworks, with a smaller project component. The course goal is to prepare students perform their own research in the field. 4 graduate hours. No professional credit. Prerequisite: Basic linear algebra, probability, proof-writing, and statistics required. Real analysis recommended.

CS 541 Computer Systems Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/541/)
Same as ECE 541. See ECE 541.

CS 542 Statistical Reinforcement Learning credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/542/)
Theory of reinforcement learning, with a focus on sample complexity analyses. Specific topics include MDP basics, finite-sample analyses of online (i.e., exploration) and offline (i.e., batch) RL with a tabular representation, finite-sample analyses of online and offline RL with function approximation, state abstraction theory, off-policy evaluation (importance sampling), and policy gradient. The course goal is to provide a comprehensive understanding of the statistical properties of RL under various settings (e.g., online vs offline), preparing the students for doing research in the area. 4 graduate hours. No professional credit. Prerequisite: Calculus, linear algebra, probability and statistics, and basic concepts of machine learning. Familiarity with (at least one of) the following topics is highly recommended: stochastic processes, numerical analysis, and theoretical computer science.

CS 543 Computer Vision credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/543/)
Same as ECE 549. See ECE 549.

CS 544 Optimiz in Computer Vision credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CS/544/**)**
Applications of continuous and discrete optimization to problems in computer vision and machine learning, with particular emphasis on large-scale algorithms and effective approximations: gradient-based learning; Newton's method and variants, applied to structure from motion problems; the augmented Lagrangian method and variants; interior-point methods; SMO and other specialized algorithms for support vector machines; flows and cuts as examples of primal-dual methods; dynamics programming, hidden Markov models, and parsing: 0-1 quadratic forms, max-cut, and Markov random-fields solutions. Prerequisite: CS 450 and CS 473.

CS 545 Machine Learning for Signal Processing credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CS/545/**)**
Fundamentals of machine learning and signal processing as they pertain to the development of machines that can understand complex real-world signals, such as speech, images, movies, music, biological and mechanical readings, etc. Hands-on examples of how to decompose, analyze, classify, detect and consolidate signals, and examine various commonplace operations such as finding faces from camera feeds, organizing personal music collections, designing speech dialog systems and understanding movie content. 4 graduate hours. No professional credit. Prerequisite: MATH 415; CS 361 or MATH 461 or STAT 400.

CS 546 Advanced Topics in Natural Language Processing credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CS/546/**)**
Advanced topics in natural language processing, ranging from general techniques such as deep learning for NLP to specific topics such as information extraction, knowledge acquisition, dialogue systems, language grounding, and natural language generation. Review of classic as well as state-of-the-art techniques and remaining challenges, and exploration of recent proposals for meeting these challenges. Intended for graduate students doing research in natural language processing. 4 graduate hours. No professional credit. May be repeated in separate terms up to 16 hours, if topics vary. Credit towards a degree from multiple offerings of this course is not given if those offerings have significant overlap, as determined by the CS department. Prerequisite: CS 447 and CS 446 or equivalent background.

CS 547 Deep Learning credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CS/547/**)**
Same as IE 534. See IE 534.

CS 548 Models of Cognitive Processes credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CS/548/**)**
Formal models and concepts in automated cognition; integrating machine learning and prior knowledge; current approaches and detailed analyses of the role of reasoning in the learning process; computational complexity and fundamental tradeoffs between expressiveness and tractability; implications for state-of-the-art artificial intelligence areas such as automated planning, the semantic web, relational learning, structured prediction, latent models, structure learning, theory formation, etc.; philosophical and psychological aspects of integrating analytic and empirical evidence. Same as ECE 548. Prerequisite: CS 440 or CS 446.

CS 549 Seminar in Cognitive Science credit: 2 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CS/549/**)**
Same as PSYC 514, ANTH 514, EPSY 551, LING 570, and PHIL 514. See PSYC 514.

CS 554 Parallel Numerical Algorithms credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CS/554/**)**
Numerical algorithms for parallel computers: parallel algorithms in numerical linear algebra (dense and sparse solvers for linear systems and the algebraic eigenvalue problem), numerical handling of ordinary and partial differential equations, and numerical optimization techniques. Same as CSE 512. Prerequisite: One of CS 450, CS 457, CS 555.

CS 555 Numerical Methods for PDEs credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CS/555/**)**
Numerical techniques for initial and boundary value problems in partial differential equations. Finite difference and finite element discretization techniques, direct and iterative solution methods for discrete problems, and programming techniques and usage of software packages. Same as CSE 510 and MATH 552. 4 graduate hours. No professional credit. Prerequisite: CS 450 or CS 457.

CS 556 Iterative & Multigrid Methods credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CS/556/**)**
Comprehensive treatment of algebraic and multigrid iterative methods to solve systems of equations, primarily linear equations arising from discretization of partial differential equations. Same as CSE 511.

CS 558 Topics in Numerical Analysis credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CS/558/**)**
Advanced topics in numerical analysis selected from areas of current research. Same as CSE 513. May be repeated. Prerequisite: As specified for each topic offering, see Schedule or departmental course description.

CS 562 Advanced Topics in Security, Privacy, and Machine Learning credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CS/562/**)**
Advanced topics in security and privacy problems in machine learning systems, selected from areas of current research such as: adversarial machine learning, differential privacy, game theory enabled defenses, robust learning methods, machine learning based cybercrime analysis, network intrusion detection, and malware analysis, and machine learning interpretation techniques. 4 graduate hours. No professional credit. May be repeated if topics vary. Credit is not given towards a degree from multiple offerings of this course if those offerings have significant overlap, as determined by the CS department. Prerequisite: CS 446 and CS 463 or equivalent courses, by consent of instructor. Additional prerequisites or corequisites may be specified each term. See section information.

CS 563 Advanced Computer Security credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CS/563/**)**
Current research trends in computer and network security. Privacy, tamper-resistance, unwanted traffic, monitoring and surveillance, and critical infrastructure protection. Subtopics will vary depending upon current research trends. Students work in teams in close coordination with the course instructor to develop one of the topics in depth by carrying out background research and an exploratory project. Same as ECE 524. Prerequisite: CS 461 or CS 463.

CS 565 Human-Computer Interaction credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CS/565/**)**
In-depth coverage of advanced topics in human-computer interaction (HCI). Applied models of human performance and attention, design tools for creative design tasks, interruptions and peripheral displays, gestures, and bimanual input, and usability evaluation techniques. Students complete a research-oriented term project of their choosing. Prerequisite: CS 465.

CS 567 Social Signals and Social Media credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/567/)
Online social interactions occur in many arenas important to society and human well-being, but are mediated through algorithmic interventions that alter the users expectations in these social spaces. This class explores the presentation of self, the presentation of collectives, the presentation of news, and social dynamics in these online spaces--and how algorithmic intervention shapes them from the perspective of social signaling theory. Topics covered include: the evolution of algorithmic matchmaking (as in online resume/interviews and dating sites), why people share misinformation, the mitigation of trolling, ethics, and bias in social media systems. Upon completion of this course, students will have an up-to-date understanding of the design social media interfaces with incentive structures from social signaling theory. 4 graduate hours. No professional credit. Prerequisite: CS 465 or equivalent or permission of instructor. Prioritize PhD students, then others.

CS 571 Combinatorial Mathematics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/571/)
Same as MATH 580. See MATH 580.

CS 572 Extremal Graph Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/572/)
Same as MATH 581. See MATH 581.

CS 573 Algorithms credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/573/)
NP-completeness, design and analysis techniques, approximation algorithms, randomized algorithms, combinatorial optimization, linear programming. Intended for graduate students in Computer Science. Same as CSE 515. 4 graduate hours. No professional credit.

CS 574 Randomized Algorithms credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/574/)
Basic and advanced concepts in the design and analysis of randomized algorithms. Sampling; concentration inequalities such as Chernoff-Hoeffding bounds; probabilistic method; random walks, dimension reduction; entropy; martingales and Azuma's inequality; derandomization. Randomized algorithms for sorting and searching; graphs; geometric problems. Basics of pseudorandomness and randomized complexity classes. Prerequisite: CS 473; MATH 461 or STAT 400.

CS 575 Methods of Combinatorics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/575/)
Same as MATH 584. See MATH 584.

CS 576 Topics in Automated Deduction credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/576/)
Advanced topics in computer-aided methods for formal deduction, selected from areas of current research, such as: resolution theorem proving strategies, special relations, equational reasoning, unification theory, rewrite systems, mathematical induction, program derivation, hybrid inference systems, and programming with logic. May be repeated in separate terms. Prerequisite: As specified for each topic offering, see Schedule or departmental course description.

CS 579 Computational Complexity credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/579/)
Turing machines; determinism and non-determinism; time and space hierarchy theorems; speed-up and tape compression; Blum axioms; structure of complexity classes NP, P, NL, L, and PSPACE; complete problems; randomness and complexity classes RP, RL, and BPP; alternation, polynomial-time hierarchy; circuit complexity, parallel complexity, NC, and RNC; relativized computational complexity; time-space trade-offs. Same as ECE 579. Prerequisite: CS 473 or CS 475.

CS 580 Topics in Algorithmic Game Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/580/)
A theoretical CS course covering advances in algorithmic game theory. This includes study of strategic, computational, learning, dynamic, and fairness aspects of games and markets (organizations that involves rational and strategic agents). In particular, topics will include computation and complexity of equilibria, mechanism design, fair-division, dynamics in games and markets, price-of-anarchy etc.. These topics arise from applications such as online marketplaces (like Lyft, Uber, eBay, sponsored search, TaskRabbit), social networks, recommendation systems, kidney exchange, spectrum auction, etc., and thereby will prepare students for related research and/or industry jobs. 4 graduate hours. No professional credit. Prerequisite: CS 473.

CS 581 Algorithmic Genomic Biology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/581/)
The purpose of the course is to give each student enough background and training in the area of algorithmic genomic biology so that each will be able to do research in this area, and publish papers. The main focus of the course is phylogeny (evolutionary tree) estimation, multiple sequence alignment, and genome-scale phylogenetics, which are problems that present very interesting challenges from a computational and statistical standpoint. Time permitting, we will also discuss computational problems in microbiome analysis, protein function and structure prediction, genome assembly, and even historical linguistics. Students will learn the mathematical and computational foundations in these areas, read the current literature, and do a team research project. The course is designed for doctoral students in computer science, computer engineering, bioengineering, mathematics, and statistics, and does not depend on any prior background in biology. The technical material will depend on discrete algorithms, graph theory, simulations, and probabilistic analysis of algorithms. 4 graduate hours. No professional credit. Prerequisite: CS 374 and CS 361/STAT 361, or consent of instructor.

CS 582 Machine Learning for Bioinformatics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/582/)
This graduate course on bioinformatics introduces a selection of topics in computational biology and bioinformatics, with special emphasis on current problems in regulatory genomics and systems biology. Computational approaches discussed will focus on Machine Learning techniques such as Bayesian inference, graphical models, supervised learning and network analysis. Bioinformatics topics will be introduced through lectures by instructor and research paper presentations by students, and include regulatory sequence analysis, cistromics, epigenomics, regulatory network reconstruction, non-coding variant interpretation, and protein structure and function prediction. A research project involving real data analysis with techniques related to course content is mandatory and will help prepare students for bioinformatics research. 4 graduate hours. No professional credit. Prerequisite: CS 446; Credit or concurrent enrollment in CS 466; or consent of instructor.

CS 583 Approximation Algorithms credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/583/)
Approximation algorithms for NP-hard problems. Basic and advanced techniques in approximation algorithm design: combinatorial algorithms; mathematical programming methods including linear and semi-definite programming, local search methods, and others. Algorithms for graphs and networks, constraint satisfaction, packing and scheduling. Prerequisite: CS 573 or consent of instructor.

CS 584 Embedded System Verification credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/584/)
Same as ECE 584. See ECE 584.

CS 585 Hardware Verification credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/585/)
Same as ECE 519. See ECE 519.

CS 586 Combinatorial Optimization credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/586/)
Same as IE 519. See IE 519.

CS 588 Autonomous Vehicle System Engineering credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/588/)
Will introduce students to the computational principles involved in autonomous vehicles, with practical labwork on an actual vehicle. Sensing topics will include vision, lidar and sonar sensing, including state-of-the-art methods for detection, classification, and segmentation. Bayesian filtering methods will be covered in the context of both SLAM and visual tracking. Planning and control topics will cover vehicle dynamics models, state-lattice planning, sampling-based kinodynamic planning, optimal control and trajectory optimization, and some reinforcement learning. Evaluation will involve ambitious challenge projects implemented on a physical vehicle. 4 graduate hours. No professional credit. Prerequisite: CS 374, ECE 484, or equivalent.

CS 591 Advanced Seminar credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/591/)
Seminar on topics of current interest as announced in the Class Schedule. Approved for S/U grading only. May be repeated in the same or separate terms if topics vary. Prerequisite: As specified for each topic offering, see Class Schedule or departmental course description.

CS 597 Individual Study credit: 2 to 16 Hours. (https://courses.illinois.edu/schedule/terms/CS/597/)
Individual study or reading in a subject not covered in normal course offerings. May be repeated. Prerequisite: Consent of instructor.

CS 598 Special Topics credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CS/598/)
Subject offerings of new and developing areas of knowledge in computer science intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. May be repeated in the same or separate terms if topics vary.

CS 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/CS/599/)
Approved for S/U grading only. May be repeated.

COURSES OF INSTRUCTION

CW - CREATIVE WRITING

CW Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/CW/)

Courses

CW 100 Intro to Creative Writing credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CW/100/)
Acquaint students with the technical choices a writer makes in creating a story or a poem. Mondays are given to lectures on specific elements of poetry and fiction. Wednesdays are dedicated to readings by faculty and visiting writers. Fridays allow students the opportunity to work in small group discussion sections applying the week's techniques and skills to a close reading of stories and poems.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

CW 104 Fiction Workshop I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CW/104/)
An introductory workshop in fiction, with a primary emphasis on short stories. Prerequisite: Completion of campus Composition I general education requirement.

CW 106 Poetry Workshop I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CW/106/)
Practice in the writing of poetry; experimentation with a number of fixed forms and free verse, but emphasis mainly on the student's freedom to develop a personal style. Prerequisite: Completion of campus Composition I general education requirement.

CW 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/CW/199/)
Topics course that varies each semester and by section. The topics offered each semester will be listed in the Class Schedule. Approved for Letter and S/U grading. May be repeated.

CW 200 Reading for Writers credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CW/200/)
Emphasizes the craft of short stories and poems through the study of formal elements central to the production of creative writing (e.g., plot, character, setting, point of view in short fiction and rhythm, meter, line break, imagery, simile, metaphor, formal patterns in poetry). Prerequisite: CW 104 or CW 106. For majors only.

CW 202 Topics in Creative Writing credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CW/202/)
Independent writing projects and examination of literature as the cultural basis of the student's specialized fields. May be repeated as topics vary.

CW 204 Fiction Workshop II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CW/204/)
An intermediate workshop in fiction, with a primary emphasis on short stories. Prerequisite: CW 104 or equivalent.

CW 206 Poetry Workshop II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CW/206/)
Builds upon the workshop format of CW 106, with an emphasis on prosody and poetic technique. Students will deepen their sense of craft by putting into practice their study and understanding of a variety of poetic forms (e.g., syllabic poetry, dramatic monologue, sonnet, bound/free verse) and technical concerns (e.g., voice, tone, line, line break, image). The workshop component of the course typically includes 8-12 completed poems and their revisions. Prerequisite: CW 106.

CW 208 Creative Nonfiction Workshop credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CW/208/)
Types of nonfiction prose, including the personal essay, memoir, literary journalism, and historical writing.

CW 243 The Craft Essay: Creative Reading, Reflection, and Revision credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CW/243/)
In this writing- and reading-intensive composition class, students will look at how creative writers—fiction writers, poets, and essayists—write about creative writing outside of the standard literary analysis model. Realizing that there are other methods of discussing, analyzing, and considering literature is a major goal of this class. As a complement to the production of creative work, students will focus on how we analyze, consider, and place that work within the greater context of creative writing. Prerequisite: Completion of campus Composition I general education requirement.
This course satisfies the General Education Criteria for:
Advanced Composition

CW 404 Fiction Workshop III credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CW/404/)
An advanced workshop in fiction, with a primary emphasis on short stories. 3 undergraduate hours. 4 graduate hours. May be repeated for a maximum of 6 undergraduate hours or 8 graduate hours. Prerequisite: CW 204 or equivalent.

CW 406 Poetry Workshop III credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CW/406/)
Practice of the writing of poetry aided by intensive study of examples. 3 undergraduate hours. 4 graduate hours. May be repeated to a maximum of 6 undergraduate hours or 8 graduate hours. Prerequisite: CW 206 or equivalent.

CW 455 Creative Writing Tutorial credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CW/455/)
Personal direction in a writing project: fiction (novel or short stories), poetry or creative nonfiction. Frequency of conference to be determined by the type of project. 3 undergraduate hours. 4 graduate hours. May be repeated to a maximum of 6 undergraduate hours or 8 graduate hours. Prerequisite: CW 208, CW 404 or CW 406, and consent of the Director of Creative Writing.

CW 460 Intro to Literary Editing credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CW/460/)
Practicum in which students learn all the stages of developing and editing a literary publication. Students will solicit, read, and select poems and stories for an online supplement to the Ninth Letter literary journal. At the end of the semester, the supplement will be published on the Ninth Letter website (www.ninthletter.com). Students will gain experience in professional communications, copyediting, and marketing. 3 undergraduate hours. No graduate credit. May be repeated in separate semesters to a maximum of 6 hours. Prerequisite: CW 104 or CW 106.

CW 463 Adv Topics in Creative Writing credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CW/463/)
Advanced topics course in Creative Writing. Students study selected topic through a workshop model, pursuing advanced development in one or more approaches to writing in a specialized field or genre. 3 undergraduate hours. 4 graduate hours. May be repeated, if topics vary. Prerequisite: Junior standing required.

CW 500 The Craft of Fiction credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CW/500/)
Examination of the creative process of fiction from the perspectives of aesthetics and techniques, illustrated from the work of selected authors. Prerequisite: Graduate standing in English.

CW 502 Problems in Poetry Writing credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CW/502/**)**
Examination of the creative process of poetry from the perspective of aesthetics and techniques, illustrated from the work of selected authors. Prerequisite: Graduate standing in English.

CW 504 Writing Workshop in Fiction credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CW/504/**)**
Directed individual projects, with group discussion in fiction. May be repeated to a maximum of 16 hours. Prerequisite: Admission to the MFA program, or graduate standing in English with advanced submission of creative work and consent of instructor.

CW 506 Writing Workshop in Poetry credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CW/506/**)**
Directed individual projects, with group discussion in poetry. May be repeated to a maximum of 16 hours. Prerequisite: Admission to the MFA program, or graduate standing in English with advanced submission of creative work and consent of instructor.

CW 560 Literary Publishing &Promotion credit: 0 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CW/560/**)**
A working practicum designed to teach graduate students the basics of literary journal publishing and to introduce them to career and entrepreneurial opportunities in other types of literary arts organizations. Students will attend weekly editorial meetings, complete weekly reading assignments, and will work 2 hours per week in the 'Ninth Letter' office, reading manuscript submissions and completing various clerical tasks for the journal. Approved for both letter and S/U grading. May be repeated to a maximum of 8 hours. Prerequisite: MFA candidate standing.

CW 563 Special Topics credit: 0 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CW/563/**)**
Approved for both letter and S/U grading. May be repeated up to a maximum of 12 hours. Prerequisite: MFA candidate standing or consent of instructor.

CW 591 Independent Study credit: 0 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CW/591/**)**
Approved for both letter and S/U grading. May be repeated up to a maximum of 12 hours. Prerequisite: MFA candidate standing.

CW 595 Final Project credit: 0 to 12 Hours. **(**https://courses.illinois.edu/schedule/terms/CW/595/**)**
Guidance in writing final projects. Approved for S/U grading only. May be repeated in separate terms to a maximum of 12 hours. Prerequisite: MFA candidate standing.

CPSC - CROP SCIENCES

CPSC Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/CPSC/)

Courses

CPSC 102 Foundational Skills in Crop Sciences credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/102/)
Introduces students to opportunities and topics to prepare for success in crop sciences: basic quantitative and writing skills; research opportunities in the department; basic research skills including ethics and safety. Prerequisite: Restricted to Crop Sciences majors, Computer Sciences + Crop Sciences majors, and ACES Undeclared majors only; restricted to first time freshmen and first time transfer students.

CPSC 103 Sustainable Agriculture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/103/)
Introductory course in sustainable and organic agriculture. Examine how farming evolved from the subsistence farming of indigenous cultures to today's industrial farming of the US. Learn skills to assess the risk and benefits of different agricultural systems including organic farming. Evaluate various cropping systems used in different farming systems. Explore potential future agriculture practices for a growing world population.

CPSC 112 Introduction to Crop Sciences credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/112/)
Introductory course covering the principles and practices of crop production and sustainable agroecosystem management. Topics include plant growth and development, environmental factors influencing plant productivity, soil management, fertility, and nutrient cycling, pest control principles, and sustainability challenges facing modern crop production. Concepts are discussed in lecture and reinforced in hands-on laboratory sections. Additional fees may apply. See Class Schedule.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Life Sciences

CPSC 113 Environment, Agric, & Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/113/)
Introduction to agriculture and the environment; examine the largest managed ecosystem and its influence on natural ecosystems; develop a working understanding of natural and agriculture ecosystems and their interaction; examine various agriculture management strategies that can be used to produce food for an increasing world population while maintaining or improving environmental quality.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Life Sciences
Cultural Studies - Western

CPSC 116 The Global Food Production Web credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/116/)
Introduces students to the global web involved in the production of food we consume on a daily basis. Selected ecosystems of plants, people, and cultures in Asia, Africa, and Latin America will be studied based on involvement with various crops. Presents the origin and biology of plants; their evolution with humankind in various cultures; the spread and economic importance of crops around the world; and considers current hunger and environmental issues resulting from the global food web. Interactive communications with selected scientists, producers, and traders around the world through the World Wide Web and email system of the INTERNET permit students to get personal exposure to information and activities.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West

CPSC 117 Agriculture and Science of Coffee credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/117/)
The growth and production of coffee and its impact on society and culture. The botanical aspects of coffee, coffee varieties/cultivars, and technologies for coffee growth, harvesting, post-harvest processing, and roasting will be discussed. The wide variety of coffee beverages, coffee flavor evaluation, coffee chemistry, coffee economics, and the physiological effects of coffee will also be examined.

CPSC 131 Agriculture in Mythology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/131/)
Compare and contrast the role agriculture and plant sciences played in the development of ancient cultures. Study agricultural references in ancient global mythology. Develop an appreciation of how agricultural diversity of various ancient cultures influenced mythology in the cultures in different regions.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West

CPSC 180 Medicinal Plants and Herbology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/180/)
The use of cultivated and wild plants in medicines and health products according to Eastern and Western medical traditions. Consideration of herbal medicine use from ancient times to the present, important medicinal chemicals produced by plants, and the evaluation of plant chemical products as potential human medicines.

CPSC 199 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/199/)
Experimental course on a special topic in crop sciences. Approved for Letter and S/U grading. May be repeated if topics vary.

CPSC 212 Introduction to Plant Protection credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/212/)
Covers the fundamentals of weeds, plant-associated insects, and plant pathogens. Lecture and laboratory material will cover diagnosis, identification, and control strategies used to improve plant health. Emphasis will be given to those pests and pathogens affecting plant agricultural production in Illinois and the Midwest.

CPSC 213 Evolution in Action credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/213/)
Introduction to evolutionary theory. Examination of how domesticated species have evolved. Develops an appreciation of how agroecosystems influence evolution of adjacent natural ecosystems. Elucidation of evolutionary mechanisms necessary for agricultural species to adapt to global climate change.

CPSC 215 The Prairie and Bioenergy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/215/)
Designed for students who are interested in bioenergy and its production from prairie land. Instructors will provide information on the global trend of bioenergy production and consumption, importance of bioenergy, the role of Illinois prairie land in bioenergy production, potential U.S. bioenergy production, biofuels from plants, and socio-environmental benefits of bioenergy.

CPSC 241 Intro to Applied Statistics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/241/)
Introduces fundamental statistical procedures used to analyze and interpret data. General principles of descriptive and inferential statistics, measures of central tendency and dispersion, probability, correlation and regression, and tests of hypotheses are covered. An emphasis is placed on biological, environmental, and agricultural sciences, but numerous examples from other areas are discussed. Course content enhances students' ability to critically assess statistical information encountered in professional and every day activities. Credit is not given for both CPSC 241 and STAT 100 or ACE 261.
This course satisfies the General Education Criteria for:
Quantitative Reasoning I

CPSC 261 Biotechnology in Agriculture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/261/)
Basic introduction to the techniques and application of biotechnology to a wide range of agricultural areas, and specific examples are given. May serve as either a terminal course explaining the techniques or as an introductory base for future studies. Prerequisite: Any 100-level course in a biosciences discipline.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Life Sciences

CPSC 265 Genetic Engineering Lab credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/265/)
Laboratory/discussion course that provides a hands-on introduction to the techniques and principles of genetic engineering, recombinant DNA and the impact of molecular genetics on society. Students will isolate DNA from plants and clone specific genes into bacterial plasmids, perform polymerase chain reactions, DNA restriction analysis and DNA blotting, and discuss the relevance of these techniques to both medicine and agriculture. Additional fees may apply. See Class Schedule. Prerequisite: A general biology course.

CPSC 266 Data in Biology and Agriculture credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/266/)
This course focuses on the use of computing and data analysis to solve problems in biology and agriculture and includes an overview of computer methods and limitations of current computer, network and storage hardware for big data sets. The nature, use and future potential of different types of computer hardware and software in biology and agriculture (e.g. mobile applications, high performance computing, wireless networking) will be discussed. Examples of computing-related and computing-limited problems in biology and agriculture, such as image analysis, remote sensing and genetic analysis will be used as case studies. The potential of computing to improve the food system, medicine and other applications will be presented.

CPSC 270 Applied Entomology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/270/)
Lectures, laboratory, and field trips cover the biology of insects and the recognition and management of insect pests of agricultural and urban ecosystems. Covers insect structure and physiology, classification, identification, life histories, behavior, and pest management. Same as IB 220 and NRES 270.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Life Sciences

CPSC 336 Tomorrow's Environment credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/336/)
Introduction to interdisciplinary methods of analysis of environmental problems in a finite world; examination of the concept of the limits to growth; development of a working understanding of natural systems and environmental economics; and examination of various management strategies (technical, economic, and social) that can be used to improve environmental quality. Same as CHLH 336, and ENVS 336. Prerequisite: One course in the life sciences and one course in the social sciences, or consent of instructor.

CPSC 352 Plant Genetics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/352/)
The principles of heredity in relation to plant improvement. Same as NRES 352. Prerequisite: IB 103 or IB 104.

CPSC 382 Organic Chem of Biol Processes credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/382/)
An overview of the structure, properties, and reactions of carbon-containing compounds relevant to biological processes and cellular structure. The chemistry of hydro carbon, aromatic, as well as oxygen-nitrogen-, phosphorus-, and sulfur-containing compounds will be examined. Macromolecular structures including biological membranes, carbohydrates, proteins and nucleic acids will also be discussed. Prerequisites: CHEM 102 and CHEM 104 or CHEM 202 and CHEM 204.

CPSC 393 Crop Sciences Internship credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/393/)
Supervised experience in a field directly pertaining to a subject matter in crop sciences. Approved for S/U grading only. May be repeated in separate terms. Independent Study courses are limited to 12 hours total applying to a degree in ACES. For registration in this course, students should contact the Department Undergraduate Program Coordinator. Prerequisite: Sophomore standing, cumulative GPA of 2.0 or above at the time the internship is arranged, and consent of instructor.

CPSC 395 Undergrad Research or Thesis credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/395/)
Independent research, special problems, thesis, development and/or design work under the supervision of an appropriate member of the faculty. May be repeated. Independent Study courses are limited to 12 hours total applying to a degree in ACES. Prerequisite: Cumulative GPA of 2.5 or above at the time the activity is arranged and consent of instructor.

CPSC 396 Undergrad Honors Res or Thesis credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/396/)
Individual research, special problems, thesis, development and/or design work under the direction of the Honors advisor. May be repeated. Independent Study courses are limited to 12 hours total applying to a degree in ACES. Prerequisite: Junior standing, admission to the ACES Honors Program, and consent of instructor.

CPSC 407 Diseases of Field Crops credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/407/)
Studies the symptoms of major field crop diseases, life histories of causal organisms, and methods of control. Lecture and laboratory. Additional fees may apply. See Class Schedule. 3 undergraduate hours. 3 graduate hours. Prerequisite: CPSC 212.

CPSC 408 Integrated Pest Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/408/)
Examination of fundamental concepts of pest management including a historical review of pests and pest management; an overview of major pests (insects, weeds, plant diseases and vertebrate) in a variety of settings (agronomic, specialty crops, urban and structural); management options (area-wide, chemical, biological, cultural and physical); regulatory issues; and topics of current interest. 3 undergraduate hours. 3 graduate hours. Prerequisite: CPSC 212.

CPSC 412 Principles of Crop Production credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/412/)
Fundamentals in crop development and management, soil structure, management, and fertility, and how crops and soils interact are examined. Students learn how to diagnose real-world problems in fields and field crops grown in the Midwestern US, and to develop practical solutions to such problems. Prepares students to be competitive in careers within commercial crop agriculture. 3 undergraduate hours. 3 graduate hours. Prerequisite: CPSC 112 and NRES 201, or equivalent, or consent of instructor.

CPSC 413 Agriculture, Food, and the Environment credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/413/)
Advanced course in the complex interactions of food production resulting from different agricultural systems and the environment. Develop an appreciation of the intricacies of producing food for a growing world population while minimizing the impact on the natural environment. Understand the implementation of new technology and strategies for future food production. 2 undergraduate hours. 2 graduate hours. Prerequisite: CPSC 112 or CPSC 113 or equivalent course or consent of instructor.

CPSC 414 Forage Crops & Pasture Ecology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/414/)
Forages, their plant characteristics, ecology, and production; grasslands of farm and range as related to animal production and soil conservation. 3 undergraduate hours. 3 graduate hours. Offered in alternate years. Prerequisite: An introductory class in biology.

CPSC 415 Bioenergy Crops credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/415/)
Provides an overview and understanding of biomass feedstock production systems for sustainable biofuels production. 3 undergraduate hours. 3 graduate hours. Prerequisite: CPSC 112 or consent of instructor.

CPSC 416 Native Plants, Pollinators, & Food Ecosystems credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/416/)
Introduction to herbaceous native and non-native plants cultivated for landscape applications - conservation, uses, benefits for pollinators, significance for local biodiversity, and contribution to food production. Learn to: identify plants, establish and maintain plantings, and to enhance the interaction between beneficial insects and food crops. 3 undergraduate hours. 3 graduate hours. Credit is not given for CPSC 416 if credit for NRES 415 or HORT 344 has been earned. Prerequisite: HORT 100, IB 103, or basic Plant Biology course.

CPSC 418 Crop Growth and Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/418/)
Crop physiology and management as influenced by environment, plant species, and cropping system; relates plant growth processes to crop production practices based on current research. 3 undergraduate hours. 3 graduate hours. Prerequisite: IB 103 or CPSC 112 or equivalent, or consent of instructor.

CPSC 419 Midwest Agricultural Practices credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/CPSC/419/)
Introduces agronomic production practices in the Midwest and economics of the crop production value chain. Specifically designed for beginning graduate students in crop genetic improvement from non-agricultural backgrounds. 1 undergraduate hour. 1 graduate hour.

CPSC 426 Weed Mgt in Agronomic Crops credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/426/)
Principles of weed ecology and biology, and their application to weed management. Herbicides and their use in corn, soybeans and other agronomic crops. Specialized topics include weed management in reduced tillage, herbicide tolerant crops and management of problem weeds. Additional fees may apply. See Class Schedule. 3 undergraduate hours. 3 graduate hours. Prerequisite: CPSC 212 or consent of instructor.

CPSC 428 Weed Science Practicum credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/428/)
Intensive course on field diagnostic skills in weed science. Topics include weed and weed seed identification, sprayer calibration, herbicide application, herbicide injury symptomatology, and field diagnostics. Students who complete the course will be encouraged to enter the North Central Weed Science Society weeds contest, which occurs during the summer. Additional fees may apply. See Class Schedule. 2 undergraduate hours. 2 graduate hours. Prerequisite: CPSC 212 or CPSC 426 or consent of instructor.

CPSC 431 Plants and Global Change credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/431/)
The science of global atmospheric and climate change in the 21st Century. Understanding of how plants, including crops, will respond and may be adapted to these changes. Using plants to ameliorate predicted climate change. Same as IB 440 and NRES 431. 3 undergraduate hours. 3 graduate hours. Offered in alternate years. Prerequisite: CPSC 112 or IB 103.

CPSC 433 Basic Toxicology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/433/)
Same as CB 449, ENVS 480 and FSHN 480. See FSHN 480.

CPSC 436 Conservation Biology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/436/)
Same as ENVS 420 and IB 451. See IB 451.

CPSC 437 Principles of Agroecology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/437/)
Examines the dynamics and function of agricultural ecosystems and reviews fundamental concepts of ecology. Agricultural systems will be compared on the basis of energy flow, nutrient cycling, diversity, stability and required inputs. 3 undergraduate hours. 3 graduate hours. Offered in alternate years. Prerequisite: IB 100 or IB 103 or equivalent.

CPSC 438 Soil Nutrient Cycling credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/438/)
Same as NRES 438. See NRES 438.

CPSC 439 Env and Sustainable Dev credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/439/)
Same as NRES 439. See NRES 439.

CPSC 440 Applied Statistical Methods I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/440/)
Statistical methods involving relationships between populations and samples; collection, organization, and analysis of data; and techniques in testing hypotheses with an introduction to regression, correlation, and analysis of variance limited to the completely randomized design and the randomized complete-block design. Same as ABE 440, ANSC 440, FSHN 440, NRES 440, and NUTR 440. 4 undergraduate hours. 4 graduate hours. Prerequisite: MATH 112 or equivalent.

CPSC 444 Introduction to Spatial Analytics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/444/)
New technologies in biological sciences make it possible to collect information in time and space and analyze it to open new insights with broad impact in academia and industry. The goal in this course is to provide students with a broad understanding of how to collect and integrate spatial datasets and to develop analytical skills for use in research and decision making. 4 undergraduate hours. 4 graduate hours. Prerequisite: CPSC 440 or equivalent, and some familiarity with R.

CPSC 448 Biological Modeling credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/448/)
Same as ANSC 449, GEOG 468, and IB 491. See GEOG 468.

CPSC 452 Advanced Plant Genetics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/452/)
Survey of selected contemporary topics in plant genetics and genomics. Topics include the nature of genes and genomes, crop domestication, selection, allelic diversity in populations, and genetics mapping. Serves as an introduction to functional genomics, population genetics, transmission genetics, quantitative genetics, and bioinformatics. Same as IB 478. 3 undergraduate hours. 3 graduate hours. Prerequisite: CPSC 352 or IB 204, or consent of instructor.

CPSC 453 Principles of Plant Breeding credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/453/)
Principles, concepts and tools used in plant breeding. Includes methods and breeding schemes used with different plant species. Additional fees may apply. See Class Schedule. 4 undergraduate hours. 4 graduate hours. Prerequisite: IB 103; CPSC 352 or equivalent.

CPSC 454 Plant Breeding Methods credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/454/)
Discussion of the application of current scientific tools and methods available to plant breeders for improving plants; emphasis on actual use of plant breeding methods and production of high quality seed. 2 undergraduate hours. 2 graduate hours. Offered summer only in alternate years. Prerequisite: CPSC 453.

CPSC 462 Plant Molecular Biology credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/CPSC/462/)
Same as IB 472. See IB 472.

CPSC 466 Genomics for Plant Improvement credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/466/)
An overview of applying the methods of genomics to discover variation in genes and their expression, creating new genetic variation, and applying this information to the improvement of economically important plants. Emphasis is on recent advances in genomic science and activities where functional genomics information is used to efficiently create and manipulate desirable phenotypes. 2 undergraduate hours. 2 graduate hours. Prerequisite: CPSC 352 or a similar course, or consent of instructor.

CPSC 467 Plant Genomics credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/CPSC/467/)
Same as IB 473. See IB 473.

CPSC 473 Mgmt of Field Crop Insects credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/473/)
Ecological principles of insect populations in agroecosystems including: sampling insect populations, threshold development, bioeconomics and decision-making, population regulation, designing management strategies for field crop insect pests, and deployment of transgenic crops for management of insect pests. Case studies describing various pest management programs in field-crop settings will be provided. 3 undergraduate hours. 3 graduate hours. Prerequisite: CPSC 270 or an equivalent course, or consent of instructor.

CPSC 475 Insect Pathology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/475/)
Same as IB 483. See IB 483.

CPSC 479 Insect Pest Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/479/)
Same as IB 482. See IB 482.

CPSC 480 Cannabis Classification and Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/480/)
Designed to provide students with an understanding of the cannabis classification system and proper management practices for target compounds and products. Understanding cannabis biology and taxonomic classification is critical for proper management practices for the production of essential oils, psychoactive compounds, fiber, and seed oil and protein, and applications of those products. Discrepancies between scientific and vernacular names of cannabis and the inconsistency of vernacular names mislead producers and consumers. This course will discuss the taxonomy and vernacular nomenclature of cannabis and cannabis biology will be discussed based on individual subspecies. The subspecies classification will be necessary for proper management practices and harvesting of target compounds and products. 3 undergraduate hours. 3 graduate hours. Prerequisite: Students are expected to have basic knowledge of plant biology or consent of instructor.

CPSC 484 Plant Physiology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/484/)
Same as IB 420. See IB 420.

CPSC 486 Plant Growth and Development credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/486/)
Plant growth and development is a complex and highly regulated process that occurs over various spatiotemporal scales. This advanced interdisciplinary course integrates genetic, molecular, cellular, biochemical, anatomical, and physiological information in order to explore the life of a plant from its embryonic origins to its final death. Same as IB 479. 3 undergraduate hours. 3 graduate hours. Prerequisite: IB 103; CPSC 352 or IB 204, or equivalent.

CPSC 488 Soil Fertility and Fertilizers credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/488/)
Same as NRES 488. See NRES 488.

CPSC 489 Photosynthesis credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/489/)
Same as BIOP 432 and IB 421. See IB 421.

CPSC 491 Ugrad Bioinformatics Seminar credit: 0 to 2 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/491/)
Same as INFO 491. See INFO 491.

CPSC 498 Crop Sci Professional Develpmt credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/CPSC/498/)
Topics related to professional development including resumes, interview skills, business etiquette, ethics, and presentations on opportunities in crop sciences and horticulture. 1 undergraduate hour. No graduate credit. Prerequisite: Junior standing in Crop Sciences or Horticulture.

CPSC 499 Advanced Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/499/)
Advanced experimental course on a special topic in crop sciences. 1 to 4 undergraduate hours. 1 to 4 graduate hours. Approved for Letter and S/U grading. May be repeated if topics vary.

CPSC 501 Programming for Genomics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/501/)
Same as IB 501. See IB 501.

CPSC 505 Research Methods in Crop Sciences credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/505/)
Lectures, discussions, and seminars dealing with research in crop sciences. 4 graduate hours. No professional credit.

CPSC 518 Crop Growth and Development credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/518/)
Study of the physiological processes involved in growth and development of crop plants and the interaction of these processes with the environment that influences productivity. Prerequisite: CPSC 418 or CPSC 484.

CPSC 526 Herbicide Action in Plants credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/526/)
Study of various chemicals used to inhibit plant growth, including their uptake, translocation, mode of action, metabolism and resistance mechanisms in plants; and the relationship of chemical structure to the environmental fate of herbicides. Offered in alternate years. Prerequisite: CPSC 426 and CPSC 484.

CPSC 527 Weed Science and Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/527/)
Advanced course on the biological and practical aspects of weeds and their management within Midwest agricultural systems. Includes discussions of current scientific literature to understand the latest advancements in weed science and management. 3 graduate hours. No professional credit. Prerequisite: CPSC 212. For Crop Sciences Online MS students only.

CPSC 538 Environmental Plant Physiology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/538/)
Same as IB 542. See IB 542.

CPSC 540 Applied Statistical Methods II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/540/)
Statistical methods as tools for research. Principles of designing experiments and methods of analysis for various kinds of designs, experimental (completely randomized, randomized complete block, split plots, Latin square) and treatment (complete factorial); covariate analysis; use of SAS for all analyses. 4 graduate hours. No professional credit. Credit is not given for CPSC 540 if credit for CPSC 542 has been given. Prerequisite: CPSC 440 or equivalent.

CPSC 541 Regression Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/541/)
The application of regression methods to problems in the agricultural, biological, and life sciences. Topics include simple linear, multiple linear, nonlinear, and logistic regression analysis and correlation analysis. Emphasis is placed on predictor variable selection, diagnostics, model selection and validation, and remedial measures, including ridge regression, weighted least squares regression, and the use of autoregressive models. Both quantitative and qualitative predictor variables are examined. SAS and R will be used. Same as ANSC 541. 4 graduate hours. No professional credit. Prerequisite: CPSC 440 or equivalent.

CPSC 543 Appl. Multivariate Statistics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/543/)
This class introduces students to statistical methods that consider several variables at once. Emphasis will be given to the applications of multivariate methods to data sets in biology and ecology. Students will develop good knowledge as to how multivariate methods work, they will be able to apply these methods using SAS and R and they will be able to make inferences on the results of the analyses for subsequent scientific publication. Same as STAT 543. Prerequisites: CPSC 440 or equivalent or consent of instructor.

CPSC 545 Statistical Genomics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/545/)
Same as ANSC 545 and IB 507. See ANSC 545.

CPSC 554 Quantitative Genetics and Genomics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/554/)
Most important traits in plant species are quantitative, which means that they are affected by large numbers of genes and their interaction with the environment. Many techniques and tools have developed to try to accelerate quantitative trait improvement, however understanding these methods and how to apply them appropriately remains a significant challenge for breeders and breeding organizations. Through this course, students will gain knowledge on fundamental quantitative genetics concepts and learn how to apply this knowledge to everyday plant breeding situations. Special attention will be given to the application of QTL discovery, population improvement, and genomic selection in plant breeding programs. Each class will consist of a combination of lecture and in-class computer exercises conducted in small groups that the instructor will coach individually. Weekly readings from textbooks and/or primary sources will be assigned to help deepen student's understanding of the topics covered in class. 3 graduate hours. No professional credit. Prerequisite: CPSC 352 or equivalent and CPSC 440 or equivalent. Familiarity with population genetics, plant breeding, mixed models, matrix algebra, and the R programming language is recommended.

CPSC 555 Crop Germplasm Resources credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CPSC/555/)
In this course students will explore the use, curation and collection of germplasm resources to facilitate crop improvement. Genetic diversity is the foundational resource that plant breeders use for the benefit of society; however, it is often challenging to identify, access, and use desirable genes from relatives of crop plants. Strategies and methods employed by plant breeders, curators and collectors will be discussed. Topics will include using distant relatives in breeding program, selecting a subset of accessions for evaluations when large collections are available, circumventing breeding barriers to obtain wide-cross progenies, navigating intellectual property issues, and writing a successful plant exploration proposal. 2 graduate hours. No professional credit. Prerequisite: Introductory courses in genetics (e.g. CPSC 352) and plant breeding (e.g. CPSC 453) or equivalent.

CPSC 556 Plant Breeding Literature credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/CPSC/556/**)**
Students will read a diverse group of plant breeding journal articles, will learn skills involved in evaluating a scientific paper, and will discuss articles with plant breeding faculty members. Approved for S/U grading only. May be repeated in separate terms to a maximum of 5 hours. Prerequisite: Graduate student status.

CPSC 563 Chromosomes credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/CPSC/563/**)**
Includes cytogenetic analysis of eukaryotic organisms, the role of chromosomes in genome organization and evolution, and introduction to molecular cytogenetic laboratory techniques such as mitotic analysis, chromosome banding, flow cytogenetics, somatic cell genetics, chromosomal length polymorphisms, fluorescent microscopy and in situ hybridization. 3 graduate hours. No professional credit. Prerequisite: CPSC 352 or consent of instructor.

CPSC 565 Perl & UNIX for Bioinformatics credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/CPSC/565/**)**
This intensive course is an introduction to high-throughput bioinformatics and genome data analysis. An introduction to programming with Perl and Bioperl will be given, and students will learn to write scripts relevant to their own research goals. We will also cover the use of UNIX and Perl for automating and customizing bioinformatics tools. Prerequisite: Graduate status or consent of instructor. In addition, familiarity with DNA and protein sequence data, and basic Windows computing skills are required.

CPSC 566 Plant Gene Regulation credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CPSC/566/**)**
Current topics and literature on the function and regulation of higher plant genes. Topics of emphasis: transposable elements, their effect on gene expression and variation, and uses in tagging and isolating genes; the developmental, tissue specific, or environmental regulations of plant genes; the structure, synthesis, subcellular targeting, and regulation of major cereal and legume seed proteins; the use of genetic engineering to explore the regulation of plant genes or to alter traits of agricultural importance. 4 graduate hours. No professional credit. Prerequisite: CPSC 352, MCB 450, or consent of instructor.

CPSC 567 Bioinformatics & Systems Biol credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CPSC/567/**)**
Bioinformatics and Systems Biology are emerging disciplines that address the need to manage and interpret the massive quantities of data generated by genomic research. In systems biology, advances in genomics, bioinformatics, and structural biology are used to generate global and unified views that integrate fragmentary knowledge of biological systems, their components and their interrelationships. This course is intended for students interested in the crossroads of biology and computational science and includes both lectures and hands-on experience. Same as IB 505. Prerequisite: Graduate level status or consent of instructor.

CPSC 569 Applied Bioinformatics credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CPSC/569/**)**
Same as ANSC 542 and IB 506. See ANSC 542.

CPSC 575 Scientific Writing: Proposals, Manuscripts, and Peer Review credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/CPSC/575/**)**
Advanced writing course covering topics specific to scientific writing, with emphasis on proposals, manuscripts, and peer review. 3 graduate hours. No professional credit. Prerequisite: Any 599 credit (sufficient data or research results for at least one figure or table).

CPSC 588 Plant Biochemistry credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CPSC/588/**)**
Enzymes and pathways involved in plant intermediary metabolism. Basic cell physiology, bioenergetics, and hormonal regulation of metabolism. Same as IB 524. 4 graduate hours. No professional credit. Prerequisite: CPSC 484 and MCB 450.

CPSC 591 Grad Bioinformatics Seminar credit: 0 to 2 Hours. **(**https://courses.illinois.edu/schedule/terms/CPSC/591/**)**
Same as ANSC 591 and INFO 591. See INFO 591.

CPSC 593 Adv Studies in Crop Sciences credit: 1 to 8 Hours. **(**https://courses.illinois.edu/schedule/terms/CPSC/593/**)**
Directed studies of selected problems or topics relevant to Crop Sciences. Study may be in one of the following fields: 1) Plant Breeding and Genetics; 2) Plant Molecular Biology; 3) Plant Physiology; 4) Crop Production and Ecology; 5) Biometrics; 6) Plant Pathology; 7) Entomology; and 8) Weed Science. Prerequisite: Consent of instructor.

CPSC 594 Professional Orientation CPSC credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/CPSC/594/**)**
Discussion of the philosophy and components of graduate education in Crop Sciences including discussion of the development of methods and strategies useful in research, teaching, and extension. Students will be required to develop and submit a proposal describing planned research for a non-thesis research project, M.S. thesis or Ph.D. Dissertation. Approved for S/U grading only.

CPSC 598 Seminar credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/CPSC/598/**)**
Current research in crops, genetic engineering, plant protection and other topics relevant to Crop Sciences. Approved for both letter and S/U grading. May be repeated to a maximum of 14 hours if topics vary. Prerequisite: Graduate standing.

CPSC 599 Thesis Research credit: 0 to 16 Hours. **(**https://courses.illinois.edu/schedule/terms/CPSC/599/**)**
Individual research under supervision of faculty. Required of all students working toward the Master of Sciences (thesis option) or Doctor of Philosophy in Crop Sciences. 0 to 16 graduate hours. No professional credit. Approved for S/U grading only. May be repeated in separate semesters.

CI - CURRICULUM AND INSTRUCTION

CI Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/CI/)

Courses

CI 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/CI/199/)
Approved for both letter and S/U grading. May be repeated.

CI 205 Undergraduate Honors Research credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/CI/205/)
Course focuses on reading/understanding education research and working with a College of Education faculty mentor on a small research project. Student projects will be presented at the Spring Campus Undergraduate Research Symposium. Classes initially will be led by the instructor, but later will be conducted as a seminar with students leading discussions on the topic of their research. To the extent possible, students will select readings and research topics of personal interest. May be repeated in separate semesters if topics vary. Prerequisite: Restricted to College of Education James Scholar Program Students.

CI 210 Introduction to Digital Learning Environments credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CI/210/)
Surveys the field of digital environments and their capacity to support teaching and learning. Examines theories of interactivity, immersion, learning with multi-media, and digital literacies to discuss and evaluate various digital environments. Students learn to critically assess digital environments and to create original prototypes that target a specific and important learning or teaching goal. Environments that will be discussed and experimented with in class include virtual worlds, social networks, digital classrooms, interactive exhibits, video games, and tangible technologies.
This course satisfies the General Education Criteria for:
Social Beh Sci - Beh Sci

CI 260 Serving Children in Schools and the Community credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CI/260/)
This community engagement course is designed for students interested in working with children (defined as birth through high school), careers serving children, and/or parenthood. The focus for this course is tutoring and mentoring children (elementary through high school). A minimum of two hours per week of approved community service related to children is a requirement of the course. Placements with schools will be made through the course instructor. Class content focuses on relating to children, motivating and engaging children in learning, community institutions and agencies serving children, and social issues affecting the lives of American children today.

CI 395 Independent Study credit: 2 or 3 Hours. (https://courses.illinois.edu/schedule/terms/CI/395/)
Permits study of problems not considered in other courses; for students who excel in self-direction and intellectual curiosity. Approved for both letter and S/U grading. Prerequisite: Junior or senior standing; minimum GPA of 3.5; completion of Advanced Composition requirement, and consent of adviser and staff member supervising the work.

CI 401 Introductory Teaching in a Diverse Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CI/401/)
Orients the student to ways in which English, Mathematics, Science, Social Studies or Computer Science is learned in school settings. Integrates an introduction to the use of technology as both a tool and a context for teaching and learning. As participants in a series of learning activities, students will reflect on the teaching and learning of English, Mathematics, Science, Social Studies or Computer Science from an inquiry oriented perspective. Coursework is integrated with a school field experience to connect theory with practice in an examination of research and current trends. 3 undergraduate hours. 3 graduate hours. Prerequisite: Admission to the Secondary Teacher Education Program, Department of Curriculum and Instruction Computer Science licensure program or consent of the instructor/department.

CI 402 Teaching Diverse Middle Grade Students credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CI/402/)
Examines the curriculum and philosophy of teaching students in the middle grades. Students will focus on a number of related topics including teaching a diverse middle school student population, including all students in instruction, using technology for teaching middle school English, Mathematics, Science, and Social Studies and alternative means of assessing students' learning. Seminar content will be integrated with coursework in adolescent development, and special education in middle school settings. Coursework is integrated with a middle grade field experience. 3 undergraduate hours. 3 graduate hours. May be repeated up to 9 credit hours. Prerequisite: CI 401, CI 405, or CI 410.

CI 403 Teaching a Diverse High School Student Population credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CI/403/)
Examines the curriculum and philosophy of teaching students in high school grades. Students will focus on a number of related topics including teaching a diverse student population, including all students in instruction, using technology for teaching high school English, Mathematics, Science, and Social Studies and alternative means of assessing students' learning. Seminar content will be integrated with coursework in instructional technology, assessment, and special education with high school students. Coursework is integrated with a high school field experience. 3 undergraduate hours. 3 graduate hours. Prerequisite: CI 401. Requires concurrent enrollment in CI/EPSY 485 and SPED 405.

CI 404 Teaching and Assessing Secondary School Students credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CI/404/)
Emphasizes the practical application of theory and recommended practices for developing curriculum, teaching, and assessing learning in the middle and senior high school years. 3 undergraduate hours. 3 graduate hours. Prerequisite: CI 402 or CI 403. Concurrent enrollment in EDPR 442 required.

CI 405 Introduction to Teaching Elementary Age Children credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CI/405/)
Examines the contexts of elementary education in the public schools. Includes content on teaching as a profession and community/family contexts of education. Coursework is integrated with field experiences with elementary children. 3 undergraduate hours. 3 graduate hours. Prerequisite: Admission to the Elementary Teacher Education Program.

CI 406 Theory Practice in Elementary School Teaching I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CI/406/)
Course examines teaching in the elementary grades. Students will focus on a number of related topics, including classroom management, instructional design, personal and professional attributes of effective teachers, and multicultural perspectives. Coursework is integrated with field assignments in public elementary schools. 3 undergraduate hours. 3 graduate hours. Prerequisite: CI 405; admission to the Elementary Teacher Education Program.

CI 407 Theory Practice in Elementary School Teaching II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CI/407/)
Course continues the examination of teaching in the elementary grades, begun in CI 405 and CI 406. In addition to continuing the study of some topics introduced in the previous courses, students will focus on the following topics as they complete student teaching: designing instruction for classes including special needs students, managing technology in the classroom, and working with parents. 3 undergraduate hours. 3 graduate hours. Prerequisite: CI 406; admission to the Elementary Teacher Education Program. Requires concurrent enrollment in EDPR 432.

CI 410 Middle School Instruction, Philosophy and Structures credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CI/410/)
This course will introduce middle school concept and philosophy; cover common instructional and assessment strategies aligned with this concept, with a specific focus on curriculum integration and the use of newer communication technologies; and will review middle school organizational structures, including teaming, advisory, alternative scheduling, exploratory classes, and parental involvement. Students will connect theory and practice by incorporating their concurrent field placement (in middle level setting) into assignments and discussions. 3 undergraduate hours. 3 graduate hours.

CI 415 Language Varieties, Cultures and Learning credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CI/415/)
For students in the early childhood, elementary and middle grades licensure programs. Introduces students to issues related to first- and second-language development, cultural diversity, and language variation. Addresses the above issues in terms of teaching and learning and serves as a base for subsequent courses that will extend these issues in the content areas. 3 undergraduate hours. 3 graduate hours. Prerequisite: Admission to a teacher preparation program.

CI 420 Foundations of Early Childhood Education credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/CI/420/)
Students will study of the role of the early childhood teacher in designing, organizing, and implementing educational programs for children in preschools, kindergartens, and the primary grades. This course includes the history, philosophy, and theory of early childhood education. Students will complete a morning field placement in a local elementary school. 5 undergraduate hours. 5 graduate hours. Prerequisite: Admission to the Early Childhood Teacher Education Program; EPSY 236; EPS 201.

CI 421 Principles and Practices in Early Childhood Education credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CI/421/)
Studies the principles and practices of using play as an educational tool in early childhood education; reviews historical, philosophical, and psychological foundations of nursery-kindergarten methods; assesses techniques relating play to various aspects of instruction; surveys materials and equipment; and presents methods of classroom evaluation. 3 undergraduate hours. No graduate credit. Prerequisite: CI 420; admission to the Early Childhood Teacher Education Program. Concurrent enrollment in EDPR 420 and EDPR 438; credit or concurrent registration in EDPR 250, section EC.

CI 422 Families, Communities, Schools credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/422/)
Principles and practices of building partnerships and collaboration among families, community agencies, and schools in a diverse society for early childhood professionals; covers strategies for building understanding, trust, and effective communication with all children and their families including those who have special needs, have cultural and linguistic differences, come from non-traditional family configurations, and who face poverty, health problems, and/or family dysfunction. 3 undergraduate hours. 4 graduate hours. Prerequisite: Admission to the Early Childhood Teacher Education Program or consent of the instructor.

CI 424 Child Development & Technology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/424/)
Theories of development will inform an analysis of current technologies marketed for pre-school children; issues related to technology and childhood will be explored. One class each week will focus on lectures and discussions about child development, the second class will focus on presentation of technology or technology genre and evaluation of their value for young children. 3 undergraduate hours. 4 graduate hours. Approved for both letter and S/U grading.

CI 430 Teaching Children Mathematics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CI/430/)
Examines children's learning of mathematics and meaningful instructional methods, representations and materials. Emphasis given to number and operations (including both whole and rational numbers), number theory and statistics/probability. Includes laboratory experience with supervised problem solving. 3 undergraduate hours. 3 graduate hours. Credit is not given for both CI 430 and CI 431. Prerequisite: MATH 103; admission to the Elementary Teacher Education Program.

CI 431 Teaching Elementary Mathematics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/431/)
Examines the organization, scope, and sequence of the mathematics program and the functional nature of mathematics; methods, techniques, experiences, and materials of value in teaching mathematics, and the role of the classroom teacher. Includes laboratory experience, with supervised problem solving. 4 undergraduate hours. 4 graduate hours. Credit is not given for both CI 430 and CI 431. Prerequisite: MATH 103; admission to the Special Education Program.

CI 432 Investigative Approach to Elementary Mathematics Instruction credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/CI/432/)
Course will model and examine an investigative approach to elementary mathematics instruction, which is purposeful, inquiry-based, and meaningful mathematics instruction. Particular focus will be given to the teaching and learning of measurement, geometry and algebra/functions. 3 undergraduate hours. 3 graduate hours. Prerequisite: CI 430 or CI 431; admission to the Elementary Teacher Education Program.

CI 433 Foundations of Bilingual Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/433/)
Analyzes historical, political, and educational influences on bilingual/ESL education in US. Theoretical foundation of bilingual and ESL programs are examined as well as the effectiveness of program models in promoting academic achievement. Meets standards and course requirements for the Illinois State Board of Education Teaching Approval and Endorsement for Bilingual and ESL teachers. Same as LLS 433. 4 undergraduate hours. 4 graduate hours.

CI 434 Teaching Secondary Mathematics credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/CI/434/**)**
This is a required course for students seeking a mathematics endorsement at the middle school level while earning or holding teacher certification in another subject area. It is also required for students completing the campus Teacher Education Minor in Mathematics for grades 9-12 and the Teacher Education Minor in Mathematics for grades 6-8. This methods course covers: a) The NCTM and Illinois Learning Standards for Mathematics, b) "Best practice" in mathematics pedagogy, c) Assessment in the mathematics classroom, d) technology in mathematics classrooms, and e) the design of unit and lesson plans in mathematics. Students will design and deliver lessons as part of their course work. 3 undergraduate hours. 3 graduate hours. Prerequisite: Prerequisite: Although there are no stated prerequisites for this course, it is advised that most, if not all, of the mathematics content requirements be completed before taking this course.

CI 435 Technology Applications for Teachers credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CI/435/**)**
In this course, students will dive in-depth into the opportunities and challenges of integrating technology into formal K-12 classrooms. Students will get a chance to critically examine a range of learning technologies, including examples of their use and approaches for assessing their efficacy. As an outcome of this course, each student will construct a lesson plan for integrating a chosen technology in their own classroom. 4 undergraduate hours. 4 graduate hours.

CI 436 Technology and Mathematics Education credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CI/436/**)**
Examines the role of technology as a learning tool in the secondary school mathematics classroom; reviews curricular materials and develops sample classroom projects using available technologies; analyzes mathematical problems using technology methods including simulations, representations, and invented algorithms. 3 undergraduate hours. 4 graduate hours.

CI 437 Educational Game Design credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CI/437/**)**
Examines the role that physical and digital games play in learning. Focuses on how people learn through play and how game structures support educational outcomes. Principles of game design are described and students apply them to the design of original games with a specified educational objective. Students learn to prototype, playtest, and evaluate the educational content of games. Surveys and samples games in the areas of serious games, persuasive games, games for impact, etc. 3 undergraduate hours. 4 graduate hours. Prerequisite: Junior standing or consent of instructor.

CI 438 Computer Programming and the Classroom credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CI/438/**)**
This course will introduces educators to the theoretical, pedagogical, and practical aspects of teaching computer programming in the K-12 setting. It will explore how computer science topics and concepts can impact learning, and offer practical strategies and resources to help teachers incorporate computer programming into their practice. 3 undergraduate hours. 4 graduate hours.

CI 439 Critiques of Educational Technology credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CI/439/**)**
This course will critically examine the social, pedagogical, cognitive, and political impact of implementing technology in educational contexts. We will survey various perspectives critical of educational technology in an effort to clarify its actual and potential value. The course will review papers and other works skeptical of educational technology as a whole, as well as research questioning specific initiatives such as mass distribution of computers in schools, data analytics, MOOCs, intelligent tutors, virtual reality, etc. 3 undergraduate hours. 4 graduate hours. Prerequisite: Undergraduate Students in the DELTA LES concentration should first take CI 210 Introduction to Educational Technology.

CI 442 Math, Science, and Techniques in Early Childhood Education credit: 5 Hours. **(**https://courses.illinois.edu/schedule/terms/CI/442/**)**
The principles, place and practice of science and mathematics education in early childhood education and in the lives of young children; stresses the functional nature of science and mathematics and their inter-relatedness; presents methods, techniques, experiences, and materials of value in teaching mathematics and science in early childhood education; and the role of the classroom teacher. Opportunity for experience in field and laboratory work. 5 undergraduate hours. 5 graduate hours. Prerequisite: CI 420, general education requirements in mathematics (MATH 103 or equivalent), 2 years of college science, admission to the Early Childhood Teacher Education Program. Requires concurrent enrollment in EDPR 432.

CI 443 Mathematics in Early Childhood Education credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/CI/443/**)**
This course focuses on the teaching of foundational mathematical concepts in prekindergarten, kindergarten, and the primary grades. Pre-service teachers will learn the value of "mathematizing" the worlds of children and creating authentic experiences through which children learn key mathematics concepts. 3 undergraduate hours. 3 graduate hours. Prerequisite: Completed or concurrent enrollment in general education requirements in mathematics, admission to the Early Childhood Teacher Education Program. Early Childhood Education majors only. Must be taken concurrently with CI 420.

CI 444 Social Studies in Early Childhood Education credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/CI/444/**)**
Course emphasizes the place of social studies in early childhood education program (preschool - grade 3). Focuses on several areas of knowledge related to the social life of the community as it is concerned with young children; (1) knowledge from the social sciences, (2) social cognition and social skills learning, and (3) ways of dealing with cultural and social diversity. 2 undergraduate hours. 2 graduate hours. Prerequisite: CI 420; admission to the Early Childhood Teacher Education Program.

CI 445 Science and Social Studies Inquiry credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/CI/445/**)**
This course is an exploration into the construct of inquiry as an essential human trait and methodological approach for teaching and learning. Through the disciplines of science and social studies we will inquire into elements and methods for building inclusive and critical communities of practice, designing curriculum for depth of understanding, and using documentation as democratic action. This course will encompass and revisit enduring understandings from the entire ECE professional program sequence, mediated by Danielson's Framework for Teaching. Cohort members will synthesize the above in the real context of student teaching placements, class meetings, online discussions, and course assignments. 3 undergraduate hours. 3 graduate hours. Prerequisite: CI 421. Concurrent enrollment in EDPR 432 is required.

CI 446 Culture in the Classroom credit: 2 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CI/446/**)**
Explores cultural, political, and social factors that affect learning and teaching. Introduces students to the fields of educational anthropology and multicultural education and to the application of cultural information to curriculum development and classroom practice. The 3-hour undergraduate version and 4-hour graduate version meet the Cross-Cultural Studies for Teaching Limited-English-Proficient Students requirement for Bilingual and/or ESL Teaching Approval or Endorsement from the Illinois State Board of Education. 3 undergraduate hours. 2 or 4 graduate hours.

CI 448 Teaching Elementary Social Studies credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/CI/448/**)**
Course examines the nature and role of social studies in elementary schools, both in terms of the formal curriculum and of the impact of the school as a social system on children's social learning. Examines multiple approaches to what should be experienced and learned in social studies as well as the nature of social inquiry. Various instructional methods emphasizing direct experiences as well as reading are emphasized. Local, state, and national trends in curriculum and evaluation are addressed. Students engage in social inquiry, as well as develop, implement, and evaluate an action research project focusing in depth on a particular practice of social education. 3 undergraduate hours. 3 graduate hours. Prerequisite: Admission to the Elementary Teacher Education Program.

CI 449 Issues in Latina/o Education credit: 2 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CI/449/**)**
Critiques and explores various theoretical frameworks used to explain Latina/Latino academic achievement. Examines curricular and instructional issues by investigating how different school systems have implemented schooling for Latina/Latino students. Develops critical understanding of the role of education within the Latina/Latino community. Same as LLS 449. 3 undergraduate hours. 2 or 4 graduate hours.

CI 450 Teaching Elementary Science I credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/CI/450/**)**
Course is the first of two, 3-hour science methods courses in the elementary education program, which will examine elementary science content, learning theory, and the teaching of science in the elementary school. 3 undergraduate hours. 3 graduate hours. Prerequisite: Admission to the Elementary Teacher Education Program.

CI 451 Teaching Elementary Science II credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/CI/451/**)**
Course is the second of two 3-hour science methods courses in the elementary education program. Focus on in-depth understanding of inquiry science teaching. Coursework is integrated with field assignments in schools. Topics include curriculum materials; literacy instruction in science; children's "thinking" about science; differentiated instruction; assessment; incorporating technology. 3 undergraduate hours. 3 graduate hours. Prerequisite: CI 450; admission to the Elementary Teacher Education Program.

CI 452 Social Studies as Action and Inquiry credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CI/452/**)**
This course continues the application of methods and content knowledge from CI 448 and will use an inquiry approach to study classrooms and school communities. Students will learn about teacher action research and begin planning an implement classroom inquiry in their teaching, first as a small pilot project and then a more extensive study connected with EdTPA assignments. The continuing themes of active citizenship, diversity, equity, and professional practices will guide learning and action research planning. 3 undergraduate hours. 4 graduate hours. Prerequisite: Admission to the Elementary Teacher Education Program.

CI 465 Language Literacy in Early Childhood Education I credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/CI/465/**)**
Basic principles, techniques, and materials for the emergent literacy in infancy through preschool. Emphasizes linguistic and cultural factors in culturally diverse settings. 3 undergraduate hours. 3 graduate hours. Prerequisite: Admission to the Early Childhood Teacher Education Program. Concurrent enrollment in HDFS 301.

CI 466 Language Literacy in Early Childhood Education II credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/CI/466/**)**
Emphasizes developmentally appropriate practices for the teaching of reading and writing in grades K-2. 3 undergraduate hours. 3 graduate hours. Prerequisite: CI 465. Requires concurrent enrollment in CI 420 and CI 443.

CI 467 Principles in Teaching Literature to Children and Youth credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/CI/467/**)**
Examines literature written for children and youth and the uses of literature in the school curriculum. 3 undergraduate hours. 3 graduate hours. Credit is not given for both CI 467 and LIS 403. Prerequisite: One college course in literature; admission to a teacher educator preparation program.

CI 468 Children's Literature for Early Childhood Education credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/CI/468/**)**
Examines literature written for children ages birth-eight years, extensive reading and analysis of literature in all genres and formats; evaluations of literature in relation to cognitive and linguistic development, emergent literacy, linguistic and cultural diversity, and family and school literacy; reviews and applies theories about the functions of literature. 2 undergraduate hours. 2 graduate hours. Prerequisite: One college course in literature; admission to the Early Childhood Teacher Education Program.

CI 471 Principles and Practices to Foster Independence in Reading credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CI/471/**)**
Emphasizes reading comprehension and reading to learn in content fields in grades K-8. Includes focus on teaching reading to students from diverse cultural and linguistic backgrounds, including dialect speakers and English learners. 3 undergraduate hours. 4 graduate hours.

CI 472 Teaching Reading in Grades 4-12 credit: 2 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CI/472/**)**
Examines current literacy practices beyond the primary grades including factors related to reading comprehension, vocabulary development, fluency, and motivation. Includes issues related to diversity and ESL related to teaching reading. 3 undergraduate hours. 2 or 4 graduate hours. Prerequisite: EPSY 201; junior standing or consent of instructor.

CI 473 Disciplinary Literacy credit: 2 or 3 Hours. **(**https://courses.illinois.edu/schedule/terms/CI/473/**)**
Provides secondary and K-12 level education majors with principles and practices of effective language and literacy instruction in their content areas, consistent with the Illinois Professional Teaching Standards for educator preparation of the Illinois State Board of Education. 2 or 3 undergraduate hours. 2 or 3 graduate hours. Students in music and kinesiology education take for 2 credit hours; students in agriculture, art, mathematics, science, social studies, and English education take for 3 credit hours. Prerequisite: Admission to a teacher education program.

CI 474 Multiliteracies with Diverse Students credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/CI/474/**)**
Emphasizes that human beings develop multiple literacies throughout their lifetimes. These diverse literacies develop contextually in various discourse communities as novices are apprenticed in the genres and ways of communicating within particular communities. Therefore, this course supports preservice teachers in recognizing and embracing their students' cultural backgrounds and varied, socio-culturally situated literate practices; supporting students' multiliteracies development by engaging them with diverse, multimodal texts and composing practices; and developing culturally sustaining pedagogical practices that create opportunities for students to connect their literacy education and their out-of-school lives. 3 undergraduate hours. 3 graduate hours. Prerequisite: Restricted to students in the Middle Grades Education Graduate Certificate or consent of instructor.

CI 475 Teaching Elementary Reading and Language Arts I credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CI/475/**)**
First of a two-course sequence that examines the basic theories, issues, methods, and materials for a developmental 1-6 language arts program. Emphasizes the need to integrate the four language arts (reading, writing, speaking, and listening) as tools for learning across the curriculum. Addresses cultural diversity in language arts instruction, with emphasis on linguistic diversity. 3 or 4 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CI 467 and admission to the Elementary Teacher Education Program. Elementary Education students register for 3 hours. Special Education students register for 4 hours.

CI 476 Teaching Elementary and Middle Grade Language Arts credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/CI/476/**)**
Second of a two-course sequence that examines the basic theories, issues, methods, and materials for a developmental K-8 language arts program. It continues to emphasize the need to integrate the four language arts (reading, writing, speaking, and listening) as tools for learning across the curriculum. This second course, however, places a relatively greater emphasis on writing than on reading, speaking, and listening. Continues to address cultural diversity in language arts instruction, with emphasis on linguistic diversity. 3 undergraduate hours. 3 graduate hours. Prerequisite: CI 467 and CI 475 or CI 471; admission to the middle grades major, elementary major, or consent of instructor.

CI 477 Bilingual/ESL Methods & Materials credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CI/477/**)**
Focuses on bilingual and English-as-a-second language (ESL) curriculum development and instruction for bilingual and second-language learners (K-12) in a variety of language and program settings. Emphasizes bilingual and ESL materials selection and development, bilingual and ESL literacy instruction, bilingual and ESL content area instruction, and sheltered English instruction. Issues related to second-language acquisition, cultural and linguistic diversity, and parental and community involvement are reviewed. 4 undergraduate hours. 4 graduate hours. Prerequisite: CI 433 or consent of instructor.

CI 480 Introduction to Computer Science for CS Teachers credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CI/480/**)**
This course introduces the core concepts of computer science and computer programming for students to gain experience creating programs using text-based programming languages. It also provides opportunities for students to reflect on how they experience learning those concepts and how this might impact teaching high school students. Students will learn about the fundamentals of how programs are executed and how to store and process data using computers. They will be introduced to the concepts of algorithms, algorithm execution time, and the core concepts of object-oriented programming. 4 undergraduate hours. 4 graduate hours. Prerequisite: Students are required to have successfully completed CI 438.

CI 482 Social Learning and Multimedia credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CI/482/**)**
Learning in multimodal environments from a social and cultural perspective. Topics include the formation and expression of individual and group identity across multiple contexts, including social networking, online gaming, reality television programs, streamed video, and in online courses. Assignments include both analytic and project-based tasks, with an emphasis on implications for formal learning environments. 3 undergraduate hours. 4 graduate hours.

CI 483 Computer Systems for CS Teachers credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/CI/483/**)**
This course teaches the fundamentals of how computers represent data and execute programs. It introduces assembly programming languages and how computers execute instructions. It discusses how computers manage inputs and outputs and how computers can communicate together via networks. It is designed to teach those concepts while addressing the needs to better understand how computers works when teaching high school computer programming courses. 2 undergraduate hours. 2 graduate hours. Prerequisite: Students are required to have successfully completed CI 480 or an equivalent introduction to computer science class.

CI 484 Learning Technologies credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CI/484/**)**
Same as EPOL 483 and HRD 472. See EPOL 483.

CI 485 Assessing Student Performance credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CI/485/**)**
Same as EPSY 485. See EPSY 485.

CI 486 Teaching Methods for Computer Science credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/CI/486/**)**
Designed to help teachers put instructional theory, especially as it relates to computer science education, into practice. It will provide an integrated coverage of methods of computer science classroom instruction, management, and assessment. Includes lesson construction, practice teaching, in class exercises, discussion of readings, and micro-teaching. Students will leave with an understanding of applying computational thinking practices to the teaching process, addressing common barriers to CS with a focus on equity and diversity in CS classrooms, strategies to create a collaborative and inquiry-based learning environment, and best practices for assessment of computer science learning. 4 undergraduate hours. 4 graduate hours. Prerequisite: Students are required to have successfully completed CI 480 (Introduction to Computer Science for CS teachers) or an equivalent introduction to computer science class.

CI 487 Data Structures for Computer Science Teachers credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/487/)
Teaches the fundamentals of data structures and provides opportunities for students to reflect on the importance of data structure knowledge when teaching computer science to high school students. Students will learn the fundamentals of how computers store collections of data, the advantages and disadvantages of different data structures and the importance of selecting the appropriate data representation when designing computer programs. Students will learn how to program various common data structures. Students will develop their computer programming abilities and learn computer programming concepts that are important when developing efficient and reusable data structures. Students will increase their knowledge of object-oriented programming through learning about inheritance and generic data types. Students will learn about dynamic memory management. 4 undergraduate hours. 4 graduate hours. Prerequisite: Students are required to have successfully completed CI 492 (Discrete Mathematics for CS teachers) and CI 483 (Computer Systems for CS teachers).

CI 488 Capstone Project for Computer Science Teachers credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/488/)
Designed as the capstone project course for the high school computer science endorsement program. As part of this course, students will further their knowledge of computer programming by learning about different applications of computer programming that can be implemented in high school classrooms. Topics will vary across semesters to ensure that they reflect topics that are current applications of computer science. Students will apply their programming knowledge to the creation of video games (game programming), the analysis of digital data (data science) and the programming of physical robots (robotics). Students will select a topic of their choice related to a unique application of computer programming and will work towards the design of lesson plans associated with this topic. Throughout the semester, they will design course material appropriate for high school classrooms. 4 undergraduate hours. 4 graduate hours. Prerequisite: Students are required to have successfully completed CI 486 (Methods for CS Teachers) and CI 487 (Data Structures for CS Teachers) or an equivalent data structure class.

CI 489 DELTA Capstone Project credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/489/)
Project-based course focusing on creating Digital Environments for Learning, Teaching and Agency. Students work in teams to build technology-supported learning activities. This course provides a studio-based, hands-on and participatory approach to the development and research of technology tools and curriculum materials. 3 undergraduate hours. 4 graduate hours. Approved for Letter and S/U grading. Prerequisite: CI 481 or consent of instructor. Required capstone project course for students enrolled in DELTA concentration, others can register with instructor's consent.

CI 492 Discrete Mathematics for CS Teachers credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CI/492/)
Introduces fundamental mathematical concepts used for computations. It provides an overview of logic, mathematical proofs, number theory, counting, sets, relations, recursion, graphs and trees. It is designed to teach those concepts while addressing the needs to understand the mathematical formalism behind computation when teaching high school computer programming courses. 2 undergraduate hours. 2 graduate hours.

CI 499 Issues and Development in Education credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/499/)
Seminar course on topics not treated by regularly scheduled courses; requests for initiation may be made by students or faculty member. 2 to 4 undergraduate hours. 2 to 4 graduate hours. Approved for both letter and S/U grading. May be repeated to a maximum of 8 hours. Prerequisite: Junior standing.

CI 501 Curriculum Development for the 21st Century credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/501/)
Examines a variety of definitions of curriculum development, from past to present. Course activities use theories and research to frame discussions of substantive issues in the field: how learning is influenced by the stated goals of education; the cultural background of diverse learners; structure of the school setting; competencies of teachers; means of student assessment; and approaches to incorporating technology and 21st Century skills into classrooms. 4 graduate hours. No professional credit.

CI 502 Introduction to Reading credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/502/)
Provides an overview of reading in the US. Topics covered include the definition of reading and its importance, theoretical models and philosophies of reading and reading instruction, the history of reading instruction, the development of reading skill, current research-based reading instruction, Federal legislation affecting reading instruction, and professional and state standards related to reading instruction.

CI 503 Reading Instruction, K-5 credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/503/)
The first of two courses focusing on research-based reading instruction for students in grades K-12. This course focuses primarily on the development of literacy from birth to preschool and reading instruction for the elementary grades, K-5.

CI 504 Reading Instruction, 6-12 credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/504/)
The second of two courses focusing on research-based reading instruction for students in grades K-12. This course focuses primarily on reading instruction for middle and high school students, grades 6-12. Reading comprehension in the content areas is a particular emphasis. Prerequisite: CI 503.

CI 505 Reading for Diverse Students credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/505/)
Reviews many of the linguistic, cultural, and social factors that affect students (K-12) reading instruction, assessment, and development. Drawing on socio-cognitive and socio-constructivist theories of literacy and culturally responsive pedagogy and social justice issues, the course involves the evaluation and design of instruction and assessments for students from diverse linguistic, cultural, and class backgrounds.

CI 506 Reading Coaching & Leadership credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/506/)
The course consists of two 2-hour components (1 and 2). The first component introduces students to course readings and discussions that explore the various roles of the K-12 reading specialist, including leadership, assessment, and coaching. The second component involves completion of an internship with a reading coach or reading specialist in which students observe and take on the roles of the reading specialist in professional development, curriculum design, instruction, and the management of resources. Both of these components are completed within the same semester. Prerequisite: CI 503, CI 504.

CI 507 Problems & Trends in Special Fields credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/507/)
Intensive examination of problems and trends in the subject fields. 4 graduate hours. No professional credit. May be repeated in separate terms to a maximum of 8 hours.

CI 508 Urban Schools and Schooling credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/508/)
This course is for anyone interested in issues of education in urban settings. It provides an overview of sociopolitical perspectives on teaching and learning for Latina/o, African American, American Indian, English learners, and other marginalized youth. The course explores how issues of identity and power are negotiated by students, communities, and teachers. Participants in the course will develop an understanding on how racism, classism, and the politics of language operate within urban schools. An emphasis of the course is on solutions that address social justice.

CI 509 Curriculum Research credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/509/)
Reviews the principal methodologies used in research on curriculum problems and guides students through the process of working with data in response to research questions; emphasizes qualitative data collection tools and techniques (e.g., surveys, interviews, observations) as well as various theoretical and methodological approaches (e.g., case study, grounded theory, ethnography); emphasizes conceptual and practical problems. 4 graduate hours. No professional credit.

CI 512 Multicultural Education and Global Perspectives credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/512/)
Examines important topics in the area of multicultural education in the United States and around the world. Engages students in the critical exploration of theories and literature that interrogate traditional views of multicultural education. Analyzes issues of race, class, gender, religion, nationality, xenophobia, homophobia, and ability in the contexts of classrooms and other educational settings. Course work focuses on an emancipatory curriculum and pedagogy for transformation and social justice education. Same as AFST 555.

CI 516 Culture and Cultural Context in Educational Evaluation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/516/)
This course provides students with an introduction to the role of culture and cultural context in program evaluation. Students will gain a basic historical perspective, introduction to selected major evaluation approaches (including culturally responsive/competent evaluation) and basic orientation to methods for designing program evaluations. 4 graduate hours. No professional credit.

CI 517 Bilingual and English as a Second Language Assessment credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/517/)
Explores the role of assessment in education of culturally and linguistically diverse students in K - 12 classrooms. Current trends in assessment in the United States will be analyzed as well as how assessments are used for the identification and placement of bilingual and ESL students. The use and scoring of language proficiency assessments will be examined along with various forms of classroom-based assessment. Meets ISBE assessment requirements for a bilingual and ESL teaching approval or endorsement. Same as LLS 517. 4 graduate hours. No professional credit. Prerequisite: CI 433 and CI 477 or consent of instructor.

CI 518 Evaluation of Educational Programs credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/518/)
Origins, assumptions, applications, and development of approaches to educational program evaluation in practice over the past twenty years; unobtrusive measures and noneducation evaluation systems; and practice in collecting evaluative data. Same as EPSY 572. Prerequisite: EPSY 480, one year of work with children or youth in an institutional setting, or consent of instructor.

CI 519 Methods of Child Study credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/519/)
Studies ways in which teachers can evaluate child behavior and development with an emphasis on classroom application; instruction and practice in the use and interpretation of observations, anecdotal records, rating scales, interviews, achievement tests, intelligence tests, questionnaires, and sociometric and projective techniques. Prerequisite: EPSY 404 or consent of instructor.

CI 520 History of Early Childhood Pedagogy and Programs credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/520/)
This course is an overview of historical influences of contemporary early childhood pedagogy and programs. Topics may include, but are not limited to, Enlightenment Era educational reforms, German kindergartens, the Progressive Era, and the War on Poverty. 4 graduate hours. No professional credit.

CI 521 Current Problems and Trends in Early Childhood Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/521/)
Includes principles underlying education practices in day care centers, preschool/nursery and kindergarten settings derived from theory and research in developmental psychology, social psychology, anthropology, and other related disciplines.

CI 522 Arts in Early Childhood and Elementary: Curriculum in Context credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/522/)
Role of dance, drama, music, literature, and the visual arts in early childhood and elementary education, focusing on production/performance, appreciation, history, and aesthetics. Interrelationships among curriculum, notions of child development, cultural contexts, and unique traditions of different arts disciplines. Current art education practices in the United States and other countries. Requires attendance at performances and visits to an art museum. 4 graduate hours. No professional credit. Prerequisite: Graduate status.

CI 526 Capstone II: Completion credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/526/)
Survey of research and best practices for producing instructional change within schools or programs, with an emphasis on the improvement of curriculum and instruction across grade levels. Students will analyze data collected from the current and previous semesters and write a report of their findings. Students will engage in professional learning communities to continue work in school contexts. Prerequisite: For students in the Advanced Instructional Design master's program.

CI 530 Trends and Issues in Mathematics Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/530/)
Addresses theories of learning, research studies, curriculum development projects, and other factors that have influenced elementary mathematics programs; also considers problems and issues in contemporary programs. 4 graduate hours. No professional credit.

CI 532 Professional Development in Mathematics Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/532/)
Considers research perspectives, policies and practices associated with the professional development of mathematics teachers. Specifically, students will examine what policymakers recommend for effective professional development, what research findings seem to suggest, how schools do professional development for successful mathematics teaching, and the implications of policy and real world practices for equality of opportunity for mathematics learning.

CI 533 Problem Solving in Mathematics Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/533/)
Focuses on the role of problem solving in the learning and teaching of mathematics. Examines mathematical problem solving processes, as well as issues surrounding the use of problem solving in K-12 mathematics classrooms, including recent reform trends, equity issues, and distinctions among teaching "about", "for", and "through" problem solving.

CI 534 Teaching and Learning Geometry credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/534/)
This course concentrates on the teaching and learning of geometry in middle school and high school by examining the history of school geometry, comparing curricular expectations and rationales for geometry instruction over time. The course provides an overview of theoretical models regarding the teaching and learning of geometry. At the same time, the course provides opportunities for discussing practical issues of teaching geometry with work on geometrical problems and laboratory sessions using dynamic geometry. Prerequisite: Acceptance into a graduate program.

CI 535 Teaching and Learning Algebra credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/535/)
This course examines perspectives about the teaching and learning of algebra in middle school and high school. Topics include an examination of historical perspectives on algebra in the school curriculum, a study of the nature of algebra and algebraic thinking, an analysis of teaching strategies for teaching algebra, an examination of documents on algebraic reasoning, and explorations of the use of technological tools to support the teaching and learning of algebra. Prerequisite: Acceptance into a graduate program.

CI 536 Curriculum and Instruction Proseminar credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/536/)
Provides an introduction to doctoral studies, research, and careers in education. Focus is on development of an identity as a researcher. Topics include a basic orientation to research in education, doctoral program navigation toward a research identity in a chosen field and career path, writing in academic genres, and education research funding. The course is designed for all CI doctoral students. Topics, readings, and assignments may vary. The course is designed for students at the beginning of their doctoral program. However, advanced students may take the course as they progress in their program. 2 or 4 graduate hours. No professional credit. May be repeated to a maximum of 8 hours in separate semesters.

CI 537 Discourse in STEM Classrooms credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/537/)
An overview of relevant literature regarding discourse in STEM classrooms with emphasis on teachers' perspectives, students' perspectives, and interactions between the teacher and the students. Discusses research methodologies for the study of discourse in STEM classrooms and implications of research for the education and the professional development of pre-service and in-service teachers. Prerequisite: Acceptance into a graduate program.

CI 538 Qualitative Analysis of Video Data credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/538/)
Attends to the special affordances of video data and the key decision points and criteria to justify claims from video. Discussions will emphasize the relevant theoretical, methodological, and ethical considerations for each of those decision points. Students will analyze a selection of video data of their choosing to build and support a claim and justify their methodological choices. 4 graduate hours. No professional credit. Approved for Letter and S/U grading. Prerequisite: A basic qualitative methods course (CI 509, CI 519, EPOL 585, EPS 515, EPSY 577, or EPSY 578), or equivalent graduate-level introductory qualitative methods course, or permission of instructor.

CI 539 Introduction to Educational Data Mining credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/539/)
Throughout the semester, students will learn how data mining and machine learning approaches can be applied to educational data. Students will learn about the different types of data mining and machine learning techniques, reading about examples of how those techniques have applied to educational data and learning how to use tools to apply those techniques. 4 graduate hours. No professional credit.

CI 540 Current Issues in Science Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/540/)
Advanced seminar in science education for teachers, consultants, and administrators. Identifies major problems and issues; analyzes current trends and research; and develops a philosophical framework related to science education. Prerequisite: Teacher education course in science and two years of college science; or consent of instructor.

CI 541 Learning in Science credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/541/)
Focuses on influential theories of student learning and their implications for science education. Examines the theoretical underpinnings of these learning theories as well as their implications for student learning, instruction, and assessment.

CI 542 Science Education and the Philosophy of Science credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/542/)
Surveys issues in philosophy of science that are central to science education through an exploration of the works of twentieth century philosophers of science who were most influential in shaping thinking about science in the science education community. Relevant readings from science and history of science are also explored. Prerequisite: College level coursework in a science discipline or consent of instructor.

CI 543 Constructivism & STEM Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/543/)
Intended for those interested in a perspective on science, technology, engineering and mathematics (STEM) learning and teaching called constructivism. Constructivism focuses on the processes of sense-making or meaning construction through experience and/or social discourse. Designed to help participants examine the implications of constructivism for learning and teaching in STEM. 4 graduate hours. No professional credit. Prerequisite: A basic familiarity with mathematics, science, and/or technology.

CI 544 Education Reforms & Inquiry credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/544/)
This course examines the history of educational reform efforts since the 1950s from the lens of inquiry, teaching and learning. The course examines developments in our understandings of inquiry as a pedagogical approach and set of instructional outcomes in middle and high school STEM education, as well as implications for instruction in classrooms. 4 graduate hours. No professional credit.

CI 545 Virtual Worlds in Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/545/)
Same as EPSY 554. See EPSY 554.

CI 546 MST Proseminar II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CI/546/)
The course examines the process of double-blind review and the metrics associated with refereed research journals and researcher productivity in mathematics, science, and technology education. Students will be provided with practical experiences as journal 'referees' through reviewing manuscripts submitted for publication, and will develop thorough understandings of the entire process of publishing in refereed journals in the field of science, mathematics, and technology education. May be repeated in separate terms to a maximum of 4 hours if topics vary.

CI 547 Sociopolitical Perspectives on Mathematics and Science Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/547/)
This course is for anyone interested in equity-related issues in mathematics and science education. It provides an overview of sociopolitical perspectives on mathematics and science education, including how issues of identity, power, and equity play out in teachings, learning, and research. Students will develop an understanding of how racism, classism, and the politics of language operate within mathematics and science classroom and in the practice of mathematics and science in society at large. An emphasis of the course is on solutions that address social justice.

CI 548 Capstone Project credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CI/548/)
Part I of the course focuses on the design on an action research project (capstone project), which integrates pedagogical and science content ideas addressed in the program courses. The project amounts to an empirical investigation of a student-generated research question around issues focused on science teaching and learning. Students are expected to collect date for their project, preferably in their own classrooms, in the period between Parts I and II of the course. Part II focuses on the analysis, interpretation, and discussion of the data collected, and the implications of the findings for classroom practice. May be repeated in separate terms to a maximum of 4 hours.

CI 550 Methods of Educational Inquiry credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/550/)
Offers a graduate-level introduction to research in education, including quantitative, qualitative and mixed methods designs and approaches. Key concepts include: identifying a research problem, reviewing the literature, design and analysis, communicating evidence, and the ethics of research. Students should gain the ability to effectively evaluate and critique design/methods sections of research publications; plan and design research studies; and organize a presentation of research to an audience of peers. Same as EPOL 550, EPSY 550, and SPED 550. 4 graduate hours. No professional credit.

CI 552 Qualitative Writing credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/552/)
Focuses on analysis of data and writing of qualitative/ethnographic research in educational contexts. Topics include the history of qualitative research practices; approaches to the analysis and interpretation of multiple forms of data, including coding, discourse analysis, text analysis, and structural/post-structural analysis; different styles of qualitative writing; social theory as a framing device; and writing for publication. Provides a theoretically informed but very practical, hands-on approach to qualitative writing for graduate researchers across the broad range of educational and social science contexts. One part of the course focuses on methods of analysis through application, while a second part is designed as a writer's workshop in which students "write up" the data from a study in three narrative styles. Assignments include weekly readings, three short writing assignments, and a more substantial writing project. Advanced graduate standing is useful but not required.

CI 554 Advanced Instructional Approach credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/554/)
An action research-based approach to implementing and evaluating a broad range of research-based instructional approaches across grade levels and content areas. Includes an action-research component. Prerequisite: For students in the Advanced Instructional Design master's program.

CI 555 Advanced Educational Technologies for Engagement and Interactive Learning credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/555/)
Same as EPSY 555 and INFO 555. See EPSY 555.

CI 556 Learning and the Body credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/556/)
This course explores how body movement and physical engagement with the environment is connected to how people learn. We will explore embodied cognition and related ideas from philosophy, cognitive science, the learning sciences, the arts, etc., and apply them to educational contexts. The course will examine the ways that body activity has been employed in curricula and other learning interventions, and we will discuss new technologies that can respond to gestures and other embodied actions. 4 graduate hours. No professional credit.

CI 557 Using Theory in Teacher Education Research credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/557/)
Students in this course will read a variety of theoretical viewpoints in order to frame and critically examine teacher education research. Students will be encouraged to use multiple theories to frame research questions and findings as a way to situate themselves as researchers and consider ways in which multiple theoretical perspectives can be used to examine and interpret different aspects of their research in teacher education.

CI 558 Programs in Teacher Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/558/)
The focus of this course will be a study of programs in teacher education considered in light of historical, social, and policy influences and also related to wider issues in contemporary teacher education efforts and research. We will consider the current context of teacher preparation programs in the U.S., examine the historical factors that have brought U.S. teacher education to this point, assess the influence of public policy on teacher education in the U.S. and globally, and study a variety of exemplary models of teacher education in the U.S. and globally. Students will conduct a study of a particular program and present this in a poster session at the end of the semester.

CI 560 Trends & Issues in Language Arts credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/560/)
Advanced seminar in literacy for teachers, researchers, and specialists. Focuses on trends and issues in elementary and secondary language arts. Current theories, relevant research and practical applications are considered in relation to reading, writing, listening, and speaking. 4 graduate hours. No professional credit.

CI 561 Theory & Practice in Children's and Youth's Composition credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/561/)
Focuses on theory and practice of children's and youth written composition. Includes development of understanding of texts, pedagogy, motivation and classroom practices that facilitate writing. Students learn about their own writing, participate in peer writing conferences, and produce research or curricular projects for use in classrooms. 4 graduate hours. No professional credit. Prerequisite: CI 475 and CI 476, or course in writing, or consent of instructor.

CI 562 Linguistics and the School Curriculum credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/562/)
Analyzes linguistics for the school curriculum including dialect diversities, use of language in social contexts, and variations in oral and written forms of language. Gives attention to classroom discourse in US and international settings, and ethnography of communication. Prerequisite: Admission to a doctoral program.

CI 563 Writing Studies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/563/)
Same as ENGL 505. See ENGL 505.

CI 565 Topics Research and Writing credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/565/)
Same as ENGL 582. See ENGL 582.

CI 566 Topics Writ Pedagogy & Design credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/566/)
Same as ENGL 583. See ENGL 583.

CI 567 Children's Literature in the School Curriculum credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/567/)
Investigates trends and issues related to teaching literature in the school; focuses attention upon the organization and planning of a balanced literature curriculum (fictional and informational). 4 graduate hours. No professional credit. Prerequisite: CI 467 or LIS 404 or consent of instructor.

CI 568 Contemporary Classics in Children's Literature credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/568/)
Critically examines children's books that have received major national and international awards and prizes and the requirements for that distinction; gives particular attention to the most recent publications so honored and their implications for use in the classroom. Prerequisite: CI 467 or CI 567, or LIS 404; and ENGL 106, or equivalent; or consent of instructor.

CI 569 Topics Discourse and Writing credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/569/)
Same as ENGL 584. See ENGL 584.

CI 570 Issues & Trends in Reading credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/570/)
The timing of beginning reading, the influence of certain linguistic findings on methodology and terminology in instructional materials, and the influence of research on methodology are addressed in a way that provides a historical perspective for evaluating the merit of emerging issues and trends. Prerequisite: CI 475 and CI 476 or equivalent, or consent of instructor.

CI 573 Early Childhood and Elementary Reading Instruction credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/573/)
Planning and evaluating reading instruction and materials in preschool school through Grade Three. 4 graduate hours. No professional credit. Prerequisite: CI 475 or CI 471, or equivalent; or consent of instructor.

CI 575 Assessment in Reading credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/575/)
Nature, causes, and diagnosis of reading difficulties; translation of diagnostic information into instructional practice. Prerequisite: CI 475 or CI 471, or equivalent.

CI 576 Assessment-Based Reading Instruction credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/576/)
Supervised experiences; special attention to evaluative and interpretative techniques in cases of severe reading disabilities based on the analysis of specific reading needs. May be repeated to a maximum of 8 hours. Prerequisite: CI 575.

CI 577 Clinical Practicum in Reading credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/577/)
Diagnostic procedures and individual instruction with small groups of children who have reading difficulties. Prerequisite: CI 575 and CI 576.

CI 578 Biliteracy Development of Young Children credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/578/)
Helps students understand the language and literacy development of young bilinguals. Students will develop an understanding of the issues in biliteracy research, explore the diversity of research topics and perspectives in biliteracy research, and learn to think and write critically about research on early biliteracy development.

CI 580 Qualitative Research in Language and Literacy Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/580/)
Focuses on the goals and nature of qualitative, observational study of life in educational settings, with an emphasis on oral and written languages. Adopts interpretive and critical perspectives on research and includes key readings on the ethnography of oral and written communication in schools, given a socioculturally and linguistically diverse society. All students will conduct a small scale study in an education site. Prerequisite: At least one semester of graduate course work.

CI 581 Aesthetics and Curriculum credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/581/)
Provides a synthesis of theoretical and autobiographical perspectives on aesthetic issues and their ramifications for the development and the critique of arts curricula. Drawing on art as an important source of knowledge and communication, the course reviews ideas from aesthetics and arts education (e.g., music, poetry, literature, visual arts, theater and dance education). Identifies principles common to all art forms but manifested differently in each of them to develop tools and skills for the design of, evaluation of, and research on arts curricula. Same as DANC 581. Prerequisite: Graduate standing, and background with one of the arts, or consent of instructor.

CI 582 Reading and Writing Across the Curriculum credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/582/)
Designed for elementary and middle school educators, this course focuses on theory and practice related to both intradisciplinary integration (across the language arts) and interdisciplinary integration (across the content areas). Specific methods and strategies for fostering effective integrated literacy instruction are explored. Prerequisite: CI 475 and CI 476, or equivalent methods course in reading and language arts.

CI 584 Theories in Second Language Acquisition credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/584/)
Same as EALC 584, EPSY 563, FR 584, GER 584, ITAL 584, LING 584, PORT 584, and SPAN 584. See SPAN 584.

CI 585 Informational Children's Literature credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/585/)
Intended for elementary and middle school teachers, this course is an introduction to informational, or nonfiction children's literature. Students will explore the importance of including informational literature in the curriculum, how to select informational children's literature, and methods for teaching with informational text and for helping children learn from informational text. Prerequisite: CI 467, or equivalent children's literature course; CI 475 and CI 476, or equivalent methods course in reading and language arts.

CI 586 Topics in Digital Studies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/586/)
Same as ENGL 586. See ENGL 586.

CI 587 Multicultural Literature K-12 credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/587/)
This course focuses on the meaning, function, and value of multicultural/multiethnic literature in teaching and learning. Through readings, dialogue, and research, students will focus on rewards of teaching and reading multiculturally that make it worth any effort involved. Blending multicultural theory and research, literary study, and educational practice, this course is appropriate for graduate students in education, library science, and English literature and for any other graduate student interested in the role of literature in our culturally diverse society. Prerequisite: A college literature course taken as part of an approved teacher certification program, college literature course in English literature, or consent of instructor.

CI 590 Seminar for Advanced Study of Education credit: 0 to 8 Hours. (https://courses.illinois.edu/schedule/terms/CI/590/)
Seminar for graduate students on specific topics. 0 to 8 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated to a maximum of 8 hours in the same term and a maximum of 12 hours in separate terms, if topics vary. Prerequisite: Admission to doctoral study.

CI 591 Field Study & Thesis Seminar credit: 4 to 8 Hours. (https://courses.illinois.edu/schedule/terms/CI/591/)
Assists doctoral candidates in planning field studies and thesis problems. Students are expected to present their studies at each of four stages: (1) the inception, delimitation, tentative design stage; (2) the proposed design stage; (3) the revised design stage; and (4) the final design stage. Students are expected to analyze critically all presentations. Prerequisite: Admission to doctoral study.

CI 592 Ed.D. Proseminar credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/CI/592/)
Course covers various topics related to research in practice and critical reading of research in the field of curriculum and instruction. May be repeated to a maximum of 6 hours in separate terms. Prerequisite: Ed.D. students.

CI 595 Independent Study credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CI/595/)
Offers opportunity and challenge of self-directive, independent study; develops the individual's ability as an independent student, and enables the student to pursue needed study in a field in which appropriate courses are not being offered during a given term. May be repeated to a maximum of 8 hours with approval. Prerequisite: Approval of study outline by adviser and the department chairperson prior to enrollment.

CI 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/CI/599/)
Individual direction of research and thesis writing. Approved for S/U grading only. May be repeated.

CZCH - CZECH

CZCH Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/CZCH/)

Courses

CZCH 101 Elementary Czech I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CZCH/101/)
Develops basic proficiency in Czech in listening, speaking, reading, and writing.

CZCH 102 Elementary Czech II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CZCH/102/)
Continuation of CZCH 101. Prerequisite: CZCH 101.

CZCH 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/CZCH/199/)
May be repeated.

CZCH 201 Second-year Czech I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CZCH/201/)
Develops intermediate-level proficiency in Czech in listening, speaking, reading, and writing. Prerequisite: CZCH 102 or equivalent.

CZCH 202 Second-year Czech II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/CZCH/202/)
Continuation of CZCH 201. Prerequisite: CZCH 201 or equivalent.

CZCH 484 Readings in Czech credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/CZCH/484/)
Reading and analysis of selected texts. 3 undergraduate hours. 4 graduate hours. Prerequisite: CZCH 202 or consent of instructor.

DANC - DANCE

DANC Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/DANC/)

Courses

DANC 100 Intro to Contemporary Dance credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/DANC/100/)
Overview of major works, figures, and trends responsible for shaping dance as an evolving contemporary art form. The course will have lecture, viewing, discussion and experiential (studio participation) components. For non-dance majors.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

DANC 101 Modern Dance I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/101/)
Introduction to basic dance technique and movement improvisation; the study of motion as an art, group relationships in improvisation, and discussion of choreographic ideas. For non-dance majors. May be repeated to a maximum of 8 hours.

DANC 102 Modern Dance II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/102/)
Intermediate dance technique and improvisation. For non-dance majors. May be repeated to a maximum of 8 hours. Prerequisite: DANC 101 or consent of instructor.

DANC 103 Contact Improvisation credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/103/)
Introduction to basic elements of Contact Improvisation through learning skills such as weight sharing, falling, rolling, responding to touch, momentum, gravity and disorientations. Course work will include dancing, dance making, viewing dance, in-class discussions and short writing assignments. Concert attendance is required. May be repeated to a maximum of 8 hours. Prerequisite: For Non-dance majors.

DANC 104 Making Dances credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/104/)
Introduction to basic choreographic elements. Course work will include dancing, dance making, viewing dance, in-class discussions and short writing assignments. Concert attendance is required. May be repeated to a maximum of 8 hours. Prerequisite: For non-dance majors.

DANC 105 Jazz Dance I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/105/)
Introduction to basic dance technique and stylistic work in the jazz idiom. May be repeated to a maximum of 8 hours. Prerequisite: For non-dance majors.

DANC 106 Jazz Dance II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/106/)
Progressive development of the concepts and skills in DANC 105. May be repeated to a maximum of 8 hours. Prerequisite: DANC 105 or equivalent; or consent of instructor. For non-dance majors.

DANC 107 Ballet I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/107/)
Introduction to ballet for nondance majors. May be repeated to a maximum of 8 hours. Prerequisite: For non-dance majors.

DANC 108 Ballet II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/108/)
Progressive development of the concepts and skills in DANC 107; for the non-dance major. May be repeated to a maximum of 8 hours. Prerequisite: Two semesters of DANC 107 or equivalent or consent of instructor. For non-dance majors.

DANC 109 Ballet III credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/109/)
Intermediate level of Ballet technique for non-dance majors. Course is a continuation and development of the skills in DANC 108. May be repeated to a maximum of 8 hours. Prerequisite: Two semesters of DANC 108 or equivalent or consent of instructor. For non-dance majors.

DANC 111 Dancing Techniques/Non-Majors: credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/111/)
Dancing Techniques is an umbrella course for courses not regularly taught in the department and provides students with the physical study of various dance techniques. Topics reflect specializations or new forms of dance such as House, Vogueing, Clogging, Capoiera, Balinese dance, etc. May be repeated to a maximum of 4 hours in the same term and 8 hours in separate terms. Prerequisite: Restricted to non-dance majors.

DANC 112 Hip Hop credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/112/)
Hip-Hop dance technique will consist of the study and practice of Urban dance forms grounded in hip-hop culture. Students will explore the multiple dimensions of hip-hop dance as they train in the fundamentals of each form, learn its respective historical context, and access ways of incorporating individual ideas and lived experiences into their dancing. May be repeated in separate terms up to 8 hours.

DANC 120 Tap Dance I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/120/)
Introduction to basic tap technique for non-dance majors. Emphasis is on a conceptual understanding of tap style and the development of the specific skills needed for performance. May be repeated to a maximum of 8 hours. Prerequisite: For non-dance majors.

DANC 121 Tap Dance II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/121/)
Intermediate level of tap dance technique for non-dance majors. Course is a continuation of DANC 120, emphasizing a progression in movement vocabulary, style, rhythm, and performance quality. May be repeated to a maximum of 8 hours. Prerequisite: DANC 120 or equivalent, or consent of instructor.

DANC 125 Black Dances of Resistance credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/DANC/125/)
The Break Down: Black Dances of Resistance interrogates African American dance for its potential for social resistance. "Break Down" refers to the spirituality of perseverance and the "vital aliveness" of African Diasporic movement that has counteracted the dismal social climate in which Black people have found themselves throughout American history. Concurrent with on-line lectures, students will participate in African-informed dance classes once a week to excavate the "BreakDown" in selected African American dance forms including but not limited to plantation dances, hip hop, Black queer dance styles, and contemporary choreography.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

DANC 131 Production Practicum I credit: 1 or 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/131/)
Practical experience in the production of dance concerts mounted in the Krannert Center for the Performing Arts. May be repeated to a maximum of 6 hours. (1 hour credit per concert up to 2 hours per term).

DANC 150 Orientation to Dance credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/150/)
Survey of the field including dance as a theatre art, careers, injury prevention and nutrition. Also serves to orient incoming students to the faculty, programs, and policies of the Department of Dance, and the production and performing resources in the Krannert Center for the Performing Arts. Prerequisite: Major standing in Dance or consent of instructor.

DANC 160 Beg Contemp Modern Tech Core credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/DANC/160/)
Elementary technique for majors with emphasis on a conceptual understanding of movement principles and the development of technical skill and performance sensitivity. May be repeated to a maximum of 18 hours. Prerequisite: Major standing in Dance or consent of instructor.

DANC 166 Beginning Ballet Tech Core credit: 1 or 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/166/)
Elementary ballet for dance majors; emphasizes placement, refinement of adagio, pirouette, jumps, and connecting steps. May be repeated to a maximum of 8 hours. Prerequisite: Major standing in Dance or consent of instructor.

DANC 167 Beginning Ballet Tech Elect credit: 1 or 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/167/)
Elementary ballet for dance majors; emphasizes placement, refinement of adagio, pirouette, jumps, and connecting steps. May be repeated to a maximum of 8 hours. Prerequisite: Major standing in Dance or consent of instructor.

DANC 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/DANC/199/)
May be repeated to a maximum of 9 hours.

DANC 200 Explore Music through Dance credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/DANC/200/)
In-depth study of musical form, history, culture, and styles, taught from a physical learning, i.e., dance, perspective. Musical and dance forms will be studied across cultures and time periods, from both a technical and a cross-cultural perspective. Content will be delivered as a series of video lectures and performances, and online readings. Students will create movement studies that mirror the musical forms being analyzed, produce video documentation of these works, engage in peer review of other students' performance work, and complete exams that cover the cultural and historical aspects of the examples studied.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

DANC 201 Yoga Practicum credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/201/)
Introduces basic yoga asanas (postures) and overview of the 8-limb system of yoga. Focus will be on physical understanding, correct alignment and inner awareness in the major basic poses. Weekly home practice, ongoing journal, and a research paper about an area of yoga philosophy are required. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Not intended for Dance or Dance major(s).

DANC 209 Lyric Theatre Dance credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/209/)
Designed for Lyric Theatre Students, this course will introduce a broad variety of movement techniques used in the collaborative singing-acting industry. Through integrative cognitive and physical instruction, students will learn to optimize kinesthetic awareness, expressiveness, breath control, and governance of the singing actors' physical instrument. Classes will include: physical exercises and improvisations, group collaborations, and analysis of movement choices in theatrical performances. Dance styles ranging from Baroque opera and ballroom dance forms to contemporary musical theatre will be covered within this course. May be repeated once in separate semesters. Prerequisite: For Dance or Lyric Theater majors only or by consent of the instructor.

DANC 210 Int Jazz Technique credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/DANC/210/)
Introduction to basic dance techniques and stylistic work in the jazz idiom for experienced dancers. Emphasis on a conceptual understanding of jazz style (as related to America's own cultural diversity) and the development of the specific skills necessary for performance and teaching. May be repeated to a maximum of 2 hours. Prerequisite: Major standing in Dance or consent of instructor.

DANC 211 Int Hip Hop Technique credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/DANC/211/)
Hip-Hop dance technique will consist of the study and practice of Urban dance forms grounded in hip-hop culture. Students will explore the multiple dimensions of hip-hop dance as they train in the fundamentals of each form, learn its respective historical context, and access ways of incorporating individual ideas and lived experiences into their dancing. May be repeated in separate terms for a maximum of 8 hours. Prerequisite: For majors only.

DANC 212 Musical Theater Dance credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/DANC/212/)
Introduction to basic dance techniques and stylistic work in the Musical Theater idiom for experienced dancers. Emphasis is on a physical and conceptual understanding of a variety of Musical Theater styles as related to America's own cultural diversity and the development of the specific skills necessary for performance and teaching. May be repeated in separate terms to a maximum of 2 hours. Prerequisite: Audition required. Primarily for Dance and Music Majors with a Concentration in Lyric Theater. Students with sufficient skills from other majors may be accepted with approval from instructor.

DANC 215 Int Tap Dance Technique credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/DANC/215/)
Introduction to basic tap technique for experienced dancers. Emphasis on a conceptual understanding of tap style and the development of the specific skills necessary for performance and teaching. May be repeated to a maximum of 2 hours. Prerequisite: Major standing in Dance, or consent of instructor.

DANC 220 Perf Pract Student Works I credit: .5 to 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/220/)
Performance laboratory involving the rehearsal and performance of student works under faculty supervision. Approved for S/U grading only. May be repeated in the same semester for 4 hours to a maximum of 16 hours in separate semesters. Prerequisite: Consent of instructor. A maximum of 16 hours of performance credit may be counted toward degree requirements.

DANC 221 Performance in Grad Thesis I credit: .5 to 3 Hours. (https://courses.illinois.edu/schedule/terms/DANC/221/)
Performance laboratory involving the rehearsal and performance of student works under faculty supervision performed in MFA Thesis concert. May be repeated to a maximum of 16 hours, in separate terms. Prerequisite: Consent of instructor. A maximum of 16 hours of performance credit may be counted toward degree requirements.

DANC 222 Perf Pract November I credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/DANC/222/)
Performance laboratory involving the rehearsal and performance of works by faculty and visiting artists performed in November Dance. May be repeated to a maximum of 16 hours. Prerequisite: Consent of instructor. A maximum of 16 hours of performance credit may be counted toward degree requirements.

DANC 223 Perf Pract February I credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/DANC/223/)
Performance laboratory involving the rehearsal and performance of works by faculty and visiting artists performed in February Dance. May be repeated to a maximum of 16 hours. Prerequisite: Consent of instructor. A maximum of 16 hours of performance credit may be counted toward degree requirements.

DANC 231 Production Practicum II credit: 1 or 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/231/)
Practical experience in the production of dance concerts mounted in the Krannert Center for the Performing Arts. May be repeated to a maximum of 6 hours. (1 hour credit per concert up to 2 hours per term).

DANC 232 Repertory Company credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/232/)
Provides dance majors with diverse performing experiences in the community. Venues will include area schools, nursing homes, and special populations. Students will participate in the creation of lecture-demonstrations which may include improvisation and choreography. Participation in all performances is a requirement. May be repeated to a maximum of 6 hours. Prerequisite: Major standing in Dance or consent of instructor.

DANC 240 Dance History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/DANC/240/)
Introduction to major artistic movements in dance history from ancient Greece through the 20th century. Goal of the course is to gain a broad understanding of dance in relation to socio-political ideologies of gender, race, sexuality, and national identities. Prerequisite: Major standing in Dance or consent of instructor.

DANC 245 Introduction to Somatics credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/DANC/245/)
Introduction to the basic concepts and principles of somatic practices, or body-mind disciplines, as related to dance. Through reading, writing, and experiential work, students will learn basic tenets of a number of somatic practices such as Ideokinesis and Imagery, Body-Mind Centering, The Alexander Technique, Bartenieff Fundamentals, and the Feldenkrais Method. Exploration of the ways in which somatics has helped to shape current dance training practices by looking at common themes and distinguishing features of these modalities.

DANC 256 Choreographic Laboratory Intermediate credit: 1 to 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/256/)
Students will work in depth within each professor's choreographic process, learning creative tools for generating dance material, directing performance, crafting choreographic ideas over a full semester and developing performance skills. This is an elective course that may be repeated to a maximum of 4 hours. May be repeated in separate terms to a maximum of 4 credit hours. Prerequisite: Major standing in Dance or consent of instructor.

DANC 259 Contact Improvisation for Actors, Musicians and Dancers credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/DANC/259/)
In this interdisciplinary course, performing arts students learn physical skills necessary for the practice of the contact improvisation (CI) partnering dance form as well as improvisational and performance skills. Encourages contemplation of the broader philosophical implications inherent in the form: community building and accepting difference. Content includes visits to lectures and events outside the Dance Department.

DANC 260 Int Contemp Modern Tech Core credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/DANC/260/)
Progressive development of the concepts in DANC 160 and DANC 161, with emphasis on the qualitative and definitive performance of a variety of technical styles. May be repeated to a maximum of 18 hours. Prerequisite: Major standing in Dance and successful completion of two semesters of DANC 160; or consent of instructor.

DANC 261 Int Contemp Modern Tech Elect credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/DANC/261/)
Progressive development of the concepts in DANC 160 and DANC 161, with emphasis on the qualitative and definitive performance of a variety of technical styles. May be repeated to a maximum of 18 hours. Prerequisite: Major standing in Dance and successful completion of two semesters of DANC 160; or consent of instructor.

DANC 262 Choreographic Process I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/262/)
Theory and practice in principles of dance composition; emphasis on solo creative work using various approaches to composition. Prerequisite: DANC 259 or consent of instructor. Limited to dance majors.

DANC 266 Intermediate Ballet Tech Core credit: 1 or 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/266/)
Intermediate ballet for dance majors; a progressive development of movement concepts and vocabulary in DANC 166 and DANC 167, with emphasis on technical development and extended movement combinations. May be repeated to a maximum of 8 hours. Prerequisite: Major standing in Dance and successful completion of two semesters of DANC 166 or DANC 167; or consent of instructor.

DANC 267 Intermediate Ballet Tech Elect credit: 1 or 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/267/)
Intermediate ballet for dance majors; a progressive development of movement concepts and vocabulary in DANC 166 and DANC 167, with emphasis on technical development and extended movement combinations. May be repeated to a maximum of 8 hours. Prerequisite: Major standing in Dance and successful completion of two semesters of DANC 166 or DANC 167; or consent of instructor.

DANC 268 Music Theory for Dancers credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/DANC/268/)
Introduction to basic music theory with a concentration on rhythm. The first half of the term will concentrate on 1) learning, understanding, and being conversant in basic music parameters; 2) analytical listening; 3) notation; 4) transcripts; 5) reading notation/following a score; 6) performance of simple rhythm patterns. The second half will deal with form and formal analysis as it relates to choreography, as well as more advanced parameters of music theory. Prerequisite: Major standing in Dance or consent of instructor.

DANC 301 Yoga Fundamentals credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/DANC/301/)
Introduces basic yoga asanas (postures) and brief overview of the 8-limb system of yoga. Focus will be on understanding correct alignment and developing inner awareness. Weekly home practice, journal, and discussions about yoga philosophy are required. May be repeated in separate terms to a maximum of 8 hours. Prerequisite: Restricted to Dance or Dance major(s).

DANC 302 Intermediate Asana credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/DANC/302/)
Continues to develop deep intellectual and physical understanding of the basic yoga asanas learned in DANC 301: Yoga Fundamentals. Begin to practice intermediate-level poses, and develop a remedial understanding of pranayama (energy control achieved though breath). May be repeated in separate terms up to 2 hours. Prerequisite: DANC 301. For dance majors only.

DANC 303 Yoga Teacher Training credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/DANC/303/)
This course introduces basic yoga philosophy. Course content also includes discussion of the ethics involved in teaching yoga as well as applying prior experience with teaching and anatomy to teaching yoga asana. Prerequisite: DANC 301 and DANC 302. For dance majors only.

DANC 310 Dancing Techniques/Dance Majors: credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/DANC/310/)
Dancing Techniques is an umbrella course for courses not regularly taught in the department and provides student with the physical study of various dance techniques. Topics reflect specializations or new forms of dance such as House, Vogueing, Clogging, Capoiera, Balinese dance, etc. May be repeated in the same term to a maximum of 2 hours and in separate terms to a maximum of 8 hours. Prerequisite: Restricted to Dance Majors.

DANC 330 Dance Documentation credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/DANC/330/)
This is a hands-on course for students interested in exploring the relationship between dance and camera and the fundamentals of dance documentation. Using critical and experiential approach, we will explore the technical and artistic capabilities of mini-DV cameras and film-editing software to create dance performance documentation. Students will learn to execute clear and effective camerawork in relationship to dance performance, and to utilize editing software to most clearly display the artistic intent of the choreographers and directors. May be repeated up to 8 hours in separate terms. Prerequisite: For majors only, or by instructor approval.

DANC 331 Production Practicum III credit: 1 or 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/331/)
Practical experience in all aspects of the production of dance concerts mounted in the Krannert Center for the Performing Arts and within the Department of Dance. May be repeated to a maximum of 6 hours. (1 hour credit per concert up to 2 hours per term). Prerequisite: DANC 131, DANC 231 or equivalent, and consent of instructor.

DANC 340 Dancing Black Popular Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/DANC/340/)
Introduces students to black dance aesthetics and its interconnectedness with American popular culture. By exploring its cultural, political and historical roots, coupled with theoretical concepts of "the popular" and ties to the vernacular, the course will be organized around significant markers that have shaped black dance's development. Same as AFRO 340.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

DANC 345 Dance Anatomy and Kinesiology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/DANC/345/)
The study of human and anatomy and kinesiology, specifically as applied to dance. The human musculoskeletal system, movement analysis, and conditioning principles are covered both theoretically and practically.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Life Sciences

DANC 350 Creative Dance for Children credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/DANC/350/)
Through lecture, discussion and practice, students develop skills to teach elements and concepts of dance to children ages 4-10. Course includes strategies for behavior and time management, spatial transitions, and how to organize and communicate creative concepts clearly and effectively. Students will observe master teaching and apply teaching techniques, acquire lesson plans that form the basis for a creative dance curriculum and the skills to implement them, and participate in all phases of a creative dance curriculum, including informal performance. Same as ARTE 350 and HDFS 361. May be repeated to a maximum of 6 hours. Prerequisite: Consent of instructor.

DANC 360 Int/Adv Contemp Mod Tech Core credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/DANC/360/)
Progressive development of the concepts in DANC 260 and DANC 261, with emphasis on virtuosity and versatility. May be repeated to a maximum of 18 hours. Prerequisite: Major standing in Dance or consent of instructor; departmental placement.

DANC 361 Int/Adv Contemp Mod Tech Elect credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/DANC/361/)
Progressive development of the concepts in DANC 260 and DANC 261, with emphasis on virtuosity and versatility. May be repeated to a maximum of 18 hours. Prerequisite: Major standing in Dance or consent of instructor; departmental placement.

DANC 362 Choreographic Process II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/362/)
Choreography for the experienced student; includes performance of at least one original work. May be repeated in separate terms to a maximum of 10 hours. Prerequisite: DANC 262 or consent of instructor.

DANC 363 Advanced Improvisation credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/DANC/363/)
Exploration of the physical skills and philosophical concepts at the base of improvisation practice. Students will develop individual and collective approaches to improvisatory structures, systems and performance contexts as well as look at the historical ways that improvisation has been used in contemporary performance. The course will culminate in performance in various public and private contexts. May be repeated in separate terms to a maximum of 4 credit hours.

DANC 366 Int/Adv Ballet Tech Core credit: 1 or 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/366/)
Intermediate/Advanced ballet for dance majors; a progressive development of movement concepts and vocabulary in DANC 266 and DANC 267. For dancers of advanced technical level with the ability to execute the ballet vocabulary. May be repeated to a maximum of 8 hours. Prerequisite: Major standing in dance or consent of instructor; or Departmental placement.

DANC 367 Int/Adv Ballet Tech Elect credit: 1 or 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/367/)
Intermediate/Advanced ballet for dance majors; a progressive development of movement concepts and vocabulary in DANC 266 and DANC 267. For dancers of advanced technical level with the ability to execute the ballet vocabulary. May be repeated to a maximum of 8 hours. Prerequisite: Major standing in dance or consent of instructor; or Departmental placement.

DANC 375 Production in Dance credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/DANC/375/)
Examines the theoretical and practical aspects of dance production. Includes lighting, costumes, scenery, props, audio, make-up, and management. Commitment outside of scheduled class includes participation in the production of the annual Senior Concert.

DANC 400 Viewing Dance credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/DANC/400/)
Overview of contemporary dance from the United States, Canada, and Europe focusing on the current works of significant emerging and established choreographers working in the field today. 1 undergraduate hour. 1 graduate hour. Approved for S/U grading only. May be repeated to a maximum of 4 hours.

DANC 401 Alexander Tech for Dancers credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/DANC/401/)
Introduces the Alexander Technique: a practical method for changing habitual movement patterns which interfere with coordination, ease, and efficiency of movement. The course focuses on learning the principles through hands-on work, readings, discussions, and application to dance. 1-3 individual lessons outside of class required per term. 1 undergraduate hour. 1 graduate hour. May be repeated for a total of 2 credit hours. Prerequisite: Major standing in Dance or consent of instructor.

DANC 402 Alexander Technique Practicum credit: 1 or 3 Hours. (https://courses.illinois.edu/schedule/terms/DANC/402/)
Facilitates conscious and reasoned control of the human organism as a psychophysical whole. Helps students recognize habits that constitute their daily activities and discard, through conscious control, those that impede open-minded enquiry and self-reliance. Through one-on-one work with certified teachers and trainees, students will learn to change habitual patterns of coordination. 1 undergraduate hour. 3 graduate hours. May be repeated in separate terms to a maximum of 8 undergraduate hours or 6 graduate hours.

DANC 410 Advanced Jazz Technique credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/DANC/410/)
Continuation of DANC 110, emphasizing the conceptual understanding of the jazz style and development of specific skills necessary for this idiom. No undergraduate credit. 1 graduate hour. May be repeated to a maximum of 4 hours. Prerequisite: Major standing in Dance or DANC 110 or equivalent and consent of instructor.

DANC 411 Adv Hip Hop Technique credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/DANC/411/)
Advanced Level Hip Hop Class. Hip-Hop dance technique will consist of the study and practice of Urban dance forms grounded in hip-hop culture. Students will explore the multiple dimensions of hip-hop dance as they train in the fundamentals of each form, learn its respective historical context, and access ways of incorporating individual ideas and lived experiences into their dancing. No undergraduate credit. 1 graduate credit. May be repeated in separate terms up to 8 hours. Prerequisite: For majors only.

DANC 420 Perf Pract Student Works II credit: .5 to 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/420/)
Performance laboratory involving the rehearsal and performance of student works under faculty supervision. 0.5 to 2 undergraduate hours. 0.5 to 2 graduate hours. Approved for S/U grading only. May be repeated to a maximum of 16 hours in separate terms.

DANC 421 Performance in Grad Thesis II credit: .5 to 3 Hours. (https://courses.illinois.edu/schedule/terms/DANC/421/)
Performance laboratory involving the rehearsal and performance of student works under faculty supervision performed in MFA Thesis concert. 0.5 to 3 undergraduate hours. 0.5 to 3 graduate hours. May be repeated.

DANC 422 Perf Pract November II credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/DANC/422/)
Performance laboratory involving the rehearsal and performance of works by faculty and visiting artists performed in November Dance. 1 to 3 undergraduate hours. 1 to 3 graduate hours. May be repeated to a maximum of 16 hours. Prerequisite: Consent of instructor.

DANC 423 Perf Pract February II credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/DANC/423/)
Performance laboratory involving the rehearsal and performance of works by faculty and visiting artists performed in February Dance. 1 to 3 undergraduate hours. 1 to 3 graduate hours. May be repeated to a maximum of 16 hours. Prerequisite: Consent of instructor.

DANC 424 Collaborative Performance credit: 1 or 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/424/)
COLAB is an interdisciplinary class fusing improvisation, composition and collaborative projects for students in the departments of Music, Dance and Engineering. The class will be run along the lines of a professional performance company. Work in class will include sharing and adapting the principles and elements from each of these disciplines with a focus on producing material that will be presented in numerous public performances throughout the semester. 1 undergraduate hour. 2 graduate hours. May be repeated to a maximum of 3 undergraduate hours or 6 graduate hours in separate terms. Prerequisite: DANC 162 or DANC 259 or consent of instructor.

DANC 425 Dance Internship credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/DANC/425/)
Supervised field experience in community and/or professional organizations in a variety of danced-related areas. Provides students with work experience and exposure to professional situations. Written and/or video documentation and department presentation of internship activities required. 1 to 4 undergraduate hours. 1 to 4 graduate hours. Approved for S/U grading only. May be repeated to a maximum of 6 hours. Prerequisite: Major standing in Dance and consent of instructor.

DANC 431 Production Practicum IV credit: 1 or 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/431/)
Practical experience in all aspects of the production of dance concerts mounted in the Krannert Center for the Performing Arts and within the Department of Dance. 1 or 2 undergraduate hours. 1 or 2 graduate hours. May be repeated to a maximum of 6 hours. (1 hour credit per concert up to 2 hours per term). Prerequisite: DANC 131 or DANC 231, or equivalent and consent of instructor.

DANC 441 Dance History Seminar credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/DANC/441/)
Survey of critical approaches in dance studies including feminist theory, poststructural, and postcolonial theory, historiography, and ethnographic research methods. Course topics will cover a variety of theatrical, popular, and social dance practices. 3 undergraduate hours. 3 graduate hours. Prerequisite: DANC 240 or consent of instructor.
This course satisfies the General Education Criteria for:
Advanced Composition

DANC 450 Teaching Workshop credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/DANC/450/)
Methods and approaches to the teaching of dance technique in the modern, ballet, and jazz idioms. 3 undergraduate hours. 3 graduate hours. Prerequisite: Junior standing in Dance or consent of the instructor.

DANC 451 Ind Study and Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/DANC/451/)
Special projects in research or creative investigation taught on an individual or class basis. 1 to 4 undergraduate hours. 1 to 4 graduate hours. Approved for Letter and S/U grading. May be repeated to a maximum of 8 hours. Prerequisite: Junior standing in Dance and consent of instructor.

DANC 455 Supervised Teaching credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/DANC/455/)
Practical teaching experience under the supervision of a faculty member; weekly conference devoted to evaluation and planning. Teaching areas include major and non-major university courses and classes for community adults and children. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated to a maximum of 8 hours with approval.

DANC 456 Choreographic Laboratory Advanced credit: 1 to 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/456/)
Students will work in depth within each professor's choreographic process, learning creative tools for generating dance material, directing performance, crafting choreographic ideas over a full semester and developing performance skills. 1 to 2 undergraduate hours. 1 to 2 graduate hours. May be repeated in separate terms to a maximum of 4 credit hours. Prerequisite: Major standing in Dance or consent of instructor.

DANC 459 Contact Improv Act/Mus/Dan II credit: 1 or 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/459/)
An interdisciplinary course in which performing arts students learn physical skills necessary for the practice of the contact improvisation (CI) partnering dance form as well as improvisational and performance skills. Encourages contemplation of the broader philosophical implications inherent in the form: community building and accepting difference. Content includes visits to lectures and events outside the dance department. 1 or 2 undergraduate hours. 1 or 2 graduate hours. May be repeated in separate terms to a maximum of 4 undergraduate hours or 6 graduate hours if topics vary.

DANC 460 Adv Contemp Modern Tech Core credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/DANC/460/)
Modern technique for advanced graduate students. 1 to 3 undergraduate hours. 1 to 3 graduate hours. May be repeated to a maximum of 16 hours. Prerequisite: Major standing in dance or consent of instructor; or departmental placement.

DANC 461 Adv Contemp Modern Tech Elect credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/DANC/461/)
Modern technique for advanced graduate students. 1 to 3 undergraduate hours. 1 to 3 graduate hours. May be repeated to a maximum of 16 hours. Prerequisite: Major standing in dance or consent of instructor; or departmental placement.

DANC 462 Composition Workshop credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/462/)
Structured creative utilization of formal choreographic elements in the creation, rehearsal, staging, and performance of original dance works. 2 undergraduate hours. 2 graduate hours. Approved for S/U grading only. Prerequisite: Graduate standing in dance or consent of instructor.

DANC 463 Advanced Improvisation II credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/DANC/463/)
Exploration of the physical skills and philosophical concepts at the base of improvisation practice. Students will develop individual and collective approaches to improvisatory structures, systems and performance contexts as well as look at the historical ways that improvisation has been used in contemporary performance. The course will culminate in performance in various public and private contexts. 1 undergraduate hour. 1 graduate hour. May be repeated in separate terms to a maximum of 4 credit hours. Prerequisite: Major standing in Dance or consent of instructor.

DANC 464 Composer-Chor Workshop credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/464/)
For experienced composers and choreographers; explores the many relationships between musical composition and choreography. Same as MUS 471. 2 undergraduate hours. 2 graduate hours. Prerequisite: For dance majors, DANC 263 or consent of instructor; for music majors, MUS 106 or equivalent, other compositional experience, and consent of instructor.

DANC 465 Screendance credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/DANC/465/)
This course is an introduction to Screendance and provides a comprehensive approach, from the camera use to editing techniques, leading to a practical ability to develop and produce a Screendance project. The course will also address issues of aesthetics, history, theory and technology as a foundation for the approaches to Screendance composition. Specific population encouraged to take the course are Cinema and Media studies, Theater Design and Technology and Art and Design. 3 undergraduate hours. 3 graduate hours.

DANC 466 Advanced Ballet Tech Core credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/DANC/466/)
Ballet for advanced students. 1 to 3 undergraduate hours. 1 to 3 graduate hours. May be repeated to a maximum of 16 hours. Prerequisite: Major standing in dance or consent of instructor or departmental placement.

DANC 467 Advanced Ballet Tech Elect credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/DANC/467/)
Ballet for advanced students. 1 to 3 undergraduate hours. 1 to 3 graduate hours. May be repeated to a maximum of 16 hours. Prerequisite: Major standing in dance or consent of instructor or departmental placement.

DANC 495 Senior Career Seminar credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/DANC/495/)
Addresses survival strategies and the transition from academe to the profession. Course content includes research and discussion of career possibilities in performance, choreography, teaching, community dance work, therapy, and the dance-related fields of health/fitness/recreation. Students will research individualized projects in an area of interest. 1 undergraduate hour. No graduate credit. Prerequisite: Senior standing in Dance.

DANC 496 BA Senior Thesis Research credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/496/)
Within the Bachelor of Arts (BA) Program of Study, the senior thesis is a capstone project that synthesizes a student's study in dance and another focused area of study outside of dance. BA Senior Thesis Research is designed to be a designated 'work-time' for BA Candidates while they are pursuing their research interests via their thesis projects. Much of the BA Curriculum in Dance requires students to work independently as they explore their research interests. BA Senior Thesis Research (DANC 496) supplements this independent work with dialog among other BA candidates, structured guidance from DAI faculty, and opportunities to 'trouble-shoot' research challenges amidst a community of aspiring dance students. Successful completion with a passing grade in DANC 375 Senior Think Tank is required to register for this course. 2 undergraduate hours. No graduate credit. May be repeated in separate terms. Prerequisite: DANC 375 (passing grade required). Senior standing required. For Dance majors only.

DANC 497 BA Capstone Project credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/DANC/497/)
The BA Capstone Project is a synthesis of dance studies with the student's selected focused area of study (focused electives, dual major, or minor), which results in a culminating presentation, performance, and/or written project. 1 to 3 undergraduate hours. No graduate credit. May be repeated to a maximum of 3 hours in separate semesters. Prerequisite: BA in Dance majors only, senior standing required.

DANC 498 Senior Thesis Production credit: 1 or 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/498/)
The planning, design, and production of the Senior Capstone Project (DANC 499) for public performance. Students will work as a team to plan the Senior Concerts including designing and producing promotional materials and managing technical rehearsals and performances. 1 or 2 undergraduate hours. No graduate credit. May be repeated in separate terms. Prerequisites: DANC 375. Concurrent enrollment in DANC 499 is required.

DANC 499 Senior Thesis Project credit: 1 to 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/499/)
The creation of a culminating choreographic/performance project. 1 to 2 undergraduate hours. No graduate credit. Approved for S/U grading only. May be repeated to a maximum of 2 hours. Prerequisite: DANC 362 and senior standing in Dance. Concurrent enrollment in DANC 498 is required.

DANC 510 Grad Seminar/Special Topics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/DANC/510/)
A theory based course that examines current thinking around issues relevant to the field of dance and performance, and brings these concerns into conversation with the practice of various dance forms, the cultures and communities in which they exist and the bodies most (and sometimes least) affected. 4 graduate hours. No professional credit. Prerequisite: Graduate standing in Dance.

DANC 520 Synthesis Laboratory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/DANC/520/)
Required laboratory course focused on the practice of synthesizing expertise in choreography, physical practice, teaching, written and oral communication, and creative career planning. Critical theory and inquiry will be intertwined with rigorous examination of performance and construction of dance-making. Issues of sustaining practice, testing and conveying one's mission and vision, and elaborating on one's individual research in relationship to the field will be emphasized. May be repeated up to 8 hours in separate terms. Spring and Fall terms, even years. Prerequisite: Graduate standing in Dance required.

DANC 530 Somatics in Dance Training credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/DANC/530/)
Addresses current issues and trends in the teaching of dance technique, with a focus on the incorporation of dance science and somatics into dance training. Course includes reading, writing, discussion, teaching observation, and experiential work. Prerequisite: Completion of DANC 445 and DANC 450, or consent of instructor.

DANC 531 MFA Prof Practice Seminar credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/DANC/531/)
A course examining current field practices and trends including curatorial practices, and interdisciplinary practices. Includes preparation of practical materials for career presentation and examination of resources. Approved for S/U grading only. May be repeated to a maximum of 3 hours. Prerequisite: Graduate standing in dance.

DANC 532 Digital Media for Dancers credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/532/)
Survey of the manipulation of digital images, video, and audio, with an emphasis on how these technologies are valuable to the dancer as both creative and marketing tools. Prerequisite: Graduate standing in Dance or consent of instructor.

DANC 541 Contemporary Directions I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/541/)
A critical approach to 20th century dance with emphasis on the evolution of ideas that have influenced and shaped the dance of today. Prerequisite: Graduate standing in dance or consent of instructor.

DANC 542 Contemporary Directions II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/542/)
Continuation of Dance 541 Contemporary Directions I emphasizing viewing, discussing, analyzing, and writing about the work of current significant contemporary choreographers worldwide with special attention toward contextualizing student research. May be repeated in separate terms up to 4 hours. Prerequisite: DANC 541 or consent of instructor. For graduate students only except by permission of instructor.

DANC 550 Advanced Research in Dance credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/DANC/550/)
Advanced Independent Research in an opportunity for exceptional returning level professional MFA candidates in Dance to design and implement an in-depth examination of a creative, historical, contemporary, philosophical, technological, or educational facet of dance under the guidance of a faculty advisor. May be repeated for a maximum of 12 graduate hours. Prerequisite: Consent of instructor, advisor, and graduate program director.

DANC 560 Advanced Physical Practice credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/DANC/560/)
MFA candidates are required to maintain a demonstrated level of technical proficiency through a consistent graduate level physical practice. The physical practice of each candidate is determined through advisement and may include ballet technique, modern technique, Alexander Technique, yoga, or additional somatic practices offered in the department. Approved for S/U grading only. May be repeated to a maximum of 24 hours. Prerequisite: MFA candidate in dance.

DANC 562 Graduate Composition II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/DANC/562/)
Includes reading, writing, and discussion. Students will examine the creative process, the conventions that form choreographers' works, and the historical situations from which specific dance works spring. Students will produce works in specific contexts outside the standard theatre setting. They will be responsible for all promotional and production aspects of a project that will be presented to the public. Prerequisite: Dance 462.

DANC 581 Aesthetics and Curriculum credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/DANC/581/)
Same as CI 581. See CI 581.

DANC 598 Creative Thesis Project credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/DANC/598/)
The design, implementation, and completion of a culminating creative project in choreography and/or performance. Approved for S/U grading only. May be repeated to a maximum of 8 hours. Prerequisite: 28 hours of graduate work in dance, including 4 hours in choreography.

EALC - EAST ASIAN LANGUAGES & CULTURES

EALC Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/EALC/)

Courses

EALC 120 East Asian Civilizations credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EALC/120/)
Same as HIST 120. See HIST 120.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

EALC 122 History East Asian Religions credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EALC/122/)
Introduction to East Asian religious traditions; emphasizes the ideas of Confucianism, Taoism, and Buddhism in China and their historical interactions. Same as REL 122.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

EALC 130 The Chinese Language credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EALC/130/)
An introduction to the scientific study of the Chinese language. We will explore where the Chinese language came from, its similarities to and differences from Japanese and Korean, and how the Chinese character writing system was invented, plus what is it like now. We will explore differences among Chinese dialects (e.g., Cantonese, Mandarin, Taiwanese and Shanghai) and learn where in China these are spoken, and also explore how the Chinese language operates in the brain. Finally, we will investigate how children in China learn to speak, read, and write, how adults learn to speak Chinese as a foreign language, and how Chinese can be used by different social groups in different settings in order to influence social power and distance. Approved for Letter and S/U grading. This course does not fulfill the campus foreign language requirement.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West
Social Beh Sci - Soc Sci

EALC 132 Zen credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EALC/132/)
Same as REL 132. See REL 132.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

EALC 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/EALC/199/)
May be repeated.

EALC 207 Classical Chinese Lit credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EALC/207/)
Surveys Chinese literary works from the classical tradition (history, philosophy, poetry, literary criticism) with attention to intellectual and artistic values. Same as CWL 217. No knowledge of Chinese is required.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Non-West

EALC 214 Art in China credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EALC/214/)
Same as ARTH 214. See ARTH 214.
This course satisfies the General Education Criteria for:
Advanced Composition
Cultural Studies - Non-West

EALC 220 Traditional China credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EALC/220/)
Same as HIST 220. See HIST 220.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

EALC 221 Modern China credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EALC/221/)
Same as HIST 221. See HIST 221.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West

EALC 222 Chinese Thought and Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EALC/222/)
Examination of China's principal philosophical, religious, and political schools of thought - such as Confucianism, Taoism, Zen Buddhism, and Maoism - as ways of understanding one of the world's major civilizations; the period of the classical philosophers, the glory years of empire, and the troubled era of Western contact receive approximately equal attention.
Same as HIST 222 and REL 224.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

EALC 226 Premodern Japanese History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EALC/226/)
Same as HIST 226. See HIST 226.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

EALC 227 Modern Japanese History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EALC/227/)
Same as HIST 227. See HIST 227.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

EALC 230 Popular Cultures of Contemporary East Asia credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EALC/230/)
An introduction to the popular cultures and subcultures of China, Korea, and Japan through exposure to popular films, music, anime, games, and everyday practices. Already hugely popular in its home countries, East Asian popular culture has become familiar to American audiences through films, video games, food, toys, and comic books. The course explores the historical, social, cultural, and economic roots of this global appeal, while gauging popular culture's impact on national identity, gender, and lifestyle. No knowledge of East Asian languages is required.
Same as CWL 230.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Non-West

EALC 240 Chinese Civilization credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EALC/240/)
Introduction to the historical development of Chinese civilization. Emphasis will be on broad themes and the connections among cultural values, women and gender, social institutions, political structures, and contacts with outsiders. Visual and literary evidence will be stressed.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West

EALC 250 Intro to Japanese Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EALC/250/)
Topical introduction to Japanese cultural and aesthetic life with attention to cultural and aesthetic patterns as they are reflected in literature, language, and the arts.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West
Social Beh Sci - Soc Sci

EALC 275 Masterpieces of East Asian Lit credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EALC/275/)
Study of major works in the literary traditions of China and Japan, including haiku, noh, Tale of Genji, kabuki, Tang poetry, Ming theater, and the colloquial tale. Same as CWL 275. No knowledge of Chinese or Japanese language required.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Non-West

EALC 276 Asian Film Genres credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EALC/276/)
Same as CWL 276 and ENGL 276. See ENGL 276.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Non-West

EALC 285 Intro to Korea Through Film credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EALC/285/)
Course uses film, literary, and ethnographic works to explore the impact of Post-Colonial (1945-present) socioeconomic and cultural transformation on the personal and collective South Korean experience. Same as ANTH 285.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West

EALC 287 Introduction to Buddhism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EALC/287/)
Same as REL 287. See REL 287.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

EALC 288 Contemporary East Asia credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EALC/288/)
Introduction to aspects of daily life in East Asia in relation to local and extra-local political and economic structures and transformations. Same as ANTH 287.

EALC 305 Japan Lit in Translation I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EALC/305/)
Survey of Japanese literature from earliest times to 1600; readings in prose, poetry, and drama in English translation. Same as CWL 311.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Non-West

EALC 306 Japan Lit in Translation II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EALC/306/)
Survey of Japanese literature from 1600 to recent times; readings in prose, poetry, and drama in English translation; and lectures and papers. Same as CWL 312.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Non-West

EALC 308 Chinese Popular Lit credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EALC/308/)
Surveys Chinese popular literary works written in the vernacular language (short story, novel, and drama), with attention to cultural and artistic values. Same as CWL 308. No knowledge of Chinese is required.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Non-West

EALC 343 Gov & Pol of China credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EALC/343/)
Same as PS 343. See PS 343.

EALC 344 Government and Politics of Japan credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EALC/344/)
Same as PS 344. See PS 344.

EALC 361 Gender and Women in East Asia credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EALC/361/)
Interdisciplinary inquiry into the cultural and social patterns that have shaped women's lives in China, Japan, and Korea. Same as GWS 361.
This course satisfies the General Education Criteria for:
Advanced Composition

EALC 365 Contemporary Korean Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EALC/365/)
Introduces contemporary Korean society: the twentieth century struggle of Korea for an individual identity; the Korean road to modernization and its significance for the United States and the developing world.
This course satisfies the General Education Criteria for:
Social Beh Sci - Beh Sci
Cultural Studies - Non-West
Social Beh Sci - Soc Sci

EALC 367 History of Korea credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EALC/367/)
Historical examination of the Korean experience, with introduction from the earliest times to the present day with a focus on modern Korea: basic political, social, economic patterns; examination of the cultural and intellectual tradition; Korea's historical role in Asia; the Korean colonial experience; Korea in the modern world. Same as HIST 325.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

EALC 390 Individual Study credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/EALC/390/)
Directed readings in the languages and literatures of East Asia. The area selected depends on the student's interest. May be repeated to a maximum of 8 hours. Prerequisite: Consent of instructor.

EALC 398 Colloquium in EALC credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EALC/398/)
See online schedule for current topics. May be repeated in the same or separate terms to a maximum of 12 hours if topics vary. Prerequisite: Junior standing.

EALC 402 Ways of Seeing in Edo Japan credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EALC/402/)
Same as ARTH 402. See ARTH 402.

EALC 403 Word and Image in Chinese Art credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EALC/403/)
Same as ARTH 403. See ARTH 403.

EALC 404 China through Film credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EALC/404/)
Same as ARTH 404. See ARTH 404.

EALC 411 The Chinese Novel credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EALC/411/)
Reading and analysis of representative pieces of Chinese fiction from the fourth century B.C. to 1900 with emphasis on the development of Chinese fiction, its place in the literary tradition, and its role in society. Same as CWL 411. 3 undergraduate hours. 4 graduate hours. No knowledge of Chinese is required.

EALC 412 Mod Chinese Lit in Translation credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EALC/412/)
Reading and analysis of representative selections from Chinese literature since the May 4 Movement (early 20th century), with special attention to the relationship between literature and ideology in twentieth-century China. Same as CWL 412. 3 undergraduate hours. 4 graduate hours. No knowledge of Chinese is required.

EALC 415 Mod Japan Lit in Translation credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/EALC/415/)
Critical study of selected 20th century writers with an emphasis on cultural background, world view, human relationships, aesthetic theories, Japanese and Western traditions, and universal literary issues. Same as CWL 415. 3 undergraduate hours. 2 or 4 graduate hours. Requires no knowledge of Japanese; readings and films. Prerequisite: Junior standing or consent of instructor.

EALC 420 China Under the Qing Dynasty credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/EALC/420/)
Same as HIST 420. See HIST 420.

EALC 421 Soc-Econ Hist Modern China credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/EALC/421/)
Same as HIST 422. See HIST 422.

EALC 425 Chinese Poetry and Translation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EALC/425/)
A critical introduction to major Chinese poetic genres and an in depth examination of various translation strategies used in the translation of Chinese poetry. The poetry component acquaints students with essential aspects of Chinese language and poetry and thus enables them to evaluate the translated texts from the perspectives of both an insider and outsider. The translation component entails both the evaluation of existing translations and practice by the students. Same as TRST 430. 3 undergraduate hours. 3 graduate hours.

EALC 426 Early Modern Japan credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EALC/426/)
Same as HIST 426. See HIST 426.

EALC 427 Twentieth-Century Japan credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EALC/427/)
Same as HIST 427. See HIST 427.

EALC 430 Intro to East Asian Ling credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EALC/430/)
Same as LING 430. See LING 430.

EALC 466 Japanese Cinema credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EALC/466/)
Same as CWL 467 and MACS 466. See MACS 466.

EALC 476 Classical Chinese Thought credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EALC/476/)
Inquiry into the major schools of Chinese thought in the Classical Period through the Han (206 B.C. - A.D. 220): Confucianism, Taoism and Legalism. Topics such as the concept of history, military thought and logic will be covered. Readings are in English. Same as CWL 478 and HIST 425. 3 undergraduate hours. 4 graduate hours. Prerequisite: One 200 or 300-level course on Chinese culture or consent of instructor.

EALC 484 Buddhist Meditation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EALC/484/)
Same as REL 484. See REL 484.

EALC 488 History of Chinese Buddhism credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EALC/488/)
Survey of the history of Chinese Buddhism since its introduction; analysis of Buddhological trends and styles; and the sociocultural milieu of Chinese Buddhism and its place in the total history of ideas and lifestyles. Same as REL 488. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: REL 287 or consent of instructor.

EALC 490 Individual Study credit: 2 to 12 Hours. (https://courses.illinois.edu/schedule/terms/EALC/490/)
Supervised individualized study of a topic not covered by regular course offerings. The topic must be approved by the instructor. 3 to 12 undergraduate hours. 2 to 12 graduate hours. May be repeated to a maximum of 16 hours. Prerequisite: Consent of instructor.

EALC 495 Topics in Asian Religions credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EALC/495/)
Same as REL 495. See REL 495.

EALC 500 Proseminar in EALC credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EALC/500/)
Interdisciplinary introduction for first-term East Asian Languages and Cultures graduate students to western-language writings on East Asia that have been important to modern scholarship on the region. The proseminar will cover the three cultures of the region in an interdisciplinary fashion, focusing on the methods of various disciplines in their treatment of East Asia. Method refers both to the kinds of materials studies, and the theory and tools used in research.

EALC 501 Seminar in Chinese Art credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EALC/501/)
Same as ARTH 501. See ARTH 501.

EALC 511 Applied Literary Translation I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EALC/511/)
Same as CWL 511, GER 511, SLAV 501, and TRST 501. See TRST 501.

EALC 512 Applied LiteraryTranslation II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EALC/512/)
Same as CWL 512, GER 512, SLAV 502, and TRST 502. See TRST 502.

EALC 520 Problems in Chinese History credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EALC/520/)
Same as HIST 520. See HIST 520.

EALC 521 Seminar in Chinese Literature credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EALC/521/)
Examination of Chinese literature from a variety of genres and historical periods intended to prepare students for independent work in literary criticism and analysis. Readings include both primary texts and important works of secondary scholarship. Students will produce a term paper based on independent research. May be repeated to a maximum of 8 hours with approval.

EALC 522 Research Seminar: China credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EALC/522/)
Same as HIST 521. See HIST 521.

EALC 526 Problems in Japanese History credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EALC/526/)
Same as HIST 526. See HIST 526.

EALC 527 Research Seminar: Japan credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EALC/527/)
Same as HIST 527. See HIST 527.

EALC 550 Seminar in EALC credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EALC/550/)
Seminar on selected topics. Topic varies with instructor. May be repeated to a maximum of 12 hours. Prerequisite: Consent of instructor.

EALC 560 East Asian Language Pedagogy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EALC/560/)
Course is for teachers of Japan, Chinese, or Korean language who wish to improve their teaching skills and learn more about second and foreign language acquisition specific to the East Asian Language context. Besides reviewing research on language teaching methodology and curriculum development, students will observe each other conduct practice classes and analyze videotapes of class sessions. Undergraduates may enroll with consent of instructor and the Graduate College. Prerequisite: Native or near-native fluency in Japan, Chinese, or Korean.

EALC 567 Popular Religion in East Asia credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EALC/567/)
Same as REL 568. See REL 568.

EALC 584 Theories in Second Language Acquisition credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EALC/584/)
Same as CI 584, EPSY 563, FR 584, GER 584, ITAL 584, LING 584, PORT 584, and SPAN 584. See SPAN 584.

EALC 588 Sem Second Lang Learn credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EALC/588/)
Same as FR 588, GER 588, ITAL 588, LING 588, PORT 588, and SPAN 588. See SPAN 588.

EALC 590 Individual Study and Research credit: 2 to 12 Hours. (https://courses.illinois.edu/schedule/terms/EALC/590/)
Supervised individual investigation or study of a topic not covered by regular course offerings. The topic selected by the student and the proposed plan of study must be approved by the adviser and the instructor. May be repeated. Prerequisite: Consent of instructor.

EALC 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/EALC/599/)
Research and guidance in writing theses for advanced degrees. Approved for S/U grading only. May be repeated to a maximum of 16 hours. Prerequisite: Satisfactory completion of the preliminary examinations.

ESE - EARTH, SOCIETY, & ENVIRONMENT

ESE Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/ESE/)

Courses

ESE 100 Sustainable Earth credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ESE/100/)
Provides an introduction to sustainability that explores how today's human societies can endure in the face of global change, ecosystem degradation, and limited resources. Emphasizes the fundamentals of the physical sciences and the scientific method while also exploring the special impact of sustainability challenges on minority cultures in the U.S. Prerequisite: This course is intended for first and second year students.
This course satisfies the General Education Criteria for:
Grand Challenge-Sustainability
Nat Sci Tech - Phys Sciences

ESE 103 Earth's Physical Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ESE/103/)
Same as GEOG 103. See GEOG 103.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences

ESE 104 Geology of the National Parks credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ESE/104/)
Same as GEOL 104. See GEOL 104.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences

ESE 106 Geographies of Globalization credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ESE/106/)
Same as GEOG 106. See GEOG 106.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West
Social Beh Sci - Soc Sci

ESE 111 Emergence of Life credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ESE/111/)
Same as GEOL 111. See GEOL 111.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Life Sciences

ESE 117 The Oceans credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ESE/117/)
Same as GEOL 117. See GEOL 117.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences

ESE 118 Natural Disasters credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ESE/118/)
Same as GEOL 118 and GLBL 118. See GEOL 118.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences

ESE 120 Severe and Hazardous Weather credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ESE/120/)
Same as ATMS 120. See ATMS 120.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences
Quantitative Reasoning II

ESE 140 Climate and Global Change credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ESE/140/)
Same as ATMS 140. See ATMS 140.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences

ESE 143 History of Life credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ESE/143/)
Same as GEOL 143. See GEOL 143.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Life Sciences

ESE 170 Nature Religion credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ESE/170/)
Same as REL 170. See REL 170.

ESE 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/ESE/199/)
Special topics in Earth, Society, and the Environment; content is variable. May be repeated if topics vary.

ESE 200 Earth Systems credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ESE/200/)
Interdisciplinary lecture class intended to introduce Earth Systems studies, which focuses on integrating social and natural science approaches to studying the Earth and its environments.

ESE 202 American Environmental History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ESE/202/)
Same as HIST 202 and NRES 202. See HIST 202.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

ESE 208 History of the Earth System credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ESE/208/)
Same as GEOL 208. See GEOL 208.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences

ESE 210 Social & Environmental Issues credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ESE/210/)
Same as GEOG 210. See GEOG 210.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

ESE 222 Big Rivers of the World credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ESE/222/)
Same as GEOG 222. See GEOG 222.

ESE 254 American People, Places, & Environments credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ESE/254/)
Same as GEOG 254. See GEOG 254.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - US Minority

ESE 287 Environment and Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ESE/287/)
Same as GEOG 287, NRES 287 and PS 273. See NRES 287.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - Western

ESE 289 Environment & Sustainability Field Study credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/ESE/289/)
Group expedition to study environment and sustainability issues at a nearby field site. Includes in-class meetings, student-led presentation, and a field trip that may be short as part of a day or as long as several days. Field trip and field trip fee required. Additional fees may apply. See Class Schedule. Approved for letter and S/U grading. May be repeated in separate terms if topics vary. Prerequisite: For ESE majors, minors, and Sustainability Living Learning Community students. Non majors can apply to the waitlist.

ESE 293 The Anthropocene credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ESE/293/)
Same as ENGL 293. See ENGL 293.

ESE 311 Environmental Issues Today credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ESE/311/)
Seminar exposing students to different disciplinary perspectives on specific environmental issues, as revealed in the scholarly literature. Specific problems will vary from term to term. This seminar helps students make the transition from disciplinary to interdisciplinary thinking.

ESE 320 Water Planet, Water Crisis credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ESE/320/)
Study of the science of water on planet earth, the developing water crisis, and some possible solutions to it. Topics include water's unique physical and chemical properties; how it profoundly shapes the earth/ocean/atmosphere system; dynamics of oceans, atmosphere, lakes, rivers, groundwater, and ice masses; current fresh water supplies and their distribution on earth relative to population; current and future water crises and the compounding effects of droughts, floods, and global change; and prospects for some technological and economic approaches to easing the crisis. Same as GEOG 370 and GEOL 370.

ESE 333 Earth Materials and the Env credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ESE/333/)
Same as GEOL 333. See GEOL 333.

ESE 350 Sustainability and the City credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ESE/350/)
Same as GEOG 350. See GEOG 350.

ESE 360 Environmental Writing credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ESE/360/)
Equips students to write about the environment for various audiences, with a focus on specific current efforts to promote sustainability on the Urbana-Champaign campus. We will practice effective techniques for each stage of the writing process-from defining topics, to gathering information, to crafting active, engaging prose. Readings will include models of effective environmental writing and "how to" pieces by experts. Research will include visits to campus sites and student-conducted interviews with subjects. Same as ENGL 360. Prerequisite: Completion of campus Composition I general education requirement.
This course satisfies the General Education Criteria for:
Advanced Composition

ESE 379 Intro to GIS Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ESE/379/)
Same as GEOG 379. See GEOG 379.

ESE 380 GIS II: Spatial Prob Solving credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ESE/380/)
Same as GGIS 380. See GGIS 380.
This course satisfies the General Education Criteria for:
Quantitative Reasoning II

ESE 389 Environment and Sustainability Field Expedition credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ESE/389/)
Group expedition to study environment and sustainability issues at a field site. Includes in-class meetings, student-led presentation, and field trip; expeditions run during spring break, winter break, in mid-May or in intercession; dates depend on location. Field Trip and field trip fee required. Additional fees may apply. See Class Schedule. May be repeated up to 12 hours in separate terms if topics vary.

ESE 401 ESE Capstone credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ESE/401/)
Capstone experience for majors in Earth, Society, and Environment Sustainability. 3 undergraduate hours. No graduate credit. Approved for Letter and S/U grading. May be repeated once.

ESE 410 Green Development credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ESE/410/)
Same as GEOG 410. See GEOG 410.

ESE 411 Geomorphology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ESE/411/)
Same as GEOL 401. See GEOL 401.

ESE 421 Earth Systems Modeling credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ESE/421/)
Same as ATMS 421, GEOG 421, GEOL 481 and NRES 422. See ATMS 421.

ESE 439 Biogeography credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ESE/439/)
Same as ANTH 436, GEOG 436, IB 439, and NRES 441. See IB 439.

ESE 445 Earth Resources Sustainability credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ESE/445/)
Introduces the physical (energy, mineral, and soil) resources of the Earth, the environmental consequences of producing and using resources, the controls on resource supplies, and the alternatives to traditional supplies. Focuses on the geological origin and context of resources, the means of exploration and production, the history of production, and sustainability issues related to consumption and depletion. Provides an understanding of why resources can be scarce and expensive, why many are not renewable, and why their use impacts the Earth System. May include field trips. 3 undergraduate hours. 3 graduate hours. Credit is not given for both ESE 445 and GEOL 380. Prerequisite: Junior standing or higher.

ESE 452 Ecosystem Ecology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ESE/452/)
Same as IB 452 and NRES 462. See IB 452.

ESE 465 Transportation & Sustainability credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ESE/465/)
Same as GEOG 465. See GEOG 465.
This course satisfies the General Education Criteria for:
Advanced Composition

ESE 466 Environmental Policy credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ESE/466/)
Same as GGIS 466. See GGIS 466.

ESE 467 Multimedia Environmental Communications credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ESE/467/)
Students will develop capacities to communicate with a broad audience about sustainability and the environment. Storytelling and clear exposition across multiple platforms will be emphasized, including blogs, audio podcasts and short videos, among others. In addition, students in the course will have the opportunity to partner with campus units and other local organizations to create materials that will be useful for real-world outreach and education efforts as well as credit in the course. Same as ENGL 467. 3 undergraduate hours. No graduate credit.

ESE 470 Introduction to Hydrogeology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ESE/470/)
Same as GEOL 470. See GEOL 470.

ESE 477 Advanced Environmental Writing credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ESE/477/)
Same as ENGL 477. See ENGL 477.
This course satisfies the General Education Criteria for:
Advanced Composition

ESE 482 Challenges of Sustainability credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ESE/482/)
An interdisciplinary approach to investigating the meaning and practice of sustainability in the contemporary Earth system. As a consequence, students explore the sustainability of crucial resources - water, soil, energy, mineral and the biota - in the context of the social and environmental systems in which these resources are used, including the moral, physical, ecological, political and economic. Same as GEOG 482 and GEOL 483. 3 undergraduate hours. 3 graduate hours. Prerequisite: Junior or senior standing, or consent of instructor.

ESE 486 Environmental Consulting credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ESE/486/)
Same as GEOL 486. See GEOL 486.

ESE 497 Special Topics in ESE credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ESE/497/)
Advanced topics course, consisting of seminar or lectures in subjects not covered by regular course offerings; for advanced undergraduates and graduate students. Possible field study in a prominent geological locality; includes in-class meetings, student-led presentations, and field trip; trips run during spring break, winter break, in mid-end May; dates depend on location. Additional fees may apply. See Class Schedule. 1 to 4 undergraduate hours. 1 to 4 graduate hours. Approved for letter and S/U grading. May be repeated in the same or separate terms to a maximum of 12 undergraduate hours or 8 graduate hours. Prerequisite: Consent of instructor.

ESE 498 Environmental Writing for Publication credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ESE/498/)
Provides students with both the experience of the real-world editorial process and with a research product (the published essay) that showcases their professional development as well-informed and persuasive writers on environmental issues. Same as ENGL 498. 3 undergraduate hours. No graduate credit. Prerequisite: Consent of instructor.

ECON - ECONOMICS

ECON Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/ECON/)

Courses

ECON 101 Introduction to Economics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/101/)
General survey of the operation of the economic system; emphasizes the determination of the level of national income, the pricing and allocation of products, and factors of production under existing conditions in the United States. This is an honors course limited to students currently enrolled in the Chancellor's Scholar Program. Credit is not given for ECON 101 if credit has been earned in both ECON 102 and ECON 103.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

ECON 102 Microeconomic Principles credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECON/102/)
Introduction to the functions of individual decision-makers, both consumers and producers, within the larger economic system. Primary emphasis on the nature and functions of product markets, the theory of the firm under varying conditions of competition and monopoly, and the role of government in prompting efficiency in the economy. Credit is not given for ECON 102 and ACE 100.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

ECON 103 Macroeconomic Principles credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECON/103/)
Introduction to the theory of determination of total or aggregate income, employment, output, price levels, and the role of money in the economy. Primary emphasis on monetary and fiscal policy, inflation, unemployment, economic growth, and international economics.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

ECON 198 Economics at Illinois credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/ECON/198/)
An introductory course intended to help students explore the various fields of economics. Presents brief introductions to various faculty members within the Department of Economics at Illinois and an overview of their respective fields. Enrollment limited to undergraduate Economics majors only. Approved for S/U grading only.

ECON 199 Undergraduate Open Seminar credit: 0 to 5 Hours. (https://courses.illinois.edu/schedule/terms/ECON/199/)
Approved for both letter and S/U grading. May be repeated.

ECON 202 Economic Statistics I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECON/202/)
Introduction of basic concepts in statistics including the presentation of data, descriptive statistics, probability theory, discrete and continuous distributions, sampling distributions, estimation, and hypothesis testing. The approach of the class includes both learning the concepts behind basic statistics and also how to apply these concepts in "real-life" situations. Utilizes a practical project format. To complete the Business Statistics sequence, students must also complete ECON 203. Credit is not given for ECON 202 if credit for a college-level introductory statistics course such as PSYC 235, SOC 280, or STAT 100 has been earned. Prerequisite: Credit or registration in one of MATH 220, MATH 221, MATH 234.
This course satisfies the General Education Criteria for:
Quantitative Reasoning I

ECON 203 Economic Statistics II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECON/203/)
Continuation of ECON 202. Builds upon point and interval estimation as well as hypothesis testing skills first introduced in ECON 202. Utilizes a practical project format to extend the student skill set to include simple and multiple linear regression and time series techniques. Students will: Understand the relevance of statistics in their future course-work and professions; Be trained to identify the proper statistical technique to apply to a problem; Be adept at finding the answers to statistical queries using excel; Be able to properly interpret the results of their analysis. Students must have completed a course on probability and statistical analysis before taking ECON 203. The best course to meet this requirement is ECON 202 at the University of Illinois. Prerequisite: ECON 202; one of MATH 220, MATH 221, or MATH 234.

ECON 210 Environmental Economics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECON/210/)
Same as ACE 210, ENVS 210, NRES 210, and UP 210. See ACE 210.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

ECON 220 Intl Economic Principles credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECON/220/)
Principles-level course in international economics for non-majors. The first half of course, international trade, covers such topics as comparative advantage, protectionism (tariff and nontariff), impact on income distribution, and industrial policies. The second half, international finance, covers topics such as balance of payments, exchange-rate determination, currency crises, dollarization, and macroeconomic policy in an open economy. Issues relating to globalization will be covered in both halves. Prerequisite: ECON 101; or ECON 102 (or ACE 100) and ECON 103. Credit in ECON 220 is not applicable toward graduation in the Economics Major.

ECON 302 Inter Microeconomic Theory credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECON/302/)
Microeconomic analysis including value and distribution theory; analysis of the pricing of the factors of production integrated in a micro-general equilibrium context which builds towards explaining the resource allocation process. Prerequisite: ECON 102 or equivalent. MATH 220, MATH 221, MATH 234 or equivalent.

ECON 303 Inter Macroeconomic Theory credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECON/303/)
The modern theory of the determination of the level and rate of growth of income, employment, output, and the price level; discusses alternate fiscal and monetary policies to facilitate full employment and economic growth. Prerequisite: ECON 102; ECON 103; and one of MATH 220, MATH 221, MATH 234.

ECON 397 Senior Research I credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/397/)
Research and readings course for students majoring in economics; may be taken by students in the college honors program in partial fulfillment of the honors requirements. Prerequisite: Cumulative grade-point average of 3.0 or honors in the junior year, or consent of instructor; senior standing.

ECON 398 Senior Research II credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/398/)
Research and readings course for students majoring in economics; may be taken by students in the college honors program in partial fulfillment of the honors requirements. Prerequisite: Cumulative grade-point average of 3.0 or honors in the junior year; senior standing.

ECON 399 Advanced Undergraduate Open Seminar credit: 0 to 8 Hours. (https://courses.illinois.edu/schedule/terms/ECON/399/)
Independent study course covering topics not treated by regular course offerings. This class does not satisfy departmental graduation requirements. Approved for Letter and S/U grading. May be repeated to a maximum of 8 hours. Prerequisite: Junior or senior standing; ECON 302; ECON 202.

ECON 402 American Economic History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECON/402/)
Survey of the history of the American economy from the colonial era to the present. Studies the features and development of the American economy and examines the watershed events that have transformed it over its history. 3 undergraduate hours. No graduate credit. Prerequisite: ECON 202; ECON 302; MATH 220/221 or other Calculus course are required.

ECON 411 Public Sector Economics credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/411/)
Economic analysis of government tax and expenditure policies; topics include public good and externality theory, public choice theory, income distribution, cost-benefit analysis, principles of taxation, tax incidence, economic effects and optimal structures of major taxes, and taxation in developing economies. 3 undergraduate hours. 2 or 4 graduate hours. Prerequisite: ECON 302 or consent of instructor.

ECON 413 The Nonprofit Economy credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/413/)
Many economic activities do not appear to maximize profits. Many businesses engage in corporate social responsibility, and governments and individuals give away resources. Nonprofit organizations make up a large and growing share of the economy. This course uses economics to understand these activities and evaluate policies that influence them. 3 undergraduate hours. 4 graduate hours. Prerequisite: ECON 202; ECON 302; MATH 220/MATH 221 or other Calculus course are required.

ECON 414 Urban Economics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/414/)
Analyzes the urban economy. Topics include: economic reasons for the existence of cities; the theory of urban spatial structure; the effects of taxation on housing decisions; the economics of freeway congestion; economics analysis of local public goods and services; economic analysis of rent control, slum policies and land-use controls. Same as FIN 414. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: ECON 302.

ECON 415 Environmental Economics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/415/)
Application of economic theory to topical issues such as pollution, climate change, and the environmental impacts of overpopulation. Both market-based and regulatory solutions to these problems are discussed. 3 undergraduate hours. 4 graduate hours. Prerequisite: ECON 202; ECON 302; MATH 220/MATH 221 or other Calculus course.

ECON 417 Cost-Benefit Analysis credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/417/)
Analyzes changes in welfare in various market settings such as monopolistic and perfectly competitive markets. Students will develop the skills to account for uncertainty when weighing the costs and benefits of a project or policy, as well as its potential distributional effects. Also examines the strategies used by governments to select from alternative policies, and how assets are purchased or sold in order to implement the policy. 3 undergraduate hours. 4 graduate hours. Prerequisite: ECON 202; ECON 302; MATH 220 or MATH 221 or other Calculus course are required. ECON 203 is recommended.

ECON 418 Health Economics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/418/)
Introduction to the economics of the U.S. health care system. Analyzes the supply of and demand for health care, building upon models of consumer, producer, and insurer behavior. Covers public policy, including regulation and provision of services to the poor and elderly. Emphasizes empirical evidence on these topics. 3 undergraduate hours. 4 graduate hours. Credit is not given for ECON 482 and ECON 418. Prerequisite: ECON 202; ECON 302; MATH 220 or MATH 221 or other calculus course are required.

ECON 420 International Economics credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/420/)
Introduction to the theory of international trade and finance with selected application to current problems of trade policy, balance of payments adjustment, the international monetary system, and globalization issues. 3 undergraduate hours. 2 or 4 graduate hours. Prerequisite: ECON 302 or equivalent, or consent of instructor; ECON 303 is recommended.

ECON 425 Macroeconomic Policy credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/425/)
Analyzes current macroeconomic policy issues, problems, and techniques; discusses various policy techniques including monetary, fiscal, incomes, and exchange rate policies, and their effectiveness for treating inflation, unemployment, productivity, resource and exchange rate problems. May emphasize current issues in developed economies or in emerging market economies. 3 undergraduate hours. 4 graduate hours. Credit is not given for ECON 462 and ECON 425. Prerequisite: ECON 203; ECON 302; ECON 303; MATH 220 or MATH 221 are required. MATH 231 is recommended. Prior exposure to financial markets is encouraged.

ECON 426 Monetary Economics and Policy credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/426/)
Study of a variety of topics on money, banking, and financial markets. In particular, provides an introduction to money and its role in the economy, the bond market and interest rates, the stock market and other financial assests, exchange rates, banks and regulation of the banking industry, the money supply process and monetary policy. 3 undergraduate hours. 4 graduate hours. Prerequisite: ECON 202; ECON 303; MATH 231 are required. ECON 302 is recommended; Prior exposure to financial markets is also encouraged.

ECON 436 Economics of Coordination credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/436/)
Builds on theories and applications of intermediate microeconomics. Topics covered include: the importance of models, the basic principles and concepts of economics, game theory and evolutionary game theory, the role of markets and government and the role of other institutions in general, the role of information, competition, the problems of collective action, and coordination problems. 3 undergraduate hours. 4 graduate hours. Prerequisite: ECON 302; MATH 220/ MATH 221 or Calculus I equivalent.

ECON 437 Game Theory credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/437/)
Explores game theory and strategic decision making. Game theory is the study of strategic interaction where one person's actions affect the actions of others. Introduces students to the tools for modeling and solving problems with strategic interaction. Will cover topics such as Nash equilibrium, dominance, voting, bargaining, auction, adverse selection, each of which have broad applications in economics, politics, psychology, and everyday life. 3 undergraduate hours. 4 graduate hours. Prerequisite: ECON 202; ECON 302; MATH 220/MATH 221 are required. ECON 203; MATH 231 are recommended.

ECON 440 Economics of Labor Markets credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/440/)
Studies the microeconomic determinants of labor demand and supply, economic effects of unions, and macroeconomic labor market problems. Same as LER 440. 3 undergraduate hours. 2 or 4 graduate hours. Prerequisite: ECON 302 or equivalent.

ECON 442 Women in the Economy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECON/442/)
Applies economic models of the labor market and household organization to a wide range of important topics, including marriage, fertility, discrimination, and family policies to better understand both personal life choices and public policy problems. 3 undergraduate hours. No graduate credit. Prerequisite: ECON 203; ECON 302; MATH 220 or 221 or other Calculus I equivalent; completion of campus Composition I general education requirement.
This course satisfies the General Education Criteria for:
Advanced Composition

ECON 447 Economics of the Workplace credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/447/)
Application of economic theory to the relationship between workers and firms in the workplace. We will apply important economic concepts and models to issues including recruitment, personnel selection, employee training, managing turnover, job design, performance evaluation, and incentive compensation. 3 undergraduate hours. 4 graduate hours. Prerequisite: ECON 202; ECON 302; MATH 220/MATH 221 or other Calculus course.

ECON 448 Employee Compensation and Incentives credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/448/)
Employee compensation is a critical tool for organizations to attract, retain, and motivate its employees. Students will be introduced to major principles in compensation design and will examine the incentives embedded in various compensation systems. The topics include forms of pay, incentive theory, pay structure, pay-for-performance, and employee benefits. 3 undergraduate hours. 4 graduate hours. Prerequisite: ECON 202; ECON 302; MATH 220/MATH 221 or other Calculus course.

ECON 450 Development Economics credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/450/)
Analyzes the economic problems associated with newly developing nations; emphasizes their economic structures, their factor scarcities, and their programs for development. Not open for graduate credit to graduate candidates in economics. 3 undergraduate hours. 2 or 4 graduate hours. Graduate credit is not given for both ECON 450 and ECON 550 or ECON 551. Prerequisite: ECON 102 and ECON 103 or equivalent. ECON 302 strongly recommended.

ECON 451 Program Evaluation in Developing Economies credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/451/)
Advanced economics course on microeconomic issues in developing countries with particular attention to empirical analyses and methodologies to address fundamental theoretical and policy relevant questions. Focus is on topics within health and education, although papers may cover other topics. An original empirical research paper is required, applying ideas and concepts covered in class. Class alternates between lectures (discussing new ideas or concepts and assigned readings) and lab (applying concepts to actual data using Stata). 3 undergraduate hours. 4 graduate hours. Prerequisite: ECON 203 and ECON 302 or equivalents; for undergraduate students only: Completion of campus Composition I general education requirement. Junior Standing Required. Priority registration provided to Economics Majors.
This course satisfies the General Education Criteria for:
Advanced Composition

ECON 452 The Latin American Economies credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/452/)
Focuses on the economic history of the region, the recent industrialization process and its impact, the role of the state and foreign capital, the impact of the recent privatization processes, inflation and stabilization policies, and issues surrounding the distribution of income. Same as ACE 452. 3 undergraduate hours. 2 or 4 graduate hours. Prerequisite: ECON 102 or ECON 103. ECON 302 or ECON 303 strongly recommended.

ECON 453 Economies of the Middle East and North Africa credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/453/)
Study of the business and economic conditions in the Middle East and North Africa (MENA). Students are expected to expand their knowledge of microeconomic, macroeconomics, and economic development theories and to apply them to concrete cases in the MENA region. 3 undergraduate hours. 4 graduate hours. Prerequisite: ECON 202; ECON 302; MATH 220/MATH 221 or other Calculus course.

ECON 455 Economics of Poverty Alleviation in Developing Countries credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/455/)
This course examines which policies are effective for alleviating poverty, which are not, and why. The course will have a strong methodological and analytical component, focus on why interventions and policies work, and how to establish evidence on the effectiveness of specific interventions and policies. 3 undergraduate hours. 4 graduate hours. Prerequisite: ECON 202; ECON 302; MATH 220/MATH 221 or other Calculus course are required.

ECON 456 Migration and Economic Development credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/456/)
Covers topics regarding the inter-relationships between economic development and migration. After introducing the basic concepts of poverty and inequality - between as well as within countries - this course focuses on the role that migration and population growth play in the process of economic development. The causes of migration and its consequences are examined at national and international levels together with their policy implications, including those related to urbanization, brain drain, and labor market impacts of immigration. A range of migration forms is discussed, including international and internal migration, permanent and temporary migration, legal and illegal migration, as well as forced migration and refugees. 3 undergraduate hours. 4 graduate hours. Prerequisite: ECON 202; ECON 302; MATH 220/221 or other Calculus course.

ECON 460 Financial Economics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/460/)
Study of a variety of financial economics topics. Introduces basic financial products (stocks, bonds, futures, options, and other derivatives), asset pricing theory including capital asset pricing model (CAPM), arbitrage pricing theory (APT), financial institutions and the organization of financial markets, and some topics on financial crisis and monetary policy. 3 undergraduate hours. 4 graduate hours. Prerequisite: ECON 202; ECON 302; MATH 220/MATH 221 or other Calculus course.

ECON 469 Economics of Risk credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/469/)
Exploration of economic decisions under uncertainty. Includes expected utility theory and non-expected utility theory; applications to individual decision problems in investment and insurance; general equilibrium in markets under uncertainty, including problems generated by asymmetric information; measurement of risk; the value of information obtained before a decision. 3 or 4 undergraduate hours. 3 or 4 graduate hours. Prerequisite: ECON 302 or equivalent; one of MATH 220 or MATH 221 or equivalent.

ECON 471 Intro to Applied Econometrics credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/471/)
Introduction to specification, estimation, prediction and evaluation of econometric models, emphasizing the interplay between statistical theory and economic applications. 3 undergraduate hours. 2 or 4 graduate hours. Prerequisite: ECON 203 or equivalent; ECON 302 or ECON 303.

ECON 472 Financial Econometrics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/472/)
Examines the econometric modeling applied to empirical and computational finance. Explains the empirical properties of financial data as well as the statistical models behind these stylized facts from the data. Explains the statistics and time series concepts that will be useful to understand financial market dynamics, and investigates some popular econometric models and estimation methods. 3 undergraduate hours. 4 graduate hours. Prerequisite: ECON 203; ECON 302; MATH 220/MATH 221 are required. MATH 231; ECON 471 are recommended.

ECON 474 Econometrics of Policy Evaluation credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/474/)
Develops the basic tools to understand and use modern econometric methods for estimating and making inference of causal effects. The topics include randomized experiments, natural experiments, matching methods, instrumental variables, and regression discontinuity. Focuses on topics which are relevant for policy problems. 3 undergraduate hours. 4 graduate hours. Prerequisite: ECON 203; ECON 302; MATH 220/MATH 221 are required. MATH 231; ECON 471 are recommended.

ECON 475 Economic Forecasting credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/475/)
Overview of modern, quantitative, statistical and econometric methods for forecasting and evaluating forecasts. Topics include linear regressions; modeling and forecasting trends and seasonality; characterizing and forecasting cycles; MA, AR, and ARMA models; forecasting with regressions; evaluating and combining forecasts. Advanced topics include unit roots, stochastic trends, ARIMA models, and smoothing will be covered as time permits. 3 undergraduate hours. 4 graduate hours. Prerequisite: ECON 203; ECON 302; MATH 220/MATH 221 are required. MATH 231 is recommended.

ECON 480 Industrial Comp and Monopoly credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/480/)
Analyzes the ways firms and markets are organized, how they interact, outcomes of various types of firm behavior and performance of markets, and causes and types of market failure. Particular emphasis on the contribution of game theory as the equilibrium concept in oligopoly settings. 3 undergraduate hours. 2 or 4 graduate hours. Prerequisite: ECON 302.

ECON 481 Govt Reg of Economic Activity credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/481/)
Analysis of economic bases, policies, and consequences of government regulation of economic activity. Reasons for government intervention in market behavior, methods of government intervention, and outcomes are studied. 3 undergraduate hours. 2 or 4 graduate hours. Prerequisite: ECON 302 or consent of instructor.

ECON 482 Economics of the Digital Economy credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/482/)
Analysis of firm strategies and public policy issues surrounding the digital economy and related industries. Applies economic tools and principles, including game theory, industrial organization, and information economics. Topics include: differentiation of prices and products; search cost and price dispersion; network effects and system competition; economics of platforms; intellectual property; antitrust regulations. 3 undergraduate hours. 4 graduate hours. Prerequisite: ECON 302; MATH 220/MATH 221 or Calculus I equivalent.

ECON 483 Econ of Innovation and Tech credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/483/)
Examines the economic factors shaping innovation and technical change since the industrial revolution with emphasis on the economic relationship between science and technology and the role of government in technical change. 3 undergraduate hours. 2 or 4 graduate hours. Prerequisite: ECON 102 or equivalent; ECON 302 or consent of instructor.

ECON 484 Law and Economics credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/484/)
Applications of economic theory to problems and issues in both civil and criminal law and the effect of legal rules on the allocation of resources; includes property rights, liability and negligence assignment, the use of administrative and common law to mitigate market failure, and the logic of private versus public law enforcement. 3 undergraduate hours. 2 or 4 graduate hours. Prerequisite: ECON 302 or equivalent.

ECON 490 Topics in Economics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/490/)
Special topics in advanced economics within a variety of areas. See course schedule for topics. 3 undergraduate hours. 4 graduate hours. May be repeated in the same or separate terms to a maximum of 9 undergraduate hours or 8 graduate hours if topics vary. Prerequisite: ECON 202; ECON 302 or ECON 303; MATH 220 or MATH 221 or other Calculus course. Some topics may require additional prerequisites, read the section text for each topic.

ECON 500 Microeconomics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/500/)
Emphasizes microeconomic theory; principal topics include a review of value and distribution theory, the theory of choice by households and firms, general microeconomic theory, and theoretical developments of current interest. 4 graduate hours. No professional credit. Credit is not given for both ECON 500 and ECON 528. Graduate credit for both ECON 302 and ECON 500 is given only upon recommendation of the student's adviser and approval by the Department of Economics. Prerequisite: ECON 102 or equivalent.

ECON 501 Macroeconomics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/501/)
Emphasis on macroeconomic theory; principal topics include a review of Keynesian macroeconomic theory, formal growth theory, and selected business cycle theory. 4 graduate hours. No professional credit. Credit is not given for both ECON 501 and ECON 529. Graduate credit for both ECON 303 and ECON 501 is given only upon recommendation of the student's adviser and approval by the Department of Economics. Prerequisite: ECON 102 and ECON 103 or equivalent.

ECON 502 Economic Statistics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/502/)
Classical statistics and regression analysis; descriptive statistics, probability and point and interval estimation; decision theory; variance analysis; and linear regression and least-squares estimates. 4 graduate hours. No professional credit. Prerequisite: A course in statistics or consent of instructor.

ECON 503 Econometrics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/503/)
Develops a general methodological basis for searching for quantitative economic knowledge; integrates and gives operational content to the topics of economic, statistical, and econometric theory. 4 graduate hours. No professional credit. Prerequisite: ECON 502, or equivalent.

ECON 504 Time Series Analysis in Econ credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/504/)
Modern time series analysis techniques for handling economic data which arises in a happenstance fashion through time and their application to specific economic problems. Prerequisite: ECON 503 or STAT 578, or equivalent. MSPE Graduate Student Standing.

ECON 505 Introduction to Game Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/505/)
Applications of game theory. Introduction to basic static games and dynamic games with particular attention to applying these games to real world situations. Prerequisite: MATH 415; ECON 500 and ECON 501, or equivalent. MSPE Graduate Student Standing.

ECON 507 Computable G E Modeling credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/507/)
Discusses problems and methods of building social accounting matrices and computable general equilibrium (CGE) models; provides hands-on experience with CGE models with a series of PC-based exercises. The exercises demonstrate a number of techniques for constructing CGE models and show applications of these models to a variety of economic policy problems in developing countries such as food subsidies, international trade restrictions, foreign debt, and sectoral investment priorities. Prerequisite: ECON 500 and ECON 501 or equivalent; MATH 220 or MATH 221, or equivalent. MSPE Graduate Student Standing.

ECON 510 Economics of Taxation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/510/)
Theoretical and empirical analysis of the impact of taxation on the economic system; topics include tax equity and excess burden, incentive effects of taxation, tax incidence, structure of major types of taxes (income, consumption, and wealth), normative tax analysis, and taxation in developing economies. Prerequisite: ECON 302 or equivalent. MSPE Graduate Student Standing.

ECON 511 Public Goods Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/511/)
In-depth analysis of the theory of public goods; includes public goods and externality theory, public choice, theory of cost-benefit analysis, optimal income redistribution, and fiscal federalism. Prerequisite: ECON 302 or equivalent. MSPE Graduate Student Standing.

ECON 513 International Trade credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/513/)
The pure theory of international trade, general equilibrium income and welfare, tariffs, the theory of policy ranking, strategic trade policy, customs unions, international trade law and the WTO. Prerequisite: ECON 302 and ECON 303, or equivalent. MSPE Graduate Student Standing.

ECON 514 International Financial credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/514/)
Examines the balance of payments, exchange rate, capital flows and international monetary system; fiscal and monetary policy in open economies. Prerequisite: ECON 302 and ECON 303, or equivalent. MSPE Graduate Student Standing.

ECON 516 Monetary Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/516/)
Micro- and macroeconomic theories of the supply of and demand for money; money substitutes and their significance; review of current empirical research; money in closed economy, macroeconomic, and static general equilibrium models; and analysis of inflation and unemployment. Prerequisite: Consent of instructor. MSPE Graduate Student Standing.

ECON 517 Monetary Policy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/517/)
Theories of money; money in dynamic models; money in open economy macroeconomic models; stabilization policy; and international aspects of monetary theory. Prerequisite: Consent of instructor. MSPE Graduate Student Standing.

ECON 519 Development and Growth Policy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/519/)
Review and analysis of the theories and patterns of growth in developed and underdeveloped economies; the process and impact of import substitution industrialization; trade and economic development; the role of the state and privatization in the development process; agricultural stagnation and modernization. Prerequisite: ECON 500 and ECON 501 or consent of instructor. MSPE Graduate Student Standing.

ECON 527 Business International Econ credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/527/)
Provides the business student with a working knowledge of the principles of international economics, issues in the current international business environment, U. S. and international trade law, and current policy issues and debates. Considers the basic causes and consequences of international trade, the foreign exchange market and theory of exchange rate determination, the U. S. trade deficit, the international monetary system, and antidumping and countervailing duty law, copyright and patent infringement law, the General Agreement on Tariffs and Trade, the rudiments of strategic trade theory, and selected policy issues varying by year. Prerequisite: Familiarity with intermediate microeconomics at the level of ECON 302.

ECON 528 Microeconomics for Business credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/528/)
Microeconomics for professional business students. Shows relevance of value and distribution theories for business managers. Includes demand and supply theory, consumer choice, production and cost theory, industrial structure, and wage and capital theory. Intended for students in the Master of Business Administration program. Credit is not given for both ECON 528 and either ECON 302 or ECON 500. Prerequisite: Enrollment is often restricted to students in specialized programs.

ECON 529 Macroeconomics for Business credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/529/)
Development of short run macroeconomic models. Analysis of private sector behavior functions, and government policy alternatives. Extensions for open economy models and growth models. Intended for students in the Master of Business Administration program. Credit is not given for both ECON 529 and either ECON 303 or ECON 501. Prerequisite: Enrollment is often restricted to students in specialized programs.

ECON 530 Microeconomic Theory I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/530/)
Emphasizes microeconomic theory particularly theory of the consumer, theory of the firm, general equilibrium analysis and welfare analysis. Also, covers uncertainty in general equilibrium and informational economics. Prerequisite: ECON 302 and ECON 303 or equivalent.

ECON 531 Macroeconomic Theory I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/531/)
Introduces students to a variety of dynamic general equilibrium models that currently dominate the study of growth and economic fluctuations. These models include: neoclassical growth models, overlapping generations models, CAPM models, search models, and endogenous growth models. In covering these models, the course also seeks to develop a set of techniques for students to use. These techniques include discrete time optimization, continuous time optimization, dynamic programming and model calibration. Prerequisite: ECON 302 and ECON 303, or equivalent; calculus.

ECON 532 Econometric Analysis I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/532/)
Theoretical treatment of economic statistics. Covers probability theory, set theory, asymptotic theory, estimation and hypothesis testing. Prerequisite: A course in statistics or consent of instructor.

ECON 533 Microeconomic Theory II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/533/)
Focusses on information and incentives in economic problems. Topics include non-cooperative games, dynamic games, mechanism design, auctions, matching and networks. Prerequisite: ECON 530, or equivalent; calculus.

ECON 534 Macroeconomic Theory II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/534/)
Development of modern macroeconomic theory, including disequilibrium theory, optimal short-term stabilization measures, and monetary, fiscal, incomes, and exchange rate policies; large-scale econometric models; linear and neoclassical growth models; aggregate distribution theory; money, capital movements, trade, and growth; optimal growth models; and exhaustible resources and growth. Prerequisite: ECON 531.

ECON 535 Econometric Analysis II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/535/)
Part 1: The construction of econometric models; characteristics of models and choice of estimating methods; and estimates of parameters by various methods. Part 2: Bayesian statistics and decision theory. Prerequisite: ECON 532 or equivalent.

ECON 536 Applied Econometrics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/536/)
Focus on specification, estimation, prediction and evaluation of econometric models. Covers instrumental variable estimation, simultaneous equation models, non-linear models, discrete choice models and quantile regression methods. Prerequisite: ECON 532 and ECON 535.

ECON 540 Labor Economics I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/540/)
Survey of recent trends in the labor force, of real and money earnings, and of the distribution of national income used as the basis for a critical economic analysis of contemporary English and American wage theory. Same as LER 540. Prerequisite: ECON 302 and ECON 303.

ECON 541 Labor Economics II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/541/)
Economic issues and implications involved in hours of work, employment and unemployment, and trade union institutionalism (the impact of the trade union upon the basic institution of a free enterprise economy); emphasis in all cases on the development of appropriate public policy. Same as LER 541. Prerequisite: ECON 302 and ECON 303.

ECON 542 Collective Bargaining credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/542/)
Same as LER 542. See LER 542.

ECON 543 Workplace Dispute Resolution credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/543/)
Same as LAW 665 and LER 543. See LER 543.

ECON 546 Gen Equ Env Tax Policy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/546/)
Same as FIN 519. See FIN 519.

ECON 547 Urban Economics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/547/)
Examines the microeconomic theory of urban land-use and spatial structure (static and dynamic models); analyzes externalities caused by traffic congestion; normative and positive analysis of the provision of local public goods; and public policy issues (i.e., slums and urban decline, pollution). Prerequisite: ECON 530 and ECON 533.

ECON 548 Adv Natural Resource Economics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/548/)
Same as ACE 510, ENVS 510, and NRES 510. See ACE 510.

ECON 549 Environmental Economics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/549/)
Examines both theory and policy applications in the environmental area; selectively reviews the literature to provide a framework for understanding the relevant economic relationships and the criteria appropriate for policy assessment; emphasizes the characteristics of major environmental problems and policy choices; and considers the valuation of environmental amenities and the conflict between environmental quality and growth. Same as ACE 516. Prerequisite: ECON 302 or consent of instructor.

ECON 550 Econ of Development and Growth credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/550/)
Theories of economic development and growth. Covers the role of agriculture, trade, manufacturing, human capital, genetics, geography and culture in growth. Prerequisite: ECON 533 and ECON 534, or equivalent.

ECON 551 Topics in Development Econ credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/551/)
Analyzes the newly developing economies, with emphasis on institutional factors affecting development and economic policy relating to development. Prerequisite: ECON 535 or equivalent.

ECON 553 Demand/Supply/Firms/Households credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/553/)
Same as ACE 502. See ACE 502.

ECON 555 Topics in Microeconomics I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/555/)
Study at an advanced level of one or more of the following possible topics: economics of externalities, advanced aggregate economic theory, theory of central planning, investment theory, consumer behavior theory, capital theory, welfare economics, inflation theory, income distribution theory, or other topics. May be repeated. Prerequisite: ECON 533 and ECON 534, or consent of instructor.

ECON 556 Topics in Microeconomics II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/556/)
Studies quantitative techniques useful in economic analysis and decision making; single and systems of difference and differential equations; dynamic programming; Pontryagin maximum principle; interaction of multiplier and accelerator; von Neumann model; Turnpike theorem; growth models; and control systems. Prerequisite: MATH 415; ECON 533 and ECON 534, or equivalent.

ECON 557 Topics in Microeconomics III credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/557/)
Studies bounded rationality and learning in economics. Topics include evolutionary learning in models. Prerequisite: MATH 415, ECON 533 and ECON 534 or equivalent.

ECON 562 Topics in Macroeconomics I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/562/)
Study at an advanced level of one or more of the following possible topics: economics of externalities, advanced aggregate economic theory, theory of central planning, investment theory, consumer behavior theory, capital theory, welfare economics, inflation theory, income distribution theory, or other topics. May be repeated. Prerequisite: ECON 533 and ECON 534, or consent of instructor.

ECON 572 Political Economy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/572/)
Microeconomic analysis of political decision making processes. Includes social choice, models of political competition, game-theoretic analysis of political institutions and lobbying. Same as PS 548. Prerequisite: ECON 530 or equivalent, or instructor's consent.

ECON 574 Econometrics I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/574/)
Estimation of parameters for single-equation models; tests of hypotheses and confidence regions for regression models; large-sample theory in single-equation models; and Bayesian statistics in regression models. Prerequisite: MATH 415 and STAT 400.

ECON 575 Econometrics II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/575/)
Considers the specification of models with systems of simultaneous equations; identification problem, distributed lag models, K-class estimators, maximum likelihood estimators, three-stage least-squares, and effects of specification errors. Prerequisite: ECON 574.

ECON 576 Time Series credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/576/)
Models and techniques used in the analysis of time series data. Covers univariate and multivariate time series. non-stationary time series, cointegration and error corection, structural breaks and non-linear time series models. Prerequisite: ECON 535 or STAT 578, or equivalent.

ECON 577 Topics in Econometrics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/577/)
Examines some standard econometric problems from the Bayesian perspective and compares Bayesian and classical inference. Prerequisite: ECON 574.

ECON 578 Large Sample Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/578/)
Same as STAT 575. See STAT 575.

ECON 580 Industrial Organization credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/580/)
Theory of the organization of markets and firms, behavior of firms, functioning of competitive systems, and performance of markets.

ECON 581 Govt Regulation of Industry credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/581/)
Microeconomic and econometric analyses of market failure and government response in selected industries; topics include economic effect of regulation, bureaucratic behavior, optimal policy, and strategies for regulatory reform. Prerequisite: ECON 530; ECON 580; or consent of Instructor.

ECON 582 Empirical Ind Organization credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/582/)
Empirical Methods in Industrial Organization. Topics include: detection of anticompetitive behavior; estimation techniques that allow for product differentiation, endogenous entry and intertemporal decision-making; estimation and testing of auctions and other asymmetric information models.

ECON 585 Topics in International Econ credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/585/)
Frontier advanced topics in international economics; subject matter varies. May not be repeated for credit. Prerequisite: ECON 533 and ECON 534, or consent of instructor.

ECON 590 Individual Study and Research credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ECON/590/)
Directed reading and research. Approved for both letter and S/U grading. May be repeated.

ECON 598 Workshop and Research Seminar credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ECON/598/)
Workshops are offered in all areas of specialization in which graduate students are writing Ph.D. dissertations. The specific format varies, but in general workshop sessions include presentations by graduate students of thesis research, by faculty members of their current research, and by occasional outside speakers. Approved for S/U grading only. May be repeated. A minimum of 4 hours of ECON 598 is required of all students in the Ph.D. program. Prerequisite: Admission to the Department of Economics Ph.D. program.

ECON 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/ECON/599/)
Preparation of thesis required of all students writing master's or doctoral theses in economics. Approved for S/U grading only. May be repeated.

EPOL - ED POLICY, ORG & LDERSHIP

EPOL Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/EPOL/)

Courses

EPOL 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/199/)
Various special topics. See class schedule for offerings. Approved for Letter and S/U grading. May be repeated in the same or separate terms as topics vary.

EPOL 201 Foundations of Education credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/201/)
Studies some of the problems of formulating and justifying aims and policies in American education, of designing and systematizing the curriculum, of organization and social context of the public school system, and of the teaching-learning process; examined in terms of perspectives provided by social philosophy, history, sociology, and philosophy of education. Same as EPS 201.

EPOL 202 Foundations of Education-ACP credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/202/)
Course is identical to EPS 201 except for the additional writing component. Same as EPS 202. Credit is not given for both EPS 202 and EPS 201. Prerequisite: Completion of campus Composition I general education requirement.
This course satisfies the General Education Criteria for:
Advanced Composition

EPOL 250 Experiences of US Minorities in Public Schools credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/250/)
This course provides a foundational approach to examining the diverse experiences of minority groups in the United States from the Colonial Era to the present. Particular attention is paid to how social constructions of race in US history dictated parameters around citizenship, immigration and the right to attend public schools. Racial and cultural identities are not examined in isolation, but in critical ways that gender, class, sexual identity and abilities have also informed processes of (mis)understandings in the classroom. Students are encouraged to reflect deeply on the topics as well as consider possibilities of addressing structural inequality in education as we enter a new demographic era where racial diversity will be the mainstay.

EPOL 310 Race and Cultural Diversity credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/310/)
Study of race and cultural diversity from Colonial era to present; the evolution of racial ideology in an ethnically heterogeneous society; the impact of race on the structures and operations of fundamental social institutions; the role of race in contemporary politics and popular culture. Same as AAS 310, AFRO 310, EPS 310, and LLS 310. Prerequisite: Completion of campus Composition I general education requirement.
This course satisfies the General Education Criteria for:
Advanced Composition
Cultural Studies - US Minority

EPOL 325 Social Media and Global Change credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/325/)
Social media is a new frontier of politics, religion, commerce, courtship, and education. It has altered an array of social relations from statecraft to sex. The course draws on case studies from across the globe to explore the wide-ranging transformation taking place, from how people organize mass uprisings, to ways the mange the most intimate details of their lives. Examples will be taken from the Middle East, East Asia, Africa, Latin America, the US and Europe. Same as AFST 325, ASST 325, EPS 325, EURO 325, INFO 325, LAST 325, REES 325, and SAME 325.

EPOL 350 Social Learning and Knowledge credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/350/)
This course explores how we access and generate knowledge. In formal education, the legacy classroom is also being augmented with technology or replaced entirely with online learning. Across a wide range of domains of knowledge, the traditional separations between knowledge producers (experts or teachers) and knowledge consumers (everyday citizens or students) are undergoing transformation. In this course you will be exposed to the changing landscape of knowledge and learning through a hands-on experience of collaborative knowledge production and learning. Issues and concepts to be addressed include Web 2.0, participatory media, peer-to-peer knowledge networks, 'the commons', informal online learning, and the dynamics of formal e-learning ecologies.
This course satisfies the General Education Criteria for:
Advanced Composition
Social Beh Sci - Soc Sci

EPOL 370 Effective Workplace Relations credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/370/)
Introduces the knowledge and skills required to be successful in today's globalized workplace through the study of human interactions, also known as human relations. Students learn about the various issues in contemporary society that affect human behavior, and theories and strategies to improve interactions with others. The course uses a variety of activities to facilitate student's ability to understand the theories and apply strategies and techniques to ensure more effective human functioning in the workplace.

EPOL 380 Education and Social Justice credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/380/)
Introduces students to key definitions, theories, and practices of justice in education. Using a combination of philosophical and political theory-based analyses of the features of justice: fairness, equity, representation, responsibility, and difference, among others, readings invite students to consider how education and schooling can help to nurture democratic ties and equity. Same as EPS 380.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

EPOL 390 Undergraduate Advanced Seminar credit: 0 to 9 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/390/)
Advanced undergraduate seminar that includes historical, philosophical, legal, and social science perspectives on education. Same as EPS 390. Approved for Letter and S/U grading. May be repeated to a maximum of 9 hours.

EPOL 395 Independent Study credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/395/)
Designed for students who wish to do advanced readings and research in greater depth and to investigate further ideas and themes that have been explored in EPOL 199 and EPOL 201. Same as EPS 395. Prerequisite: EPOL 201; and consent of adviser and staff member who supervises the work.

EPOL 401 History of American Education credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/401/)
Development of American education in relation to political, social, and cultural developments; attention to the influence of movements in the cultural environment upon evolving conceptions of educational theory and practice. Same as EPS 400. 3 undergraduate hours. 2 or 4 graduate hours.

EPOL 402 Asian American Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/402/)
Examination and analysis of Asian American education from the late 1800's to the present. Same as AAS 402 and EPS 402. 4 undergraduate hours. 4 graduate hours.
This course satisfies the General Education Criteria for:
Advanced Composition
Cultural Studies - US Minority

EPOL 403 Historical and Social Barriers credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/403/)
Examines the relationship between ability, race, class, and gender to citizenship and schooling. Particular emphasis is placed on how the construction of "citizenship" has been used as a tool to further deny equal participation in the public sphere such as schools. To that end, an application of historical understanding of social barriers to educational access is analyzed from the Colonial period to the present. Same as EPS 405. 3 undergraduate hours. 4 graduate hours.

EPOL 404 History of American Indian Education credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/404/)
Same as AIS 481 and EPS 481. See AIS 481.

EPOL 405 School and Society credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/405/)
Analyzes normative and conceptual aspects of the interrelationship of school and society, and of reciprocal influences between schools and major social trends and forces. Same as EPS 411. 3 undergraduate hours. 4 graduate hours.

EPOL 406 Professional Ethics in Education credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/406/)
Philosophical examination of selected educational issues; conveys a grasp of the complexities of the issues and some philosophical methods for dealing with them. Same as EPS 410. 3 undergraduate hours. 4 graduate hours.

EPOL 407 Critical Thinking in Education credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/407/)
Examination of critical thinking dispositions and abilities as an approach to the foundations of knowledge and structure of thinking in subject-matter areas. Same as EPS 412. 3 undergraduate hours. 4 graduate hours.

EPOL 408 Aesthetic Education credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/408/)
Theoretical introduction to the problems involved in teaching critical appreciation of the arts; examines materials from aesthetics, art history, and criticism for their relevance to the problems of aims, curriculum, organization, and teaching-learning. Same as EPS 413. 3 undergraduate hours. 4 graduate hours.

EPOL 409 Sociology of Education credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/409/)
Education as a social process in various cultures and historical periods, emphasizing current systems in Westernized countries. Same as EPS 420. 3 undergraduate hours. 2 or 4 graduate hours. Differential credit will be based on additional assignments and requirements as specified by instructor.

EPOL 410 Racial and Ethnic Families credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/410/)
Sociological examination of how gender, race, ethnicity, cultural diversity and class function in the development of diverse American families, which are important foundations of education. Primary attention will be given to African American and Hispanic families. Secondary attention will be given to Asian American, Native American and other racial and ethnic family groups. Same as AFRO 421, EPS 421, and HDFS 424. 3 undergraduate hours. 2 or 4 graduate hours.

EPOL 411 Race, Educational Policy, and Sociology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/411/)
Same as EPS 422 and SOC 426. See SOC 426.

EPOL 412 Politics of Education credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/412/)
Overview of the political structure and processes through which many of the major issues in education are treated; analyzes nature of the policymaking process in education and discusses the roles of principal participants in the process of educational decision making, but focuses on fundamental recurring issues in education and the ways these issues have been resolved or not resolved by the overall system. Particular attention to the role that both the federal and state judiciary as well as legislative authority have had in shaping educational policy. Same as EPS 423. 3 undergraduate hours. 4 graduate hours.

EPOL 413 Economics of Education credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/413/)
Introduction to economic concepts and their application to education, including investment and consumption theories of education and the role of human capital in economic growth and development; cost-benefit analyses in education, education and the distribution of income, and manpower and educational planning. Same as EPS 424. 3 undergraduate hours. 2 or 4 graduate hours.

EPOL 414 Anthropology of Education credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/414/)
Same as ANTH 425, EPS 425, and EPSY 466. See EPSY 466.

EPOL 420 Global Migration and Education credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/420/)
This course will integrate contemporary global and comparative perspectives on the study of migration and formal education at the preschool, primary and secondary (P-12) levels. Students will critically examine how institutions of education around the world are shaped by migration, as well as how migrant students and their families interface with educational institutions in resettlement contexts. Specific topics will include: policy responses, curricular approaches, language(s) of instruction, teacher and learner identities, and community-school dynamics. 3 undergraduate hours. 4 graduate hours.

EPOL 440 Professional Issues for Teachers credit: 1 or 3 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/440/)
Provides the basic common understanding of schools as social organizations and the professional role of teachers in public schools; analyzes selected legal issues relating to student rights, employment and teacher rights, and collective bargaining in schools; and serves as an introduction to instructional supervision, teacher evaluation, and continuing professional development of teachers. Same as EOL 440. 3 undergraduate hours. 1 graduate hour. Prerequisite: Admission into a teacher preparation program. 1 hour section requires concurrent enrollment in EDPR 432 or EDPR 442.

EPOL 470 Principles of Human Resource Education credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/470/)
Study of the basic concepts and practices of education for and about work: its philosophical foundations and historical development, mission and goals, structure and function, curricular areas of emphasis, learner audiences served and settings in which programs are conducted, and issues and trends affecting program change. Same as HRD 400. 3 undergraduate hours. 4 graduate hours.

EPOL 471 Business Principles for Human Resource Development credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/471/)
Study of essential business understandings, knowledge, and skills required for HRD professionals to interact effectively with others in the business community. Same as HRD 402. 3 undergraduate hours. 4 graduate hours.

EPOL 472 Instructional and Training System Design credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/472/)
Provides instruction and practice in the selection, organization, and preparation of content for instructional programs in business and technical settings. Provides students with a theoretical orientation to instructional design as well as the opportunity to experience the instructional design process as it applies to business and technical settings through the development of instructional materials. Same as HRD 411. 3 undergraduate hours. 4 graduate hours.

EPOL 473 Facilitation Skills credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/473/)
Provides an in-depth examination into the body of research of effectively facilitating groups, including the nature of groups, the dynamics of individuals within groups, effective planning, role clarification, identification of intervention points in groups, and effective use of tools and techniques. The theoretical foundations for the course reside in theories of human values, group dynamics, decision-making, communication, managing conflicts, and effective group intervention. Course emphasis is on experiential learning, with students practicing self-reflection and self-directed facilitations. Same as HRD 414. 3 undergraduate hours. 4 graduate hours.

EPOL 474 Diversity in the Workplace credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/474/)
Examines the ways in which "diversity" is conceived, defined and enacted within a range of workplace environments. This course provides a foundation to help students understand and develop the cross#cultural competence necessary to work and lead effectively in today's global workforce. This course is designed to provide evidence#based insights, as well as proven individual, interpersonal, organization#level strategies to harness the power of diversity and inclusion in teams, organizations, markets, and societies. Same as HRD 415. 3 undergraduate hours. 4 graduate hours.

EPOL 475 Work Analysis credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/475/)
The ability to analyze work is a fundamental skill for individuals interested in human resource development. Work analysis is necessary for identifying job standards, designing training programs, performance support systems, evaluating work performance, and perhaps most importantly improving performance. This course will provide students with the opportunity to learn and use range of work analysis techniques and to apply this information in service to an organization. Same as HRD 440. 3 undergraduate hours. 4 graduate hours. Prerequisite: HRD 400 or consent of instructor.

EPOL 476 Project Management Principles and Applications credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/476/)
Effective project management skills are essential for successful professional development. This course, in particular, studies the basic principles, techniques, and best practices related to managing personnel, time, and resources in education and training projects. Through a variety of learning activities, including case study review and project simulation, students will apply project management concepts and tools in various training and education-related project development. Same as HRD 475. 3 undergraduate hours. 4 graduate hours.

EPOL 477 Issues and Developments in Human Resource Development credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/477/)
Special course for experimentation or for seminar on topics not treated by regularly scheduled courses. Topics vary; consult Class Schedule for specific section offerings. Same as HRD 490. 3 undergraduate hours. 4 graduate hours. May be repeated to a maximum of 8 hours.

EPOL 480 Technology and Educational Reform credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/480/)
Examines the normative and policy issues raised by the use of new information and communication technologies in education. The course is interdisciplinary, drawing from social and historical as well as philosophical perspectives on these issues. Same as EPS 415. 3 undergraduate hours. 4 graduate hours.

EPOL 481 New Learning credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/481/)
Education is in a state of flux - transitioning from traditional architectures and practices to new ecologies of teaching and learning influenced by the tremendous social and technological change of our times. What changes are afoot today in workplaces, civic life and everyday community life? What are their implications for education? What are the possible impacts of contemporary social transformations on teaching and learning - including in the areas of technology, media, globalization, diversity, changing forms of work in the "knowledge society", and, in these contexts, changing learner needs and sensibilities? This course explores three pedagogical paradigms: "didactic", "authentic" and "transformative" learning. It takes a historical perspective in order to define the contemporary dimensions of what we term "new learning". It prepares participants to make purposeful choices and link particular theories/instructional approaches to individual and group learning goals. Same as EPS 431. 3 undergraduate hours. 4 graduate hours.

EPOL 482 Designing and Evaluating eLearning Systems credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/EPOL/482/**)**
Surveys and examines models and theories for designing eLearning systems across disciplines and organizations. Particular emphasis is given to topics on designing instructor-led and/or autonomous learning systems for individual learners and for organizations in contemporary technology-enabled environments. In addition, this course covers introductory methodologies for evaluating the efficacy of various eLearning systems. The guiding philosophy of the course is that intended learning outcomes by any eLearning system should be achieved through systematic and pedagogically grounded design and evaluation processes while considering various individuals' and organizations' needs. Same as HRD 470. 3 undergraduate hours. 4 graduate hours.

EPOL 483 Learning Technologies credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/EPOL/483/**)**
Addresses two important needs of educators. First, educators should be aware of recent developments in the area of instructional technology. Second, educators must be able to select, develop, and effectively use appropriate instructional technologies to enhance learning and communication. To meet these needs, this course covers a wide range of instructional technologies that are used for instructional and administrative purposes. Traditional instructional media are considered in the course although significant emphasis is placed on more recent developments that involve the use of the computer and its applications in education. Instructional technologies such as computer-based instruction, computer-based testing, distance learning, interactive video, and intelligent instructional technologies are covered. Through course readings, discussions, and projects, students in the course are expected to gain skills in choosing appropriate instructional technologies, designing effective presentations that rely on those technologies, and properly using instructional technologies to enhance communication with an audience. Same as CI 484 and HRD 472. 3 undergraduate hours. 4 graduate hours.

EPOL 484 Evaluating Learning Technology credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/EPOL/484/**)**
Same as EPSY 474 and HRD 474. See EPSY 474.

EPOL 485 Introduction to eLearning credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/EPOL/485/**)**
Seeks to build foundational knowledge in areas associated with online teaching and learning and distance education in both higher education and workplace learning settings. Major areas of interest include the overview of online teaching and learning strategies, digital learning system design, digital media for learning, and evaluation online teaching and learning. Same as HRD 480. 3 undergraduate hours. 4 graduate hours.

EPOL 486 New Media & Learner Differences credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/EPOL/486/**)**
An investigation of the dimensions of learner diversity: material (class, locale), corporeal (age, race, sex and sexuality, and ability) and symbolic (culture, language, gender, family, affinity and persona). Examines social-cultural theories of difference, as well as considering alternative responses to these differences in educational settings - ranging from broad, institutional responses to specific pedagogical responses within classes of students. 4 undergraduate hours. 4 graduate hours.

EPOL 490 Special Study and Investigation credit: 2 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/EPOL/490/**)**
Offers opportunity for an individual to study, on or off campus, selected problems, trends, and new developments in education or to conduct specialized investigations for the improvement of instructional programs. Same as HRD 495. 2 or 4 undergraduate hours. 2 or 4 graduate hours. Approved for Letter and S/U grading. May be repeated to a maximum of 8 hours.

EPOL 491 Supervised Internship credit: 2 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/EPOL/491/**)**
While employed in approved cooperating organizations, students observe the relationship between reform or innovations and organizational performance. Same as HRD 492. 2 or 4 undergraduate hours. 2 or 4 graduate hours.

EPOL 500 Proseminar in EPOL credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/EPOL/500/**)**
Introduces new doctoral students in EPOL to the variety of educational research traditions in order to foster reflective inquiry and critical research literacy. 4 graduate hours. No professional credit. Prerequisite: Admission to a doctorate program in EPOL.

EPOL 501 History of U.S. Educational Thought credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/EPOL/501/**)**
Studies the evolution of educational theories and philosophies since the eighteenth century; particular reference to their impact upon educational developments in the United States; a broad view of the general growth of American educational thought; and attention to selected major educational theorists, or schools of thought, exploration of their fundamental ideas, and the relation of these ideas to significant intellectual currents in American culture. Same as EPS 501. 4 graduate hours. No professional credit. Prerequisite: Consent of instructor.

EPOL 502 Education in the 20th Century credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/EPOL/502/**)**
Historical study of significant educational trends during the past sixty years, with special reference to their influence on American education; an analytical examination of the principal transition movements in the last decade of the nineteenth century and of efforts to solve the problems since 1900. Same as EPS 502. 4 graduate hours. No professional credit.

EPOL 503 Seminar in the History of Education credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/EPOL/503/**)**
Intensive group study of a small number of selected problems to assist individual students to develop an understanding of and the ability to use the techniques of historical research in furthering such study; problems studied are selected in the light of the interests and previous training of the group of students enrolled. Same as EPS 503. 4 graduate hours. No professional credit. Prerequisite: Two courses in the history of education or consent of instructor.

EPOL 505 Traditions in Philosophy of Education credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/EPOL/505/**)**
Analyzes major trends and primary sources in philosophy of education, drawing mainly from the 20th century. Movements covered will include pragmatism, concept analysis, phenomenology, feminism, and Marxism/Critical theory. Same as EPS 510. 4 graduate hours. No professional credit. Prerequisite: An appropriate 300- and 400-level coursework in philosophy, philosophy of education, or consent of the instructor.

EPOL 506 Contemporary Philosophy of Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/506/)
Analyzes exemplary current work in the field, covering a range of contrasting philosophical issues and approaches. The course goal is to provide familiarity with notable contemporary authors from a variety of perspectives. Same as EPS 511. 4 graduate hours. No professional credit.

EPOL 507 Philosophy and Educational Research credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/507/)
Examines some crucial assumptions and concepts of contemporary research in education from the point of view both of the consumer and the practitioner of educational research. Topics include paradigm conflicts, causal attributions in social science, assessment, ethical problems in the conduct of research, and the assumptions of quantitative research. Same as EPS 515. 4 graduate hours. No professional credit.

EPOL 508 Social Theories and Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/508/)
Examines philosophical issues in social and political theory as they pertain to educational problems. The course includes topics such as autonomy, democratic education, educational reform, and social change. Same as EPS 516. 4 graduate hours. No professional credit.

EPOL 509 Case Studies Professional Ethics and Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/509/)
Examines issues in moral philosophy as they pertain to education. Topics include current theories of moral education, ethical problems in teaching, or topics of moral dispute in educational policy. Same as EPS 517. 4 graduate hours. No professional credit. Prerequisite: Consent of instructor.

EPOL 510 Foundations of Aesthetic Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/510/)
Philosophical approach to the problems of teaching for appreciation in formal education; appraisal of the status of aesthetic education, its nature and function, and its relation to other types of education. Same as EPS 520. 4 graduate hours. No professional credit.

EPOL 515 Introduction to Diversity & Equity credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/515/)
Designed to broaden and deepen students' reflective understanding of diversity and equity and promote a critical and analytical approach to research on relevant topics, as well as support the development of scholar-practitioners. While diversity is inclusive of social and economic status, gender, race, religion, sexuality, ethnicity, ability, and culture, the course is organized around intersectional identity formations as they continue to inform educational and workforce policies and practices. Throughout this course, students will examine the definitions, role, function and effects of diversity and equity in broadly defined educational structures. The dynamics of power and privilege impact the ways in which diversity and equity manifest, particularly via educational and social policies. Same as EPS 576. 4 graduate hours. No professional credit.

EPOL 516 Critical Race Theory and Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/516/)
Focuses on critical race theory as a critique of racism and the law in U.S. society and discusses its current applications to education policy and research in K-12 schooling and higher education. Also looks at how critical race theory can be used as a methodological lens for policy analysis and educational research. Same as EPS 531. 4 graduate hours. No professional credit.

EPOL 517 Race, Gender and Sexuality Issues credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/517/)
Examines contemporary theories of race, gender, class, and sexuality, as well as analyzing how their dynamics play out in U.S. public schooling and history. In an attempt to discuss a range of disciplinary and theoretical approaches to diversity, we will shift among historical, sociological, political, theoretical and pedagogical issues. Traces the place of diversity in forming notions of citizenship, community, identity, and political affiliation/alliance. While two extended examples will focus on the interplay of race, class, and gender in the school-based issues of drop out rates and gendered interactions in the classroom and playground, we will also consider contemporary theories of diversity in local and global contexts. Same as EPS 536. 4 graduate hours. No professional credit.

EPOL 518 Youth, Culture and Society credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/518/)
Same as AAS 539, EPS 539, and HDFS 539. See HDFS 539.

EPOL 520 Education and Globalization credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/520/)
Analyses of the role and functions of education in social, political, and economic development, with particular reference to the new and the developing countries. Same as EPS 530. 4 graduate hours. No professional credit.

EPOL 521 Globalizing Educational Policy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/521/)
Dynamics associated with globalization are now fully articulated to modern schooling and the social and cultural environments in which both school youth and educators operate. This course will reconsider the boundaries of educational policy and practice beyond the mainstream emphasis on subject matter specialization, as educators more fully engage with the complex range of experiences, images, and practices that now compel modern school youth and affect their articulation of needs, interests and desires. Same as EPS 537. 4 graduate hours. No professional credit.

EPOL 522 Globalization of Higher Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/522/)
Focuses on the rapid changes happening in the Higher Education around the world. Using case studies, we will examine a variety of issues that have come about as the Higher Education system responds to rapid changes in the global economy. These include issues of access and equity; accountability; finance; privatization and for-profit institutions; curricular responses to the changing realities of knowledge and knowledge production; and issues of internationalization within these changing contexts. We will also look at future trends in higher education within the US and internationally. Same as EPS 538. 4 graduate hours. No professional credit.

EPOL 523 Global Issues in Learning credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/523/)
Investigates how culture has been taken up in theories that try to explain differences in educational outcomes between nations, within classrooms, and across schools. Through readings drawn from cultural psychology, but also including sociology, anthropology, and education, students will examine how globalization has shaped the discourse about the relationships between culture, learning, and academic achievement. Same as EPS 553 and EPSY 553. 4 graduate hours. No professional credit. Prerequisite: For majors only.

EPOL 524 Education and Human Rights credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/524/)
Introduces students to varieties of definitions of citizenship - ranging from nation-specific practices and obligations to human rights-based global citizenship - and their relationship to globalized education and public problem solving. Readings include canonical texts on political organization and responsibilities as well as contemporary theories discussing transnational, global, and cosmopolitan citizenship. Also covers the challenges and promises of diversity, statelessness and non-citizenship participation, particularly in educational concerns but also more broadly. Same as EPS 529. 4 graduate hours. No professional credit.

EPOL 525 Global Youth and Citizenship credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/525/)
Discusses youth and citizenship in a global context. Covers the social construction of children and youth, the sociology of global generations, education and social media, and new youth movements in the digital age. Draws on a diversity of case studies from North America, the Middle East and North Africa, sub-Saharan Africa, Europe and Latin America. Same as EPS 533. 4 graduate hours. No professional credit.

EPOL 526 Education and Power in Middle East credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/526/)
Survey of education in Middle East and North Africa from the nineteenth century to the present. Course deals with education in relation to colonialism, nationalism, economic development, imperialism, war and geopolitics, youth politics, Islam, and Arab uprisings. Takes a multidisciplinary perspective that draws on social history, anthropology, sociology, political economy, gender studies and international development. Same as EPS 534. 4 graduate hours. No professional credit.

EPOL 527 Postcolonial Theory and Methodology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/527/)
Since the 1990s, scholarship focusing on center-periphery relations has grown considerably. This scholarship is often identified with postcolonial theories of education and society. The purpose of this course is to acquaint students with this body of literature that addresses the way in which post-independent states are currently engaged in massive institutional transformations in light of globalization. Ultimately, we will explore the theoretical and methodological traditions foregrounded in postcolonial research and their implications for educational policy. Same as EPS 570. 4 graduate hours. No professional credit.

EPOL 528 Researching Global Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/528/)
Introduces education research methodology and consider the cultural, political and ethical implications of engaging in education research in cross-cultural, global contexts. Students will learn to select an appropriate topic for research, effectively navigate and use an academic research library, conduct a literature review, and craft a literature review portion of a larger research project. Same as EPS 580. 4 graduate hours. No professional credit.

EPOL 529 Cultural Studies and Critical Interpretation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/529/)
Explores the history, applications and limitations of various theoretical and methodological approaches to the study of contemporary culture and popular media. Examines debates and issues within cultural studies and with other schools of thought. The impact of cultural studies across the disciplines. Same as EPS 575 and MDIA 575. 4 graduate hours. No professional credit.

EPOL 530 Educational Politics and Policies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/530/)
Examines the legislative and political processes in the formulation of current federal and state educational policies, together with the evaluation of policy and the formulation of policy alternatives. Same as EOL 561. 4 graduate hours. No professional credit.

EPOL 531 Diversity, Leadership & Policy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/531/)
Intended to provide students with an opportunity to study both historical and contemporary perspectives on leadership and policy in diverse contexts and to prompt reflection on their own practice. As students read, discuss, reflect on, and critique a variety of perspectives and topics such as race, class, power, cultural leadership, policy, change, diversity, and building community, they will consider how the literature informs the development of a personal philosophy of education leadership, takes into consideration moral and ethical issues, the implementation of educational policy, the purposes and nature of the task, and the complexity and diversity of educational contexts. Same as EOL 568. 4 graduate hours. No professional credit.

EPOL 532 Researching Race in Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/532/)
This course focuses on the methods and methodology that education researchers engage to research educational equity as it relates to race, racism and racial equity in education. Drawing on the research methods literature in the social sciences, humanities and education, this course is appropriate for graduate students in education, sociology, anthropology, and others who have an interest in research methods, methodology and educational issues. 4 graduate hours. No professional credit.

EPOL 533 The School Superintendency credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/533/)
Course examines the legal and fiscal responsibilities of school superintendents, the relationship of superintendents with school boards and employee groups, the importance of public relations and partnerships with community stakeholders, the process for selecting superintendents, and the effect of the position on individuals. Same as EOL 563. 4 graduate hours. No professional credit. Prerequisite: Students must be admitted to the Superintendent Endorsement program or consent of instructor.

EPOL 534 Assessment for Learning credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/534/)
For several decades now, assessment has become an increasingly pressing education priority. Teacher and school accountability systems have come to be based on analysis of large-scale, standardized summative assessments. As a consequence, assessment now dominates most conversations about reform, particularly as a measure of teacher and school accountability for learner performance. Behind the often heated and at times ideologically gridlocked debates is a genuine challenge to address gaps in achievement between different demographically identifiable groups of students. There is an urgent need to lift whole communities and cohorts of students out of cycles of underachievement. For better or for worse, testing and public reporting of achievement is seen to be one of the few tools capable of clearly informing public policy makers and communities alike about how their resources are being used to expand the life opportunities for their children. This course is an overview of current debates about testing, and analyzes the strengths and weaknesses of a variety of approaches to assessment. The course also focuses on the use of assessment technologies in learning. It will explore recent advances in computer adaptive and diagnostic testing, the use of natural language processing technologies in assessments, and embedded formative assessments in digital and online curricula. Same as EPS 535. 4 graduate hours. No professional credit.

EPOL 535 Introduction to Educational Leadership credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/535/)
Multiple perspectives for understanding theory and practice in the governance and operation of complex organizations in P-12 school systems. Focusses on leadership development and the changing role of the school leader in leading learning-focused schools dedicated to significant and continuous growth for every student. Same as EOL 540. 4 graduate hours. No professional credit.

EPOL 536 Leading School Improvement credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/536/)
Study of major ideas on school improvement, past and present, and of emerging research on the condition of public education in the United States. In-depth examination of reform proposals for changing the organization of schools, the instructional program, and the roles of students, teachers, and school administrators. Same as EOL 543. 4 graduate hours. No professional credit.

EPOL 537 Education Law credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/537/)
Examines the range of federal and state constitutional and statutory sources that apply to the constituents (pupils, parents, teachers, administrators, and board members) engaged in public schools. Emphasizes development of legal analytical skills. Same as EOL 547. 4 graduate hours. No professional credit.

EPOL 538 Supervision of Learning Environments credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/538/)
Methods, theories, and research applying to the supervision and evaluation of classroom practices in learning-centered schools; includes analysis and application of research in effective teaching practices, formative assessment and summative evaluation, data collection techniques, and professional development. Same as EOL 541. 4 graduate hours. No professional credit.

EPOL 540 Leading Learning-Centered Schools credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/540/)
Provides an overview and analysis of the administrative, supervisory, and leadership functions of building-level administrators; emphasizes the design and implementation of effective educational programs on a school-wide basis; analyzes administrative tasks and processes that focus on learning-centered schools. Same as EOL 542. 4 graduate hours. No professional credit. Prerequisite: Priority will be given to department majors.

EPOL 541 Leading Improvement and Innovation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/541/)
In-depth examination of leadership competencies and skills required for the public school superintendent to successfully lead, innovate, and manage complex educational organizations. Analysis of research and evidenced-based practices that focus on learning, building organizational capacity, strategic design, and ensuring equity and excellence for all learners. Emphasis placed on preparing individuals to effectively lead socially just organizations that ensure high quality learning. Same as EOL 544. 4 graduate hours. No professional credit.

EPOL 542 Public School Finance credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/542/)
Study of financing public education systems in the United States; focuses on the social, economic, political, legal, and technical dimensions of developing school finance policy for federal, state, and local governments; relates theory and research in public school finance to administrative practice in budgeting and financial administration. Same as EOL 546. 4 graduate hours. No professional credit.

EPOL 543 Educational Leadership and Professional Development credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/543/)
Study of major issues on educational leadership and professional development. Examination of research, theories, and practices pertaining to: professional development purposes, content, context, policies, and processes; fostering and sustaining quality professional development; and the roles of teachers, school administrators and policy analysts. Same as EOL 550. 4 graduate hours. No professional credit.

EPOL 544 Organizational Theory for Educational Leaders credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/544/)
Study of theoretical perspectives and empirical research drawn from the social sciences relating to educational organizations and administrative leadership with an emphasis on application of theory to practice. Same as EOL 549. 4 graduate hours. No professional credit.

EPOL 545 Ethical Dimensions in Educational Leadership credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/545/)
Designed to prepare students to analyze ethical issues involved in educational policy making, policy administration, and policy evaluation; includes topics such as educational equity, privacy, due process, and compliance; draws upon multiple disciplines to analyze issues developed out of practice. Same as EPS 522. 4 graduate hours. No professional credit.

EPOL 546 Law and School District Leader credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/546/)
Advanced study of public school law, addressing legal and fiscal policy issues related to effective management of public school districts. In-depth analysis of federal and state statutes, with an emphasis on recent court decisions and legal trends; emphasizes development of legal analytical skills. Same as EOL 562. 4 graduate hours. No professional credit.

EPOL 547 District Change for Equity and Social Justice credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/547/)
Critical examination of democratic principles of education, especially as it pertains to equity and social justice. Addresses the fundamental question of "Who gets access to the fundamental right of education and how?" Application of theories and concepts to the role of district leaders in implementing socially just educational settings. Same as EOL 564. 4 graduate hours. No professional credit.

EPOL 548 Human Resource Management at the School District Level credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/548/)
Principles, problems, and trends in the administration of professional public school personnel; organization of personnel; the legal framework of the personnel function; selection, evaluation and development of staff; collective bargaining, contract administration and personnel policy; and the personnel administrator's role as a catalyst for school improvement. Same as EOL 565. 4 graduate hours. No professional credit.

EPOL 549 School District Financial Management credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/549/)
Analysis of how public schools are managed, including the theory and managerial practices necessary to oversee the functioning of a school district; study of the integration of managerial issues with attendant conditions of school board functioning, priority and educational goal-setting, taxation, capital outlay, debt management, and contractual implementation. Emphasis placed on principles and practices relating to public school financial management, including budgeting and accounting systems. Same as EOL 566. 4 graduate hours. No professional credit.

EPOL 550 Methods of Educational Inquiry credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/550/)
Same as CI 550, EPSY 550, and SPED 550. See CI 550.

EPOL 551 Organization of Higher Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/551/)
Examination of American higher education both as a system and as a field of study. Includes consideration of organizational patterns, stakeholders, governance, and the purposes of higher education. Same as EOL 570. 4 graduate hours. No professional credit.

EPOL 552 Foundation of Higher Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/552/)
Examination of the development of American higher education, including the evolution of its forms, purposes, practices, leadership, and constituents. Same as EOL 571. 4 graduate hours. No professional credit.

EPOL 553 Administration in Higher Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/553/)
Designed for students to gain a greater understanding of administrative leadership in higher education. Provides current and future administrators an opportunity to explore foundational theories of academic organization and leadership; investigate contemporary leadership issues within various contexts; and develop analytical skills which connect theoretical frameworks to leadership practice and research. Same as EOL 584. 4 graduate hours. No professional credit.

EPOL 554 College Teaching credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/554/)
Scholarly approach to curriculum and pedagogy at the college level: instructional methods, active and cooperative learning, technology-enhanced teaching, evaluation and assessment, faculty roles and responsibilities. Same as EOL 585. 4 graduate hours. No professional credit.

EPOL 555 Higher Education Finance credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/555/)
Explores the foundations of higher education finance by analyzing key theories, structures, and challenges of college and university financing. Students will examine readings, present papers and actively participate in class discussions, so as to better comprehend the financial complexities dictating current institutional policies and practices. Same as EOL 576. 4 graduate hours. No professional credit.

EPOL 556 Access to Higher Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/556/)
Explores current practices, conditions, and policies shaping access to college at the undergraduate level. The course is based in a sociological approach to understanding conditions of access to higher education. Provides an opportunity to examine and discuss current research on class, race, gender, institutional policy, and individual factors that are known to impact participation in higher education. Particular attention is given to stratification in higher education including but not limited to: the historical and legal context of access; points of access; pathways to higher education; and the effects of various policies and programs. Same as EOL 579 and EPS 579. 4 graduate hours. No professional credit.

EPOL 557 Education and Stratification credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/557/)
Examines the varied and complex interplay between social stratification and education. Through readings covering the theoretical work on stratification and education, students will examine a variety of social inequalities, focusing mainly on educational inequalities. With an emphasis on substantive and methodological critique of empirical works on education and stratification, this course is appropriate for any graduate student interested in the topic of educational inequalities and methodological issues relevant to research on this topic. Same as EPS 581. 4 graduate hours. No professional credit.

EPOL 558 The Community College credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/558/)
Community and technical colleges; their purposes, function, and objectives; social forces related to their development and evaluation; characteristics and needs of students; educational programs and teaching strategies; and organization, control, and financing. Same as EOL 573 and HRD 501. 4 graduate hours. No professional credit.

EPOL 559 Higher Education Law credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/559/)
Provides graduate students with core knowledge of the law affecting the administration of colleges and universities. Students become versed in legal issues to enhance administrative effectiveness and to address legal issues that confront the administrator in the operation of an institution of higher education. Importantly, the course does not aspire to invest the student with legal knowledge sufficient to operate without advice of professional legal counsel. Same as EOL 578. 4 graduate hours. No professional credit.

EPOL 560 Student Affairs Administration credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/560/)
Theory, research, and practice of student affairs administration, including philosophical foundations, management, professional development and organizational issues. Same as EOL 583. 4 graduate hours. No professional credit.

EPOL 561 Changing College Curriculum credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/561/)
Examines the historical roots, contemporary controversies, current trends, and possible futures of the curriculum in American postsecondary education. It is a graduate seminar built on small group discussions and conversations about important literature on the changing college curriculum. Increases student understanding of historical and contemporary curricular issues in higher education with the additional goal of fostering the consideration of the possibilities of challenges to enacting curricular change. Same as EOL 586. 4 graduate hours. No professional credit.

EPOL 562 Diversity in Higher Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/562/)
Explores critical topics and issues related to diversity in higher education, including race/ethnicity, class, and gender. Covers current research that explores diversity in higher education, institutional diversity policies and organizational behaviors, campus constituents, and the role of external groups. The course consists of reading, in-class discussion, group exercise, and completing a research project that is of interest to the student. Same as EOL 574. 4 graduate hours. No professional credit.

EPOL 563 The College Student credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/563/)
Study of the characteristics and development of college students, the institutional contexts in which they operate, and the interaction of students with the college environment. Same as EOL 572. 4 graduate hours. No professional credit.

EPOL 564 College Student Development credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/564/)
Provides students with an understanding of theories and research involving the cognitive, intrapersonal and interpersonal development of college students. Special attention is paid to the application of student development research in educational settings and the intentional creation of educational environments along developmental principles. Same as EOL 582. 4 graduate hours. No professional credit.

EPOL 565 Critical Issues in Higher Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/565/)
The examination of critical trends that impact higher education from various perspectives, including legal, organizational, and political. Same as EOL 580. 4 graduate hours. No professional credit. May be repeated in separate terms to a maximum of 8 hours.

EPOL 566 Public Policy in Higher Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/566/)
Intended primarily for doctoral students in higher education, this course will enable students to analyze contemporary public policy issues confronting American higher education. Selected policy issues will be probed in depth, drawing upon scholarly sources and public reports. Students will comprehend the interaction and tension among higher education leaders, and local, state, and federal policymakers. Same as EOL 577. 4 graduate hours. No professional credit.

EPOL 567 Program Planning & Evaluation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/567/)
Introduces students to school district leadership expectations in program planning and evaluation, highlighting leaders' responsibilities to utilize the program evaluation cycle to improve teaching and learning, and assuring that schools and districts meet state and national accountability standards. Topics include planning educational programs, monitoring and evaluating program effectiveness, and reaching decisions related to continuing, restructuring, or terminating programs based upon empirical evidence collected through the program evaluation process. Same as EOL 567. 4 graduate hours. No professional credit.

EPOL 570 Organization Development credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/570/)
Addresses the history, concepts, theories, and techniques of Organization Development as applied in Human Resource Education; emphasis on creating, managing, and sustaining system-wide change in public and private organizations; organized around diagnosis, implementation, and evaluation of individual, team, and organization-wide interventions. Same as HRD 530. 4 graduate hours. No professional credit.

EPOL 571 Advanced Theories in Human Resource Development credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/571/)
Provides a reading of advanced texts related to Human Resource Development from a variety of applied social science disciplines. Targeted towards doctoral students in the later stage of their course work who are interested in HRE theory and social science foundations. Same as HRD 509. 4 graduate hours. No professional credit. Prerequisite: HRD 400, HRD 411, HRD 530.

EPOL 572 Quality Process Improvement credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/572/)
Examines quality and process improvement philosophies, theories, and strategies as they apply to the practice of professionals in human resource education. Based on a critical analysis of the historical antecedents, theoretical foundations, and empirical research results of Total Quality Management (TQM) and Continuous Process Improvement (CPI), students will be able to apply improvement strategies and evaluate the merits and limitations in public and private settings. Same as EOL 587 and HRD 531. 4 graduate hours. No professional credit.

EPOL 573 Strategic Human Resource Development credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/573/)
Study of the theories, research, and applications of strategic human resource development in a variety of organizational settings. Same as HRD 532. 2 or 4 graduate hours. No professional credit.

EPOL 574 Management of Human Resource Development credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/574/)
Study of management fundamentals related to planning, organizing, staffing, leading, and controlling the HRD function in organizations. Same as HRD 533. 4 graduate hours. No professional credit.

EPOL 575 Economics of Human Resources credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/575/)
Same as HRD 534 and LER 545. See LER 545.

EPOL 576 Consulting in Human Resource Development credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/576/)
Analysis of key elements of consulting in the human resource development profession. Emphasis is placed on subject matter expertise, consulting skills, marketing, organization, business management, communication, and life/work balance. The course examines both the internal and external consulting practices. Issues of education and training of consultants for work in industry, business, government, and non-profit sectors are covered in detail. Same as HRD 535. 4 graduate hours. No professional credit.

EPOL 577 International Human Resource Development credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/577/)
Course is designed to provide insights into international HRD at macro and micro levels. Course will cover: cross-cultural issues in international HRD; design and delivery of international HRD programs; HRD practices and programs in different regions of the world; national HRD programs; expatriate training and training in multinational corporations. Same as HRD 536. 4 graduate hours. No professional credit.

EPOL 578 Learning on the Job credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/578/)
Research and practice suggest that individuals learn most of what they know and can do while on-the-job, not in a corporate classroom or some other formal learning setting. This seminar will provide opportunity to examine the literature on this topic and consider how they also might contribute to the literature through their own research. The seminar will also provide the opportunity to experience how to design a workplace learning system, such as structured on-the-job training. Same as HRD 540. 4 graduate hours. No professional credit.

EPOL 579 Adult and Professional Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/579/)
Same as HRD 550. See HRD 550.

EPOL 580 Ubiquitous Learning credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/580/)
Explores the dynamics of learning using mobile computing devices, broadly defined to range from mobile phones, tablets and laptops to interesting new possibilities raised by emerging technologies such as wearable devices and a potentially pervasive "internet of things". Our journey will take us through museums, galleries and parks - real and virtual. We will visit new media and gaming spaces in which either incidental or explicit learning is taking place. We will look at sites of informal as well as formal learning - extraordinary classrooms offering blended learning opportunities, as well as new forms and modes of out-of-school and self-directed learning. Same as EPS 506. 4 graduate hours. No professional credit.

EPOL 581 Knowledge, Learning and Pedagogy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/581/)
Investigates a variety of pedagogical paradigms, including didactic, authentic and critical pedagogies. Develops the concept of a pedagogical repertoire, as a way of interpreting the ways in which learners engage in a variety of "knowledge processes" or task types. The course focuses on approaches to literacy teaching and learning, but course participants can address parallel examples from other discipline areas and across all levels of education. As a counterpoint, it also reflects on the practicalities of learning knowledge-making in informal as well as consciously designed learning environments. Same as EPS 532. 4 graduate hours. No professional credit.

EPOL 582 New Media and Literacies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/582/)
Designed to address issues of language and literacy, not only for language arts teachers, but all educators in all disciplines and at all levels, where students are required to read and represent their knowledge in writing as well as other media. It will introduce the 'Multiliteracies' theory of literacy learning which recognizes that the contemporary communications environment is increasingly multimodal. Written language today is more closely connected with oral, visual, gestural, tactile and spatial modes. To remain relevant, effective pedagogy needs to connect with the new communications media, and to explore their underlying processes. The course will focus on current trends in literacy instruction, not only in language arts or composition classes, but academic literacies across all curriculum areas. The course will also investigate the implications of new media of language and literacy and explore the implications of developments in the contemporary media, particularly the new, digital media. This reflects an expansive view of literacy in which reading and writing includes media objects such as embedded video, datasets, infographics, digital story boards. The course investigates the implications of new media and technology-mediated learning for teaching methods and pedagogical designs. Same as EPS 554. 4 graduate hours. No professional credit.

EPOL 583 eLearning Ecologies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/583/)
An examination of emerging environments of eLearning, some setting out to emulate the heritage social relationships and discourses of the classroom, others attempting to create new forms of learning. Aims to push the imaginative boundaries of what might be possible in eLearning environments. Explores the ways in which assessments can be constructed and implemented which are integral to the learning process, with the assistance of today's new media, 'big data' and other information technologies. Same as HRD 572. 4 graduate hours. No professional credit.

EPOL 584 Innovation in eLearning credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/584/)
Designed to provide an in-depth look at ongoing innovations in Web-based electronic technologies that can be used to deliver eLearning content and to enhance learning experiences in eLearning environments. Students will acquire and synthesize advanced content knowledge and critically review research on ongoing innovations that are integrated with targeted content in today's eCommunication and eLearning environments. Same as HRD 575. 4 graduate hours. No professional credit.

EPOL 585 Ethnographic Methods in Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/585/)
This course focuses on goals, nature, and methodological means of ethnographic research in educational settings broadly defined. Such research aims to describe and, moreover, to understand the ways of living of teachers, students, administrators, parents, and other participants in relevant social spaces. The class will be grounded in the disciplinary perspectives of cultural anthropology, linguistic anthropology, and cultural studies. We will have an ongoing discussion of how one conducts ethnographic research, and all members of the class will conduct their own mini-study. 4 graduate hours. No professional credit.

EPOL 586 General Field Research Seminar credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/586/)
This course will guide doctoral students as they develop a broad and critical understanding of their general field of doctoral study. Students will conduct a synthesized and critical review of the general field literature, which will become part of their dissertation. This course may meet the doctoral requirement of the General Field Qualifying Examination. 4 graduate hours. No professional credit. Approved for S/U grading only. May be repeated in separate terms for up to 8 hours. Prerequisite: To be taken by EPOL doctoral students upon completion of graduate course work. See advisor for guidance.

EPOL 587 Special Field Research Seminar credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/587/)
This course will guide doctoral students as they develop a broad and critical understanding of their special field of doctoral study. Students will conduct a synthesized and critical review of the special field literature, which will become part of their dissertation.This course may meet the doctoral requirement of the Special Field Qualifying Examination. 4 graduate hours. No professional credit. Approved for S/U grading only. May be repeated in separate terms up to 8 hours. Prerequisite: To be taken by doctoral students upon completion of graduate course work. See advisor for guidance.

EPOL 588 Methodology Research Seminar credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/588/)
This course will guide EDD doctoral students as they develop a broad and critical understanding of the methodological approaches in their doctoral field. Students will critique methodologies used in educational research and develop a thorough methodological proposal for their research, which will become part of their dissertation.This course may meet the doctoral requirement of the Research Methodology Qualifying Examination. 4 graduate hours. No professional credit. Approved for S/U grading only. May be repeated in separate terms up to 8 hours. Prerequisite: To be taken by Ed.D. doctoral students upon completion of graduate course work. See advisor for guidance. For Ed.D. students only.

EPOL 589 Uses and Abuses of Educational Research credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/589/)
Aims at comprehensive research literacy by considering educational research in historical, philosophical, policy and political context. Through close reading and quantitative, qualitative, and humanistic studies, the discussion of interdisciplinary perspectives on the research process, students learn to engage intelligently with multiple modes of research and deal critically with policies claiming an evidentiary warrant. Specific topics include: the relationship between research, policy, and practice; the nature of theory and method, argument and evidence in the humanities and social sciences; the tensions between advocacy and research. Same as EPS 508. 4 graduate hours. No professional credit.

EPOL 590 Advanced Graduate Seminar credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/590/)
Seminar in educational policy studies; sections offered in the following fields: (a) history of education; (b) philosophy of education; (c) comparative education; (d) social foundations of education; (e) philosophy of educational research; and (f) historical methods in education. 4 graduate hours. No professional credit. May be repeated in the same and separate semesters to a maximum of 12 hours, if topics vary.

EPOL 591 Thesis Seminar credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/591/)
Designed to take students through the entire process of proposal development, this course is intended for masters or doctoral students who are ready to prepare a thesis or dissertation proposal. Students will learn to use a systematic and comprehensive approach to develop the research proposal and how each step in the research process is related. 4 graduate hours. No professional credit. Approved for Letter and S/U grading.

EPOL 592 Special Topics in EPOL credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/592/)
Introduction to significant problems, points of view, and trends in the field; explores significant research relating to organization, content, and techniques. Topics vary; consult Class Schedule for specific section offerings. Same as HRD 592. 4 graduate hours. No professional credit. May be repeated if topics vary. Prerequisite: Instructor approval required.

EPOL 593 The Role of Theory in Educational Research credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/593/)
All research is guided by theory. Theory provides a vocabulary, a set of laws or generalizations, a background literature, and a conceptual framework for any effort to plan, design, and execute a research study. There is no theory-free inquiry. This is true in the social sciences as well as the natural sciences. All research seeks to explain phenomena: a theory provides an explanation for those explanations. However, these theoretical assumptions are often implicit and unreflective. Researchers may think they have no theory, or have a theory that is so taken for granted that they don't recognize it as an assumed theory. Much of educational research suffers from this lack of theoretical self-awareness. Like any other aspect of research, theories are falsifiable. They must stand the test of evidence – which may go against them. The goal of the class is not to identify the "right" or "best" theory, but to make the identification and selection of a theory more critical and reflective. Any major theory has insights, and each has limitations. 4 graduate hours. No professional credit.

EPOL 594 Program Evaluation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/594/)
This course examines models and methods of evaluating programs, processes, and products in broadly-defined organizations situated in various operational contexts (eg., education, business, government, NGO). Particular emphasis is given to topics of formative and summative evaluation, frameworks for program evaluation, quantitative and qualitative methods of data collection and analysis, communicating and reporting evaluation findings, and the ethics and standards of evaluation practice. The underlying philosophy of the course is that evaluation can be the catalyst for organizational learning to facilitate intended changes, especially when initiated by those in training and organization development positions. Same as HRD 585. 4 graduate hours. No professional credit.

EPOL 595 Independent Study credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/EPOL/595/)
Offers opportunity and challenge of self-directive, independent study; develops the individual's ability as an independent student and enables the student to pursue needed study in a field in which appropriate courses are not being offered during a given term. 1 to 4 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated with approval.

EPOL 596 Capstone Experience I & II credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/EPOL/596/**)**
Part I is the design of a research study (capstone project) that integrates literature covered in the degree program leading to a research question to be explored empirically. It includes literature review, problem statement, research design, methodology, identifying participants, IRB review and a final proposal paper. Students are expected to collect data for their study (project) between Parts I and II. Part II topics include data analysis, interpretation, discussion, implications, dissemination of findings, and future research. Leads to a final research (capstone) paper that synthesizes work from Part I and adds to it through data analysis, discussion of findings, implications, and ways to disseminate findings to relevant audiences. Same as EOL 588. 2 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated in separate terms to a maximum of 4 hours.

EPOL 597 Clinical Experience Administration credit: 0 to 12 Hours. **(**https://courses.illinois.edu/schedule/terms/EPOL/597/**)**
Direct experience in the study of educational problems of concern to administrators; features an action component whereby the student is provided with opportunities for assuming responsibility for decision making in a live or simulated setting; each student works under the supervision of a professor, and where possible and appropriate, a practicing administrator. Same as EOL 560. 0 to 12 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated to a maximum of 12 hours; no more than 4 hours earned at the master's level. Prerequisite: Students must be admitted to the General Administrative or Superintendent Endorsement program and must have completed at least 16 hours of EAL required courses, or consent of instructor.

EPOL 598 Internship in Education Policy, Organization and Leadership credit: 2 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/EPOL/598/**)**
Supervised direct experience in the administration of higher education. With the aid of the faculty, students select the internship relevant to their career goals. Same as EOL 589. 2 or 4 graduate hours. No professional credit. Approved for S/U grading only. May be repeated to a maximum of 8 hours; no more than 8 hours may be earned toward an advanced degree. Prerequisite: Consent of instructor.

EPOL 599 Thesis Research credit: 0 to 16 Hours. **(**https://courses.illinois.edu/schedule/terms/EPOL/599/**)**
Individual direction of research and thesis writing. 0 to 16 graduate hours. No professional credit. Approved for S/U grading only. May be repeated with approval.

EOL - EDUC ORGANIZATION & LEADERSHIP

EOL Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/EOL/)

Courses

EOL 440 Professional Issues for Teachers credit: 1 or 3 Hours. (https://courses.illinois.edu/schedule/terms/EOL/440/)
Same as EPOL 440. See EPOL 440.

EOL 540 Introduction to Educational Leadership credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EOL/540/)
Same as EPOL 535. See EPOL 535.

EOL 541 Supervision of Learning Environments credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EOL/541/)
Same as EPOL 538. See EPOL 538.

EOL 542 Leading Learning-Centered Schools credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EOL/542/)
Same as EPOL 540. See EPOL 540.

EOL 543 Leading School Improvement credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EOL/543/)
Same as EPOL 536. See EPOL 536.

EOL 544 Leading Improvement and Innovation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EOL/544/)
Same as EPOL 541. See EPOL 541.

EOL 546 Public School Finance credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EOL/546/)
Same as EPOL 542. See EPOL 542.

EOL 547 Education Law credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EOL/547/)
Same as ERAM 574. See ERAM 574.

EOL 549 Organizational Theory for Educational Leaders credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EOL/549/)
Same as EPOL 544. See EPOL 544.

EOL 550 Educational Leadership and Professional Development credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EOL/550/)
Same as EPOL 543. See EPOL 543.

EOL 560 Clinical Experience Administration credit: 0 to 12 Hours. (https://courses.illinois.edu/schedule/terms/EOL/560/)
Same as EPOL 597. See EPOL 597.

EOL 561 Educational Politics and Policies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EOL/561/)
Same as EPOL 530. See EPOL 530.

EOL 562 Law and School District Leader credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EOL/562/)
Same as EPOL 546. See EPOL 546.

EOL 563 The School Superintendency credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EOL/563/)
Same as EPOL 533. See EPOL 533.

EOL 564 District Change for Equity and Social Justice credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EOL/564/)
Same as EPOL 547. See EPOL 547.

EOL 565 Human Resource Management at the School District Level credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EOL/565/)
Same as EPOL 548. See EPOL 548.

EOL 566 School District Financial Management credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EOL/566/)
Same as EPOL 549. See EPOL 549.

EOL 567 Program Planning & Evaluation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EOL/567/)
Same as EPOL 567. See EPOL 567.

EOL 568 Diversity, Leadership & Policy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EOL/568/)
Same as EPOL 531. See EPOL 531.

EOL 570 Organization of Higher Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EOL/570/)
Same as EPOL 551. See EPOL 551.

EOL 571 Foundation of Higher Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EOL/571/)
Same as EPOL 552. See EPOL 552.

EOL 572 The College Student credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EOL/572/)
Same as EPOL 563. See EPOL 563.

EOL 573 The Community College credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EOL/573/)
Same as EPOL 558 and HRD 501. See EPOL 558.

EOL 574 Diversity in Higher Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EOL/574/)
Same as EPOL 562.See EPOL 562.

EOL 576 Higher Education Finance credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EOL/576/)
Same as EPOL 555. See EPOL 555.

EOL 577 Public Policy in Higher Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EOL/577/)
Same as EPOL 566. See EPOL 566.

EOL 578 Higher Education Law credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EOL/578/)
Same as EPOL 559.See EPOL 559.

EOL 579 Access to Higher Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EOL/579/)
Same as EPOL 556 and EPS 579. See EPOL 556.

EOL 580 Critical Issues in Higher Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EOL/580/)
Same as EPOL 565. See EPOL 565.

EOL 582 College Student Development credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EOL/582/)
Same as EPOL 564. See EPOL 564.

EOL 583 Student Affairs Administration credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EOL/583/)
Same as EPOL 560. See EPOL 560.

EOL 584 Administration in Higher Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EOL/584/)
Same as EPOL 553. See EPOL 553.

EOL 585 College Teaching credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EOL/585/)
Same as EPOL 554. See EPOL 554.

EOL 586 Changing College Curriculum credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EOL/586/)
Same as EPOL 561. See EPOL 561.

EOL 587 Quality Process Improvement credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EOL/587/)
Same as EPOL 572 and HRD 531. See EPOL 572.

EOL 588 Capstone Experience I & II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/EOL/588/)
Same as EPOL 596. See EPOL 596.

EOL 589 Internship in Education Policy, Organization and Leadership credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EOL/589/)
Same as EPOL 598. See EPOL 598.

EDUC - EDUCATION

EDUC Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/EDUC/)

Courses

EDUC 101 Education Orientation Seminar credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/EDUC/101/**)**
Informational orientation seminar for Education majors to enhance their understanding of college life and the field of education as a profession.

EDUC 102 Freshman Honors Seminar credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/EDUC/102/**)**
Provides an introduction to critical issues in education with focus on selected contemporary issues in the field; emphasis is on critical analysis and reflection on relationships between teachers, schools, and society.

EDUC 199 Undergraduate Open Seminar credit: 0 to 6 Hours. **(**https://courses.illinois.edu/schedule/terms/EDUC/199/**)**
See class schedule for topics. Approved for Letter and S/U grading. May be repeated in the same and separate semesters to a maximum of 6 hours, if topics vary.

EDUC 201 Identity and Difference in Education credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/EDUC/201/**)**
Focuses on the role of identity in schooling and the way in which identity is socially constructed. Examine how power and privilege impact equity and opportunities based on socially constructed identities such as race, social class, gender, sexual identity, language, (dis)ability, and nationalism. Explore asset-based frameworks that are identity affirming and counter deficit-based perspectives. This course is designed for students interested in reflecting on their own experiences as learners by critically examining their socially constructed identities and "ways of knowing" and the societal implications of these experiences. It is also for those considering careers in teaching, and anyone interested in reflecting on how issues of inclusion, exclusion, power, and privilege play out in education.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

EDUC 202 Social Justice, School and Society credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/EDUC/202/**)**
Examines the nature of justice and the dynamics of a pluralistic society to derive a conception of social justice. Working with this conception, it asks how schools function to perpetuate and/or remediate social injustice. The course will consider the history and nature of schooling, issues of access and tracking, and notions of the public and the common. The course is designed for students interested in reflecting on their own educational histories, for those considering careers in teaching, and for all future parents and citizens needing to be able to reflect critically on justice, school, and society.
This course satisfies the General Education Criteria for:
Advanced Composition
Humanities - Hist Phil

EDUC 299 Education Study Abroad credit: 0 to 18 Hours. **(**https://courses.illinois.edu/schedule/terms/EDUC/299/**)**
Provides credit toward the undergraduate degree for study at approved, accredited foreign institutions or approved overseas programs. Final determination of credit is made upon the student's completion of the work. College of Education students studying abroad on a Campus or College of Education program should enroll in 299 as a placeholder course for a semester length study abroad and in 499 for short term study abroad programs. Approved for letter and S/U grading. May be repeated to a maximum of 36 term hours per academic year or to a total of 44 term hours, all of which must be earned in a calendar year. Prerequisite: One year of residence at UIUC, good academic standing, and a prior approval of the College of Education. (Summer session, 0 to 8 hours).

EDUC 499 Education Abroad credit: 0 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/EDUC/499/**)**
This course will serve as a foundation for your education abroad experience. The class will center on the experience of travel as it relates to education - your own education, the education systems and policies you encounter, as well as your prospective role as a future educator. This course will introduce comparative education inquiry and provide space to consider the cultural, political, and ethical implications of engaging in education travel and research in cross-cultural, global contexts. 0 to 3 undergraduate hours. 0 to 4 graduate hours. Approved for Letter and S/U grading. May be repeated if topics vary.

EPS - EDUCATIONAL POLICY STUDIES

EPS Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/EPS/)

Courses

EPS 201 Foundations of Education credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EPS/201/)
Same as EPOL 201. See EPOL 201.

EPS 202 Foundations of Education-ACP credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/202/)
Same as EPOL 202. See EPOL 202.
This course satisfies the General Education Criteria for:
Advanced Composition

EPS 310 Race and Cultural Diversity credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/310/)
Same as AAS 310, AFRO 310, EPOL 310, and LLS 310. See EPOL 310.
This course satisfies the General Education Criteria for:
Advanced Composition
Cultural Studies - US Minority

EPS 325 Social Media and Global Change credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EPS/325/)
Same as AFST 325, ASST 325, EPOL 325, EURO 325, INFO 325, LAST 325, REES 325, and SAME 325. See EPOL 325.

EPS 380 Education and Social Justice credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EPS/380/)
Same as EPOL 380. See EPOL 380.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

EPS 390 Undergraduate Advanced Seminar credit: 0 to 9 Hours. (https://courses.illinois.edu/schedule/terms/EPS/390/)
Same as EPOL 390. See EPOL 390.

EPS 395 Independent Study credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/EPS/395/)
Same as EPOL 395. See EPOL 395.

EPS 400 History of American Education credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/400/)
Same as EPOL 401. See EPOL 401.

EPS 402 Asian American Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/402/)
Same as AAS 402 and EPOL 402. See EPOL 402.
This course satisfies the General Education Criteria for:
Advanced Composition
Cultural Studies - US Minority

EPS 405 Historical and Social Barriers credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/405/)
Same as EPOL 403. See EPOL 403.

EPS 410 Professional Ethics in Education credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/410/)
Same as EPOL 406. See EPOL 406.

EPS 411 School and Society credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/411/)
Same as EPOL 405. See EPOL 405.

EPS 412 Critical Thinking in Education credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/412/)
Same as EPOL 407. See EPOL 407.

EPS 413 Aesthetic Education credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/413/)
Same as EPOL 408. See EPOL 408.

EPS 415 Technology and Educational Reform credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/415/)
Same as EPOL 480. See EPOL 480.

EPS 420 Sociology of Education credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/420/)
Same as EPOL 409. See EPOL 409.

EPS 421 Racial and Ethnic Families credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/421/)
Same as AFRO 421, EPOL 410, and HDFS 424. See EPOL 410.

EPS 422 Race, Educational Policy, and Sociology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/422/)
Same as EPOL 411 and SOC 426. See SOC 426.

EPS 423 Politics of Education credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/423/)
Same as EPOL 412. See EPOL 412.

EPS 424 Economics of Education credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/424/)
Same as EPOL 413. See EPOL 413.

EPS 425 Anthropology of Education credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/425/)
This seminar considers how sociocultural anthropology has approached the study of education. Readings include ethnographies of schooling as well as works which consider how schooling is implicated in modernist projects of social improvement, the politics of cultural pluralism in nation states, and the spread of neoliberalism. Same as ANTH 425, EPOL 414, and EPSY 466. 2 or 4 undergraduate hours. 2 or 4 graduate hours.

EPS 431 New Learning credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/431/)
Same as EPOL 481. See EPOL 481.

EPS 481 History of American Indian Education credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/481/)
Same as AIS 481 and EPOL 404. See AIS 481.

EPS 501 History of U.S. Educational Thought credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/501/)
Same as EPOL 501. See EPOL 501.

EPS 502 Education in the 20th Century credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/502/)
Same as EPOL 502. See EPOL 502.

EPS 503 Seminar in the History of Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/503/)
Same as ERAM 570. See ERAM 570.

EPS 506 Ubiquitous Learning credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/506/)
Same as EPOL 580. See EPOL 580.

EPS 508 Uses and Abuses of Educational Research credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/508/)
Same as ERAM 510. See ERAM 510.

EPS 510 Traditions in Philosophy of Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/510/)
Same as ERAM 571. See ERAM 571.

EPS 511 Contemporary Philosophy of Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/511/)
Same as EPOL 506. See EPOL 506.

EPS 515 Philosophy and Educational Research credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/515/)
Same as ERAM 551. See ERAM 551.

EPS 516 Social Theories and Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/516/)
Same as ERAM 515. See ERAM 515.

EPS 517 Case Studies Professional Ethics and Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/517/)
Same as ERAM 572. See ERAM 572.

EPS 520 Foundations of Aesthetic Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/520/)
Same as EPOL 510. See EPOL 510.

EPS 522 Ethical Dimensions in Educational Leadership credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/522/)
Same as EPOL 545. See EPOL 545.

EPS 529 Education and Human Rights credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/529/)
Same as EPOL 524. See EPOL 524.

EPS 530 Education and Globalization credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/530/)
Same as EPOL 520. See EPOL 520.

EPS 531 Critical Race Theory and Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/531/)
Same as EPOL 516. See EPOL 516.

EPS 532 Knowledge, Learning and Pedagogy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/532/)
Same as EPOL 581. See EPOL 581.

EPS 533 Global Youth and Citizenship credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/533/)
Same as EPOL 525. See EPOL 525.

EPS 534 Education and Power in Middle East credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/534/)
Same as EPOL 526. See EPOL 526.

EPS 535 Assessment for Learning credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/535/)
Same as EPOL 534. See EPOL 534.

EPS 536 Race, Gender and Sexuality Issues credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/536/)
Same as EPOL 517. See EPOL 517.

EPS 537 Globalizing Educational Policy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/537/)
Same as EPOL 521. See EPOL 521.

EPS 538 Globalization of Higher Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/538/)
Same as EPOL 522. See EPOL 522.

EPS 539 Youth, Culture and Society credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/539/)
Same as AAS 539, EPOL 518, and HDFS 539. See HDFS 539.

EPS 553 Global Issues in Learning credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/553/)
Same as EPOL 523 and EPSY 553. See EPOL 523.

EPS 554 New Media and Literacies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/554/)
Same as EPOL 582. See EPOL 582.

EPS 570 Postcolonial Theory and Methodology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/570/)
Same as ERAM 554. See ERAM 554.

EPS 575 Cultural Studies and Critical Interpretation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/575/)
Same as ERAM 573 and MDIA 575. See ERAM 573.

EPS 576 Introduction to Diversity & Equity credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/576/)
Same as EPOL 515. See EPOL 515.

EPS 579 Access to Higher Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/579/)
Same as EOL 579 and EPOL 556. See EPOL 556.

EPS 580 Researching Global Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/580/)
Same as EPOL 528. See EPOL 528.

EPS 581 Education and Stratification credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPS/581/)
Same as EPOL 557. See EPOL 557.

EDPR - EDUCATIONAL PRACTICE

EDPR Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/EDPR/)

Courses

EDPR 199 Undergraduate Open Seminar credit: 1 to 5 Hours. **(**https://courses.illinois.edu/schedule/terms/EDPR/199/**)**
Approved for S/U grading only. May be repeated.

EDPR 250 School & Community Experiences credit: 0 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/EDPR/250/**)**
Early field experiences in teacher education, including observation and laboratory experiences in public schools: designed to provide opportunities for career exploration, professional orientation, the development of insight into the interrelationship of theory and practice, and the place of the student in the educational process. Approved for S/U grading only. May be repeated. Prerequisite: Consent of instructor.

EDPR 420 Ed Prac Students with Sp Needs credit: 2 to 12 Hours. **(**https://courses.illinois.edu/schedule/terms/EDPR/420/**)**
Course in practice teaching which provides teaching experience with exceptional children. 2 to 12 undergraduate hours. 2 to 12 graduate hours. Approved for S/U grading only. May be repeated for 18 hours, 12 of which may be taken in the same term. Prerequisite: Satisfactory completion of all requirements of the Council on Teacher Education Undergraduate or Graduate Common Assessment Plan for Initial Certification (http://www.cote.uiuc.edu).

EDPR 432 Ed Prac in EC & ELED credit: 2 to 12 Hours. **(**https://courses.illinois.edu/schedule/terms/EDPR/432/**)**
Course in practice teaching to meet licensure requirements for teaching in the elementary school. 2 to 12 undergraduate hours. 2 to 12 graduate hours. Approved for S/U grading only. Prerequisite: CI 420 or CI 406 as required by the student's curriculum; Satisfactory completion of all requirements of the Council on Teacher Education Undergraduate or Graduate Common Assessment Plan for Initial Certification (http://cote.illinois.edu/).

EDPR 438 Educational Practice in Special Fields credit: 2 to 12 Hours. **(**https://courses.illinois.edu/schedule/terms/EDPR/438/**)**
Course in student teaching to meet requirements for licensure in special fields. 2 to 12 undergraduate hours. 2 to 12 graduate hours. Approved for S/U grading only. Prerequisite: All professional education coursework, except those requiring concurrent enrollment with student teaching, must be completed prior to student teaching. Satisfactory completion of all requirements of the Council on Teacher Education Undergraduate or Graduate Common Assessment Plan for Initial Licensure (www.cote.illinois.edu).

EDPR 442 Educational Practice in Secondary Education credit: 2 to 12 Hours. **(**https://courses.illinois.edu/schedule/terms/EDPR/442/**)**
Course in practice teaching to meet licensure requirements for teaching in the secondary schools. 2 to 12 undergraduate hours. 2 to 12 graduate hours. Approved for S/U grading only. Prerequisite: All professional education coursework, except those requiring concurrent enrollment with student teaching, must be completed prior to student teaching. Satisfactory completion of all requirements of the Council on Teacher Education Undergraduate or Graduate Common Assessment Plan for Initial Licensure (www.cote.illinois.edu).

EDPR 550 School and Community Experience credit: 0 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/EDPR/550/**)**
Early field experiences in teacher education, including observation and laboratory experiences in schools: Designed to provide opportunities for career exploration, professional orientation, the development of insight into the relationships of theory and practice, and the place of the student in the educational process. 0 to 4 graduate hours. No professional credit. Approved for S/U grading only. May be repeated. Prerequisite: Must be admitted to an educator preparation program.

EPSY - EDUCATIONAL PSYCHOLOGY

EPSY Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/EPSY/)

Courses

EPSY 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/199/)
Approved for both letter and S/U grading. May be repeated.

EPSY 200 Honors Symposium in Education credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/EPSY/200/)
Course affords students an opportunity to consider important topics impacting current educational practices. Students select six scholarly presentations from an approved list. The presentations are delivered by outstanding visiting and resident scholars in education and related disciplines. Three times during the term, students gather to consider the issues raised by the presentations. Course expectations include: attending six presentations, attending the three course discussion meetings, reading the course text and selected publications, and developing written reflections based on presentations attended. May be repeated to a maximum of 8 hours.

EPSY 201 Educational Psychology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/201/)
Explores fundamental issues of development, learning, instruction, and assessment. This course articulates how people learn, how they are influenced by cultural and social contexts, how to assess learning and its outcomes, and how best to teach and motivate people to achieve. Educational psychologists improve learning in a broad range of settings: homes, classrooms, work environments, and communities. Prerequisite: PSYC 100.
This course satisfies the General Education Criteria for:
Social Beh Sci - Beh Sci

EPSY 202 Exploring Cultural Diversity credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/202/)
Introduction to cultural diversity and social justice issues through interdisciplinary readings, discussion, and experiential activities. The course involves a 1-hour lecture and 2-hour lab/discussion section each week. The lecture focus is on raising awareness of key issues, concerns and concepts, providing accurate information on diverse groups, and relating theories and models to critical incidents of social oppression in everyday life. The lab/discussion sections follow a group dialogue and experiential activity format, and focus on relating the readings and lecture material to personal experiences and active learning activities.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

EPSY 203 Social Issues Group Dialogues credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/EPSY/203/)
Provides students with opportunities to converse on specific diversity and social justice topic areas offered as separate sections under the course heading. Each section uses a structured dialogue format to explore intergroup and intragroup differences and similarities within historical and contemporary contexts. Specific focus will be on participants sharing their experiences and perspectives related to the specific dialogue topic. The dialogue format uses active learning exercises in addition to weekly readings, journal assignments, and topic based dialogues. May be repeated in the same term to a maximum of 2 hours. May be repeated in separate terms to a maximum of 6 hours. Prerequisite: Consent of the instructor.

EPSY 204 Learning in a Digital World credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/204/)
Addresses the fundamental use of information and information technology in knowledge creation and learning, with a specific focus on the use of computers, new media, and related digital technologies within formal and informal learning environments. The paramount goal is the reconceptualization of learning practices and environments and how these will impact students, teachers, schools, and society at large. Major areas of interest covered include new learning theories, educational informatics, ubiquitous learning, collective intelligence and social networking, creativity, and universal design for knowledge creation. Applicable to any student interested in the principles of learning, knowledge, and education. Students will need access to a laptop computer.

EPSY 220 Career Theory and Practice credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/220/)
Various behavioral science theories will be covered (e.g., person-environment interaction, decision-making, group dynamics, stereotype threat, personality traits). Discussions of research findings to applied career practices will also be included. Students will develop a working-knowledge of these theories through interactive lectures, guided class discussions, case-based readings, and group activities that require them to think critically and flexibly about theory in order to generate solutions for real-world problems. Additional fees may apply. See Class Schedule. On request, students will be required to participate in a total of 6 hours of experiments outside of class.
This course satisfies the General Education Criteria for:
Social Beh Sci - Beh Sci

EPSY 222 Language & Culture of Deaf Communities credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/222/)
Same as SHS 222. See SHS 222.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - US Minority

EPSY 236 Child Development in Education credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/236/)
Study of child growth and development designed particularly for those preparing to teach in the elementary school; special emphasis on the significance of the developmental process for educational programs and procedures; and systematic experience in studying and evaluating children's behavior and in supporting their learning and development. Includes limited voluntary participation as a subject in experiments. Credit is not given for both EPSY 236 and PSYC 216. Prerequisite: PSYC 100.

EPSY 280 Elements of Statistics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/280/)
Course content includes descriptive statistics, correlation, regression, the normal curve, statistical interference, and the presentation of statistics. The course does not require calculus, and makes use of examples drawn from education, medicine, social science, business, and the popular media. Designed for professional training of students whose major interests are not in math or science. Credit is not given for both EPSY 280 and any of ACE 261, CPSC 440, ECON 202, ECON 203, EPSY 480, PSYC 235, SOC 280, STAT 100. Prerequisite: MATH 112.
This course satisfies the General Education Criteria for:
Quantitative Reasoning I

EPSY 330 Development and Relationships credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/330/)
Same as PSYC 326. See PSYC 326.

EPSY 395 Independent Study credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/395/)
Study of problems not considered in other courses; designed for students who excel in self-direction and intellectual curiosity. May be repeated. Prerequisite: Minimum GPA of 3.5; demonstrated writing and research potential as evaluated by advisor, and consent of advisor and consent of staff member who supervises the work.

EPSY 398 Thesis credit: 2 or 3 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/398/)
Prerequisite: Senior standing.

EPSY 399 Thesis credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/399/)
Prerequisite: Senior standing.

EPSY 400 Psychology of Learning in Education credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/400/)
Study of the psychology of human learning as it applies to instruction, educational issues, and educational problems. 3 undergraduate hours. 2 or 4 graduate hours. Taking 4 credit hours requires consent of the instructor and the completion of a substantive scholarly project. Undergraduate and graduate work load will be commensurate with the requirements. 2 hours for Latin and Spanish Certification, Elementary Edm Music and GSLIS. Prerequisite: EPSY 201 or equivalent.

EPSY 401 Child Language and Education credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/401/)
Provides an overview of current knowledge about children's acquisition of linguistic and communicative competence together with a consideration of the educational import of this developmental process. 3 undergraduate hours. 2 or 4 graduate hours. Taking 4 hours of credit requires consent of the instructor and completion of a substantive scholarly project. Undergraduate and graduate work load will be commensurate with the requirements. 3 hours of ECE Undergraduate certification and 2 hours for ECE graduate certification, Elementary Ed, Music certification and GSLIS. Prerequisite: EPSY 201 or EPSY 236; or equivalent.

EPSY 402 Sociocultural Influence on Learning credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/402/)
Provides a general overview of the relationship of language, culture, and society to the teaching-learning process; gives broad exposure to research and theory concerned with the effects of sociocultural factors on cognition, perception, and motivation; also considers the effects of such factors on classroom interaction. 3 undergraduate hours. 2 or 4 graduate hours. Taking 4 hours of credit requires consent of the instructor and the completion of a substantive scholarly project. 2 hours for Elementary Education and Music certification. Prerequisite: EPSY 201 or EPSY 236; or equivalent.

EPSY 403 Research Methods in Learning Sciences credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/403/)
This course is an introduction to conducting research in the learning sciences, including how to use theory as a guide to conducting literature reviews and formulating research questions. The course introduces quantitative and qualitative research design, data collection and analysis, and other aspects of research relevant to learning, teaching, and other topics relevant to education. A secondary goal is to better understand research reported in the primary literature as well as in the news media. Assignments will include evaluating research papers and writing a research proposal. 3 undergraduate hours. 4 graduate hours. Prerequisite: EPSY 280 or EPSY 480 or PSYC 235 or PSYC 301.

EPSY 404 Adjustment in School Settings credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/404/)
Examines theories of adjustment, factors that influence adjustment, and common adjustment problems of children and adolescents in school context. 3 undergraduate hours. 4 graduate hours. Prerequisite: EPSY 201 or equivalent.

EPSY 405 Personality and Soc Dev credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/405/)
Same as PSYC 465. See PSYC 465.

EPSY 406 Psychology of Classroom Management credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/406/)
General overview of theories related to analyzing student behaviors in the classroom; the incidence and etiology of conduct problems and behavior disorders in the classroom, with emphasis upon preventive strategies and guiding principles for maintaining classroom discipline. 3 undergraduate hours. 2 or 4 graduate hours. Taking 4 hours of credit requires consent of the instructor and the completion of a substantive scholarly project. Undergraduate and Graduate work load will be commensurate with the requirements. 2 hours for Elementary Education and Music certification and GSLIS. Prerequisite: EPSY 201 or EPSY 236, or equivalent.

EPSY 407 Adult Learning and Development credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/407/)
Theory of and research on adult learning and development; includes societal context, performance, physiology and health, personality, and learning; and considers stability and change during young adulthood, middle age, and old age. Meets both foundational requirements for EPSY. 3 undergraduate hours. 4 graduate hours. Assignments and work load will commensurate with credit. Prerequisite: EPSY 201, or equivalent, or consent of instructor.

EPSY 408 Learning and Human Development with Educational Technology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/408/)
Sets out to provide an understanding of theories of learning and development and how these theories relate to educational technology. It has two components. The first is theoretical, in which we attempt to develop an overall frame of reference, locating approaches to the psychology of learning in terms of large paradigm shifts, from 'behaviorism' to 'brain developmentalism' to 'social cognitivism'. The second component is practical, in which we will use these theoretical concepts to 'parse' a technology-mediated learning environment for its underlying presuppositions. 3 undergraduate hours. 4 graduate hours.

EPSY 413 Intelligence Assessment and Theory credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/413/)
Study of fundamental concepts relevant to the general problem of the individual testing of learning aptitude; acquisition of psychometric competence in the use of the Binet and the Wechsler tests; acquaintance and limited practice in the administration, scoring, and interpretation of results obtained by performance scales and other devices appropriate for use with individuals having sensory, associative, and/or motor impairments. 3 undergraduate hours. 4 graduate hours. Prerequisite: Consent of instructor and 6 hours of psychology courses, including SPED 424 or PSYC 490.

EPSY 419 Counseling Psychology Pre-Practicum credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/419/)
Study of basic helping skills and professional ethics in professional psychology. The course links theory with practice, as students engage in the exploration of new helping skills and learn to analyze their developing counseling style and performance; includes an examination of relevant ethical standards and counseling theories, and their application in a multicultural context. Discussion and experiential activities are supplemented by films, videotapes, and case studies. Primarily for counseling psychology graduate students, though other students in programs with a mental health focus may be admitted with the consent of the instructor if space is available. Same as REHB 419. 2 to 4 undergraduate hours. 2 to 4 graduate hours. May be repeated to a maximum of 8 hours. Prerequisite: Junior standing.

EPSY 420 Theories of Psychotherapy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/420/)
Study of counseling and psychotherapeutic processes and theories in relation to social and cultural developments. Coverage of major models and theories as well as current and historical trends and a review of counseling skills will be included. Same as PSYC 420. 4 undergraduate hours. 4 graduate hours. Prerequisite: PSYC 238 or equivalent.

EPSY 421 Sex Role Theory in Counseling credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/421/)
Reviews research on sex role socialization related to career, family, and personal roles for both sexes; discusses counseling strategies aimed at freeing persons from attitudes and behaviors that limit their freedom to choose; and reviews strategies for change at policy, agency and individual levels. Same as GWS 421. 4 undergraduate hours. 4 graduate hours.

EPSY 427 Learning from Text credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/427/)
This course will survey the range of topics related to how we learn from text, i.e., from reading. The course will focus on reading in education settings and approaches to improving reading comprehension. Students will read secondary and primary literature and have opportunities to critique, discuss, and present the findings of this research. Topics discussed will include: eye movements during reading, grammatical structures and discourse conventions of texts that support comprehension, and how comprehension and memory for text can be measured. Assignments will include written reviews of texts and topics. Students taking the course for 4 graduate hours will also plan and present a proposed empirical study related to some topic within the course. 3 undergraduate hours. 2 or 4 graduate hours. Credit is not given for EPSY 427 if credit has been received for either PSYC 425 or LING 425.

EPSY 430 Early Adolescent Development credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/430/)
Examines early adolescent development, covering biological, cognitive, and social transitions. Topics include identity, autonomy, peer and family relationships and the role of schooling and the media. 3 undergraduate hours. 3 or 4 graduate hours.

EPSY 431 Cognitive Development in Educational Context credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/431/)
The purpose of this course is to cover basic issues in cognitive development, review relevant research findings, and to situate these and understand these in educational contexts. Most of our attention will focus on child and adolescent development. We will address questions such as: How do children learn new concepts? How do changes in children's thinking occur? How can we use what we know to produce positive impacts on children's learning and well-being? 3 undergraduate hours. 4 graduate hours.

EPSY 456 Human Performance and Cognition in Context credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/456/)
Theories and findings from cognitive science and related disciplines concerning human information processing mechanisms and capacities are covered, with an emphasis on how understanding people's perceptual and cognitive strengths and limitations can inform decisions about teaching/training strategies and designing technological environments to suit people's needs and abilities. Same as IE 445 and PSYC 456. 3 undergraduate hours. 4 graduate hours. Prerequisite: PSYC 100 or PSYC 103 or consent of instructor.

EPSY 457 Teachers and Technology Integration credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/457/)
Designed to help enhance the understanding of computers in the schools. This course looks at computers in the broadest sense and considers a variety of aspects of technologies and digital media that impact pedagogy, curriculum, and student learning. The course considers the context of computing by exploring the history of computing, what is currently occurring in the schools, and how technologies and student expectations are encouraging teachers to redefine the classroom experience. The main goal of this course is to enable students to develop a flexible and working knowledge of computers as educational resources in order to better reach students - students of the 21st century. 3 undergraduate hours. 4 graduate hours. Prerequisite: EPSY 480 or equivalent, or consent of instructor.

EPSY 466 Anthropology of Education credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/466/)
Same as ANTH 425, EPOL 414, and EPS 425. See EPS 425.

EPSY 470 Introduction to Evaluation Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/470/)
Introduction to the major conceptual constructs and theories of evaluation; emphasis on the critical defining components of evaluation, particularly its role in program and policy development, and on critical distinctions among evaluation theories; provides grounding for further study of both evaluation theory and methods. 4 undergraduate hours. 4 graduate hours.

EPSY 471 Introduction to Evaluation Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/471/)
Introduces the methodology of educational and social program evaluation, including the design of an evaluation, the data collection and analysis, and reporting; emphasis on negotiating the unique facets of evaluative practice, notably evaluator role, working with clients and other stakeholders, the political dynamics of evaluation contexts, and utilization of evaluative results. Students collectively conduct a field-based evaluation project. 4 undergraduate hours. 4 graduate hours. Prerequisite: EPSY 480.

EPSY 474 Evaluating Learning Technology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/474/)
In this course, students will learn to conduct a variety of evaluations related to learning technologies including needs assessments, consumer-driven evaluations, outcome or impact assessments, comparative or quasi-experimental studies and case studies. As one means of measuring need, growth, or impact, students will also create assessment instruments and strategies related to particular learning technologies. These might include electronic portfolios, web-based surveys, computer adapted tests or performance rubrics. Course requirements include a final evaluation project in which students (individuals or pre-approved small groups) plan and conduct actual evaluations of learning technologies. The course includes both face-to-face and asynchronous and synchronous on-line meetings. Same as EPOL 484 and HRD 474. 4 undergraduate hours. 4 graduate hours.

EPSY 480 Educational Statistics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/480/)
Designed for terminal value for professional training of students not intending to pursue advanced graduate work, and for introductory value for students continuing graduate study in education; descriptive statistics, introduction to correlation and regression, the normal curve, statistical inference, and the presentation and interpretation of statistical data in educational literature. 4 undergraduate hours. 4 graduate hours.

EPSY 485 Assessing Student Performance credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/485/)
Designed especially for secondary education students, this course introduces basic concepts and practices of assessment, measurement, and evaluation as they are used in school settings. The course covers current trends and issues in assessment including large scale standardized testing practices and cultural issues in assessment. Students become familiar with using assessment and evaluation data to inform instructional decisions. Same as CI 485. 3 undergraduate hours. 4 graduate hours. Prerequisite: Students should be concurrently enrolled in CI 403. Admission to the secondary teacher education program.

EPSY 486 Principles of Measurement credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/486/)
Study of the selection, preparation, administration, and interpretation of psychological and educational tests and diagnostic devices; emphasis on theory at a beginning level, with application to hypothetical school situations as a teaching device; and consideration of the sources of standard tests, criteria for their evaluation, methods of scoring, interpretation, and general and special areas. 3 undergraduate hours. 4 graduate hours. Prerequisite: EPSY 201 or EPSY 236.

EPSY 487 Principles of Language Testing credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/487/)
Same as EIL 460, FR 460, GER 460, ITAL 460, PORT 460, and SPAN 460. See EIL 460.

EPSY 490 Developments in Educational Psychology credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/490/)
Foundational theories and practices of educational psychology, including learning and development. 2 or 3 undergraduate hours. 2 or 4 graduate hours. Approved for letter and S/U grading. May be repeated to a maximum of 8 hours. Undergraduate and graduate work load will be commensurate with the requirements.

EPSY 491 Educational Psychology Field Instruction credit: 4 to 16 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/491/)
Individual instruction designed to help the advanced student apply basic principles of education or psychology in institutional settings. Each student is assigned to a school, community agency, or other applied settings for a supervised field experience in some aspect of educational psychology. 4 to 16 undergraduate hours. 4 to 16 graduate hours. Approved for letter and S/U grading. May be repeated to a maximum of 16 hours if topics vary; no more than 8 hours may be taken in any given term. Prerequisite: Master's degree in educational psychology or equivalent, and consent of instructor.

EPSY 492 History and Systems of Psychology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/492/)
A seminar on the history of psychology within a social and cultural context and its theoretical systems, and their relations to contemporary psychology. An awareness of the roots and context of one's own views as well as understanding and appreciation of others' views will be fostered. There will be some focus on encouraging self-study of the history of one's own theoretical orientation. 4 undergraduate hours. 4 graduate hours. Prerequisite: EPSY 420, or equivalent.

EPSY 501 Evaluation in Society credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/501/)
Examines evaluation as a social practice, explains various approaches to evaluation both nationally and internationally, and explores how evaluation is linked to policy and decision making. Students will read about and discuss both foundational and contemporary issues in evaluation practice and theory as they relate to the use of evaluation in improving both practice and policy decisions. For graduate students in education, public policy, social work, community health, and other related fields.

EPSY 505 Data, Evidence, & Decisions credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/505/)
Examines how practitioners and policy makers come to interpret sources of evidence; how the use of data, information, and evidence are shaped by organizational structures, routines, and cultures; how technical infrastructures have emerged to enable the collection, distribution, consolidation, and use of data, information, and evidence; the political economy of generated and using evidence (e.g., university research, think tanks, advocacy organizations, etc.). This multidisciplinary course is situated against the broad backdrop of the social science literature on social scientific knowledge production and use, and the relationship between science and society.

EPSY 507 Economic Analysis and Education Policy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/507/)
Introduces key economic principles and applies them to the analysis of current education policy issues. Concepts covered include supply and demand, competitive markets, human capital acquisition, efficiency, equity and the role of government intervention, among others. Focuses on applications within the context of policy making in education. Designed for students without prior coursework in economics, but with a working basic knowledge of statistics (e.g., regression). Prerequisite: EPSY 480.

EPSY 508 Display/Interpretation of Data credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/508/)
Provides instruction in representing and communicating data accurately and clearly using visual displays (e.g., graphs, tables and figures). Examines the most appropriate ways to visually display the results of data analyses so that they are clear, accurate and unambiguous. Drawing on both contemporary techniques and publication standards, it will address topics including audience, context, precision, visual metaphor, data display tools and best practices.

EPSY 510 Counseling Psych/Ethics ProSem credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/510/)
Introduction to and critical examination of applied issues within the discipline of counseling psychology. A review of (a) the historical development of counseling psychology, (b) psychologists' professional code of ethics, and (c) major psychotherapy theories and interventions. Issues of race, class, gender, and diversity more broadly are integrated throughout the course.

EPSY 511 Vocational Psychology Theories and Assessment credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/511/)
Study of vocational psychology theories, assessment, decision-making, and the job search process; includes an historical overview of the development field. The course links theory with practice, as students engage in the interpretation of vocational assessments, examine relevant ethical standards, and discuss their application. 2 hours credit is for work on either the vocational theories or vocational assessment parts of the course (this must be negotiated). For 4 hours credit, a student must do both aspects. Prerequisite: Admission to the graduate program in counseling psychology or consent of instructor.

EPSY 513 Research Methods in Counseling Psychology II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/513/)
This course is the second course sequence for Counseling Psychology graduate students. This course builds on the previous course (EPSY 512) in that students continue work on refining their thesis proposal in the area of Counseling Psychology. They also explore advanced research designs as applied to Counseling Psychology literature. This course may not be repeated for credit. Prerequisite: EPSY 512 or consent of instructor.

EPSY 515 Multicultural Counseling credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/515/)
Overview of multicultural counseling theory, empirical research, and practice; includes didactic as well as experiential learning components. The goal of the course is to enhance students' multicultural counseling competencies, with regard to developing: (a) appropriate knowledge of specific cultural groups and sociopolitical issues, (b) cultural self-awareness, and (c) multiculturally relevant intervention skills. May not be repeated for credit.

EPSY 520 Counseling Psychology Practicum credit: 2 to 8 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/520/)
Intensive supervised experiences in applied educational psychology; use of a wide variety of diagnostic and observational techniques and treatment. Students may take more than one section. Approved for letter and S/U grading. Prerequisite: Master's degree in educational psychology or equivalent; consent of instructor.

EPSY 521 Group Counseling credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/521/)
Study of the principles of group process and their application in institutional and other settings; includes a review of the historical development of group processes and study of pertinent research; discussion and experiential activities are supplemented by films, videotapes, and case studies. Prerequisite: EPSY 510 or consent of instructor.

EPSY 530 Social Development credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/530/)
This seminar is an advanced, doctoral-level survey of social development from infancy to adolescence. The range of topics includes attachment, temperament, genes and developmental process, social contexts of cognitive development gender development, moral reasoning and prosocial behavior, aggressive behavior, and the development of ethnic identity and discrimination. Family, peer, community, and cultural ecologies of children and adolescents receive extensive consideration. Developmental theory, methodology, and relations to social policy and intervention are continuing concerns. Same as PSYC 540.

EPSY 531 Cognitive Development and Socialization credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/531/)
Addresses basic issues in cognitive development, with special attention to how social interactions impact cognitive development. Two major foci: theories, especially in terms of the role that socialization plays in these theories; and effects of domains of socialization (e.g., peers, school) on cognitive development. Primary age span: preschool thru adolescence. Prerequisite: Consent of instructor.

EPSY 535 Capstone: Issues in Professional Preparation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/535/)
This course is recommended for doctoral students as they are completing their degrees (typically while working on the dissertation) and preparing for postdoctoral or faculty positions. Students will receive guidance on preparing their portfolios for job applications and on anticipating and understanding expectations for their careers. 3 graduate hours. No professional credit. Prerequisite: This course is recommended for doctoral students in their final or penultimate year of graduate study, to prepare them for completing their doctoral studies and applying for positions after degree completion.

EPSY 540 Networks for Learning credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/540/)
In this course students engage in hands on activities through which they come to understand the intricacies of building substantial and sustainable networks for learning environments, in particular network planning for school districts. Studies read and discuss literature that relates to the building of network systems. Students will explore various tools and techniques that best serve the network environment. Students will complete a major project in which they design (or modify) their own network and discuss the means by which they come to understand critical factors associated with maintaining and growing such an environment. Prerequisite: Enrollment in the Educational Technology for Teaching, Learning, and Leadership concentration in the Educational Psychology on-line CTER Program.

EPSY 546 Human Factors in Health Care Engineering Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/546/)
Provides an overview of research that applies theories and methods from human factors and cognitive science to analyze the sources of these problems and to develop and evaluate design and training interventions to help providers and patients successfully navigate heath care systems. An introduction to problems and accidents in health care related to human factors is followed by an overview of concepts and methods from the fields of human factors and cognitive science. Same as IE 546. 4 graduate hours. No professional credit. Prerequisite: Priority will be given to students enrolled in the Healthcare Engineering Systems Concentration of M.Eng. degree program.

EPSY 550 Methods of Educational Inquiry credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/550/)
Same as CI 550, EPOL 550, and SPED 550. See CI 550.

EPSY 551 Seminar in Cognitive Science credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/551/)
Same as PSYC 514, ANTH 514, CS 549, LING 570, and PHIL 514. See PSYC 514.

EPSY 552 Classroom Learning credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/552/)
Provides a broad picture of the nature and conditions of classroom learning. Considers analysis of knowledge; institutional constraints on teachers; characteristics of instruction and instructional materials for reading, social studies, and science; social context of learning; motivation and interest; questioning and discussion; and learning strategies and study skills. Intended for doctoral students with a special interest in research leading to the improvement of classroom teaching and learning. Same as PSYC 554. Prerequisite: Consent of instructor required.

EPSY 553 Global Issues in Learning credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/553/)
Same as EPOL 523 and EPS 553. See EPOL 523.

EPSY 554 Virtual Worlds in Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/554/)
Examines the history, theory, and practice of pedagogy in virtual environments. Students will read research literature, participate in online discussions through the Moodle course management system, and engage in real-time activities in several types of virtual worlds. The project component requires students to develop educational artifacts in virtual worlds and perform peer review of artifacts developed by other students. Projects will support some aspect of learning or teaching in the students' own workplace, and will incorporate multimedia, web, and other network-based resources. Students are expected to have access to computers that meet the hardware and networking requirements. Same as CI 545. Prerequisite: Students must be enrolled in the Educational Technology for Teaching, Learning, and Leadership concentration in the Educational Psychology on-line CTER Program.

EPSY 555 Advanced Educational Technologies for Engagement and Interactive Learning credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/555/)
This course examines technologies that seek to promote and sustain engagement in learning, both in formal and informal settings. Topics covered include educational games, artificial intelligence, virtual environments, mobile devices, affective computing, pedagogical agents, narrative learning environments, and more. A highly interdisciplinary approach is taken by blending theory and evidence from psychology and education with discussions of technological advances. Students in the class will be expected to work in teams to design and implement a prototype for a problem of their own choosing. Same as CI 555 and INFO 555. 4 graduate hours. No professional credit.

EPSY 556 Analysis of Educational Technologies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/556/)
This course will analyze currently available technologies for learning. Areas addressed include: learning management systems, intelligent tutors, computer adaptive testing, gamification, simulations, learning in and through social media and peer interaction, universal design for learning, differentiated instruction systems, big data and learning analytics, attention monitoring, and affect-aware systems. Participants will explore the processes for selection and implementation of suitable technologies, the design of electronic learning resources, design and application of digital media in teaching and learning, familiarization with web usually and accessibility, and critical analysis of the benefits of technologies in education. 4 graduate hours. No professional credit.

EPSY 559 Advanced Learning Technologies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/559/)
In this course participants identify and justify the implementation of advanced learning technologies in the overall environment of learning. They investigate the ways in which advanced technologies influence the design process and how the design process may be enhanced. Areas addressed include: learning management systems, intelligent tutors, computer adaptive testing, gamification, simulations, learning in and through social media and peer interaction, universal design for learning, differentiated instruction systems, big data and learning analytics, attention monitoring, and affect-aware systems. Participants will explore the processes for selection and implementation of suitable technologies, the design of electronic learning resources, design and application of digital media in teaching and learning, familiarization with web usability and accessibility, and critical analysis of the benefits of technologies in education. 4 graduate hours. No professional credit.

EPSY 560 Technology and Educational Change credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/560/)
Today's wave of educational technologies foreshadow what may be a second great education revolution, after the rise of mass-institutional education in the nineteenth century. This has the potential to transform the characteristic communication artifacts of classrooms, teacher lecture, classroom discourse and textbooks. This course explores the possibilities for educational technologies to influence educational change. However, with a critical eye, we also raise the concerns - we can use digital media to prolong the life of old ways of learning, for instance, where the video-lecturing teacher, the monovocal e-textbook or the bullet-pointed PowerPoint presentation transmit facts and concepts. How can we use the affordances of networked digital media to do something different? Can we imagine learning where the knowledge that learners bring to the table is valued, where learners' knowledge repertoires are extended as they actively make new knowledge, and which build collaborative knowledge cultures? 4 graduate hours. No professional credit.

EPSY 563 Theories in Second Language Acquisition credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/563/)
Same as CI 584, EALC 584, FR 584, GER 584, ITAL 584, LING 584, PORT 584, and SPAN 584. See SPAN 584.

EPSY 566 Adv Psycholinguistics credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/566/)
Same as PSYC 526. See PSYC 526.

EPSY 567 Personality Assessment credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/567/)
Same as PSYC 567. See PSYC 567.

EPSY 570 Advanced Theories of Educational Evaluation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/570/)
This topical seminar is designed for advanced graduate students with a significant interest in the evaluation of educational and social policies and programs. The seminar will engage in some depth an issue of contemporary currency and controversy in evaluation theory and practice. Readings, discussions, guest speakers, and the occasional field trip will frame the seminar. Each student in this seminar will be expected to develop a scholarly paper for conference presentation and/or publication. Prerequisite: EPSY 470, EPSY 471, and coursework in research methods.

EPSY 572 Evaluation of Educational Programs credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/572/)
Same as CI 518. See CI 518.

EPSY 574 Quasi-Experimental Design credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/574/)
Intermediate course for graduate students in education and related fields. Goal is to prepare students to design and conduct quasi-experimental studies and critique the work of others in an informed, systematic way. Students will read and discuss foundational and contemporary issues in design, validity, sampling and loss, regression artifacts, analysis and causal inferences. Prerequisite: EPSY 580 or equivalent.

EPSY 575 Mixed Method Inquiry credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/575/)
This advanced course addresses the theory and practice of mixing inquiry methodologies in program evaluation and applied research. Topics include selected roots of mixed inquiry, various stances on mixing philosophical traditions while mixing methods, conceptualizations of mixed method design and analysis, and challenges of mixed method practice. Students should have basic familiarity with experimental or survey (quantitative) with and constructivist or interpretivist (qualitative) social science. Familiarity with other social science frameworks (e.g., critical theory, feminism, action science) is also highly desirable. Same as SPED 575. 4 graduate hours. No professional credit. Approved for Letter and S/U grading. Prerequisite: EPSY 574 or EPSY 580; EPSY 577 or EPSY 578; or equivalents; or consent of instructor.

EPSY 577 Foundations of Qualitative Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/577/)
Introduction to epistemological, methodological, ethical, and political issues characterizing the broad field of qualitative inquiry. Topics covered include an overview of logical positivism and logical empiricism; the Continental philosophers' critique of scientism and the emergence of hermeneutics; sociological theories of Verstehen; interpretive anthropology; feminist qualitative inquiry; social constructionism; contemporary crises of ethics, representation, and justification.

EPSY 578 Qualitative Inquiry Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/578/)
Introductory course addressing the practice of qualitative inquiry. Topics include developing inquiry questions appropriate for qualitative studies; designing qualitative studies; generating data via interviews, observations, document analyses; analyzing and interpreting qualitative data; judging the quality of inquiry; representing and reporting qualitative inquiry; addressing ethical and political issues in the conduct of qualitative inquiry.

EPSY 579 Structural Equation Modeling credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/579/)
Structural Equation Modeling (SEM) is a general class of multivariate techniques that models relationships between latent variables and observed variables (“measurement models”) and relationships among latent variables (“structural models”) simultaneously. Students will learn the theoretical background of SEM as well as the techniques using programming language R. Topics covered in this class include mediation/moderation model; confirmatory factor analysis; model fit evaluation; multi-group SEM; latent growth modeling; MTMM model; and SEM with categorical variables. 4 graduate hours. No professional credit. Prerequisite: EPSY 580 and EPSY 581; or Equivalents.

EPSY 580 Statistical Inference in Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/580/)
Intermediate statistical methods in education; includes probability theory, distribution theory, interval estimation, hypothesis testing, regression and correlational analysis, and analysis of variance. Prerequisite: EPSY 480 or equivalent.

EPSY 581 Applied Regression Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/581/)
Emphasis on educational research applications of regression with special emphasis placed on application and interpretation of techniques. Topics covered include rudimentary linear algebra, the general linear model, different coding schemes, regression diagnostics, and extensions to binary data and nested data structures. Same as PSYC 581. Prerequisite: EPSY 580 or equivalent; consent of instructor.

EPSY 582 Advanced Statistical Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/582/)
Advanced topics in analyses of variance and covariance, and principles of experimental design; brief introduction to multivariate analysis, including rudiments of matrix algebra. Prerequisite: EPSY 580, PSYC 407, or equivalent.

EPSY 583 Single Case Experimental Design credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/583/)
Same as SPED 583. See SPED 583.

EPSY 584 Multivar Anlys in Psych and Ed credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/584/)
Same as PSYC 594 and SOC 584. See PSYC 594.

EPSY 585 Theories of Measurement I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EPSY/585/)
Provides a conceptual framework of classical test theory (e.g., true scores, error of measurement, composite measures) and alternatives to the classical model (e.g., generalizability theory, latent trait theory). Students will learn the techniques and theory of classical test theory and apply the methods to educational and psychological assessments. Topics covered include reliability, validity, generalizability, dichotomous Item Response Theory (IRT), test construction and design, item bias and fairness, Differential Item Functioning (DIF), scaling, linking, and equating. Same as PSYC 595. Prerequisite: EPSY 581 and EPSY 582; PSYC 406 and PSYC 407; or equivalents.

EPSY 586 Theories of Measurement II credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/EPSY/586/**)**
Provides a conceptual framework of Item Response Theory (IRT) and its applications. Students will learn the techniques and theory of IRT and apply the methods to educational and psychological assessments. Topics covered include both dichotomous and polytomous IRT modelling, item structure and latent traits estimation, modeling and detecting Differential Item Functioning, linking and equating, computer adaptive testing, dimensionality testing, and cognitive diagnosis. Same as PSYC 596. Prerequisite: EPSY 585 or PSYC 490.

EPSY 587 Hierarchical Linear Models credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/EPSY/587/**)**
This course provides an overview of the use of multilevel models. Students will learn the techniques and theory of hierarchical linear models and apply the methods to data from studies in education, psychology and social sciences. Topics covered include multilevel analyses, random intercept and slope models, 2- and 3-level models, hypothesis testing, model assessment, longitudinal (repeated measures) data, and generalized hierarchical models for categorical variables. Same as PSYC 587 and STAT 587. Approved for letter and S/U grading. Prerequisite: EPSY 581 and EPSY 582, or PSYC 406 and PSYC 407.

EPSY 588 Covar Struct and Factor Models credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/EPSY/588/**)**
Same as PSYC 588, SOC 588, and STAT 588. See PSYC 588.

EPSY 589 Categorical Data Analysis in Educational Psychology credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/EPSY/589/**)**
Concepts and methods for analyzing categorical data with an emphasis placed on building and applying models in education, sociology and psychology. Generalized linear models covered including logistic and Poisson regression models, loglinear, logit, and probit models, and models for ordinal data. Same as PSYC 589 and SOC 579. Approved for letter and S/U grading. Credit is not given for EPSY 589 and STAT 426. Prerequisite: EPSY 581 or PSYC 507.

EPSY 590 Advanced Seminar in Educational Psychology credit: 0 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/EPSY/590/**)**
Seminar in educational psychology; topics relate to the areas of specialization represented by the various divisions within the department. 0 to 4 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated to a maximum of 8 hours in the same or separate semesters, if topics vary. Prerequisite: Consent of instructor required.

EPSY 591 Field Study and Thesis Seminar credit: 4 to 8 Hours. **(**https://courses.illinois.edu/schedule/terms/EPSY/591/**)**
Assists doctoral candidates in planning field studies and thesis problems. Students are expected to present their studies at each of four stages: (1) the inception, delimitation, tentative design stage; (2) the proposed design stage; (3) the revised design stage; and (4) the final design stage. Students are expected to analyze critically all presentations. Prerequisite: Limited to students who have been admitted for doctoral study.

EPSY 595 Independent Study credit: 0 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/EPSY/595/**)**
Offers opportunity and challenge of self-directive, independent study; develops the individual's ability as an independent student; and enables the student to pursue needed study in a field in which appropriate courses are not being offered during a given term. Approved for both letter and S/U grading. May be repeated with approval. Prerequisite: Approval of study outline by adviser and the department chairperson prior to enrollment.

EPSY 599 Thesis Research credit: 0 to 16 Hours. **(**https://courses.illinois.edu/schedule/terms/EPSY/599/**)**
Individual direction of research and thesis writing. Approved for S/U grading only. May be repeated.

ECE - ELECTRICAL AND COMPUTER ENGINEERING

ECE Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/ECE/)

Courses

ECE 101 Exploring Digital Info Technol credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/101/)
Principles and processes for the development of information technologies: digital music, digital images, digital logic, data compression, error correction, information security, and communication networks. Laboratory for design of hardware and software, and experiments in audio and image processing. Intended for students outside the College of Engineering. Credit is not given to Computer or Electrical Engineering majors.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences
Quantitative Reasoning II

ECE 110 Introduction to Electronics credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/110/)
Introduction to selected fundamental concepts and principles in electrical engineering. Emphasis on measurement, modeling, and analysis of circuits and electronics while introducing numerous applications. Includes sub-discipline topics of electrical and computer engineering, for example, electromagnetics, control, signal processing, microelectronics, communications, and scientific computing basics. Lab work incorporates sensors and motors into an autonomous moving vehicle, designed and constructed to perform tasks jointly determined by the instructors and students.

ECE 120 Introduction to Computing credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/120/)
Introduction to digital logic, computer systems, and computer languages. Topics include representation of information, combinational and sequential logic analysis and design, finite state machines, the von Neumann model, basic computer organization, and machine language programming. Laboratory assignments provide hands-on experience with design, simulation, implementation, and programming of digital systems. Prerequisite: Restricted to Computer Engineering or Electrical Engineering majors or transfer students with ECE Department consent.

ECE 198 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/198/)
Lectures and discussions relating to new areas of interest. May be repeated in the same or separate terms for unlimited hours if topics vary. See class schedule for topics and prerequisites.

ECE 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/ECE/199/)
Approved for both letter and S/U grading. May be repeated.

ECE 200 Seminar credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/ECE/200/)
Discussions of educational programs, career opportunities, and other topics in electrical and computer engineering. Approved for Letter and S/U grading. May be repeated. For Computer Engineering and Electrical Engineering majors only.

ECE 205 Electrical and Electronic Circuits credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/205/)
ECE 205 is an introductory course on circuit analysis and electronics for non-majors in engineering. The course includes bi-weekly electronics lab experiments designed to provide students with hands-on experience. Basic principles of circuit analysis and DC circuits; time-domain analysis of 1st and 2nd order linear circuits; complex numbers, phasors, AC steady-state analysis; frequency response; op-amp, diode, and BJT circuits; logic gates and digital logic circuits. Credit is not given to Computer or Electrical Engineering majors. Credit is not given to Computer or Electrical Engineering majors. Prerequisite: PHYS 212.

ECE 206 Electrical and Electronic Circuits Lab credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/ECE/206/)
Laboratory experiments in digital logic and controllers; transistor amplifier and switching circuits; DC motor control and voltage regulators; sensors and motion control with feedback; wireless communication. Credit is not given to Computer or Electrical Engineering majors. Prerequisite: ECE 205.

ECE 210 Analog Signal Processing credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/210/)
Analog signal processing, with an emphasis on underlying concepts from circuit and system analysis: linear systems; review of elementary circuit analysis; differential equation models of linear circuits and systems; Laplace transform; convolution; stability; phasors; frequency response; Fourier series; Fourier transform; active filters; AM radio. Credit is not given for both ECE 210 and ECE 211. Prerequisite: ECE 110 and PHYS 212; credit or concurrent registration in MATH 285 or MATH 286.

ECE 211 Analog Circuits & Systems credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ECE/211/)
Concepts from circuit and system analysis: linear systems; review of elementary circuit analysis; op amps; transient analysis; differential equation models of linear circuits and systems; Laplace transform. Credit is not given for both ECE 211 and ECE 210. Prerequisite: ECE 110 and PHYS 212; credit or concurrent registration in MATH 285 or MATH 286.

ECE 220 Computer Systems & Programming credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/220/)
Advanced use of LC-3 assembly language for I/O and function calling convention. C programming, covering basic programming concepts, functions, arrays, pointers, I/O, recursion, simple data structures, linked lists, dynamic memory management, and basic algorithms. Information hiding and object-oriented design as commonly implemented in modern software and computer systems programming. Prerequisite: ECE 120. Restricted to Computer Engineering or Electrical Engineering majors or transfer students with ECE Department consent.

ECE 297 Individual Study credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/ECE/297/)
Individual projects. Approved written application to department as specified by department or instructors is required. Approved for both letter and S/U grading. May be repeated in separate terms to a maximum of 2 hours. Prerequisite: Consent of instructor.

ECE 298 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/298/)
Lectures and discussions relating to new areas of interest. May be repeated in the same or separate terms for unlimited hours if topics vary. See class schedule for topics and prerequisites.

ECE 304 Photonic Devices credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/304/)
Introduction to active and passive photonic devices and applications; optical processes in semiconductor and dielectric materials including electrical junctions, light emission and absorption, and waveguide confinement; photonic components such as light emitting diodes, lasers, photodetectors, solar cells, liquid crystals, and optical fiber; optical information distribution networks and display applications. Prerequisite: PHYS 214.

ECE 307 Techniques for Engrg Decisions credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/307/)
Modeling of decisions in engineering work and the analysis of models to develop a systematic approach to making decisions. Fundamental concepts in linear and dynamic programming; probability theory; and statistics. Resource allocation; logistics; scheduling; sequential decision making; siting of facilities; investment decisions; application of financial derivatives; other problems for decision making under uncertainty. Case studies from actual industrial applications illustrate real-world decisions. Prerequisite: ECE 210; credit or concurrent registration in ECE 313.

ECE 310 Digital Signal Processing credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/310/)
Introduction to discrete-time systems and discrete-time signal processing with an emphasis on causal systems; discrete-time linear systems, difference equations, z-transforms, discrete convolution, stability, discrete-time Fourier transforms, analog-to-digital and digital-to-analog conversion, digital filter design, discrete Fourier transforms, fast Fourier transforms, spectral analysis, and applications of digital signal processing. Prerequisite: ECE 210.

ECE 311 Digital Signal Processing Lab credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/ECE/311/)
Companion laboratory for ECE 310. Prerequisite: Credit or concurrent registration in ECE 310.

ECE 313 Probability with Engrg Applic credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/313/)
Probability theory with applications to engineering problems such as the reliability of circuits and systems to statistical methods for hypothesis testing, decision making under uncertainty, and parameter estimation. Same as MATH 362. Credit is not given for both ECE 313 and MATH 461. Prerequisite: MATH 286 or MATH 415.

ECE 314 Probability in Engineering Lab credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/ECE/314/)
Designed to be taken concurrently with ECE 313, Probability in Engineering Systems, to strengthen the students' understanding of the concepts in ECE 313 and their applications, through computer simulation and computation using the Python programming language. Topics include sequential hypothesis testing, parameter estimation, confidence intervals, Bloom filters, min hashing, load balancing, inference for Markov chains, PageRank algorithm, vector Gaussian distribution, contagion in networks, principle component method and linear regression for data analysis, investment portfolio analysis. Prerequisite: Concurrent enrollment in ECE 313 or credit in one of: ECE 313, IE 300, STAT 410.

ECE 316 Ethics and Engineering credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/316/)
Ethical issues in the practice of engineering: safety and liability, professional responsibility to clients and employers, whistle-blowing, codes of ethics, career choice, and legal obligations. Philosophical analysis of normative ethical theories. Case studies. Same as PHIL 316. Credit is not given for both ECE 316 and either CS 210 or CS 211. Junior standing is required. Prerequisite: RHET 105.
This course satisfies the General Education Criteria for:
Advanced Composition
Humanities - Hist Phil

ECE 317 ECE Technology & Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/317/)
Basic understanding of electrical and computer engineering concepts applicable to technology management. Circuit components; dc fundamentals; ac fundamentals; semiconductors; operational amplifiers; device fabrication; power distribution; digital devices; computer architecture (including microprocessors). Intended for the Business Majors in the Technology and Management program. Credit is not given to Computer or Electrical Engineering majors. Prerequisite: One of MATH 220, MATH 221, MATH 234.

ECE 329 Fields and Waves I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/329/)
Electromagnetic fields and waves fundamentals and their engineering applications: static electric and magnetic fields; energy storage; Maxwell's equations for time-varying fields; wave solutions in free space, dielectrics and conducting media, transmission line systems; time- and frequency-domain analysis of transmission line circuits and Smith chart applications. Prerequisite: ECE 210.

ECE 330 Power Ckts & Electromechanics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/330/)
Network equivalents; power and energy fundamentals, resonance, mutual inductance; three-phase power concepts, forces and torques of electric origin in electromagnetic and electrostatic systems; energy conversion cycles; principles of electric machines; transducers; relays; laboratory demonstration. Prerequisite: ECE 210.

ECE 333 Green Electric Energy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/333/)
Electric power grid structure and policy; analysis of wind, solar, and fuels as raw resources; wind turbines and parks; solar cells, modules, arrays and systems; fuel cell power plants; energy and financial performance of green energy projects; integration of green energy into power grid; energy project report and presentation. Prerequisite: ECE 205 or ECE 210.

ECE 340 Semiconductor Electronics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/340/)
Modern device electronics: semiconductor fundamentals including crystals and energy bands, charge carriers (electrons and holes), doping, and transport, (drift and diffusion); unipolar devices with the MOS field effect transistor as a logic device and circuit considerations; basic concepts of generation-recombination and the P-N junction as capacitors and current rectifier with applications in photonics; bipolar transistors as amplifiers and switching three-terminal devices. Prerequisite: ECE 210; PHYS 214; credit or concurrent registration in ECE 329.

ECE 342 Electronic Circuits credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/342/)
Analysis and design of analog and digital electronic circuits using MOS field effect transistors and bipolar junction transistors, with emphasis on amplifiers in integrated circuits. Credit is not given for both ECE 342 and PHYS 404. Prerequisite: ECE 210.

ECE 343 Electronic Circuits Laboratory credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/ECE/343/)
Companion laboratory for ECE 342. Credit is not given for both ECE 343 and PHYS 404. Prerequisite: Credit or concurrent registration in ECE 342.

ECE 350 Fields and Waves II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/350/)
Continuation of ECE 329: radiation theory; antennas, radiation fields, radiation resistance and gain; transmitting arrays; plane-wave approximation of radiation fields; plane-wave propagation, reflection, and transmission; Doppler effect, evanescent waves and tunneling, dispersion, phase and group velocities; waveguides and resonant cavities; antenna reception and link budgets. Prerequisite: ECE 329.

ECE 365 Data Science and Engineering credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/365/)
Project-based course focused on exploring and understanding how data are collected, represented and stored, and computed/analyzed upon to arrive at appropriate and meaningful interpretation. Foundations of machine learning are developed and then applied in the context of two specific application areas, such as social network analytics, biological data analysis, and auto and video analytics. Prerequisite: ECE 313.

ECE 374 Introduction to Algorithms & Models of Computation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/374/)
Same as CS 374. See CS 374.

ECE 380 Biomedical Imaging credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/380/)
Physics and engineering principles associated with x-ray, computed tomography, nuclear, ultrasound, magnetic resonance, and optical imaging, including human visualization and perception of image data. Same as BIOE 380. Prerequisite: MATH 285 or MATH 286.

ECE 385 Digital Systems Laboratory credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/385/)
Design, build, and test digital systems using transistor-transistor logic (TTL), SystemVerilog, and field-programmable gate arrays (FPGAs). Topics include combinational and sequential logic, storage elements, input/output and display, timing analysis, design tradeoffs, synchronous and asynchronous design methods, datapath and controller, microprocessor design, software/hardware co-design, and system-on-a-chip. Prerequisite: ECE 110 and ECE 220.

ECE 391 Computer Systems Engineering credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/391/)
Concepts and abstractions central to the development of modern computing systems, with an emphasis on the systems software that controls interaction between devices and other hardware and application programs. Input-output semantics; synchronization; interrupts; multitasking; virtualization of abstractions. Term-based projects. Credit is not given for both ECE 391 and CS 241. Prerequisite: ECE 220 or CS 233.

ECE 395 Advanced Digital Projects Lab credit: 2 or 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/395/)
Planning, designing, executing, and documenting a microcomputer-based project. Emphasis on hardware but special projects may require an equal emphasis on software. May be repeated in separate terms. Prerequisite: ECE 385.

ECE 396 Honors Project credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/396/)
Special project or reading course for James Scholars in engineering. May be repeated. Prerequisite: Consent of instructor.

ECE 397 Individual Study in ECE credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/397/)
Individual Projects. Approved for both letter and S/U grading. May be repeated. Prerequisite: Consent of instructor. Approved written application to department as specified by department or instructor is required.

ECE 398 Special Topics in ECE credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/398/)
Subject offerings of new and developing areas of knowledge in electrical and computer engineering intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. Approved for both letter and S/U grading. May be repeated in the same or separate terms if topics vary.

ECE 399 Honors Seminar credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/399/)
Special lecture sequences or discussion groups arranged each term to bring James Scholars in engineering into direct contact with the various aspects of engineering practices and philosophy. For Computer Engineering and Electrical Engineering majors with senior standing. Prerequisite: Consent of instructor.

ECE 401 Signal and Image Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/401/)
An introduction to signal analysis and processing methods for advanced undergraduates or graduate students in the biological, physical, social, engineering and computer sciences. Signal analysis methods and their capabilities, weaknesses, and artifacts with an emphasis on their practical application. Significant hands-on processing and interpretation of real data using MATLAB. 4 undergraduate hours. 4 graduate hours. Credit is not given for both ECE 310 and ECE 401. Prerequisite: MATH 220.

ECE 402 Electronic Music Synthesis credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/402/)
Historical survey of electronic and computer music technology; parameters of musical expression and their codification; analysis and synthesis of fixed sound spectra; time-variant spectrum analysis/synthesis of musical sounds; algorithms for dynamic sound synthesis. 3 undergraduate hours. 3 graduate hours. Prerequisite: ECE 310.

ECE 403 Audio Engineering credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/403/)
Resonance and wave phenomena; Acoustics of rooms and transmission lines (e.g., horns); How loudspeakers work: A lab component has been added to measure and model real loudspeakers and enclosures; Topics in digital audio, including AD and DA (Sigma-Delta) audio converters. 3 undergraduate hours. 3 graduate hours. Prerequisite: ECE 210 and ECE 310.

ECE 407 Cryptography credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/407/)
Cryptography is a powerful toolbox for building secure systems --- not just for private communication, but also for building fault tolerant protocols, for securely outsourcing computation to untrusted services, and more. The goal of this course is to introduce the concepts of modern cryptography, including a combination of theoretical foundations (how do we precisely state security guarantees and assumptions, and prove that a protocol is designed correctly?) and practical techniques (how do we combine secure primitives to make effective systems?). This course is intended for senior undergraduate students with an interest in applying cryptographic techniques to building secure systems, and for graduate students with an interest in cryptography or systems security. Same as CS 407. 3 or 4 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 225.

ECE 408 Applied Parallel Programming credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/408/)
Parallel programming with emphasis on developing applications for processors with many computation cores. Computational thinking, forms of parallelism, programming models, mapping computations to parallel hardware, efficient data structures, paradigms for efficient parallel algorithms, and application case studies. Same as CS 483 and CSE 408. 4 undergraduate hours. 4 graduate hours. Prerequisite: ECE 220.

ECE 410 Neural Circuits and Systems credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/410/)
Introduction to modeling functions of neurons and systems of neurons in the brain. Topics include Boolean signal processing, nonlinear diffusion equations, delay-and-add synaptic signal processing. Integrates information from the structure and physiology from a single neuron up to the assembly of brain circuits. Examples presented to discuss neural circuit and systems include the auditory, and to a lesser extent, visual system. Course concludes with a look at theories of brain function built up from systems of neurons. Same as NE 410. 3 undergraduate hours. 4 graduate hours. Prerequisite: MATH 285 or equivalent. CS 101 or equivalent.

ECE 411 Computer Organization & Design credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/411/)
Basic computer organization and design: integer and floating-point computer arithmetic; control unit design; pipelining; system interconnect; memory organization; I/O design; reliability and performance evaluation. Laboratory for computer design implementation, simulation, and layout. 4 undergraduate hours. 4 graduate hours. Prerequisite: ECE 391 or CS 241.

ECE 412 Microcomputer Laboratory credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/412/)
Design, construction, and use of a small general-purpose computer with a micro-processor CPU; MSI and LSI circuits used extensively; control panel, peripheral controllers, control logic, central processor, and programming experiments. 3 undergraduate hours. 3 graduate hours. Prerequisite: ECE 385; ECE 391 or CS 233. Recommended: Credit or concurrent registration in ECE 411.

ECE 414 Biomedical Instrumentation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/414/)
Same as BIOE 414. See BIOE 414.

ECE 415 Biomedical Instrumentation Lab credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ECE/415/)
Same as BIOE 415. See BIOE 415.

ECE 416 Biosensors credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/416/)
Underlying engineering principles used to detect small molecules, DNA, proteins, and cells in the context of applications in diagnostic testing, pharmaceutical research, and environmental monitoring. Biosensor approaches including electrochemistry, fluorescence, acoustics, and optics; aspects of selective surface chemistry including methods for biomolecule attachment to transducer surfaces; characterization of bisensor performance; blood glucose detection; fluorescent DNA microarrays; label-free biochips; bead-based assay methods. Case studies and analysis of commercial biosensor. Same as BIOE 416. 3 undergraduate hours. 3 graduate hours. Prerequisite: ECE 329.

ECE 417 Multimedia Signal Processing credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/417/)
Characteristics of speech and image signals; important analysis and synthesis tools for multimedia signal processing including subspace methods, Bayesian networks, hidden Markov models, and factor graphs; applications to biometrics (person identification), human-computer interaction (face and gesture recognition and synthesis), and audio-visual databases (indexing and retrieval). Emphasis on a set of MATLAB machine problems providing hands-on experience. 4 undergraduate hours. 4 graduate hours. Prerequisite: ECE 310 or ECE 401; one of ECE 313, CS361, or STAT 400.

ECE 418 Image & Video Processing credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/418/)
Concepts and applications in image and video processing; introduction to multidimensional signal processing: sampling, Fourier transform, filtering, interpolation, and decimation; human visual perception; scanning and display of images and video; image enhancement, restoration and segmentation; digital image and video compression; image analysis. Laboratory exercises promote experience with topics and development of C and MATLAB programs. 4 undergraduate hours. 4 graduate hours. Prerequisite: ECE 310; credit or concurrent registration in one of ECE 313, STAT 400, IE 300, MATH 461; MATH 415; experience with C programming language.

ECE 419 Security Laboratory credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/419/)
Same as CS 460. See CS 460.

ECE 420 Embedded DSP Laboratory credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ECE/420/)
Development of real-time digital signal processing (DSP) systems using a DSP microprocessor; several structured laboratory exercises, such as sampling and digital filtering; followed by an extensive DSP project of the student's choice. 2 undergraduate hours. 2 graduate hours. Prerequisite: ECE 310.

ECE 421 Neural Interface Engineering credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/421/)
This course will focus on hardware and software technologies that enable control and readout of neural activity in the brain. Engineering grounded innovation will accelerate our understanding of the brain, impact new therapies for restoring lost neural functions, and lead to neural interfaces to augment our interaction with the world and machines. Focuses on using physical, chemical and biological principles to understand technology design criteria governing ability to observe and alter brain structure and function. Topics include noninvasive and invasive brain mapping and stimulation, neural interfaces and neural prosthetics, data processing problems, decoding/encoding techniques based on machine learning, future brain interfaces based on nanotechnology, optogenetics. Same as NE 420. 3 undergraduate hours. 4 graduate hours. Prerequisite: ECE 210 or BIOE 205 and NE 330, or instructor approval.

ECE 422 Computer Security I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/422/)
Same as CS 461. See CS 461.

ECE 424 Computer Security II credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/424/)
Same as CS 463. See CS 463.

ECE 425 Intro to VLSI System Design credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/425/)
Complementary Metal-Oxide Semiconductor (CMOS) technology and theory; CMOS circuit and logic design; layout rules and techniques; circuit characterization and performance estimation; CMOS subsystem design; Very-Large-Scale Integrated (VLSI) systems design methods; VLSI Computer Aided Design (CAD) tools; workstation-based custom VLSI chip design using concepts of cell hierarchy; final project involving specification, design, and evaluation of a VLSI chip or VLSI CAD program; written report and oral presentation on the final project. 3 undergraduate hours. 3 graduate hours. Prerequisite: ECE 385 and ECE 411; or CS 233.

ECE 426 Principles of Mobile Robotics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/426/)
Same as ABE 426. See ABE 426.

ECE 428 Distributed Systems credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/428/)
Same as CS 425. See CS 425.

ECE 431 Electric Machinery credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/431/)
Theory and laboratory experimentation with three-phase power, power-factor correction, single- and three-phase transformers, induction machines, DC machines, and synchronous machines; project work on energy control systems; digital simulation of machine dynamics. 4 undergraduate hours. 4 graduate hours. Prerequisite: ECE 330.

ECE 432 Advanced Electric Machinery credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/432/)
Advanced rotating machine theory and practice: dynamic analysis of machines using reference frame transformations; tests for parameter determination; reduced order modeling of machines; mechanical subsystems including governors, prime movers and excitation systems; digital simulation of inter-connected machines. 3 undergraduate hours. 3 graduate hours. Prerequisite: ECE 431.

ECE 434 Mobile Computing & Application credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/434/)
Introduction to cross-disciplinary ideas and techniques in mobile computing, with an emphasis on how they can be composed to build systems and applications on smartphones, tablets, and wearable devices. Topics of interest include smartphone sensing, energy efficiency, indoor localization, augmented reality, context-awareness, gesture recognition, and data analytics. Various techniques and methods utilized to combine them into functional systems, propose a new system, define the underlying problems, and solve them end to end. Same as CS 434. 3 undergraduate hours. 4 graduate hours. Prerequisite: ECE 391, CS 241, or ECE 310.

ECE 435 Computer Networking Laboratory credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/435/)
Same as CS 436. See CS 436.

ECE 437 Sensors and Instrumentation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/437/)
Hands-on exposure to fundamental technology and practical application of sensors. Capacitive, inductive, optical, electromagnetic, and other sensing methods are examined. Instrumentation techniques incorporating computer control, sampling, and data collection and analysis are reviewed in the context of real-world scenarios. 3 undergraduate hours. 3 graduate hours. Prerequisite: ECE 329.

ECE 438 Communication Networks credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/438/)
Same as CS 438. See CS 438.

ECE 439 Wireless Networks credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/439/)
Overview of wireless network architectures including cellular networks, local area networks, multi-hop wireless networks such as ad hoc networks, mesh networks, and sensor networks; capacity of wireless networks; medium access control, routing protocols, and transport protocols for wireless networks; mechanisms to improve performance and security in wireless networks; energy-efficient protocols for sensor networks. Same as CS 439. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 241 or ECE 391; one of MATH 461, MATH 463, ECE 313.

ECE 441 Physcs & Modeling Semicond Dev credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/441/)
Advanced concepts including generation-recombination, hot electron effects, and breakdown mechanisms; essential features of small ac characteristics, switching and transient behavior of p-n junctions, and bipolar and MOS transistors; fundamental issues for device modeling; perspective and limitations of Si-devices. 3 undergraduate hours. 3 graduate hours. Prerequisite: ECE 340.

ECE 442 Silicon Photonics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/442/)
Overview of silicon integrated photonics in three sections: (1) fundamentals of waveguide optics and passive silicon photonic devices including wavelength filters, mode converters, polarization and dispersion management. (2) active silicon photonic devices based on carrier injection/depletion pn junction, photonic modulators, optical switches, photodetectors. (3) application of integrated silicon photonics in optical communications systems in short and long haul optical links and datacenters. Emerging applications in quantum computing, neuromoprhic computing and biosensing. 3 undergraduate hours. 4 graduate hours. Prerequisite: ECE 350.

ECE 443 LEDs and Solar Cells credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/443/)
This course explores the energy conversion devices from fundamentals to system-levels including electronic structure of semiconductors; quantum physics; compound semiconductors; semiconductor heterostructures and low dimensional quantum structures; energy transfer between photons and electron-hole pairs; photon emission and capture processes; radiative and non-radiative processes; light extraction and trapping; emission and absorption engineering; electrical and optical modelling via numerical and TCAD simulation tools; hands-on characterization of modern light emitting diodes and solar cells. 4 undergraduate hours. 4 graduate hours. Prerequisite: ECE 340.

ECE 444 IC Device Theory & Fabrication credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/444/)
Fabrication lab emphasizing physical theory and design of devices suitable for integrated circuitry; electrical properties of semiconductors and techniques (epitaxial growth, oxidation, photolithography diffusion, ion implantation, metallization, and characterization) for fabricating integrated circuit devices such as p-n junction diodes, bipolar transistors, and field effect transistors. 4 undergraduate hours. 4 graduate hours. Prerequisite: ECE 340.

ECE 445 Senior Design Project Lab credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/445/)
Individual design projects in various areas of electrical and computer engineering; projects are chosen by students with approval of instructor. A professionally kept lab notebook, a written report, prepared to journal publication standards, and an oral presentation required. 4 undergraduate hours. No graduate credit.
This course satisfies the General Education Criteria for:
Advanced Composition

ECE 446 Principles of Experimental Research in Electrical Engineering credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/446/)
Interdisciplinary approach to learning principles of experimental research. Focuses on: 1) experimental design 2) prevalent experimental techniques 3) data organization, analysis, and presentation and 4) scientific computing. Presentation methods explored include poster session, conference talk, and journal paper. Open-ended labs and a project reinforce concepts discussed in class. 4 undergraduate hours. 4 graduate hours. Prerequisite: ECE 313.

ECE 447 Active Microwave Ckt Design credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/447/)
Microwave circuit design of amplifiers, oscillators, and mixers. 3 undergraduate hours. 3 graduate hours. Prerequisite: ECE 350 and ECE 453.

ECE 448 Artificial Intelligence credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/448/)
Same as CS 440. See CS 440.

ECE 449 Machine Learning credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/449/)
Same as CS 446. See CS 446.

ECE 451 Adv Microwave Measurements credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/451/)
Manual- and computer-controlled laboratory analysis of circuits at microwave frequencies. 3 undergraduate hours. 3 graduate hours. Prerequisite: ECE 350.

ECE 452 Electromagnetic Fields credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/452/)
Plane waves at oblique incidence; wave polarization; anisotropic media; radiation; space communications; waveguides. 3 undergraduate hours. 3 graduate hours. Prerequisite: ECE 350.

ECE 453 Wireless Communication Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/453/)
Design of a radio system for transmission of information; modulation, receivers, impedance matching, oscillators, two-port network analysis, receiver and antenna noise, nonlinear effects, mixers, phase-locked loops. 4 undergraduate hours. 4 graduate hours. Prerequisite: ECE 329, credit or concurrent registration in ECE 342.

ECE 454 Antennas credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/454/)
Antenna parameters; polarization of electromagnetic waves; basic antenna types; antenna arrays; broadband antenna design; antenna measurements. 3 undergraduate hours. 3 graduate hours. Prerequisite: ECE 350.

ECE 455 Optical Electronics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/455/)
Optical beams and cavities; semiclassical theory of gain; characteristics of typical lasers (gas, solid state, and semiconductor); application of optical devices. 3 undergraduate hours. 4 graduate hours. Prerequisite: ECE 350 or PHYS 436.

ECE 456 Global Nav Satellite Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/456/)
Engineering aspects of space-based navigation systems, such as the Global Positioning System (GPS). Engineering and physical principles on which GPS operates, including orbital dynamics, electromagnetic wave propagation in a plasma, signal encoding, receiver design, error analysis, and numerical methods for obtaining a navigation solution. GPS as a case study for performing an end-to-end analysis of a complex engineering system. Laboratory exercises focus on understanding receiver design and developing a MATLAB-based GPS receiver. Same as AE 456. 4 undergraduate hours. 4 graduate hours. Prerequisite: ECE 329 and ECE 310 or AE 352 and AE 353.

ECE 457 Microwave Devices & Circuits credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/457/)
Electromagnetic wave propagation, microwave transmission systems, passive components, microwave tubes, solid state microwave devices, microwave integrated circuits, S-parameter analysis, and microstrip transmission lines. 3 undergraduate hours. 3 graduate hours. Prerequisite: ECE 340 and ECE 350.

ECE 458 Applic of Radio Wave Propag credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/458/)
Terrestrial atmosphere, radio wave propagation, and applications to radio sensing and radio communication. 3 undergraduate hours. 3 graduate hours. Prerequisite: ECE 350.

ECE 459 Communications Systems credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/459/)
Analog underpinning of analog and digital communication systems: representation of signals and systems in the time and frequency domains; analog modulation schemes; random processes; prediction and noise analysis using random processes; noise sensitivity and bandwidth requirements of modulation schemes. Brief introduction to digital communications. 3 undergraduate hours. 3 graduate hours. Prerequisite: ECE 313.

ECE 460 Optical Imaging credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/460/)
Scalar fields, geometrical optics, wave optics, Gaussian beams, Fourier optics, spatial and temporal coherence, microscopy, interference chromatic and geometric aberrations, Jones matrices, waveplates, electromagnetic fields, and electro-optic and acousto-optic effects. Laboratory covers numerical signal processing, spectroscopy, ray optics, diffraction, Fourier optics, microscopy, spatial coherence, temporal coherence, polarimetry, fiber optics, electro-optic modulation and acousto-optic modulation. 4 undergraduate hours. 4 graduate hours. Prerequisite: ECE 329; credit or concurrent registration in ECE 313.

ECE 461 Digital Communications credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/461/)
Reliable communication of one bit of information over three types of channels: additive Gaussian noise, wireline, and wireless. Emphasis on the impact of bandwidth and power on the data rate and reliability, using discrete-time models. Technological examples used as case studies. 3 undergraduate hours. 3 graduate hours. Prerequisite: ECE 210 and ECE 313.

ECE 462 Logic Synthesis credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/462/)
Unate function theory, unate recursive paradigm, synthesis of two-level logic, synthesis of incompletely specified combinational logic, multi-level logic synthesis, binary decision diagrams, finite state machine synthesis, automatic test pattern generation and design for test, equivalence checking and reachability analysis of finite machines, and technology mapping. 3 undergraduate hours. 3 graduate hours. Prerequisite: ECE 220 or CS 233.

ECE 463 Digital Communications Lab credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ECE/463/)
Hands-on experience in the configuration and performance evaluation of digital communication systems employing both radio and optical signals. 2 undergraduate hours. 2 graduate hours. Prerequisite: ECE 361 or ECE 459.

ECE 464 Power Electronics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/464/)
Switching functions and methods of control such as pulse-width modulation, phase control, and phase modulation; dc-dc, ac-dc, dc-ac, and ac-ac power converters; power components, including magnetic components and power semiconductor switching devices. 3 undergraduate hours. 3 graduate hours. Prerequisite: ECE 342.

ECE 465 Optical Communications Systems credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/465/)
Fundamentals of lightwave systems: characterization of lightwave channels, optical transmitters, receivers, and amplifiers; quantum and thermal noise processes; design of optical receivers; multimode and single-mode link analysis. 3 undergraduate hours. 3 graduate hours. Prerequisite: ECE 313 and ECE 350. Recommended: credit or concurrent registration in ECE 459 and ECE 466.

ECE 466 Optical Communications Lab credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/ECE/466/)
Fiber components and measurements, transmitters and detectors, fiber amplifiers, multimode fiber links, and wavelength division multiplexing. 1 undergraduate hour. 1 graduate hour. Prerequisite: Credit or concurrent registration in ECE 465.

ECE 467 Biophotonics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/467/)
Overview of the field of biophotonics, in three segments: (1) fundamental principles of light, optics, lasers, biology, and medicine; (2) diagnostic biophotonics including imaging, spectroscopy, and optical biosensors; (3) therapeutic applications of biophotonics including laser ablation and photodynamic therapies. Reviews and presentations of current scientific literature by students. Tours of microscopy facilities. Same as BIOE 467. 3 undergraduate hours. 3 graduate hours. Prerequisite: One of ECE 455, ECE 460, PHYS 402.

ECE 468 Optical Remote Sensing credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/468/)
Optical sensors including single element and area arrays (CCDs); optical systems including imagers, spectrometers, interferometers, and lidar; optical principles and light gathering power; electromagnetics of atomic and molecular emission and scattering with applications to the atmosphere the prime example; applications to ground and spacecraft platforms. Four laboratory sessions (4.5 hours each) arranged during term in lieu of four lectures. Same as AE 468. 3 undergraduate hours. 3 graduate hours. Prerequisite: ECE 329, ECE 313.

ECE 469 Power Electronics Laboratory credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ECE/469/)
Circuits and devices used for switching power converters, solid-state motor drives, and power controllers; dc-dc, ac-dc, and dc-ac converters and applications; high-power transistors and magnetic components; design considerations including heat transfer. 2 undergraduate hours. 2 graduate hours. Prerequisite: ECE 343; credit or concurrent registration in ECE 464.

ECE 470 Introduction to Robotics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/470/)
Fundamentals of robotics including rigid motions; homogeneous transformations; forward and inverse kinematics; velocity kinematics; motion planning; trajectory generation; sensing, vision; control. Same as AE 482 and ME 445. 4 undergraduate hours. 4 graduate hours. Prerequisite: One of MATH 225, MATH 286, MATH 415, MATH 418.

ECE 472 Biomedical Ultrasound Imaging credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/472/)
Theoretical and engineering foundations of ultrasonic imaging for medical diagnostics. Conventional, Doppler, and advanced ultrasonic imaging techniques; medical applications of different ultrasonic imaging techniques; engineering problems related to characterization of ultrasonic sources and arrays, image production, image quality, the role of contrast agents in ultrasonic imaging, and system design. 3 undergraduate hours. 3 graduate hours. Prerequisite: ECE 329.

ECE 473 Fund of Engrg Acoustics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/473/)
Development of the basic theoretical concepts of acoustical systems; mechanical vibration, plane and spherical wave phenomena in fluid media, lumped and distributed resonant systems, and absorption phenomena and hearing. Same as TAM 413. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: MATH 285 or MATH 286.

ECE 476 Power System Analysis credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/476/)
Development of power system equivalents by phase network analysis, load flow, symmetrical components, sequence networks, fault analysis, and digital simulation. 3 undergraduate hours. 3 graduate hours. Prerequisite: ECE 330.

ECE 478 Formal Software Development Methods credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/478/)
Same as CS 477. See CS 477.

ECE 479 IoT and Cognitive Computing credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/479/)
Offers in-depth coverage on existing and emerging IoT and cognitive computing topics. Detailed topics include definition and characteristics of IoT; IoT enabling technologies; smart domains and applications; IoT systems; IoT design methodology; machine learning and deep learning; embedded GPU and FPGA for IoT; IoT servers and cloud; data analytics for IoT; cognitive computing; cognitive systems design; cognitive application workloads; IoT security; hands-on learning experience to build IoT systems; and various case studies such as smart city, smart home, and IoT for healthcare. Three lab-based machine problems working with actual IoT computing devices together with homework assignments will be given to reinforce students' understanding and learning of the techniques and topics. 4 undergraduate hours. 4 graduate hours. Prerequisite: CS 225 and ECE 385.

ECE 480 Magnetic Resonance Imaging credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/480/)
Fundamental physical, mathematical, and computational principles governing the data acquisition and image reconstruction of magnetic resonance imaging. Same as BIOE 480. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: Recommended: ECE 310.

ECE 481 Nanotechnology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/481/)
Fundamental physical properties of nanoscale systems. Nanofabrication techniques, semiconductor nanotechnology, molecular and biomolecular nanotechnology, carbon nanotechnology (nanotubes and graphene), nanowires, and nanoscale architectures and systems. 4 undergraduate hours. 4 graduate hours. Prerequisite: One of CHEM 442, CHBE 457, ME 485, MSE 401, PHYS 460.

ECE 482 Digital IC Design credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/482/)
Bipolar and MOS field effect transistor characteristics; VLSI fabrication techniques for MOS and bipolar circuits; calculation of circuit parameters from the process parameters; design of VLSI circuits such as logic, memories, charge-coupled devices, and A/D and D/A converters. 3 undergraduate hours. 3 graduate hours. Prerequisite: ECE 342.

ECE 483 Analog IC Design credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/483/)
Basic linear integrated circuit design techniques using bi-polar, JFET, and MOS technologies; operational amplifiers; wide-band feedback amplifiers; sinusoidal and relaxation oscillators; electric circuit noise; application of linear integrated circuits. 3 undergraduate hours. 3 graduate hours. Prerequisite: ECE 342.

ECE 484 Principles of Safe Autonomy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/484/)
Introduces techniques for building autonomous systems such as autonomous cars, delivery drones, and manufacturing robots, and techniques for performing their safety analysis. Covers key algorithms and approaches in perception, modeling, motion planning, control, and safety analysis, with a view towards understanding their basic assumptions and performance guarantees. Also provides exposure to some of the state-of-the-art software tools for control, simulation, and analysis. Students will get experience through labs, programming assignments, and they will perform hands-on laboratory work on the Polaris GEM autonomous vehicle platform. Course material is distilled from recent research papers; thus, there is no required textbook. 4 undergraduate hours. 4 graduate hours. Prerequisite: CS 124, ECE 220 or equivalent; ECE313, IE300, or STAT400. A course on data structures, algorithms, differential equations, and linear algebra is recommended.

ECE 485 MEMS Devices & Systems credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/485/)
Introduction to principles, fabrication techniques, and applications of microelectromechanical systems (MEMS). In-depth analysis of sensors, actuator principles, and integrated microfabrication techniques for MEMS. Comprehensive investigation of state-of-the-art MEMS devices and systems. Same as ME 485. 3 undergraduate hours. 3 graduate hours.

ECE 486 Control Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/486/)
Analysis and design of control systems with emphasis on modeling, state variable representation, computer solutions, modern design principles, and laboratory techniques. 4 undergraduate hours. 4 graduate hours. Prerequisite: ECE 210.

ECE 487 Intro Quantum Electr for EEs credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/487/)
Application of quantum mechanical concepts to electronics problems; detailed analysis of a calculable two-state laser system; incidental quantum ideas bearing on electronics. 3 undergraduate hours. 3 graduate hours. Prerequisite: PHYS 485.

ECE 488 Compound Semicond & Devices credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/488/)
Advanced semiconductor materials and devices; elementary band theory; heterostructures; transport issues; three-terminal devices; two-terminal devices; including lasers and light modulators. 3 undergraduate hours. 3 graduate hours. Prerequisite: ECE 340 and ECE 350.

ECE 489 Robot Dynamics and Control credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/489/)
Same as ME 446 and SE 422. See SE 422.

ECE 490 Introduction to Optimization credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/490/)
Basic theory and methods for the solution of optimization problems; iterative techniques for unconstrained minimization; linear and nonlinear programming with engineering applications. Same as CSE 441. 3 undergraduate hours. 4 graduate hours. Prerequisite: ECE 220 and MATH 415.

ECE 491 Numerical Analysis credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/491/)
Same as CS 450, CSE 401 and MATH 450. See CS 450.

ECE 492 Parallel Progrmg: Sci & Engrg credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/492/)
Same as CS 420 and CSE 402. See CS 420.

ECE 493 Advanced Engineering Math credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/493/)
Same as MATH 487. See MATH 487.

ECE 495 Photonic Device Laboratory credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ECE/495/)
Active photonic devices and lightwave technology. Hands-on experience with several classes of lasers (HeNe laser, semiconductor edge emitting lasers, vertical cavity surface emitting lasers), photodetectors, and photonic systems. Familiarization with experimental optical characterization techniques and equipment. 3 undergraduate hours. 3 graduate hours. Prerequisite: ECE 487 recommended.

ECE 496 Senior Research Project credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ECE/496/)
Individual research project under the guidance of a faculty member: for example, mathematical analysis, laboratory experiments, computer simulations, software development, circuit design, or device fabrication. Preparation of a written research proposal, including preliminary results. 2 undergraduate hours. No graduate credit. May be repeated. ECE 496 and ECE 499 taken in sequence fulfill the Advanced Composition Requirement. Prerequisite: RHET 105; consent of instructor.
This course satisfies the General Education Criteria for:
Advanced Composition

ECE 498 Special Topics in ECE credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/498/)
Subject offerings of new and developing areas of knowledge in electrical and computer engineering intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. 0 to 4 undergraduate hours. 0 to 4 graduate hours. May be repeated in the same or separate terms if topics vary.

ECE 499 Senior Thesis credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ECE/499/)
Completion of the research project begun under ECE 496. Preparation and oral presentation of a written thesis that reports the results of the project. 2 undergraduate hours. No graduate credit. To fulfill the Advanced Composition Requirement, credit must be earned for both ECE 496 and ECE 499. Prerequisite: ECE 496 and consent of instructor.
This course satisfies the General Education Criteria for:
Advanced Composition

ECE 500 ECE Colloquium credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/ECE/500/)
Required of all graduate students. Approved for S/U grading only.

ECE 508 Manycore Parallel Algorithms credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/508/)
Algorithm techniques for enhancing the scalability of parallel software: scatter vs. gather, problem decomposition, spatial sorting and binning, privatization for reduced conflicts, tiling for data locality, regularization for improved load balance, compaction to conserve memory bandwidth, double-buffering to overlap latencies, and data layout for improved efficiency of DRAM accesses. Same as CS 508. 4 graduate hours. No professional credit. Prerequisite: ECE 408 or CS 420.

ECE 511 Computer Architecture credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/511/)
Advanced concepts in computer architecture: design, management, and modeling of memory hierarchies; stack-oriented processors; associative processors; pipelined computers; and multiple processor systems. Emphasis on hardware alternatives in detail and their relation to system performance and cost. Same as CSE 521. Prerequisite: ECE 411 or CS 433.

ECE 512 Computer Microarchitecture credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/512/)
Design of high performance computer systems; instruction level concurrency; memory system implementation; pipelining, superscalar, and vector processing; compiler back-end code optimization; profile assisted code transformations; code generation and machine dependent code optimization; cache memory design for multiprocessors; synchronization implementation in multiprocessors; compatibility issues; technology factors; state-of-the-art commercial systems. Prerequisite: ECE 511 and CS 426.

ECE 513 Vector Space Signal Processing credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/513/)
Mathematical tools in a vector space framework, including: finite and infinite dimensional vector spaces, Hilbert spaces, orthogonal projections, subspace techniques, least-squares methods, matrix decomposition, conditioning and regularizations, bases and frames, the Hilbert space of random variables, random processes, iterative methods; applications in signal processing, including inverse problems, filter design, sampling, interpolation, sensor array processing, and signal and spectral estimation. Prerequisite: ECE 310, ECE 313, and MATH 415.

ECE 515 Control System Theory & Design credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/515/)
Feedback control systems emphasizing state space techniques. Basic principles, modeling, analysis, stability, structural properties, optimization, and design to meet specifications. Same as ME 540. Prerequisite: ECE 486.

ECE 517 Nonlinear & Adaptive Control credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/517/)
Design of nonlinear control systems based on stability considerations; Lyapunov and hyperstability approaches to analysis and design of model reference adaptive systems; identifiers, observers, and controllers for unknown plants. Prerequisite: ECE 515.

ECE 518 Adv Semiconductor Nanotech credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/518/)
Semiconductor nanotechnology from the formation and characterization of low-dimensional structures to device applications. Compound semiconductors, epitaxial growth, quantum dots, nanowires, membranes, strain effect, quantum confinement, surface states, 3D transistors, nanolasers, multijunction tandem solar cells, and nanowire thermoelectrics. Handouts are supplemented with papers from the research literature. Critical literature review assignments, research proposals in National Science Foundation format, and oral presentations are required. Prerequisites: ECE 340, ECE 444, and ECE 481.

ECE 519 Hardware Verification credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/519/)
This course teaches algorithms for verification that are applied to very large scale hardware in the chip design industry. The course teaches symbolic model checking, Binary decision diagrams (BDDs), satisfiability (SAT) based algorithms, symbolic simulation, coverage metrics for simulation, automatic assertion generation, analog circuit verification and post Silicon validation algorithms. The course teaches scalable search algorithms that can be applied to discrete and continuous space models. Same as CS 585. 4 graduate hours. No professional credit.

ECE 520 EM Waves & Radiating Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/520/)
Fundamental electromagnetic theory with applications to plane waves, waveguides, cavities, antennas, and scattering; electromagnetic principles and theorems; and solution of electromagnetic boundary-value problems.

ECE 523 Plasma Technology of Gaseous Electronics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/523/)
Same as NPRE 527. See NPRE 527.

ECE 524 Advanced Computer Security credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/524/)
Same as CS 563. See CS 563.

ECE 526 Distributed Algorithms credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/526/)
Theoretical aspects of distributed algorithms, with an emphasis on formal proofs of correctness and theoretical performance analysis. Algorithms for consensus, clock synchronization, mutual exclusion, debugging of parallel programs, peer-to-peer networks, and distributed function computation; fault-tolerant distributed algorithms; distributed algorithms for wireless networks. Same as CS 539. 4 graduate hours. No professional credit. Prerequisite: One of CS 473, ECE 428, ECE 438.

ECE 527 System-On-Chip Design credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/527/)
System-on-chip (SOC) design methodology and IP (intellectual property) reuse, system modeling and analysis, hardware/software co-design, behavioral synthesis, embedded software, reconfigurable computing, design verification and test, and design space exploration. Class projects focusing on current SOC design and research. Platform FPGA boards and digital cameras are provided to prototype, test, and evaluate SOC designs. Prerequisite: ECE 391 and ECE 425.

ECE 528 Analysis of Nonlinear Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/528/)
Nonlinear dynamics, vector fields and flows, Lyapunov stability theory, regular and singular perturbations, averaging, integral manifolds, input-output and input-to-state stability, and various design applications in control systems and robotics. Same as ME 546 and SE 520. 4 graduate hours. No professional credit. Prerequisite: ECE 515 and MATH 444 or MATH 447.

ECE 530 Large-Scale System Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/530/)
Fundamental techniques for the analysis of large-scale electrical systems, including methods for nonlinear and switched systems. Emphasis on the importance of the structural characteristics of such systems. Key aspects of static and dynamic analysis methods. Prerequisite: ECE 464 and ECE 476.

ECE 531 Theory of Guided Waves credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/531/)
Propagation of electromagnetic waves in general cylindrical waveguides; stationary principles; non-uniform inhomogeneously filled waveguides; mode and power orthogonality; losses in waveguides; analytical and numerical techniques; microwave integrated circuits waveguides; optical waveguides. Prerequisite: ECE 520. Recommended: MATH 556.

ECE 532 Compnd Semicond & Diode Lasers credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/532/)
Compound semiconductor materials and their optical properties. Diode lasers including quantum well heterostructure lasers, strained layer lasers, and quantum wire and quantum dot lasers. Current topics in diode laser development. Prerequisite: ECE 340 and PHYS 486. Recommended: ECE 455; credit or concurrent registration in ECE 536.

ECE 534 Random Processes credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/534/)
Basic concepts of random processes; linear systems with random inputs; Markov processes; spectral analysis; Wiener and Kalman filtering; applications to systems engineering. Prerequisite: One of ECE 313, MATH 461, STAT 400.

ECE 535 Theory of Semicond & Devices credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/535/)
Introductory quantum mechanics of semiconductors; energy bands; dynamics of Block electrons in static and high-frequency electric and magnetic fields; equilibrium statistics; transport theory, diffusion, drift, and thermoelectric effects; characteristics of p-n junctions, heterojunctions, and transistor devices. Same as PHYS 565. Prerequisite: Senior-level course in quantum mechanics or atomic physics.

ECE 536 Integ Optics & Optoelectronics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/536/)
Integrated optical and optoelectronic devices; theory of optical devices including laser sources, waveguides, photodetectors, and modulations of these devices. Prerequisite: One of ECE 455, ECE 487, PHYS 486. Recommended: ECE 488.

ECE 537 Speech Processing Fundamentals credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/537/)
Development of an intuitive understanding of speech processing by the auditory system, in three parts. I): The theory of acoustics of speech production, introductory acoustic phonetics, inhomogeneous transmission line theory (and reflectance), room acoustics, the short-time Fourier Transform (and its inverse), and signal processing of speech (LPC, CELP, VQ). II): Psychoacoustics of speech perception, critical bands, masking (JNDs), and the physiology of the auditory pathway (cochlear modeling). III): Information theory entropy, channel capacity, the confusion matrix, state models, EM algorithms, and Bayesian networks. Presentation of classic papers on speech processing and speech perception by student groups. MATLAB (or equivalent) programming in majority of assignments. Prerequisite: ECE 310.

ECE 538 2D Material Electronics and Photonics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/538/)
Explores the electronic and photonic devices based on two-dimensional (2D) materials. More specifically, this course will discuss the synthesis and characterization of a variety of 2D materials. This course will also introduce the design, fabrication and physics of various nanoscale devices, including logic transistors, radio frequency devices, tunneling devices, photodetectors, plasmonic devices, lasers and valleytronic devices. The lab sessions will provide the students hands-on experience on the fabrication and characterization of 2D electronic/photonic devices. The lab sessions will be carried out in the nanofabrication laboratory in ECEB. 4 graduate hours. No professional credit. Prerequisite: ECE 340 or equivalent.

ECE 539 Adv Theory Semicond & Devices credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/539/)
Advanced topics of current interest in the physics of semiconductors and solid-state devices. Prerequisite: ECE 535.

ECE 540 Computational Electromagnetics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/540/)
Basic computational techniques for numerical analysis of electromagnetics problems, including the finite difference, finite element, and moment methods. Emphasis on the formulation of physical problems into mathematical boundary-value problems, numerical discretization of continuous problems into discrete problems, and development of rudimentary computer codes for simulation of electromagnetic fields in engineering problems using each of these techniques. Same as CSE 530. Prerequisite: CS 357; credit or concurrent registration in ECE 520.

ECE 541 Computer Systems Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/541/)
Development of analytical models of computer systems and application of such models to performance evaluation: scheduling policies, paging algorithms, multiprogrammed resource management, and queuing theory. Same as CS 541. Prerequisite: One of ECE 313, MATH 461, MATH 463.

ECE 542 Fault-Tolerant Dig Syst Design credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/542/)
Advanced concepts in hardware and software fault tolerance: fault models, coding in computer systems, module and system level fault detection mechanism, reconfiguration techniques in multiprocessor systems and VLSI processor arrays, and software fault tolerance techniques such as recovery blocks, N-version programming, checkpointing, and recovery; survey of practical fault-tolerant systems. Same as CS 536. Prerequisite: ECE 411.

ECE 543 Statistical Learning Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/543/)
Advanced graduate course on modern probabilistic theory of adaptive and learning systems. The following topics will be covered; basics of statistical decision theory; concentration inequalities; supervised and unsupervised learning; empirical risk minimization; complexity-regularized estimation; generalization bounds for learning algorithms; VC dimension and Rademacher complexities; minimax lower bounds; online learning and optimization. Along with the general theory, the course will discuss applications of statistical learning theory to signal processing, information theory, and adaptive control. Basic prerequisites include probability and random processes, calculus, and linear algebra. Other necessary material and background will be introduced as needed. 4 graduate hours. No professional credit. Prerequisite: ECE 534 or equivalent.

ECE 544 Topics in Signal Processing credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/544/)
Lectures and discussions related to advanced topics and new areas of interest in signal processing: speech, image, and multidimensional processing. May be repeated 8 hours in a term to a total of 20 hours. Credit towards a degree from multiple offerings of this course is not given if those offerings have significant overlap, as determined by the ECE department. Prerequisite: As specified each term. It is expected that each offering will have a 500-level course as prerequisite or co-requisite.

ECE 545 Advanced Physical Acoustics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/545/)
Advanced topics in acoustics including physical properties of a fluid; linear propagation phenomena; nonlinear phenomena such as radiation force, streaming, and harmonic generation; cavitation; absorption and dispersion. Prerequisite: One of ECE 473, ECE 520, TAM 518.

ECE 546 Advanced Signal Integrity credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/546/)
Signal integrity aspects involved in the design of high-speed computers and high-frequency circuits; addressing the functions of limitations of interconnects for system-level integration. Topics explored include packaging structures, power and signal distribution, power level fluctuations, skin effect, parasitics, noise, packaging hierarch, multilayer wiring structures as well as the modeling and simulation of interconnects through the use of computer-aided design (CAD) and computational electromagnetics. Prerequisite: ECE 520.

ECE 547 Topics in Image Processing credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/547/)
Fundamental concepts, techniques, and directions of research in image processing: two-dimensional Fourier transform and filtering, image digitization, coding, restoration, reconstruction, analysis, and recognition. Same as CSE 543. Prerequisite: ECE 310 and ECE 313.

ECE 548 Models of Cognitive Processes credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/548/)
Same as CS 548. See CS 548.

ECE 549 Computer Vision credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/549/)
Information processing approaches to computer vision, algorithms, and architectures for artificial intelligence and robotics systems capable of vision: inference of three-dimensional properties of a scene from its images, such as distance, orientation, motion, size and shape, acquisition, and representation of spatial information for navigation and manipulation in robotics. Same as CS 543. Prerequisite: ECE 448 or CS 225.

ECE 550 Advanced Robotic Planning credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/550/)
Computational approaches to robot motion planning, configuration space, algebraic decompositions, artificial potential fields, retraction, approximate decompositions, planning under uncertainty, grasp planning, and task-level planning. Same as AE 583. Prerequisite: ECE 470.

ECE 551 Digital Signal Processing II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/551/)
Basic concept review of digital signals and systems; computer-aided digital filter design, quantization effects, decimation and interpolation, and fast algorithms for convolution and the DFT; introduction to adaptive signal processing. Prerequisite: ECE 310 and ECE 313.

ECE 552 Numerical Circuit Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/552/)
Formulation of circuit equations; sparse matrix algorithms for the solution of large systems, AC, DC, and transient analysis of electrical circuits; sensitivity analysis; decomposition methods. Same as CSE 532. Prerequisite: MATH 415 and ECE 210.

ECE 553 Optimum Control Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/553/)
Theoretical and algorithmic foundations of deterministic optimal control theory, including calculus of variations, maximum principle, and principle of optimality; the Linear-Quadratic-Gaussian design; differential games and H-infinity optimal control design. Prerequisite: ECE 313 and ECE 515.

ECE 554 Dynamic System Reliability credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/554/)
Reliability and dynamic performance evaluation for large-scale and complex systems; building on system-theoretic modeling, analysis, and design techniques. Design methods for reliability including architecture design and filter-based fault detection and isolation. Analytical methods for optimal redundancy allocation, sensitivity analysis methods for iterative system design, and other techniques for design optimization. Mechatronic systems used in aircraft and automotive, power electronic systems, and electrical power systems are examples of applications discussed. Same as ME 544. Prerequisite: ECE 313 and ECE 515, or permission of instructor.

ECE 555 Control of Stochastic Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/555/)
Stochastic control models; development of control laws by dynamic programming; separation of estimation and control; Kalman filtering; self-tuning regulators; dual controllers; decentralized control. Prerequisite: ECE 515 and ECE 534.

ECE 556 Coding Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/556/)
Coding theory with emphasis on the algebraic theory of cyclic codes using finite field arithmetic, decoding of BCH and RS codes, finite field Fourier transform and algebraic geometry codes, convolutional codes, and trellis decoding algorithms. Prerequisite: MATH 417.

ECE 557 Geometric Control Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/557/)
Graduate course on mathematical theory of control and optimization, with a focus on geometric and topological methods. The following topics will be covered: introduction to the basics of differential geometric, Riemannian geometry, algebraic topology and Lie group theory. Control systems on manifolds. Controllability and observability of nonlinear systems. Optimization on manifolds and Lie groups and their applications in signal processing and learning. Control of non-holonomic systems and mechanical systems, rigid body dynamics. Optimal control on manifolds and Lie groups. Feedback linearization and feedback invariants. Introduction to quantum control. 4 graduate hours. No professional credit. Prerequisite: ECE 515 or equivalent is required. A course on state-space control theory, multivariable calculus, linear algebra and overall mathematical maturity are recommended.

ECE 558 Digital Imaging credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/558/)
Multidimensional signals, convolution, transforms, sampling, and interpolation; design of two-dimensional digital filters; sensor array processing and range-doppler imaging; applications to synthetic aperture radar, optics, tomography, radio astronomy, and beam-forming sonar; image estimation from partial data. Prerequisite: ECE 310 and ECE 313.

ECE 559 Topics in Communications credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/559/)
Lectures and discussion related to advanced topics and new areas of interest in the theory of communication systems: information theory, coding theory, and communication network theory. May be repeated in the same term, if topics vary, to a maximum of 12 graduate hours; may be repeated in separate terms, if topics vary, to a maximum of 16 graduate hours. Credit toward a degree from multiple offerings of this course is not given if those offerings have significant overlap, as determined by the ECE department. Prerequisite: As specified each term. (It is expected that each offering will have a 500-level course as a prerequisite or co-requisite.).

ECE 560 VLSI in DSP & Communication credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/560/)
Basic concepts in digital signal processing, VLSI design methodologies, VLSI DSP building blocks; algorithm transformation and mapping techniques, high-speed, low-power transforms, applications to digital filtering; basics of finite-field arithmetic, forward-error correction algorithms, and architectures; DSP implementation platforms, programmable DSPs, media processors, FPGAs, ASICs, case studies of multimedia communications systems, video codecs, xDSL, and cable modems. Homework and a term project apply these concepts in the design of VLSI architectures for digital signal processing and communication systems. Prerequisite: ECE 310.

ECE 561 Statistical Inference for Engineers and Data Scientists credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/561/)
Fundamental principles of statistical decision theory and their application to hypothesis testing and estimation; classical optimality criteria for decision rules; computationally efficient implementations; sequential decision-making; performance analysis; asymptotic properties and performance of decision rules. 4 graduate hours. No professional credit. Prerequisite: ECE 534.

ECE 562 Advanced Digital Communication credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/562/)
Digital communication systems modulation, demodulation, signal space methods, channel models, bit error rate, spectral occupancy, synchronization, equalization, trellis-coded modulation, wireless channels, multiantenna systems, spread spectrum, and orthogonal frequency modulation. 4 graduate hours. No professional credit. Prerequisite: ECE 461 or ECE 459.

ECE 563 Information Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/563/)
Mathematical models for channels and sources; entropy, information, data compression, channel capacity, Shannon's theorems, and rate-distortion theory. Prerequisite: One of ECE 534, MATH 464, MATH 564.

ECE 564 Modern Light Microscopy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/564/)
Current research topics in modern light microscopy: optics principles (statistical optics, Gaussian optics, elastic light scattering, dynamic light scattering); traditional microscopy (bright field, dark field, DIC, phase contract, confocal, epi-fluorescence, confocal fluorescence); current research topics (multiphoton, CARS, STED, FRET, FIONA, STORM, PALM, quantitative phase). Prerequisite: One of ECE 460, MSE 405, PHYS 402.

ECE 566 Computational Inference and Learning credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/566/)
Computational inference and machine learning have seen a surge of interest in the last 15 years, motivated by applications as diverse as computer vision, speech recognition, analysis of networks and distributed systems, big-data analytics, large-scale computer simulations, and indexing and searching of very large databases. This course introduces the mathematical and computational methods that enable such applications. Topics include computational methods for statistical inference, sparsity analysis, approximate inference and search, and fast optimization. 4 graduate hours. No professional credit. Prerequisite: ECE 490, ECE 534.

ECE 567 Communication Network Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/567/)
Performance analysis and design of multiple-user communication systems; emphasis on rigorous formulation and analytical and computational methods; includes queuing networks, decentralized minimum delay routing, and dynamic network flow control. Prerequisite: CS 438; one of ECE 534, MATH 464, MATH 564.

ECE 568 Model & Cntrl Electromech Syst credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/568/)
Fundamental electrical and mechanical laws for derivation of machine models; simplifying transformations of variables in electrical machines; power electronics for motor control; time-scale separation; feedback linearization and nonlinear control as applied to electrical machines. Typical electromechanical applications in actuators, robotics, and variable speed drives. Prerequisite: ECE 431 and ECE 515.

ECE 569 Inverse Problems in Optics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/569/)
Physical optics, solution of linear inverse problems, and computed imaging. Forward problems in diffraction, asymptotics, ray propagation, x-ray projections, scattering, sources, optical coherence tomography, and near-field optics. Solution of associated inverse problems including back-propagation, back-projection, Radon transforms (x-ray CT), inverse scattering, source localization, interferometric synthetic aperture microscopy, and near-field tomography. Special topics as time permits. Prerequisite: ECE 460.

ECE 570 Nonlinear Optics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/570/)
Light propagation in anisotropic crystals; second- and third-order nonlinear susceptibility and electro-optic effect; discussion of the relationship of these effects along with such applications as light modulation, harmonic generation, and optical parametric amplification and oscillation. Prerequisite: ECE 520.

ECE 571 EM Waves in Inhomogen Media credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/571/)
Electromagnetic waves in layered media; plane wave expansion of electromagnetic point source field; Sommerfeld integrals; transient response; WKB method with asymptotic matching; scattering by junction discontinuity; surface integral equation; volume integral equation; inverse problems. Prerequisite: MATH 446; ECE 520 or PHYS 505.

ECE 572 Quantum Opto-Electronics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/572/)
Theoretical approach to quantum mechanics and atomic physics, with many applications in spin resonance and modern maser theory. Prerequisite: PHYS 485 recommended.

ECE 573 Power System Control credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/573/)
Energy control center functions, state estimation and steady state security assessment techniques, economic dispatch, optimal power flow, automatic generation control, and dynamic equivalents. Prerequisite: ECE 476; credit or concurrent registration in ECE 530.

ECE 574 Nanophotonics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/574/)
Nanoscale interaction between light and semiconductors, metals, or composites; plasmonics, cavity electrodynamics, polarition cavity condensation, sub-wavelength structures, metamaterials, and applications. Prerequisite: ECE 455 or ECE 572; ECE 487 or PHYS 486.

ECE 576 Power System Dynm & Stability credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/576/)
Detailed modeling of the synchronous machine and its controls, such as excitation system and turbine-governor dynamics; time-scales and reduced order models; non-linear and linear multi-machine models; stability analysis using energy functions; power system stabilizers. Prerequisite: ECE 476; credit or concurrent registration in ECE 530.

ECE 577 Advanced Antenna Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/577/)
Selected topics from recent engineering literature on antennas supplemented by advanced topics in electromagnetic theory needed for comprehension; current techniques for analysis of wire, slot, horn, frequency independent, quasi-optical, and array antennas. Prerequisite: ECE 520.

ECE 579 Computational Complexity credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/579/)
Same as CS 579. See CS 579.

ECE 580 Optimiz by Vector Space Methds credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/580/)
Normed, Banach, and Hilbert spaces; applications of the projection theorem and the Hahn-Banach Theorem to problems of minimum norm, least squares estimation, mathematical programming, and optimal control; the Kuhn-Tucker Theorem and Pontryagin's maximum principle; iterative methods. Prerequisite: MATH 415 or MATH 482; MATH 447.

ECE 581 Advanced Analog IC Design credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/581/)
Advanced topics in modern analog IC design. Emphasis on CMOS building blocks and circuit techniques as a result of fabrication technology advancement. Noise in linear analog circuits; linear feedback theory and stability; harmonic distortion in weakly nonlinear circuits; switched-capacitor circuit technique and realization; Nyquist-rate and oversampled data converters. Extensive computer simulations required in both homework and final project. Prerequisite: ECE 310 and ECE 483.

ECE 582 Physical VLSI Design credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/582/)
Basic physical design requirements for VLSI; performance-oriented formulation and optimization of chip partitioning, module placement and interconnection; optimized design and layout of on-chip modules; circuit extraction; high-speed VLSI circuits; yield and reliability analysis; advanced VLSI packaging and parametric testing. Prerequisite: ECE 425 or ECE 482.

ECE 584 Embedded System Verification credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/584/)
Examines formal analysis an synthesis approaches for discrete, continuous, and hybrid models of computing systems and their physical environment. Introduces timed and hybrid automata models. Analysis techniques including model checking, Hoare-style deduction, and abstractions for safety and stability, and controller synthesis strategies with applications in distributed robotics, automobile system, traffic control, and real-time systems. Same as CS 584. 4 graduate hours. No professional credit. Prerequisite: MATH 257 or equivalent.

ECE 585 MOS Device Modeling & Design credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/585/)
Techniques for characterizing gate oxide and interface properties and reliability, I-V models for circuit simulation, design for control of short channel effects, silicon-on-insulator, and new device structures. Prerequisite: ECE 441.

ECE 586 Topics in Decision and Control credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/586/)
Lectures and discussions related to advanced topics and new areas of interest in decision and control theory: hybrid, sampled-data, and fault tolerant systems; control over networks; vision-based control; system estimation and identification; dynamic games. May be repeated up to 12 hours within a term, and up to 20 hours total for the course. Credit towards a degree from multiple offerings of this course is not given if those offerings have significant overlap, as determined by the ECE department. Prerequisite: As specified each term. It is expected that each offering will have a 500-level course as prerequisite or co-requisite.

ECE 588 Electricity Resource Planning credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/588/)
Techniques in electricity resource planning including methodologies for reliability evaluation and assessment, production costing, marginal costing, supply-side and demand-side planning, integrated planning, and planning under competition. Prerequisite: MATH 415, ECE 313, and ECE 476.

ECE 590 Graduate Seminar in Special Topics credit: 0 to 1 Hours. (https://courses.illinois.edu/schedule/terms/ECE/590/)
Lectures and discussions on current research and literature on advanced topics in electrical engineering. 0 to 1 graduate hours. No professional credit. Approved for S/U grading only. May be repeated to a maximum of 1 hour in the same semester to a maximum of 4 credit hours in separate semesters, if topics vary. Prerequisite: Consent of instructor.

ECE 594 Math Models of Language credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/594/)
Mathematical models of linguistic structure and their implementation in computational algorithms used in automatic speech understanding and speech synthesis. Statistical and automata-theoretic techniques are studied allowing a quantitative description of acoustic-phonetics, phonology, phonotactics, lexicons, syntax, and semantics. The methods are used to build components of a speech understanding system. For 4 hours credit, an extended project is required. Prerequisite: ECE 537.

ECE 596 Master's Project credit: 1 to 8 Hours. (https://courses.illinois.edu/schedule/terms/ECE/596/)
Individual or team projects in electrical and computer engineering emphasizing advanced engineering analysis and design. May be repeated to a maximum of 16 hours.

ECE 597 Individual Study in ECE credit: 1 to 8 Hours. (https://courses.illinois.edu/schedule/terms/ECE/597/)
Individual projects. Approved written application to department as specified by department or instructor is required. May be repeated. Prerequisite: Consent of instructor.

ECE 598 Special Topics in ECE credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ECE/598/)
Subject offerings of new and developing areas of knowledge in electrical and computer engineering intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. May be repeated in the same or separate terms if topics vary.

ECE 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/ECE/599/)
Approved for S/U grading only. May be repeated.

ENG - ENGINEERING

ENG Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/ENG/)

Courses

ENG 100 Engineering Orientation credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/ENG/100/)
Orientation required of new freshmen in the College of Engineering. Approved for S/U grading only.

ENG 101 Engineering at Illinois credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/ENG/101/)
Introduction to undergraduate programs of study available in The Grainger College of Engineering and the potential careers of graduates of those programs. Intended for Division of General Studies students who may be interested in becoming an engineering major or other students who wish to explore engineering careers.

ENG 110 Communicating and Presenting in Engineering credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ENG/110/)
Technical communications skills for engineering students. Emphasis on identifying content for audience for a given presentation setting, critiquing presentations on the basis of content, delivery, and visual aids, designing slides that increase effectiveness of communication and delivery of content, and interactions in teams to design slides and present topics. Same as TE 110.

ENG 177 Engineering First-Year Experience Seminars credit: 1 to 2 Hours. (https://courses.illinois.edu/schedule/terms/ENG/177/)
Provides first-year students with opportunities to participate in interdisciplinary courses designed to help explore what is means to be an engineer and develop skills required in the engineering workplace, be it team dynamics, leadership skills, intercultural competency, or communication techniques. Students will explore topic areas offered as separate sections under the course heading. Each section uses a hands-on, interactive, discussion/team-based approach. The courses use active learning exercises in addition to reflections, readings, and project work. May be repeated in the same or separate terms for a maximum of 4 hours.

ENG 191 International Dimens of Engrg credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/ENG/191/)
Global views of the engineering profession presented by guest speakers. Key factors for success in global engineering practice, including industrial values, economics, politics, language, cultural values, and social trends. Development of individual plans to engage in international education to enhance career preparation.

ENG 198 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ENG/198/)
Subject offerings of new and developing areas of knowledge in engineering intended to augment the existing curriculum. See Class Schedule or college course information for topics and prerequisites. Approved for both letter and S/U grading. May be repeated in the same or separate terms if topics vary.

ENG 199 Undergraduate Open Seminar credit: 0 to 5 Hours. (https://courses.illinois.edu/schedule/terms/ENG/199/)
Topics will vary. See class schedule. Approved for Letter and S/U grading. May be repeated in the same or separate semesters, if topics vary.

ENG 210 Engineering Apprenticeship credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/ENG/210/)
Part-time practice of engineering science in an on-campus research laboratory environment; summary report required. Approved for both letter and S/U grading. May be repeated.

ENG 261 Technology & Mgmt Seminar credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/ENG/261/)
Same as BADM 261. See BADM 261.

ENG 298 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ENG/298/)
Subject offerings of new and developing areas of knowledge in engineering intended to augment the existing curriculum. See Class Schedule or college course information for topics and prerequisites. Approved for both letter and S/U grading. May be repeated in the same or separate terms if topics vary.

ENG 299 Engineering Study Abroad credit: 0 to 18 Hours. (https://courses.illinois.edu/schedule/terms/ENG/299/)
Illinois credit placeholder for foreign study and mechanism to maintain continuous Illinois enrollment while studying abroad. A detailed proposal must be submitted by the student for approval by the student's department and the college office prior to such study abroad. Final determination of credit and its application toward the degree is made by the college office after a review of the student's work abroad. (Summer Session, 0 to 6 hours). Approved for Letter and S/U grading. May be repeated.

ENG 300 Engineering Transfer Orientation credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/ENG/300/)
Orientation required of off-campus transfer students in the College of Engineering. Prerequisite: Restricted to first time Transfer Engineering students.

ENG 310 Engineering Internship credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/ENG/310/)
Engineering Internship is for engineering undergraduate students who are completing full-time or part-time internship or co-op that is related to their major field of study and an integral or important part of their program of study. Students participating in research-based projects should contact the Office of Undergraduate Research in Engineering to identify an appropriate course. Approved for S/U grading only. May be repeated in separate terms.

ENG 315 Learning in Community credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENG/315/)
Service-learning dedicated to benefiting nonprofit organizations. Learning through inquiry, acquisition of skills and knowledge to address projects, and development of project and team skills. Student teams work on a project of importance proposed by and in partnership with each organization. Projects vary by term. See Class Schedule. May be repeated in the same term to a maximum of 6 hours. May be repeated in separate terms to a maximum of 12 hours.

ENG 397 Undergraduate Research Abroad credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ENG/397/)
Research completed under faculty supervision at a location outside of the United States. Topics and type of assistance vary. No graduate credit. May be repeated in separate terms up to 6 hours. Prerequisite: Consent of instructor; Department and college approval of research plan submitted prior to enrollment. Not available to freshman.

ENG 398 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ENG/398/)
Subject offerings of new and developing areas of knowledge in engineering intended to augment the existing curriculum. See Class Schedule or college course information for topics and prerequisites. Approved for both letter and S/U grading. May be repeated in the same or separate terms if topics vary.

ENG 451 Success in the Workplace credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ENG/451/)
Guided experiential learning that facilitates the development of professional skills for students participating in career-related internships. Basic business skills such as reading a financial statement and annual report, understanding contracts, and understanding corporate strategy. Interpersonal skills necessary to succeed in industry such as networking, leadership, and communication. 2 undergraduate hours. No graduate credit.

ENG 471 Seminar Energy & Sustain Engrg credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/ENG/471/)
Challenges of developing energy systems and civil infrastructure that are sustainable in terms of resource availability, security, and environmental impact. Guest lecturers focus on: (i) global challenges -- future energy demand, geologic sources of energy, climate change, energy-water nexus, energy and security; (ii) markets, policies and systems -- economic incentives, policy and law, life cycle analyses; (iii) opportunities for change -- CO2 sequestration, renewable power, bioenergy feedstocks, biofuels for transportation, energy use in buildings, advanced power conversion, the smart grid. 1 undergraduate hour. 1 graduate hour. Prerequisite: MATH 220 or MATH 221; one of CHEM 104, CHEM 204, PHYS 101, PHYS 211. Recommended: NPRE 201.

ENG 491 Interdisciplinary Design Proj credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ENG/491/)
Disciplined, multi-department, team-structured project design experience with an overall (or major phase) end-of-term completion date. Projects involve design specification through a proposal, analyses of cost and other tradeoffs among alternative designs, design review, fabrication and assembly, functional and environmental testing, and demonstrations (as applicable). Reports and presentations at the end of each term. Individual engineering activities as well as team responsibilities. 1 to 4 undergraduate hours. No graduate credit. Senior standing required. May be repeated. Credit toward the degree is determined by the student's major department. Prerequisite: Consent of instructor.

ENG 498 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ENG/498/)
Subject offerings of new and developing areas of knowledge in engineering intended to augment the existing curriculum. See Class Schedule or college course information for topics and prerequisites. 1 to 4 undergraduate hours. 1 to 4 graduate hours. Approved for Letter and S/U grading. May be repeated in the same or separate terms if topics vary.

ENG 510 Engineering Practice credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/ENG/510/)
Engineering Practice is for engineering graduate students who are completing curricular practical training, either full-time or part-time, that is related to their major field of study and an integral or important part of their program of study. 0 graduate hours. No professional credit. Approved for S/U grading only. May be repeated.

ENG 571 Theory Energy & Sustain Engrg credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ENG/571/)
Mathematical, scientific, engineering, and economic bases needed to analyze sustainable energy systems and civil infrastructure. Evaluation of current practice and future development of (i) energy extraction and conversion processes from geological, biological, and non-biological resources; (ii) energy usage for transportation, in residential and commercial buildings, and by industry. 3 or 4 graduate hours. No professional credit. Prerequisite: Credit or concurrent registration in ENG 471.

ENG 572 Professional Practicum credit: 1 to 8 Hours. (https://courses.illinois.edu/schedule/terms/ENG/572/)
Internship or equivalent experience as it relates to the student's field of study. Student will complete a comprehensive written report, develop a website, and/or give an oral presentation that relates to his/her internship experience. 1 to 8 graduate hours. No professional credit. May be repeated in separate terms to a maximum of 8 hours.

ENG 573 Capstone Project credit: 1 to 8 Hours. (https://courses.illinois.edu/schedule/terms/ENG/573/)
Design project pertinent to student's field of study. Student will complete a comprehensive written report, develop a website, and/or give an oral presentation that relates to his/her project. 1 to 8 graduate hours. No professional credit. May be repeated in separate terms to a maximum of 8 hours.

ENG 591 Engineering Advanced Seminar credit: 0 or 1 Hours. (https://courses.illinois.edu/schedule/terms/ENG/591/)
Seminar on topics of current interest as announced in the Class Schedule. 0 or 1 graduate hours. No professional credit. Approved for S/U grading only. May be repeated if topics vary. Prerequisite: As specified for each topic offering, see Class Schedule for course description.

ENG 598 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ENG/598/)
Subject offerings of new and developing areas of knowledge in engineering intended to augment the existing curriculum. See Class Schedule or college course information for topics and prerequisites. May be repeated in the same or separate terms if topics vary.

ENGL - ENGLISH

ENGL Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/ENGL/)

Courses

ENGL 101 Intro to Poetry credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/101/)
Close reading and analysis of poetry and other literary texts. Introduction to argumentative strategies for writing about poetry. Addresses prosody, poetic language (diction, metaphor, image, tone), and major verse forms (the sonnet, elegy, ode, ballad, dramatic monologue, free verse). Students also study poems from a range of literary periods and movements to learn how formal qualities change and develop over time and are relevant to everyday life.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

ENGL 102 Intro to Drama credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/102/)
Explores such topics as the history of dramatic form, the major dramatic genres, the dramatic traditions of various cultures, and key terms used in the analysis of dramatic works. Reading plays from the ancient Greeks to the contemporary theatre, students will be taught skills in close reading and literary interpretation. Students will consider the importance of performance, considering how meanings might be represented through visual and aural means.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

ENGL 103 Intro to Fiction credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/103/)
An introduction to the study of literature and literary history at the university level. Explores such topics as: the historical role and place of fictional narratives, the idea of genre, relationships between context and meaning in fictional works. Student will develop a critical vocabulary for interpreting and analyzing narrative strategies. Credit is not given for both ENGL 103 and ENGL 109.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

ENGL 104 Introduction to Film credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/104/)
Thoughtful viewing of diverse films (in required weekly screenings), along with ample discussion and critical reading and writing, to gain understanding of cinematic expression and of film's capacity to entertain and to exert artistic and social influence. Same as MACS 104.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

ENGL 109 Intro to Fiction-ACP credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/109/)
Introduction to critical analysis of prose fiction. Explores a wide range of short and long fiction across historical periods; examines narrative strategies such as plot, character, and point of view. Special emphasis placed on good literary critical writing. Course is similar to ENGL 103 except for the additional writing component. Credit is not given for both ENGL 109 and ENGL 103. Prerequisite: Completion of campus Composition I general education requirement.
This course satisfies the General Education Criteria for:
Advanced Composition
Humanities - Lit Arts

ENGL 112 Literature of Global Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/112/)
Through literature and films, studies the impact of historical change on individuals and on cultures, the breakdown of borders, the building of new hierarchies of domination and exploitation, the contact and collision between the local and the global, and the transnational and problematic processes of cultural globalization. Same as CWL 112.

ENGL 114 Bible as Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/114/)
Same as CWL 111 and REL 101. See REL 101.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

ENGL 115 Intro to British Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/115/)
Acquaints students with the rich diversity of British prose, poetry, and drama. As a basic introduction to English literature, the course explores a series of literary texts, often thematically related, which appeal to modern readers and at the same time provide interesting insights into the cultural attitudes and values of the periods which produced them.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

ENGL 116 Introduction to American Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/116/)
American literature speaks in distinctive dialects that pre-date the arrival of European explorers in the Renaissance, range across centuries and continents, and intermingle a rich variety of racial, ethnic, and gendered perspectives. Genres examined in this course might include lyric poems, dystopian novels, horror stories, seduction narratives, slave narratives, political speeches, or postmodern plays. Writers studied might include Walt Whitman, Columbus, Jane Johnston Schoolcraft, Herman Melville, Edgar Allan Poe, Junot Díaz, Harriet Beecher Stowe, David Foster Wallace, Martin Luther King, and Lin-Manuel Miranda.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

ENGL 117 Shakespeare on Film credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/117/)
Explores the ongoing reinterpretation and appropriation of Shakespeare plays in twentieth- and twenty-first century film. Expect to read around five plays and analyze two productions of each play, and to consider how Shakespeare can be transformed to meet different cultural and contextual demands of the screen. Lecture and discussion. Same as MACS 117.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

ENGL 119 Literature of Fantasy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/119/)
Introduction to the rich traditions of fantasy writing in world literature. While the commercial category of fantasy post-Tolkien will often be the focal point, individual instructors may choose to focus on alternate definitions of the genre: literatures of the fantastic, the uncanny, and the weird; fantasy before the Enlightenment and the advent of realism; fantasy for young adult or child readers; and so on. Same as CWL 119.

ENGL 120 Science Fiction credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/120/)
Introduction to the study of science fiction, the genre that has both contributed to scientific knowledge and attempted to make sense of the changes that have taken place in the world since the Enlightenment, the onset of industrialization, and the acceleration of technology. Texts are taken from a variety of literary and pop culture sources: pulps and magazines, novels and films, comics and TV shows.

ENGL 121 Introduction to Comics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/121/)
Introduction to graphic narratives---comic books, comic strips, graphic novels, manga, webcomics, and so on---from a diverse panoply of cultural, formal, and historical traditions.

ENGL 122 Swords, Sorcery & Sex: The Middle Ages in Popular Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/122/)
Explores the use of medievalism in contemporary popular culture. Instructors may draw from film, television, music, fiction, graphic novels, gaming, and other sources, and they approach the material from a variety of cultural, historical, and aesthetic traditions. The goal of the course will be to understand how the medieval periods of world cultures have been reinvented in modern times, and how modernity has been constructed in relation and in opposition to the medieval imaginary. Same as MDVL 122.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

ENGL 150 Black Literature in America credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/150/)
Same as AFRO 105. See AFRO 105.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - US Minority

ENGL 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/199/)
Topics course that varies each semester and by section. The topics offered each semester will be listed in the Class Schedule. Approved for letter and S/U grading. May be repeated.

ENGL 200 Introduction to the Study of Literature and Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/200/)
Introduction to the study of literature in the twenty-first century. This course will expand your sense of what literature is and where it happens, including discussion of old and new literary forms (from novels, poems, and plays to comic books, video games, and films). Along the way, students will explore some of the literary and cultural opportunities (such as author readings, scholarly talks, and performances) available to them on a large public university campus, with two goals in mind: to develop your critical interpretive skills and to acquaint you with the discipline of literary studies as it is being practiced all around us today, both inside and outside the conventional classroom.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

ENGL 202 Medieval Literature and Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/202/)
Introduction to the diverse literatures and cultures of the global Middle Ages (Approx. 500-1500 CE). Students will read works by medieval authors in Modern English translation, with particular attention to placing works in their historical and material contexts. Same as CWL 253 and MDVL 201. Prerequisite: Completion of the Composition I requirement.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

ENGL 204 Renaissance Literature and Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/204/)
Readings in English and continental literary masterpieces with attention to significant cultural influences. Same as CWL 255. Prerequisite: Completion of the Composition I requirement.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

ENGL 206 Enlightenment Literature and Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/206/)
Study in Anglophone and global texts from the period 1600 to 1800, with attention to cultural and historical contexts. Same as CWL 257. Prerequisite: Completion of the Composition I requirement.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

ENGL 207 Romantic Literature and Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/207/)
Study of literature, philosophy, visual arts, and social criticism of the British Romantic period, with attention to broader cultural issues. Prerequisite: Completion of the Composition I requirement.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

ENGL 208 Victorian Literature and Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/208/)
While Queen Victoria was on the throne (1837-1901), Britain became a world power, but often looked backwards to the lovely worlds of the past. Many of the era's great literary works reflect this tension between realism and romance: between the realism of being a poor governess and the romance of finding true love in Jane Eyre; the tragedy of losing your best friend and the hope of emotional survival in In Memoriam; the practical work of building a useful device and the fantasy of visiting the dystopian future in The Time Machine. Literature studied in this class will include poetry, prose, drama, and fiction, possibly including works by Charlotte Brontë, Charles Dickens, Elizabeth Gaskell, Mary Seacole, Thomas Carlyle, Alfred Tennyson, Robert Browning, Christina Rossetti, William Morris, Oscar Wilde, H.G. Wells, Olive Schreiner, or George Bernard Shaw. Prerequisite: Completion of the Composition I requirement.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

ENGL 209 Early British Literature and Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/209/)
This course surveys more than a thousand years of British literature from the early Middle Ages through the Renaissance and well into the eighteenth century. But what does "British literature" really mean, especially in the context of an island archipelago populated by multiple nations (England, Ireland, Scotland, and Wales) and repeatedly subjected to foreign rule (either by violent invasion or dynastic succession)? The range of texts we thus characterize as "early British literature" is staggering, and part of our goal in this course will simply be to appreciate the sheer volume and breadth of written work created in Britain and Ireland between the sixth and eighteenth centuries. We will do this through a necessarily selective sampling of historical periods, languages, and genres. Our authors will range from the famous (e.g., Chaucer, Shakespeare, and Milton) to the lesser-known (e.g., Marie de France, Lady Mary Wroth, and Eliza Haywood) to the unknown (e.g., the anonymous Beowulf-poet). Prerequisite: Completion of the Composition I requirement and ENGL 200.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

ENGL 210 British Literature from 1800 to the Present credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/210/)
This course covers literature written during a tumultuous time in British history: first the Industrial Revolution, which created new forms of wealth from iron and steam; then the rise of the British Empire to global power; then the twentieth-century shocks of World War and decolonization. British writers responded to these transformations with passionate romantic novels, with thoughtful poems meditating on war and empire, and with visions of a more inclusive post-imperial society. Writers covered in this survey course may include Jane Austen, William Wordsworth, Mary Shelley, Charlotte Brontë, Charles Dickens, Robert Browning, Oscar Wilde, H.G. Wells, Virginia Woolf, T.S. Eliot, Philip Larkin, Hanif Kureishi, Zadie Smith, or Kazuo Ishiguro. Prerequisite: Completion of the Composition I requirement.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

ENGL 211 Introduction to Modern African Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/211/)
Same as AFST 210 and CWL 210. See AFST 210.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Non-West

ENGL 213 Modernist Literature and Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/213/)
Study of literature, philosophy, visual and performing arts, social criticism, and popular sciences of the Anglo-American Modern period (1880-1920), with attention to broad cultural issues. Prerequisite: Completion of the Composition I requirement.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

ENGL 216 Legends of King Arthur credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/216/)
Arthurian myth and legend is one of the most enduring literary traditions of Western Europe, and the characters of Arthur, Merlin, Guinevere, Lancelot, Gawain and Mordred were as popular in the Middle Ages as they are today. Originating in early medieval Wales, the legends traveled through England to France and Germany and throughout the modern world. Students will study the development of the Arthurian tradition in chronicles, poetry, romances, lais, and fabliaux, comparing variations across cultural and historical boundaries. Same as CWL 216 and MDVL 216. Prerequisite: Completion of the Composition I requirement.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

ENGL 218 Introduction to Shakespeare credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/218/)
Representative readings of Shakespeare's drama and poetry in the context of his age, with emphasis on major plays; selections vary from section to section. Prerequisite: Completion of the Composition I requirement.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

ENGL 219 Literature and Medicine credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/219/)
Introduction to the interchange between the medical and literary imaginations – how diseases, bodies, and minds get written about and represented culturally. The premise of the course is that ideas and experiences concerning our health are always mediated through the literature we read, the films we watch, and the stories we tell our doctors and that they tell us. Our focus will be on how literature and film have played and continue to play a crucial role in understanding health on local, national, and global scales.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

ENGL 220 Literature and Science credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/220/)
Explores the mutual influences of science and literature in some key literary and non-literary texts. Covers scientific texts, literary works, and cultural theory to explore how and why scientific knowledge is intimately linked to literature.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

ENGL 221 Speculative Futures credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/221/)
Introduces majors and non-majors to several important conversations arising from the expansive genre of speculative fiction. In this course students will explore some of the most profound, disturbing, and downright bizarre imaginings of the future that human beings have generated. Climate change, ageing, fascist regimes, reproductive rights, technological failures, scientific advancements, and apocalypse are just a few of the possible topics for this class. Course materials will be drawn from literary works, contemporary and historical scientific developments, and cultural theory to explore how and why speculative futures are linked to specific cultural contexts, technologies, and social schemes.

ENGL 222 Jewish American and US Minority Literatures in Dialogue credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/222/)
Same as CWL 209 and JS 209. See JS 209.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - US Minority

ENGL 223 Jewish Storytelling credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/223/)
Same as CWL 221, JS 220, REL 220, and YDSH 220. See YDSH 220.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

ENGL 224 Latina/o Popular Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/224/)
Same as LLS 240 and SPAN 240. See LLS 240.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

ENGL 225 Intro to Latina/o Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/225/)
Same as LLS 242 and SPAN 242. See LLS 242.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - US Minority

ENGL 241 Modern Poetry credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/241/)
Studies poetry in English during the first half of the twentieth century, including Modernist experimentalism and its aftermath. Class time focuses on close readings of poems by major figures such as W. B. Yeats, T. S. Eliot, Ezra Pound, H.D., Hart Crane, Claude McKay, Robert Lowell, Elizabeth Bishop, W. H. Auden, and Langston Hughes. Prerequisite: Completion of the Composition I requirement.
This course satisfies the General Education Criteria for:
Cultural Studies - Western

ENGL 242 Contemporary Poetry credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/242/)
Explores the diversity of poetry in English from 1960 to the present, focusing on various poetic movements (the Beats, confessionals, New York school, ecopoetics, postcolonial poetry, poetry of witness, and spoken word). Poets for consideration include Allen Ginsberg, Sylvia Plath, Adrienne Rich, Frank O'Hara, Gary Snyder, Derek Walcott, Carolyn Forché, Sharon Olds, Rita Dove, and Mark Doty. Prerequisite: Completion of the Composition I requirement.

ENGL 245 The Short Story credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/245/)
Historical and critical study of the short story (American and European) from the early nineteenth century to the present. Same as CWL 267. Prerequisite: Completion of the Composition I requirement.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

ENGL 247 The British Novel credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/247/)
A study of some of the more noteworthy and influential writers of the last two hundred and fifty years. The course traces the development of the novel as a genre that both celebrated and critiqued Britain and British nationalism. Examines how the novel has been important culturally over time. Prerequisite: Completion of the Composition I requirement.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

ENGL 248 British, American, and Continental Fiction credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/248/)
Same as CWL 269. See CWL 269.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

ENGL 250 Nineteenth-Century American Fiction credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/250/)
Nineteenth-century fiction gave us some of the most iconic images in American culture--the scarlet letter, the white whale--and some of the most captivating works about American life and society. This course will explore how fictional texts articulated the problems of nineteenth-century democracy, including the crises over slavery leading to the Civil War, and the rise of large-scale capitalism and urban modernity later in the century. We will look at such literary movements as sentimentalism, sensationalism, realism, and naturalism, among others. Writers studied might include Herman Melville, Edith Wharton, Nathaniel Hawthorne, Harriet Beecher Stowe, Henry James, Charles Chesnutt, Mark Twain, Pauline Hopkins, Catharine Maria Sedgwick, and many others. Prerequisite: Completion of the Composition I requirement.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

ENGL 251 The Twentieth-Century American Novel credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/251/)
Critical study of selected American novels from the twentieth century. Prerequisite: Completion of the Composition I requirement.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

ENGL 253 Topics in Literature and New Media credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/253/)
Introduction to the role technological invention has played in history of print media and how literary aesthetics are changing with the advent of new media, such as software, video games, and graphic novels. We will consider material formats, genres, and modes of production along with the cultural, political, and societal implications of different forms and formats. May be repeated in separate terms up to 6 hours.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

ENGL 255 Early American Literature and Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/255/)
This large-scale survey course offers students background in a wide range of genres, authors, and texts, focusing on "early American literature," which ranges from pre-Columbian indigenous narratives to nineteenth century novels, poems, and plays. The material studied ranges across multiple centuries and continents, and includes a wide variety of racial, ethnic, and gendered perspectives. Writers may include Christopher Columbus, Anne Bradstreet, Benjamin Franklin, Phillis Wheatley, William Apess, Nathaniel Hawthorne, Edgar Allan Poe, Frederick Douglass, Henry David Thoreau, Herman Melville, Harriet Jacobs, Walt Whitman, and Emily Dickinson. Prerequisite: Completion of the Composition I requirement and ENGL 200.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

ENGL 256 Survey of American Lit II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/256/)
American literature and its cultural backgrounds after 1870. Prerequisite: Completion of the Composition I requirement and ENGL 200.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

ENGL 259 Early African American Literature and Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/259/)
An introduction to the study of early African American literary and cultural production, ranging from the earliest writings by African descended people in British North America in the eighteenth century to the end of World War I. At each turn, we will situate texts in their cultural and historical contexts, attending not only to the specificity of a particular text's moment, but also to the forces of contingency and tradition at play in the construction of literary, cultural, and political communities. Throughout our discussions we will think about both the "African-ness" and "American-ness" of African American literature as collective and imaginative processes. Early African Americans wrote for a variety of reasons—philosophical, political, pleasurable, instrumental—and protesting slavery and racism was just one (albeit an important one) among many of those reasons. We will read letters, poems, sermons, songs, constitutions and bylaws for religious and civic organizations, stories, and texts that defy easy categorization. Writers may include Phillis Wheatley, David Walker, Maria Stewart, Frederick Douglass, Harriet Jacobs, Frances E.W. Harper, William Wells Brown, W.E.B. Du Bois, Pauline Hopkins, Charles Chesnutt, Paul Lawrence Dunbar, Alice Dunbar Nelson, and Ida B. Wells. Same as AFRO 259 and CWL 259. Prerequisite: Completion of the Composition I requirement.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

ENGL 260 Modern African American Literature and Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/260/)
Historical and critical study of African American literature in its social and cultural context between 1915 and 1980. Same as AFRO 260 and CWL 260. Prerequisite: Completion of the Composition I requirement.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

ENGL 261 Topics in Literature and Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/261/)
Introductory study of variety of topics in literature and culture, including those that bridge traditional historical periods, focus on themes or movements, and cross disciplinary boundaries. May be repeated up to 6 hours, if topics vary. Prerequisite: Completion of the Composition I requirement.

ENGL 265 Intro to American Indian Lit credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/265/)
Same as AIS 265. See AIS 265.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - US Minority

ENGL 266 Grimm's Fairy Tales in Context credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/266/)
Same as CWL 254 and GER 251. See GER 251.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

ENGL 267 Grimms' Fairy Tales - ACP credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/267/)
Same as CWL 250 and GER 250. See GER 250.
This course satisfies the General Education Criteria for:
Advanced Composition
Humanities - Lit Arts
Cultural Studies - Western

ENGL 268 The Holocaust in Context - ACP credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/268/)
Same as CWL 271 and GER 260. See GER 260.
This course satisfies the General Education Criteria for:
Advanced Composition
Humanities - Lit Arts
Cultural Studies - Western

ENGL 269 The Holocaust in Context credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/269/)
Same as CWL 273, GER 261, and JS 261. See GER 261.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

ENGL 270 American Film Genres credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/270/)
Introduction to the study of the dominant genres or types U.S. cinema. Examines the elements that constitute genres (such as visual and narrative patterns), the formation and reshaping of genres by filmmakers and the entertainment industry, the social and cultural factors that influence the genre cycles and subgenres, and the landmark works of each genre. The course treats several genres in historical perspective or focus on a single genre. May be repeated in separate terms up to 6 hours if topics vary.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

ENGL 272 Minority Images in Amer Film credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/272/)
Addresses how a range of films made in the United States have represented diverse ethnicities and cultures in relation to each other and to dominant American media conventions and social ideas.
A comparative, case study approach examines racial and gender stereotyping, historical and economic factors, and reactions of various audiences to the films. Same as AFRO 272. Prerequisite: Fulfillment of the Composition I English requirement; sophomore standing or above.

ENGL 273 American Cinema, 1950-2000 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/273/)
Explores key issues in America cinema during the second half of the twentieth century, connecting central problems of film studies (e.g., authorship, genre, narratology, style, gender analysis, and the spectacle of violence) to moments of major transition in the American film industry (e.g., the Red Scare and the end of the Production Code in the 1950s; the emergence of the New Hollywood and the breakdown of the studio system in the 1960s; and the rise of the mega-blockbuster in the 1970s). Same as MACS 273. Prerequisite: Completion of the Composition I requirement.

ENGL 275 Am Indian and Indigenous Film credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/275/)
Same as AIS 275 and MACS 275. See AIS 275.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - US Minority

ENGL 276 Asian Film Genres credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/276/)
Studies a variable selection of popular film genres produced and circulated in Asia (e.g., martial arts, horror, musicals, anime, melodramas, science fiction, monster movies, comedy) that have an impact across the region, with emphasis on East and Southeast Asia, and beyond. Takes a historical and transnational comparative approach to analyzing shifting narrative and visual and other cinematic realizations of each genre across different contexts, including Western reception and cross-cultural adaptations. Same as CWL 276 and EALC 276.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Non-West

ENGL 277 Gender in Gaming credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/277/)
Same as GWS 204 and MACS 204. See GWS 204.

ENGL 280 Women Writers credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/280/)
Study of British and American women authors. Same as GWS 280. May be repeated with permission of English advising office to a maximum of 6 hours if topics vary. Prerequisite: Completion of the Composition I requirement.

ENGL 281 Women in the Literary Imagination credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/281/)
Study of the way writers of all genders have portrayed women's images, social roles, and psychologies in British, American, or Anglophone literatures. Same as GWS 281. May be repeated in separate semesters to a maximum of 6 hours if topics vary; with permission from English advising office. Prerequisite: Completion of the Composition I requirement.

ENGL 284 Modern Jewish Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/284/)
Same as CWL 284, JS 284, and REL 284. See JS 284.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

ENGL 285 Postcolonial Literature in English credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/285/)
Examination of selected postcolonial literature, theory, and film as texts that "write back" to dominant European representations of power, identity, gender and the Other. Postcolonial writers, critics and filmmakers studied may include Franz Fanon, Edward Said, Aime Cesaire, Ousmane Sembene, Chinua Achebe, Michelle Cliff, Mahesweta Devi, Buchi Emecheta, Derek Walcott and Marlene Nourbese-Philip. Prerequisite: Completion of the Composition I requirement.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Non-West

ENGL 286 Asian American Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/286/)
Introduction to Asian American literary studies and culture through the reading of major works of literature selected from but not limited to the following American ethnic subgroups: Chinese, Filipino, Japanese, Korean, Indian, Pakistani, and Vietnamese. Same as AAS 286. Prerequisite: Completion of the Composition I requirement.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - US Minority

ENGL 290 Individual Study credit: 0 to 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/290/)
Study of selected topics. Approved for both letter and S/U grading. May be repeated to a maximum of 6 hours. Students may register in more than one section per term. Prerequisite: Consent of instructor.

ENGL 293 The Anthropocene credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/293/)
Focuses on the current historical period of humans' relative dominance over major Earth systems. Introduces students to debates surrounding the scientific basis for the Anthropocene, followed by a survey of its major historical periodizations, from the so-called "Paleo-Anthropocene" of human agriculture, to industrialization, to the post-1950 "Great Acceleration" in economic development and resource consumption whose consequences we now face in crisis phenomena such as climate change, water scarcity, resource wars, and environmental refugeeism. Same as ESE 293.

ENGL 301 Introduction to Critical Theory credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/301/)
Introduction to the critical frameworks and methods that have had the greatest impact on the field of literary studies. Students will read, discuss, and write about numerous theoretical approaches, including (but not limited to) critical race studies, ecocriticism, feminism, Marxism, postcolonialism, poststructuralism, psychoanalysis, queer theory, and structuralism. No previous background with theory is required. Prerequisite: Completion of the Composition I requirement; one year of college literature or consent of instructor. For majors only.

ENGL 310 Introduction to the Study of the English Language credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/310/)
Topics in the study of the English language, with emphasis on one or more of the following: the social, political, historical, technological, legal, and economic aspects of language use. Credit is not given for both ENGL 311 and ENGL 310.

ENGL 311 History of the English Language credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/311/)
Language variation and change from the earliest forms of English to the present day, with emphasis on the rise of Standard English and the social, geographic, and cultural aspects of linguistic change in English. Credit is not given for both ENGL 310 and ENGL 311.

ENGL 322 Dostoevsky credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/322/)
Same as CWL 324 and RUSS 322. See RUSS 322.

ENGL 323 Tolstoy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/323/)
Same as CWL 323 and RUSS 323. See RUSS 323.

ENGL 325 Topics in LGBT Literature and Film credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/325/)
Explores topics on representations of non-heteronormative sexuality in canonical and recovered historical texts and in contemporary literature, on literature by LGBT authors, and on theories of sexuality that pertain to systems of textual and cultural meaning. May be repeated in separate terms to a maximum of 6 hours, if topics vary.

ENGL 330 Slavery and Identity credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/330/)
Explores slavery in the Americas through its representation in literature over time. Using a variety of disciplinary approaches, we will look at the enslaved, the enslavers, and the middle merchants who facilitated the slave trade, and will examine the experience of slavery and the economic, political, religious, and scientific justifications used to maintain it. We will also examine the African cultural traditions from which the slaves emerged and the aspects of it that lent to creation of the new U.S. culture.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - US Minority

ENGL 333 Memoir & Autobiography credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/333/)
Same as GWS 333. See GWS 333.

ENGL 350 Writing about Literature, Text, and Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/350/)
Writing-intensive, variable-topic course designed to improve English majors' ability to produce clear, well-organized, analytically sound and persuasively argued essays relevant to English studies. Introduces students to research techniques through the examination of critical texts appropriate to the course topic. Credit is not given for ENGL 300 and ENGL 350. Prerequisite: Completion of the Composition I requirement; one year of college literature or consent of instructor. For majors only.
This course satisfies the General Education Criteria for:
Advanced Composition

ENGL 357 Literatures of the Displaced credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/357/)
Same as AAS 357, AIS 357, GWS 357, and LLS 357. See LLS 357.

ENGL 359 Responses to the Holocaust credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/359/)
Same as CWL 320, JS 320, REL 320, and YDSH 320. See CWL 320.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

ENGL 360 Environmental Writing credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/360/)
Same as ESE 360. See ESE 360.
This course satisfies the General Education Criteria for:
Advanced Composition

ENGL 373 Special Topics in Film Studies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/373/)
Extended investigation of major subjects and issues in cinema and other media; topics vary and typically include studies of author/directors, genres, historical movements, critical approaches, and themes. Same as MACS 373. May be repeated with permission of English advising office to a maximum of 6 hours if topics vary. Prerequisite: One college-level course in film studies or literature.

ENGL 374 World Cinema in English credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/374/)
Course systematically addresses cinema movements and films of different periods, genres, themes and styles produced in one or two Anglophone countries other than the U.S. (e.g., Great Britain, Ireland, Australia, New Zealand, Canada, South Africa, and regions with Anglophone film movements or strands like South Asia and the Caribbean). Topics could include cinema in relation to relevant distinctive national and cultural histories, local audiences and production circumstances, and the challenges of international distribution in light of Hollywood's global dominance. Meets for 110 minutes twice a week, with some class time devoted to film screenings (not always on same day) and some longer feature films scheduled in required out-of-class screenings announced well in advance. May be repeated to a maximum of 6 credit hours in separate terms if topics vary.

ENGL 378 Fairy Tales & Gender Formation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/378/)
Same as GWS 378. See GWS 378.

ENGL 380 Topics in Writing Studies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/380/)
Advanced-level work in the field of Writing Studies. Building upon a traditional disciplinary understanding of writing as rhetoric, this course invites students to call upon sociological, anthropological, and/or ideological approaches to the study of writing in order to understand the myriad ways that writing makes meaning(s). See Class Schedule for topics. May be repeated in separate terms to a maximum of 6 hours. Prerequisite: Completion of the Composition I requirement.

ENGL 390 Advanced Individual Study credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/390/)
Advanced study of selected topics. Approved for both letter and S/U grading. May be repeated in the same or separate terms to a maximum of 6 hours. Prerequisite: Consent of instructor.

ENGL 391 Honors Individual Study credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/391/)
Study of selected topics. Restricted to English and English education majors with a 3.33 average who are working towards the degree with distinction in English or in English education. May be repeated to a maximum of 6 hours. Prerequisite: Enroll in undergraduate advising office.

ENGL 396 English Honors Seminar credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/396/)
An open-topic, discussion-oriented seminar aimed at majors who have shown high skill and intensive interest in the area of English studies. May be repeated up to 6 hours in the same term to a maximum of 12 hours. Prerequisite: A 3.33 grade point average or consent of the English Department's Director of Undergraduate Studies. Restricted to English majors.

ENGL 400 Senior Capstone Seminar credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/400/)
In this senior-year capstone required for students in the Topics in English concentration of the English major (and optional for those in English and English Teaching concentrations), students will work in dialogue with their classmates and professor to develop a major project of their own design: a single thesis-like paper, an electronic project, or a connected portfolio of smaller projects. Capstone projects will consolidate students' previous study of English and help each student assess what they have learned, bringing their studies to a sense of completion and providing a direction for their future interests. 3 undergraduate hours. No graduate credit. Prerequisite: Restricted to senior English majors.

ENGL 402 Descriptive English Grammar credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/402/)
An introduction to English linguistics with emphasis on the phonetic, syntactic, and semantic structures of English; language variation, standardization, and change; language legislation and linguistic rights; English as a world language; and the study of language in American schools. Same as BTW 402. 3 undergraduate hours. 4 graduate hours.

ENGL 404 Engl Grammar for ESL Teachers credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/404/)
Same as EIL 422. See EIL 422.

ENGL 407 Introduction to Old English credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/407/)
Introduction to the form of English spoken and written prior to about AD 1100. Exploring concepts of cultural, historical, and linguistic change, students will learn to read Old English texts in the original. Readings include examples from the prose tradition (e.g., Bede's story of the poet Cædmon and Ælfric's Lives of Saints) as well as poetic texts (e.g., The Dream of the Rood and The Wanderer). Same as MDVL 407. 3 undergraduate hours. 4 graduate hours.

ENGL 411 Chaucer credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/411/)
A selection of Chaucer's major works read in Middle English. Instructors will usually emphasize either the Canterbury Tales or Troilus and Criseyde and the dream visions, but alternate combinations of texts are possible. Students will also be introduced to Chaucer's fourteenth-century context. Same as MDVL 411. 3 undergraduate hours. 4 graduate hours. Prerequisite: One year of college literature or consent of instructor.

ENGL 412 Topics in Medieval British and Irish Literature credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/412/)
Advanced topics course exploring the literatures of medieval Britain and Ireland, concentrating on texts in Old and/or Middle English but with some attention to Celtic, French, Latin, and Norse texts in translation. Same as CWL 417 and MDVL 410. 3 undergraduate hours. 4 graduate hours. May be repeated with permission of English advising office to a maximum of 6 undergraduate hours if topics vary; Graduate students may repeat if topics vary. Prerequisite: One year of college literature or consent of instructor.

ENGL 416 Topics in British Drama to 1660 credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/416/)
Advanced topics course devoted to dramatic practice in the medieval and/or early modern British Isles. 3 undergraduate hours. 4 graduate hours. May be repeated with permission of English advising office to a maximum of 6 undergraduate hours if topics vary; Graduate students may repeat if topics vary. Prerequisite: One year of college literature or consent of instructor.

ENGL 418 Shakespeare credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/418/)
Survey of the plays and poems of William Shakespeare. Reading assignments will reflect the generic diversity and historical breadth of Shakespeare's work. 3 undergraduate hours. 4 graduate hours. Prerequisite: One year of college literature or consent of instructor.

ENGL 421 Renaissance Poetry and Prose credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/421/)
Advanced study of poetry and prose written between the reign of Elizabeth I and the late seventeenth century. Authors may include Philip Sidney, Edmund Spenser, Ben Jonson, Mary Wroth, John Donne, Katherine Philips, Andrew Marvell, Margaret Cavendish, and others. 3 undergraduate hours. 4 graduate hours. Prerequisite: One year of college literature or consent of instructor.

ENGL 423 Milton credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/423/)
3 undergraduate hours. 4 graduate hours. Prerequisite: One year of college literature or consent of instructor.

ENGL 427 Eighteenth-Century Literature credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/427/)
Advanced study of British literature between 1660 (the restoration of Charlies II to the throne) and 1800. The course focuses on poems, plays, novels, and nonfiction works from the period, paying particular attention to issues of gender relations, colonialism, imperial expansion, the slave trade, and class tensions. Writers covered may include Aphra Behn, Mary Astell, Joseph Addison, Bernard Mandeville, Alexander Pope, Daniel Defoe, Lady Mary Wortley Montagu, Eliza Heywood, Jonathan Swift, Samuel Richardson, Henry Fielding, Charlotte Lennox, Samuel Johnson, Laurence Sterne, Olaudah Equiano, Charlotte Smith, Mary Wollstonecraft, and others. 3 undergraduate hours. 4 graduate hours. Prerequisite: One year of college literature or consent of instructor.

ENGL 428 British Drama, 1660-1800 credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/428/)
Focused study of the major male and female playwrights who wrote between 1660 (the reopening of the theaters after the Interregnum) and roughly 1800. Particular attention will be devoted to the social, cultural, political, and economic contexts of theatrical performance, and to the major issues dealt with on the London stage: sexual morality, the role of women in a patrilineal society, and the problems of empire, trade, and colonialism. 3 undergraduate hours. 4 graduate hours. Prerequisite: One year of college literature or consent of instructor.

ENGL 429 Eighteenth-Century Fiction credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/429/)
Focused study of British and Anglophone fiction in the eighteenth century. Authors may include Defoe, Swift, Haywood, Fielding, Richardson, Sterne, Burney, Walpole, Radcliffe, and others. 3 undergraduate hours. 4 graduate hours. Prerequisite: One year of college literature or consent of instructor.

ENGL 431 Topics in British Romantic Literature credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/431/)
Focused study of British literature between roughly 1785 and 1832. Authors may include Wollstonecraft, Wordsworth, Coleridge, Keats, Byron, Austen and others. 3 undergraduate hours. 4 graduate hours. Prerequisite: One year of college literature or consent of instructor.

ENGL 435 Nineteenth-Century British Fiction credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/435/)
From Jane Austen's witty couples to Charles Dickens's haunted reformers and Bram Stoker's aristocratic vampires, the characters, stories, and novels created by British writers in the nineteenth century still fascinate us today. This research class gives students a chance to read deeply in the prose fiction of this period; texts may include William Thackeray's Vanity Fair, Emily Brontë's Wuthering Heights, Oscar Wilde's The Picture of Dorian Gray, Wilkie Collins's The Moonstone, and Joseph Conrad's Heart of Darkness. 3 undergraduate hours. 4 graduate hours. May be repeated with permission of English advising office to a maximum of 6 undergraduate hours if topics vary; Graduate students may repeat if topics vary. Prerequisite: One year of college literature or consent of instructor.

ENGL 441 Innovation and Conflict in British and Irish Modernism credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/441/)
This course will examine British and Irish modernism, one of the most dynamic, provocative, and experimental periods in literary history. The early decades of the twentieth century witnessed the rapid introduction of new technologies, the upheaval of global politics, the radical transformation of gender roles, and the traumatic fallout from two world wars. The period's literature and art processed these turbulent cultural experiences through extreme formal experimentation, and this course will consider many of the key works emerging from the modernist and avant-garde movements. Among the authors we'll study are Joseph Conrad, W. B. Yeats, James Joyce, Virginia Woolf, T.S. Eliot, Charlie Chaplin, and Samuel Beckett. 3 undergraduate hours. 4 graduate hours. Prerequisite: One year of college literature or consent of instructor.

ENGL 442 Contemporary British and Irish Literature credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/442/)
This course considers how the unresolved problems of the past continue to haunt the literature of contemporary Britain, Ireland, and the postcolonial Anglophone world. These "returns of the repressed" range from personal traumas and difficult truths that have not been fully processed to groups of people who have suffered systematic inequality and violence. The texts we will read in ENGL 442 address the traumatic collapse of the post-war British empire, focusing not only on Britain's uneasy relationship to immigrants and postcolonial subjects but also on shifting gender roles, changing conceptions of sexual identity, and anxieties about literature's continued relevance in the context of new media. Readings may include works by Pat Barker, Kazuo Ishiguro, Ian McEwan, Hanif Kureishi, Zadie Smith, Tom McCarthy, Angela Carter, and Jeanette Winterson. 3 undergraduate hours. 4 graduate hours. Prerequisite: One year of college literature or consent of instructor.

ENGL 449 American Romanticism credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/449/)
Inspired by waves of radical thought and experimental writing that swept across Europe around 1800, Romanticism came late to America and stayed longer than it did across the Atlantic. This class examines the period known as "American Romanticism" (1820-1865), which saw the rise of a rich national literature even as the nation itself teetered on the edge of collapse, tested by economic panics, westward expansion, brawling electoral politics, and fierce debates over the future of slavery. Writers appearing in this course might include Washington Irving, Frederick Douglass, Edgar Allan Poe, Ralph Waldo Emerson, Harriet Jacobs, Henry David Thoreau, Herman Melville, Fanny Fern, Harriet Beecher Stowe, Walt Whitman, and Emily Dickinson. 3 undergraduate hours. 4 graduate hours. Prerequisite: One year of college literature or consent of instructor.

ENGL 450 Becoming Modern: American Literature, 1865-1914 credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/450/)
After the Civil War the United States entered a period of accelerating modernization and change. This course addresses how the nation's writers helped build modern America in response to a host of exciting and daunting developments in economics, science, and politics, including the enfranchisement of African Americans, Jim Crow segregation laws, growing income inequality, the rise of unions and anarchist movements, the invention of the automobile and the department store, new sciences such as including Darwinism and psychoanalysis, and American empire-building in places like Hawai'i and the Philippines. Writers studied might include Emily Dickinson, Mark Twain, Henry James, Booker T. Washington, W.E.B. DuBois, Zitkala-Sa, Stephen Crane, William Dean Howells, and Edith Wharton. 3 undergraduate hours. 4 graduate hours. Prerequisite: One year of college literature or consent of instructor.

ENGL 451 American Literature in the Age of Modernism credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/451/)
American literature in the age of Modernism includes some of the most influential and provocative writing in the nation's history. American writers responded to a series of upheavals including changing gender and race relations, World War I, the "Roaring Twenties," and the Great Depression by pursuing both boundary-breaking themes and revolutionary experiments in form. Readings will include a generous selection from such writers as Ernest Hemingway, F. Scott Fitzgerald, Robert Frost, Willa Cather, Gertrude Stein, Wallace Stevens, William Carlos Williams, T. S. Eliot, Langston Hughes, Dorothy Parker, Anita Loos, William Faulkner, Nella Larsen, Zora Neale Hurston, Dashiell Hammett, D'Arcy McNickle, Carson McCullers, and many others. 3 undergraduate hours. 4 graduate hours. Prerequisite: One year of college literature or consent of instructor.

ENGL 452 The Postwar Era and Contemporary American Literature credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/452/)
Examines American literature from the end of WWII to today, an era when U.S. society, politics, and culture came under pressure from such upheavals as the feminist movement, the Civil Rights movement, the Cold War, Vietnam, and the rise of neoliberalism--all of them occurring under the ever-present threat of nuclear annihilation. While writers struggled with the changes and dangers of a nation and world in such unprecedented flux, the poetry, plays, fiction, memoirs, and films they produced in response to this new precariousness forged a fertile artistic moment, in popular literature that sustained previous traditions (in realism, science fiction, children's literature, and romance) and in an avant-garde opposed to all forms of social and literary conformity. Writers studied might include Gwendolyn Brooks, Thomas Pynchon, Amiri Baraka, David Foster Wallace, Toni Morrison, Tony Kushner, Ursula K. Le Guin, and Alice Walker. 3 undergraduate hours. 4 graduate hours. Prerequisite: One year of college literature or consent of instructor.

ENGL 455 Major Authors credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/455/)
Intensive study of the work of one or two major authors. 3 undergraduate hours. 4 graduate hours. May be repeated with permission of English advising office to a maximum of 6 undergraduate hours if topics vary. May be repeated for graduate credit if topics vary. Prerequisite: One year of college literature or consent of instructor.

ENGL 458 Latina/o Performance credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/458/)
Same as LLS 458. See LLS 458.

ENGL 459 Topics in American Indian Lit credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/459/)
Same as AIS 459. See AIS 459.

ENGL 460 Literature of American Minorities credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/460/)
Advanced topics seminar exploring literary expressions of minority experience in America. 3 undergraduate hours. 4 graduate hours. May be repeated with permission of English advising office to a maximum of 6 undergraduate hours if topics vary; Graduate students may repeat if topics vary. Graduate students may repeat as topics vary. Prerequisite: One year of college literature or consent of instructor.

ENGL 461 Advanced Topics in Literature and Culture credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/461/)
Advanced seminar on any of a variety of topics in literature and culture, including those that bridge traditional historical periods, focus on themes or movements, and cross disciplinary boundaries. 3 undergraduate hours. 4 graduate hours. May be repeated with permission of English advising office to a maximum of 6 undergraduate hours if topics vary; Graduate students may repeat if topics vary. Prerequisite: One year of college literature or consent of instructor.

ENGL 462 Topics in Modern Fiction credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/462/)
Advanced seminar devoted to topics in British, American, and Anglophone fiction from approximately 1800 to the present day. Continental fiction in English translation may occasionally be considered. 3 undergraduate hours. 4 graduate hours. May be repeated with permission of English advising office to a maximum of 6 undergraduate hours if topics vary. May be repeated for graduate credit if topics vary. Prerequisite: One year of college literature or consent of instructor.

ENGL 467 Multimedia Environmental Communications credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/467/)
Same as ESE 467. See ESE 467.

ENGL 470 Modern African Fiction credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/470/)
Same as AFST 410, and CWL 410. See AFST 410.

ENGL 475 Literature and Other Disciplines credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/475/)
Advanced topics seminar exploring the intersection of literary study and other scholarly disciplines. The disciplines students study vary each term, but past courses have examined connections between literature and psychology, forensic science, environmental studies, and the law. 3 undergraduate hours. 4 graduate hours. May be repeated with permission of English advising office to a maximum of 6 undergraduate hours if topics vary; Graduate students may repeat if topics vary. Prerequisite: One year of college literature or consent of instructor.

ENGL 476 Topics in Literature and the Environment credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/476/)
From the developing field of "ecocriticism" to new historical examinations of canonical writers such as Thomson, Thoreau, or the "nature poets", to the new field of Science Studies, this advanced seminar examines a range of specialized topics related to literature and the environment. 3 undergraduate hours. 4 graduate hours. May be repeated in separate semesters for graduate credit if topics vary; for undergraduates to a maximum of 6 undergraduate hours if topics vary with permission of the English advising office. Prerequisite: One year of college literature or consent of instructor.

ENGL 477 Advanced Environmental Writing credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/477/)
Introduces students to the challenges of "turning data into narrative." With a focus on students' professional development as writers, this course emphasizes the research and rhetorical skills required to communicate current scientific research in earth and environmental science through non-fiction narrative forms--the investigative essay, long-form journalism, personal memoir, and op-ed--aimed at a general audience. Same as ESE 477. 3 undergraduate hours. No graduate credit. This course satisfies the General Education Criteria for:
Advanced Composition

ENGL 481 Composition Theory and Practice credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/481/)
Study of the history and theory of written composition. This course explores basic rhetorical principles, various theoretical perspectives in the field of composition/rhetoric, and helps students form practical approaches to the guidance of, response to, and structuring of student writing. 3 undergraduate hours. 4 graduate hours. Prerequisite: One year of college literature or consent of instructor.

ENGL 482 Writing Technologies credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/482/)
Examines the relationship of computer technology to the larger field of writing studies. Topics include a historical overview of computers and other writing technologies; current instructional practices and their relation to various writing theories; research on word processing, computer-mediated communication, and hypermedia; and the computer as a research tool. 3 undergraduate hours. 4 graduate hours. Prerequisite: Junior standing and consent of instructor. Students must have a basic knowledge of word processing.

ENGL 485 Literature for the High School credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/485/)
3 undergraduate hours. 4 graduate hours. Prerequisite: One year of college literature or consent of instructor.

ENGL 486 History of Translation credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/486/)
Same as CLCV 430, CWL 430, GER 405, SLAV 430, SPAN 436, and TRST 431. See SLAV 430.

ENGL 498 Environmental Writing for Publication credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/498/)
Same as ESE 498. See ESE 498.

ENGL 500 Intro to Criticism & Research credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/500/)
Introductory course in methods and techniques in research and literary criticism.

ENGL 503 Historiography of Cinema credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/503/)
Same as CWL 503 and MACS 503. See MACS 503.

ENGL 504 Theories of Cinema credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/504/)
Same as CWL 504 and MACS 504. See MACS 504.

ENGL 505 Writing Studies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/505/)
Reviews theory and research on the social and historical development of writing systems, including consideration of the relationship between oral and written language, writing and other graphic representation systems, alternative technologies, the evolution of writing systems, and the social functions of literacy. Same as CI 563. Prerequisite: Admission to the graduate programs of a unit offering the graduate specialization in Writing Studies, or consent of instructor.

ENGL 514 Seminar in Medieval Literature credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/514/)
Intensive study of selected texts, genres, themes, or theoretical issues in medieval British literature (usually focusing on either Old English or Middle English texts), or of scholarly methods in medieval studies (such as editing, paleography, or bibliography and methods of historical research). Same as MDVL 514. May be repeated if topics vary. Prerequisite: A college course devoted entirely to an aspect of medieval studies or consent of instructor.

ENGL 519 Seminar in Shakespeare credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/519/)
May be repeated if topics vary. Prerequisite: A college course devoted entirely to an aspect of Shakespeare's work or consent of instructor.

ENGL 524 Seminar in Early Modern Literature credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/524/)
Seminar dedicated to the study of texts, genres, themes, and/or theoretical issues from the non-Shakespearean literature of the early modern period (approximately 1500-1700). 4 graduate hours. No professional credit. May be repeated in separate terms to a maximum of 16 hours, if topics vary. Prerequisite: A college course devoted entirely to an aspect of Renaissance studies or consent of instructor.

ENGL 527 Seminar in 18th C Literature credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/527/)
May be repeated if topics vary. Prerequisite: A college course devoted entirely to an aspect of eighteenth-century studies or consent of instructor.

ENGL 533 Seminar Romantic Lit credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/533/)
May be repeated if topics vary. Prerequisite: A college course devoted entirely to an aspect of Romantic studies or consent of instructor.

ENGL 537 Seminar Victorian Lit credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/537/)
May be repeated if topics vary. Prerequisite: A college course devoted entirely to an aspect of Victorian studies or consent of instructor.

ENGL 543 Seminar Mod British Lit credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/543/)
May be repeated if topics vary. Prerequisite: One college course devoted entirely to an aspect of modern British studies or consent of instructor.

ENGL 547 Seminar Earlier American Lit credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/547/)
May be repeated if topics vary. Prerequisite: One college course devoted entirely to an aspect of American studies or consent of instructor.

ENGL 553 Seminar Later American Lit credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/553/)
May be repeated if topics vary. Prerequisite: One college course devoted entirely to an aspect of American studies or consent of instructor.

ENGL 559 Seminar Afro-American Lit credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/559/)
May be repeated if topics vary. Prerequisite: One college course devoted entirely to an aspect of American literature or consent of instructor.

ENGL 563 Seminar Themes and Movements credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/563/)
May be repeated if topics vary. Prerequisite: One year of graduate study of literature or consent of instructor.

ENGL 564 Seminar Lit Modes and Genres credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/564/)
May be repeated if topics vary. Prerequisite: One year of graduate study of literature or consent of instructor.

ENGL 578 Seminar Lit &Other Disciplines credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/578/)
May be repeated if topics vary. Prerequisite: One year of graduate study of literature or consent of instructor.

ENGL 581 Seminar Literary Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/581/)
May be repeated if topics vary. Prerequisite: A college course devoted entirely to criticism or consent of instructor.

ENGL 582 Topics Research and Writing credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/582/)
Focuses on the diverse research paradigms that are often employed in the study of writing processes. Topics will vary each term. Examines past and current writing research in the topic area with an emphasis on the critical examination of research designs and the influence of epistemologies on the interpretation of data. Same as CI 565. May be repeated to a maximum of 8 hours. Prerequisite: Graduate standing in writing studies or consent of instructor.

ENGL 583 Topics Writ Pedagogy & Design credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/583/)
Examines the relationships among writing studies, theories of pedagogy, and the practice of the writing teacher and administrator. Also focuses on particular problems or particular schools of thought. Typical topics include Writing Program Design and Administration; Writing, Thinking, and Problem Solving; The Classroom as a Research Site; Collaborative Learning; and Writing Across the Curriculum and Discourse Communities. Requirements will vary with instructors and topics. Same as CI 566. May be repeated to a maximum of 8 hours. Prerequisite: Graduate standing in writing studies or consent of instructor.

ENGL 584 Topics Discourse and Writing credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/584/)
Focuses on the modes of inquiry central to writing research. The course topic will vary each term and may address such issues as cognitive research and writing, ethnographic research and writing, and discourse analysis and writing. Same as CI 569. May be repeated to a maximum of 8 hours. Prerequisite: Graduate standing in writing studies or consent of instructor.

ENGL 586 Topics in Digital Studies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ENGL/586/)
Inquiry into theory and research in one or more areas of digital scholarship, including new media studies, digital humanities, social media studies, and/or critical code studies. Same as CI 586. 4 graduate hours. No professional credit. May be repeated in separate terms up to 8 hours, if topics vary.

ENGL 591 Research in Special Topics credit: 1 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ENGL/591/**)**
Independent study under the guidance of a member of the graduate faculty. May be repeated to a maximum of 8 hours.

ENGL 593 Professional Seminar in College Teaching credit: 0 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/ENGL/593/**)**
Seminar on undergraduate pedagogy for new graduate instructors. Individual sections will focus on the teaching of film, literature, or rhetoric. 0 to 4 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated by PhD students to a maximum of 8 hours as topics vary. Credit is not given for more than 8 hours, but course may be repeated for no credit. Prerequisite: Graduate standing in the Department of English or consent of instructor. Students needing the proseminar for their programs will be given priority enrollment.

ENGL 599 Thesis Research credit: 0 to 16 Hours. **(**https://courses.illinois.edu/schedule/terms/ENGL/599/**)**
Guidance in writing theses for doctoral degrees. Approved for S/U grading only. May be repeated up to a maximum of 16 hours. Prerequisite: Doctoral candidate standing.

ESL - ENGLISH AS A SECOND LANGUAGE

ESL Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/ESL/)

Courses

ESL 110 English Pronunciation & Oral Fluency credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/ESL/110/)
Designed to improve the international student's ability to speak and understand English at normal conversational speed and to give the student the ability to continue improving pronunciation and oral fluency skills after the course is finished. Focus on the rhythm, stress, intonation, and sounds of natural speech and on fluency building strategies. Approved for S/U grading only. May be repeated in separate terms. Credit is not given toward an undergraduate degree. Prerequisite: Placement based on the speaking section score on the TOEFL or Placement based on English as a Second Language Placement Test (EPT) for undergraduate students without TOEFL or IELTS scores.

ESL 111 Intro to Academic Writing I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ESL/111/)
Introduction to the process of writing: fundamentals of paragraph development: analysis of rhetorical patterns: development of oral skills. This course is the first term of a two-term sequence (ESL 111-ESL 112) that fulfills the campus Composition I general education requirement. Credit is not given for both ESL 111 and ESL 115. Prerequisites: 111 placement result on the English Placement Test.
This course satisfies the General Education Criteria for:
Composition I

ESL 112 Intro to Academic Writing II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ESL/112/)
Continued instruction of the fundamentals of the multi-paragraph essay and introduction to research writing; instruction on basics of library research, synthesizing sources, and elements of style. This is the second term of a two-term sequence (ESL 111-ESL 112) that satisfies the campus Composition I general education requirement. Credit is not given for both ESL 112 and ESL 115. Prerequisite: Completion of ESL 111.
This course satisfies the General Education Criteria for:
Composition I

ESL 115 Principles of Academic Writing credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ESL/115/)
Introduction to the research paper, including the writing process: pre-research, academic style and organization, and a variety of writing and skill-building tasks; development of peer and self-editing skills. ESL 115 fulfills the campus Composition I requirement for non-native speakers of English. Credit is not given for both ESL 115 and any other Comp I courses: RHET 101, RHET 102, RHET 103, RHET 104, RHET 105, CMN 111, CMN 112, ESL 111, ESL 112. Prerequisite: 115 placement result on the English Placement Test.
This course satisfies the General Education Criteria for:
Composition I

ESL 504 English Pronunciation for ITAs credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/ESL/504/)
Sounds, rhythm, and melody of spoken English for current and potential international teaching assistants who are required to teach in English. Includes word and phrase level study; special emphasis on the pronunciation of English vocabulary in students' own academic disciplines. Approved for S/U grading. Prerequisite: Placement based on SPEAK.

ESL 506 Oral Communication for ITAs credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/ESL/506/)
Focuses on use of English at the discourse level, with videotaping and critique of student presentation and development of teaching strategies related to university classroom and laboratory contexts. Approved S/U grading only. Prerequisite: Consent of instructor.

ESL 507 Adv Academic writing MATSEL credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/ESL/507/)
Focus on advanced academic writing in the field of Teaching English as a Second Language at the graduate level. Introduces rhetorical modes of writing in TESL, critical reading in the field and includes source-based writing, including critical reviews, proposals, and research reports. Approved for S/U grading only. Credit is not given for both ESL 507 and any of ESL 500, ESL 501, and ESL 502. Credit is not given toward a graduate degree.

ESL 508 Seminar for Intl TAs credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/ESL/508/)
Provides students with knowledge, resources and strategies to guide their ongoing development as international teaching assistants. Students analyze model teaching, receive feedback about their own strengths and weaknesses as a teaching assistant, and address key language or pedagogical concerns through a focused and customized term project. Approved for S/U grading only.

ESL 510 English Pronunciation & Oral Fluency credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/ESL/510/)
Designed to improve the international student's ability to speak and understand English at normal conversational speed and to give the student the ability to continue improving pronunciation and oral fluency skills after the course is finished. Focus on the rhythm, stress, intonation, and sounds of natural speech and on fluency building strategies. 0 graduate hours. No professional credit. Approved for S/U grading only. May be repeated in separate terms. Credit is not given toward a graduate degree. Prerequisite: Placement based on English as a Second Language Placement Test (EPT) or the speaking section score on TOEFL or IELTS.

ESL 511 Written and Oral Communication credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/ESL/511/)
Instruction in foundational skills for academic communication; skills covered include summarizing and synthesizing sources, reading and evaluating scholarly articles, and delivering oral presentations for an academic audience. This course is the first term of a two-term sequence (ESL 511-ESL 512). 0 graduate hours. No professional credit. Approved for S/U grading only. Credit is not given toward a graduate degree. Prerequisite: Level 1 course placement result on the English Placement Test. ESL students only.

ESL 512 Introduction to Academic Writing credit: 0 Hours. **(**https://courses.illinois.edu/schedule/terms/ESL/512/**)**
Instruction in writing secondary and primary research papers; skills covered include developing research questions and design, evaluating and synthesizing scholarly sources, producing well-reasoned and substantiated arguments, and writing research/project proposal. This course is the second term of a two-term course sequence (ESL 511-ESL 512). 0 graduate hours. No professional credit. Approved for S/U grading only. Credit is not given toward a graduate degree. Prerequisite: ESL 511. ESL students only.

ESL 515 Introduction to Academic Writing credit: 0 Hours. **(**https://courses.illinois.edu/schedule/terms/ESL/515/**)**
Instruction in essential skills in academic writing; skills for writing secondary and primary research papers, including developing research questions and design, evaluating and synthesizing scholarly sources, and producing well-reasoned and substantiated arguments. 0 graduate hours. No professional credit. Approved for S/U grading only. May be repeated in separate terms. Credit is not given toward the graduate degree. Prerequisite: Level 2 course placement result on the English Placement Test. ESL students only.

ESL 521 Written and Oral Business Communication credit: 0 Hours. **(**https://courses.illinois.edu/schedule/terms/ESL/521/**)**
Instruction for essential skills in business communication both in academic and professional settings; skills covered include writing professional correspondence, summarizing and analyzing sources, designing attractive documents, case-based writing, and delivering oral presentations. 0 graduate hours. No professional credit. Approved for S/U grading only. May be repeated in separate terms. Credit is not given toward the graduate degree. Prerequisite: Level 1 course placement result on the English Placement Test. ESL students only.

ESL 522 Introduction to Business Writing credit: 0 Hours. **(**https://courses.illinois.edu/schedule/terms/ESL/522/**)**
Continued instruction in essential skills in business communication both in academic and professional settings; Skills covered include writing professional correspondence and business proposals, synthesizing sources, and participating in group discussions. This course is the second term of a two-term course sequence (ESL 521 - ESL 522). 0 graduate hours. No professional credit. Approved for S/U grading only. Credit is not given toward a graduate degree. Prerequisite: ESL 521 or Level 2 course placement result on the English Placement Test. ESL students only.

ESL 525 Elements of Business Writing credit: 0 Hours. **(**https://courses.illinois.edu/schedule/terms/ESL/525/**)**
Instruction in essential skills in business communication both in academic and professional settings; skills covered include business proposals, synthesizing sources, and participating in group discussions. 0 graduate hours. No professional credit. Approved for S/U grading only. May be repeated in separate terms. Prerequisite: Level 2 course placement results on the English Placement Test. ESL students only.

ESL 592 Advanced Academic Writing credit: 0 Hours. **(**https://courses.illinois.edu/schedule/terms/ESL/592/**)**
Provides advanced international students additional support in the conventions of professional academic writing in their own fields. Through the use of Contract Learning, students define and pursue individualized writing goals for their own major programs with the support of the instructor. Lessons in genre analysis enable students to derive field-specific models for research articles, theses, and dissertations. 0 graduate hours. No professional credit. Approved for S/U grading only. Credit is not given toward a graduate degree. Prerequisite: ESL 515 or equivalent; OR recommendation from UIUC English Placement Test; OR "full status" English proficiency admission.

ESL 593 Academic Presentation Skills credit: 0 Hours. **(**https://courses.illinois.edu/schedule/terms/ESL/593/**)**
Provides international students with opportunities to improve skills in effectively presenting research in both oral and written formats in preparation for the professional conference presentation process. Students will practice orally explaining their research, asking and answering questions, giving and receiving feedback, and writing a conference proposal with the aim of creating and delivering compelling, professional presentations. 0 graduate hours. No professional credit. Approved for S/U grading only. Credit is not given toward a graduate degree.

EIL - ENGLISH AS AN INTL LANGUAGE

EIL Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/EIL/)

Courses

EIL 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/EIL/199/)
May be repeated.

EIL 214 TESL in the Elementary School credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EIL/214/)
On-site practical experience in an elementary school, involving at least 100 hours of classroom observations, consultations, teaching, tutoring, and assisting, to acquaint students with the many facets of ESL/bilingual education in a public school setting. Hours to be arranged with the cooperating teacher. Satisfies one requirement for those who wish to obtain an Illinois ESL endorsement on an Illinois teaching certificate.

EIL 215 TESL in the Secondary School credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EIL/215/)
On-site practical experience in a secondary school, involving at least 100 hours of classroom observations, consultations, teaching, tutoring, and assisting, to acquaint students with the many facets of ESL/bilingual education in a public school setting. Hours to be arranged with the cooperating teacher. Satisfies one requirement for those who wish to obtain an Illinois ESL endorsement on an Illinois teaching certificate.

EIL 411 Intro to TESL Methodology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EIL/411/)
Introduction to TESL/TEFL, including the concept of "communicative competence" and its components; teaching contexts; current research on teaching second language skills; syllabus, lesson, and materials design; and classroom techniques. 3 undergraduate hours. 4 graduate hours.

EIL 413 ESL Field Experience (EJP) credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EIL/413/)
Practical guided experience teaching ESL. Students will review theory associated with second language acquisition with a focus on taking a critical look at communicative language teaching and other principles commonly associated with adult ESL education. Students will teach multiple lessons, developing their own lessons and materials based on principles of communicative language teaching. Additionally, students will participate in peer-observation and feedback with their peer student teachers. 3 undergraduate hours. No graduate credit. May be repeated in separate terms if topics vary. Prerequisite: EIL 411 or permission of the instructor. Restricted to Education Justice Project students located at Danville Correctional Center.

EIL 422 Engl Grammar for ESL Teachers credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EIL/422/)
Adaptation of modern English grammar to meet the needs of the ESL/EFL teacher, with special emphasis on the development of knowledge and skills that can be used in the analysis of the syntax, lexis and pragmatics of English. Same as ENGL 404. 3 undergraduate hours. 4 graduate hours.

EIL 445 Second Lang Reading & Writing credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EIL/445/)
Introduces students to second language reading and writing, including theory, research, and practical application. 3 undergraduate hours. 4 graduate hours. May be taken concurrently with EIL 489 with consent of instructor. Prerequisite: Consent of instructor.

EIL 456 Lang and Social Interaction I credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EIL/456/)
The course goals are to develop an understanding of the characteristics of naturally-occurring talk; several methodologies for collecting and studying it; the relationship of talk to human conduct, society and culture, including cross-cultural (mis)understanding; and to relate these insights to language learning, language teaching methodologies, and materials design. 3 undergraduate hours. 4 graduate hours. Prerequisite: Consent of instructor.

EIL 460 Principles of Language Testing credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EIL/460/)
Studies theoretical and practical aspects of language testing. Examines purposes and types of language tests in relation to theories of language use and language teaching goals; discusses testing practices and procedures related to language teaching and language research; and includes the planning, writing, and administration of tests, basic descriptive statistics, and test analysis. A project is required. Same as EPSY 487, FR 460, GER 460, ITAL 460, PORT 460, and SPAN 460. 3 undergraduate hours. 4 graduate hours. Prerequisite: EIL 489 or consent of instructor.

EIL 465 TESL in the Community credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EIL/465/)
Focused classroom-based support for observation of teachers of English to multilingual learners, practice in teaching such learners, an opportunity to view and evaluate yourself as a TESL professional, and an opportunity to provide a service to the TESL profession, as well as to a specific community of learners. 3 undergraduate hours. No graduate credit. Prerequisite: At least two of the TESL core courses (EIL 422, EIL 445, EIL 456, and EIL 460) and two of the LING core courses (LING 111, LING 301, LING 302, and LING 307). For LING+TESL majors only; junior standing required.

EIL 486 Ling for Language Teachers credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EIL/486/)
Introduction to linguistics for language teachers. Examines history and scope of linguistics, and introduces key elements of linguistic analysis with accompanying theoretical analyses of syntax, morphology, phonology, the lexicon, and pragmatics. Also covers the role of non-linguistic factors in communication and prioritizes the application of linguistics to instructed language learning settings. 3 undergraduate hours. 4 graduate hours.

EIL 487 Topics in Second Lang Studies credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EIL/487/)
Topics on practical applications of second language studies for classroom practice. 2 or 4 undergraduate hours. 2 or 4 graduate hours. May be repeated to a maximum of 8 hours if topics vary. Prerequisite: Consent of instructor.

EIL 488 Phonology for Second Language Teachers credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EIL/488/)
Applications of linguistics to language learning with special emphasis on learning the sound system of English. The course involves face-to-face and online instruction. 3 undergraduate hours. 4 graduate hours. Prerequisite: Consent of instructor. A linguistics introductory course.

EIL 511 Task Based Language Teaching credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EIL/511/)
Introduces students to current issues in the theory and practice of communicative language teaching. Discusses the notion that communication is a social event from three perspectives: theoretical linguistics; applied linguistics; and classroom teaching. Specific questions addressed range from a consideration of the nature of applied linguistics to issues related to student autonomy. Prerequisite: EIL 411 and consent of instructor.

EIL 512 Practicum in Teaching ESL credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EIL/512/)
Practical guided experience teaching ESL. Students will recruit, test, and teach an ESL class of adults from the community, developing their own lessons and materials based on principles of communicative language teaching. Students will also observe their peer student teachers and provide them with feedback. Prerequisite: EIL 411 and permission of instructor.

EIL 580 Classroom Language Acquisition credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EIL/580/)
Same as FR 580, GER 580, ITAL 580, PORT 580, and SPAN 580. See SPAN 580.

EIL 587 Seminar in Second Lang Studies credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EIL/587/)
May be repeated if topics vary. Prerequisite: Consent of instructor.

EIL 591 Research in Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/EIL/591/)
Independent study under guidance of a member of the graduate faculty. May be repeated to a maximum of 8 hours. Prerequisite: Consent of instructor.

EIL 599 Thesis Research credit: 0 to 8 Hours. (https://courses.illinois.edu/schedule/terms/EIL/599/)
Individual direction of research and thesis writing. Approved for S/U grading only. May be repeated to a maximum of 8 hours. Prerequisite: Consent of thesis supervisor.

ENT - ENTOMOLOGY

ENT Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/ENT/)

Courses

ENT 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/ENT/599/)
Work may be taken in the following subjects: insect genetics; insect behavior; applied entomology; systematic entomology; biology and ecology of insects; and insect physiology. Approved for S/U grading only. May be repeated.

ENVS - ENVIRONMENTAL STUDIES

ENVS Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/ENVS/)

Courses

ENVS 101 Introduction to Energy Sources credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENVS/101/)
Same as NPRE 101. See NPRE 101.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences
Quantitative Reasoning II

ENVS 210 Environmental Economics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENVS/210/)
Same as ACE 210, ECON 210, NRES 210, and UP 210. See ACE 210.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

ENVS 220 Communicating Agriculture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENVS/220/)
Same as AGCM 220 and NRES 220. See AGCM 220.
This course satisfies the General Education Criteria for:
Advanced Composition

ENVS 299 Ind Studies of Env. Topics credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ENVS/299/)
Approved for letter and S/U grading. Prerequisite: Consent of instructor.

ENVS 301 Tools for Sustainability credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENVS/301/)
Develops systems-thinking skills needed to make connections between different disciplines to better understand problems and trade-offs related to sustainability. Students will gain competence in conducting cost-benefit and life-cycle analyses and learn about sustainability metrics while improving their ability to communicate about the integrated dimensions of sustainability within an interdisciplinary setting. Prerequisite: For students enrolled in the Sustainability, Energy and Environment Fellows Program.

ENVS 310 Natural Resource Economics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENVS/310/)
Same as ACE 310, and NRES 310. See ACE 310.

ENVS 330 Environmental Communications credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENVS/330/)
Same as AGCM 330 and NRES 330. See AGCM 330.

ENVS 336 Tomorrow's Environment credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENVS/336/)
Same as CHLH 336 and CPSC 336. See CPSC 336.

ENVS 380 Environmental Geology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ENVS/380/)
Same as GEOL 380. See GEOL 380.

ENVS 406 Urban Ecology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ENVS/406/)
Same as UP 406. See UP 406.

ENVS 420 Conservation Biology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ENVS/420/)
Same as CPSC 436 and IB 451. See IB 451.

ENVS 430 Comm in Env Social Movements credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENVS/430/)
Same as AGCM 430 and NRES 430. See AGCM 430.

ENVS 431 Environ Toxicology & Health credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENVS/431/)
Same as CHLH 461 and IB 485. See IB 485.

ENVS 433 Pesticide Toxicology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ENVS/433/)
Same as CB 434 and IB 486. See IB 486.

ENVS 447 Environmental Sociology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ENVS/447/)
Same as RSOC 447 and SOC 447. See SOC 447.

ENVS 469 Environmental Health credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ENVS/469/)
Same as CHLH 469. See CHLH 469.

ENVS 474 Principles of Epidemiology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ENVS/474/)
Same as CHLH 474 and PATH 474. See CHLH 474.

ENVS 480 Basic Toxicology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENVS/480/)
Same as CB 449, CPSC 433 and FSHN 480. See FSHN 480.

ENVS 491 Sustainability Experience credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ENVS/491/)
Students will work with faculty, staff, and/or the Student Sustainability Committee to advance campus sustainability goals and the Illinois Climate Action Plan. This course is designed to enable students to apply their disciplinary knowledge to tackle inherently interdisciplinary problems, while also developing and enhancing their critical analysis, leadership, organizational, and project management/evaluation skills and preparing them for addressing sustainability issues in their careers. 1 to 4 undergraduate hours. 1 to 4 graduate hours. Approved for letter and S/U grading. May be repeated, if topics vary. Prerequisite: Consent of instructor.

ENVS 492 Sustainability, Energy and Environment Capstone credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ENVS/492/)
Problem-focused learning and a holistic and interdisciplinary perspective to address critical sustainability-related challenges facing society. Students will gain critical thinking skills to examine the sustainability of various decisions, analyze the trade-offs between the economic, environmental and social dimensions of sustainability of alternative solutions, learn techniques to operationalize the concept of sustainability and develop practical skills in sustainability assessment. Team projects will develop team building skills, communication skills and project management skills. 4 undergraduate hours. No graduate credit. Prerequisite: ENVS 301. For students enrolled in the Sustainability, Energy and Environment Fellows Program.

ENVS 510 Adv Natural Resource Economics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ENVS/510/)
Same as ACE 510, ECON 548, and NRES 510. See ACE 510.

ENVS 514 Neurotoxicology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENVS/514/)
Same as CB 514 and PSYC 515. See CB 514.

ENVS 516 Reprod & Dev Toxicology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENVS/516/)
Same as CB 516. See CB 516.

ENVS 527 Statistics in Epidemiology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ENVS/527/)
Same as CHLH 527 and PATH 525. See CHLH 527.

ENVS 596 Interdisciplinary Tox Sem credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/ENVS/596/)
Same as PATH 596 and CB 596. See CB 596.

ENSU - ENVIRONMENTAL SUSTAINABILITY

ENSU Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/ENSU/)

Courses

ENSU 300 Environmental Sustainability credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENSU/300/)
Same as LA 370 and NRES 370. See LA 370.

ENSU 301 Soc Impacts Weather & Climate credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENSU/301/)
Examines the interconnectedness of weather, climate and society. Focus is on the complex relationship between weather, climate and society from both a physical and social perspective with an examination of the role of sustainability in both impacts and future mitigation. Discussions focused on the physical principles driving the weather and climate and how they interact with all aspects of society. Same as ATMS 322.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

ENSU 302 Air Pollution to Global Change credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ENSU/302/)
Develops the science of air pollution across spatial scales with an Earth-systems approach. Considers how fossil fuel combustion, agriculture development, waste generation, synthetic chemicals production, biomass burning, and changes in land use are significantly altering levels of radiatively and chemically active gases and aerosols in the atmosphere, and how these pollutants interact at local, regional, and global scales. The systems nature of the processes through which air pollution is linked to global change will be examined via integrated science assessment modeling that includes feedbacks from societal policies, industrial practices, and human populations. Same as ATMS 323.

ENSU 303 Sustainable Business I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ENSU/303/)
At the dawn of the 21st century, business and society is confronted with a confluence of factors, including environmental degradation, widespread poverty, and the need for renewable sources of energy. The diverse sources of information that point to an uncertain future suggests that a 'business as usual' approach has to be replaced with more proactive alternatives that address the needs of the environment, consumer welfare and community development. This course on sustainable marketing management begins to address these issues and engender an appreciation among our students for the challenges that lie ahead for businesses. Looks at the relationship between sustainable business practices, societal welfare, and ecological systems. Student projects will apply marketing and business concepts to create a sustainable business plan for organizations.

ENSU 310 Renewable & Alternative Energy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ENSU/310/)
Fossil fuel supplies are finite and growing energy demands of an ever increasing population will quickly deplete these reservoirs. Focuses on the use and availability of renewable and alternative energy sources such as wind, solar, bio-fuels, ethanol, geothermal and nuclear power as well as the impacts of using these alternative energy sources on climate, society and the global economy. Students will develop the student's perspective on human energy consumption at all scales through a complete scale analysis of energy production and consumption – from the individual to the national government to the world economy.

ENSU 410 Sustainable Organizations credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ENSU/410/)
Explores the notion of sustainability as a core business tenant, and how entrepreneurs and their companies are working to create and capture financial, social, and environmental value. The focus is on on large, for profit companies, but lessons will extend to smaller, non-profit, and governmental organizations. The aim is to prepare participants for the green challenge of adopting and implementing socially responsible practices in the workplace. 4 undergraduate hours. 4 graduate hours.

EURO - EUROPEAN UNION STUDIES

EURO Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/EURO/)

Courses

EURO 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/EURO/199/)
Approved for letter and S/U grading. May be repeated in separate terms to a maximum of 3 hours.

EURO 325 Social Media and Global Change credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EURO/325/)
Same as AFST 325, ASST 325, EPOL 325, EPS 325, INFO 325, LAST 325, REES 325, and SAME 325. See EPOL 325.

EURO 376 Children and Youth Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EURO/376/)
Same as CWL 376, GWS 376, and SCAN 376. See SCAN 376.

EURO 385 Politics of the European Union credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/EURO/385/)
Same as FR 385, GER 385, and PS 385. See PS 385.

EURO 410 Labor and the European Union credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EURO/410/)
Same as LER 410. See LER 410.

EURO 415 Europe and the Mediterranean credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EURO/415/)
Examines the governments, societies, and cultures on the shores of the Mediterranean. Examines ideas associated with the Mediterranean and practices followed by its people and governments from the perspectives of a variety of disciplines, paying special attention to the region's relationship with the European Union. Same as ITAL 415 and PS 415. 3 undergraduate hours. 4 graduate hours. Prerequisite: Minimum of junior standing, or consent of instructor.

EURO 418 Language & Minorities in Europe credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EURO/418/)
Same as GER 418, FR 418, ITAL 418, LING 418, PS 418, SLAV 418, and SPAN 418. See FR 418.

EURO 470 Scandinavian Politics and Society credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EURO/470/)
Same as CWL 470 and SCAN 470. See SCAN 470.

EURO 489 Green Screen: Film and Nature credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/EURO/489/)
Same as MACS 490 and SCAN 490. See SCAN 490.

EURO 490 Special Topics in EU Studies credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/EURO/490/)
Selected reading and research in European Studies. See schedule for current topics. 1 to 4 undergraduate hours. 1 to 4 graduate hours. Approved for letter and S/U grading. May be repeated to a maximum of 8 hours in same or separate terms if topics vary. Prerequisite: Junior or senior standing, or consent of the instructor.

EURO 500 Dialogue on Europe credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/EURO/500/)
Exploration of a variety of subjects about the European Union and EU-US relations and comparative perspectives. This transatlantic relationship will be studied via a series of expert lectures offered by University of Illinois faculty and visiting scholars. 2 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated to a maximum of 4 hours in separate terms if topics vary. Prerequisite: Priority given to students in the MAEUS and EUC FLAS Fellowship programs, other graduate students welcome by permission of the instructors.

EURO 501 EU Institutions and Governance credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EURO/501/)
A graduate-level introduction to the European Union, its history, decision-making processes, legal framework and economic effects.

EURO 502 The EU in a Global Context credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EURO/502/)
Introduces students to the role of the EU in international affairs. May be repeated in separate terms to a maximum of 8 hours.

EURO 576 Children and Youth Literature credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/EURO/576/)
Same as CWL 586, GWS 576, and SCAN 576. See SCAN 576.

EURO 580 Research Design & Techniques credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/EURO/580/)
Introduction for students in the master's in European Union Studies degree program to the processes involved in developing and completing an MA thesis project. Topics covered may include departmental and Graduate College thesis requirements; research methodologies; conducting effective field research; resources for thesis writing; and practical advice on managing a thesis project. Approved for S/U grading only.

EURO 590 Directed Ind Study credit: 1 to 6 Hours. (https://courses.illinois.edu/schedule/terms/EURO/590/)
May be repeated in the same term to a maximum of 6 hours. May be repeated in separate terms to a maximum of 12 hours. Prerequisite: Consent of instructor.

EURO 596 Special Topics in EU Studies credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/EURO/596/)
Instruction on topics of current interest about the European Union. May be repeated in the same or separate terms if topics vary. See Class Schedule for current topics.

EURO 599 Thesis Research credit: 0 to 8 Hours. (https://courses.illinois.edu/schedule/terms/EURO/599/)
To carry out work on the MA in European Union Studies. Approved for S/U grading only. May be repeated in separate terms to a maximum of 8 graduate hours. Prerequisite: EURO 501 and EURO 502.

FIN - FINANCE

FIN Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/FIN/)

Courses

FIN 199 Undergraduate Open Seminar credit: 0 to 5 Hours. (https://courses.illinois.edu/schedule/terms/FIN/199/)
Approved for letter and S/U grading. Course may be repeated for credit.

FIN 221 Corporate Finance credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/221/)
Introductory study of corporate financial management, in particular how the financial manager's choices add value to shareholder wealth through investment financing and operating decisions. Prerequisite: Completion of ECON 102 or ECON 103.

FIN 230 Introduction to Insurance credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/230/)
Introductory course on the role of insurance in society; covers insurance terminology, common personal insurance policies (auto, health, life and homeowners) and current issues.

FIN 232 Intro to Wealth Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/232/)
Creating a sound personal financial plan and issues related to becoming a financial planner. Course enrollment is limited to non-College of Business students and College of Business students with freshman or sophomore standing. Credit will not satisfy Finance major requirements. Credit is not given for both FIN 232 and ACE 240.

FIN 241 Fundamentals of Real Estate credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/241/)
A survey of real estate finance, appraisal, investment, law, brokerage, management, development and economics. Special attention is given to the analysis of aggregate real estate and mortgage markets, to the individual transactions within these markets, and to the legal and institutional factors which affect these markets. Prerequisite: ECON 102.

FIN 300 Financial Markets credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/300/)
Theory and applications associated with the functioning of financial markets to include the conceptual foundations of portfolio theory, risk management, and asset valuation. The stock, money, bond, mortgage, and futures and options markets are examined. Prerequisite: FIN 221.

FIN 321 Advanced Corporate Finance credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/321/)
Theories of firms' investment and financing decisions are covered. Topics include dividend policy, capital budgeting, capital structure, bankruptcy, long- term debt and leasing decisions. Prerequisite: FIN 300.

FIN 390 Finance Academy credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/FIN/390/)
The Finance Academy is an enrichment program for outstanding undergraduate Finance majors. A select program that focuses on developing future business leaders via enhanced academic and career opportunities. Students are normally invited to participate by the faculty during their junior year, when they are enrolled in FIN 300. If inducted, students participate throughout their junior and senior years. Approved for letter and S/U grading. May be repeated in separate terms. Course will not satisfy Finance major requirements. Prerequisite: Induction into the Finance Academy.

FIN 391 Investment Banking Academy credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/FIN/391/)
A diversified curriculum designed to prepare students for a successful career in investment banking; course incorporates peer mentorship, guest lectures (from bankers, accountants, private equity associates and hedge fund analysts), a case competition and a field trip. Course will not satisfy Finance major requirements. May be repeated for a maximum of 6 hours in separate terms. Prerequisite: Admission by application only.

FIN 392 Investment Management Academy credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/FIN/392/)
Overview of security analysis with the objective of how to value an investment proposition for inclusion in a portfolio of securities managed by students in the class. Focus will be in areas of fundamental securities analysis with the emphasis on equity valuation. Course will not satisfy Finance major requirements. May be repeated to a maximum of 6 hours in separate terms. Prerequisite: Admission by application only. Primarily for Finance majors with sophomore standing or above who show interest in pursuing their CFA credential.

FIN 393 Risk Management Academy credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/FIN/393/)
The Risk Management Academy is an enrichment program for outstanding undergraduates from across campus. The nature of risk management requires a knowledge base that includes majors from a number of colleges and departments including Finance, Actuarial Science, Atmospheric Sciences, Financial Planning, Engineering, Math and Statistics. RMA provides a select program that focuses on developing future business leaders in risk management via enhanced academic and career opportunities. Students are normally invited to participate by the faculty during their freshman or sophomore year, when they are enrolled in FIN 230 and other basic RM courses. If inducted/accepted, students participate throughout their sophomore, junior and senior years. Approved for Letter and S/U grading. May be repeated in separate terms to a maximum of 8 hours. Prerequisite: Acceptance into the Risk Management Academy. Restricted to students accepted in the Risk Management Academy.

FIN 394 Women in Finance Academy credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/FIN/394/)
Given the unique challenges women face in the business world, this course provides the tools for women to thrive in careers in finance. The course includes a mentoring program, soft and technical skills development, panel discussions with women leaders, and networking opportunities. Admission by application process in the prior semester. May be repeated in separate terms. Prerequisite: Instructor approval required. Students accepted into the Academy will be allowed to participate in their Freshman, Sophomore, Junior, and Senior years.

FIN 411 Investment & Portfolio Mngt credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/411/)
Current theories of portfolio management are covered in considerable detail to provide a conceptual framework for the evaluation of investment strategies. Applications and implementation are covered in depth, including performance evaluation and international diversification. 3 undergraduate hours. No graduate credit. Prerequisite: FIN 300.

FIN 412 Options and Futures Markets credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/412/)
Introduction of options and futures markets for financial assets; examination of institutional aspects of the markets; theories of pricing; discussion of simple as well as complicated trading strategies (arbitrage, hedging and spread); applications for asset and risk management. 3 undergraduate hours. No graduate credit. Prerequisite: FIN 300 or consent of instructor.

FIN 413 Financial Engineering credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/413/)
This course will present and analyze modern tools for identification, measurement, and management of financial risk faced by corporations and institutional investors; in particular as related to the application of futures, forwards, options, swaps, and other derivatives. The focus will be evenly split between theoretical models and practical applications, and will include careful consideration of parameter estimation and numerical implementation. 3 undergraduate hours. No graduate credit. Prerequisite: FIN 300 or consent of instructor.

FIN 414 Urban Economics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/414/)
Same as ECON 414. See ECON 414.

FIN 415 Fixed Income Portfolios credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/415/)
Conceptual foundations and implementation of strategies for the selection, evaluation, and revision of portfolios of fixed-income financial assets (bonds). 3 undergraduate hours. No graduate credit. Prerequisite: FIN 321.

FIN 418 Financial Modeling credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/418/)
The objective is to learn the fundamentals and practice building financial models using Microsoft Excel. By the end of the term, each student should be able to develop an understanding of any financial relationship and build that financial relationship into a model using the built-in functions of Excel. Financial modeling, by definition, requires significant work outside of the classroom. Models are introduced, demonstrated, and reviewed in class, but each student is expected to research and collect date, and to construct the models, prior to each week's class meeting. 3 undergraduate hours. 3 graduate hours. Prerequisite: FIN 300 and FIN 321, or consent of instructor.

FIN 419 Real Client Managed Portfolios credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/419/)
Applies academic topics on financial markets, security analysis/valuation and portfolio management to hands-on investment management. Students will form and review objectives, constraints, and investment policy as it relates to the client's money under management. They will purchase securities, monitor performance of the portfolio, and make recommendations for any adjustments to the holdings. They will be fully educated and responsible to the fiduciary and ethical standards of professional money management as guided by the CFA Institute. 3 undergraduate hours. No graduate credit. May be repeated to a maximum of 9 hours. Prerequisite: FIN 321 or consent of instructor.

FIN 422 Cases in Corporate Finance credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/422/)
Course totally devoted to the study of financial management cases, provides students a hands-on learning experience. The case work helps students to develop their analytical and interpretative skills in solving unstructured real world problems. The theoretical concepts and tools learned in the introductory finance courses provide the foundation for the case studies. Topics discussed include financial forecasting and working capital management; capital budgeting and cost of capital; and capital structure, dividend policy, corporate financing, financial restructuring, financial distress, mergers, acquisitions and firm valuation. 3 undergraduate hours. No graduate credit. Prerequisite: FIN 300 and FIN 321.

FIN 423 Financing Emerging Businesses credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/423/)
The study of the business environment, alternative methods of organization and financing, use of financial statements as a management tool, valuation methods and approaches to ethical dilemmas from the perspective of an owner-manager. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: FIN 300 or consent of instructor.

FIN 424 Mergers and Acquisition credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/424/)
Focuses on identifying ways to increase firm value through mergers and acquisitions (M&A) and corporate restructurings. Surveys the drivers of success (failure) in M&A transactions and develop your skills in the design and evaluation of transactions. 3 undergraduate hours. No graduate credit. Prerequisite: FIN 321.

FIN 425 Private Equity/Venture Capital credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/425/)
Provides students with an understanding of the nature of the private equity market, the principal participants in this market, and how they function. 3 undergraduate hours. No graduate credit. Prerequisite: FIN 321.

FIN 428 Cases in Financial Derivatives credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/428/)
This advanced elective course on financial derivatives explores the economic, legal, and regulatory concepts underlying these markets. It uses case studies to examine market weaknesses, design flaws, and regulatory breakdowns, many of which have resulted in major disasters. 3 undergraduate hours. No graduate credit. Credit is not given for FIN 428 and FIN 490 (66772) Section ADF. Prerequisite: FIN 300 or consent of instructor. Undergraduate only.

FIN 431 Property-Liability Insurance credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/431/)
Examines in detail the functions of property-liability insurers, including marketing, underwriting, claims, ratemaking and administration, and the major current issues facing this industry. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: FIN 230.

FIN 432 Managing Fin Risk for Insurers credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/432/)
Introduces basic concepts in financial economics used in the analysis and management of financial risks, with an emphasis on the applications by insurers and pension plans; topics include decision making under uncertainty, economic statistics, deterministic and stochastic interest rate models, derivative securities, valuation, binomial models and option pricing models. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: FIN 300; either FIN 230 or FIN 435.

FIN 433 Corporate Risk Management credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/433/)
Case study course examining how corporations deal with pure risk. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: FIN 221, FIN 431, and FIN 434.

FIN 434 Employee Benefit Plans credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/434/)
Studies the purpose, structure, and financial aspects of employee benefit plans, including pensions, health insurance, life insurance, and disability plans. 3 undergraduate hours. No graduate credit. Prerequisite: FIN 300 or consent of instructor.

FIN 435 Personal Wealth Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/435/)
Studies personal wealth management techniques with an emphasis on life insurance products; covers life insurance policies, annuities, trusts, buy-sell arrangements, investing in stocks, bonds and mutual funds, banking and barrowing, purchasing residential and commercial real estate, income and estate taxation and management of personal financial portfolio. 3 undergraduate hours. No graduate credit. Prerequisite: FIN 300.

FIN 443 Legal Issues in Real Estate credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/443/)
Overview of legal concepts, issues, and principles involving real estate. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: Junior standing or consent of instructor.

FIN 444 Urban Real Estate Valuation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/444/)
The terminology, theory and techniques of real estate valuation (appraisal); a modern view of the three approaches to estimating value - sales comparison, cost and income. Special requirements include local field trips to appraise at least one single-family property and one income property. 3 undergraduate hours. No graduate credit. Prerequisite: FIN 300 or consent of the instructor, FIN 241 is recommended but not required.

FIN 445 Real Estate Investment credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/445/)
An approach to the evaluation of real estate investment opportunities. Begins with the identification of the investor's goals and ends with an investment decision. Considers legal, physical, locational, and financial constraint, aggregate real estate and financial markets, tax considerations and investment criteria. 3 undergraduate hours. No graduate credit. Prerequisite: FIN 300 or consent of the instructor, FIN 241 is recommended but not required.

FIN 446 Real Estate Financial Markets credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/446/)
Discusses real estate financing techniques and the secondary market for real estate financial assets including residential and commercial mortgage-backed securities (RMBS and CMBS). 3 undergraduate hours. No graduate credit. Prerequisite: FIN 300 or consent of instructor, FIN 241 is recommended but not required.

FIN 447 Real Estate Development credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/447/)
Provides students with an exposure to the real world of real estate through a series of lectures by real estate professionals focused primarily on retail real estate development. A side benefit of the class will be to provide graduating seniors some insights into different career paths to help improve the career choices that they make. 3 undergraduate hours. 4 graduate hours. Prerequisite: FIN 221 or FIN 241.

FIN 451 Intl Financial Markets credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/451/)
This course covers the three major international financial markets; the foreign exchange market, the eurocurrency market, and the international equity and bond market. The course looks at international financial decisions including operations, structure and valuation. 3 undergraduate hours. No graduate credit. Prerequisite: FIN 300 and FIN 321.

FIN 461 Banking and Financial Regulation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/461/)
Survey of the structure, functions, regulation, and risk management activities of banks and nonbank financial institutions; central banking and monetary policy effects on financial institutions. 3 undergraduate hours. No graduate credit. Prerequisite: FIN 300 or consent of instructor.

FIN 463 Investment Banking credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/463/)
The mechanics of financial statement analysis and ratio analysis; development of investment banking/corporate finance valuation models (including DCF, leveraged buyout and merger models) in order to determine the intrinsic value of companies and price investment banking deals. 3 undergraduate hours. No graduate credit. Prerequisite: FIN 300 (FIN 300 is waived if student is admitted to FIN 391 IBA). Priority to finance majors.

FIN 464 Applied Financial Analysis credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/464/)
Provides key building blocks necessary for many careers in finance. Designed to provide a practical approach to analyzing and interpreting complex financial statements to make decisions from a range of user perspectives, including investment banks, equity investors and commercial banks. Advanced financial analysis and forecasting will be applied through assignments and casework. There will be an emphasis on business writing skills commonly applied by finance professionals. 3 undergraduate hours. 4 graduate hours. Credit is not given for FIN 464 and FIN 490 CRNs 57268 and 57353. Prerequisite: ACCY 201. Priority given to finance majors.

FIN 490 Special Topics in Finance credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/490/)
Lectures and discussions relating to new areas of interest. See class schedule for topics and prerequisites. 1 to 3 undergraduate hours. No graduate credit. May be repeated in the same term or subsequent terms to a maximum of 3 undergraduate hours or 4 graduate hours. Credit is not given for FIN 490 CRNs 57268 and 57353 and FIN 464. Course will not satisfy Finance major requirements. Prerequisite: FIN 300 or consent of instructor.

FIN 494 Senior Research credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/494/)
Research and reading course for students concentrating in finance, insurance, urban land economics, or related areas who meet one of the following requirements: (1) have a cumulative grade-point average of 3.0 or better; (2) have attained Honors Day recognition in the junior year; or (3) have consent of instructor. May be taken by students in the college honors program in partial fulfillment of the honors requirements. 2 to 4 undergraduate hours. No graduate credit. May be repeated as topics vary. Prerequisite: Senior standing.

FIN 495 Senior Research credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/495/)
Research and reading course for students concentrating in finance, insurance, urban land economics, or related areas. May be taken by students in the college honors program in partial fulfillment of the honors requirements. 2 to 4 undergraduate hours. No graduate credit. Prerequisite: Senior standing; and cumulative grade-point average of 3.0 or better, Honors Day recognition in the junior year, or consent of instructor.

FIN 500 Introduction to Finance credit: 2 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/FIN/500/**)**
Introduction to financial management and decision making. A customized course, designed to provide a survey of finance for graduate students who do not necessarily have previous training in the disciplines. Different sections of the course will cover different sets of topics. Prerequisite: Graduate standing or consent of department.

FIN 501 Economics of Stock Market Fundamentals credit: 2 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/FIN/501/**)**
A firm's long-run value ultimately depends on its business fundamentals. This course covers micro- and macro-economic drivers of such fundamentals, such as consumer demand, market competitiveness, government regulation, interest rates, business cycles, and monetary policy. Also includes topics in risk and intertemporal decision-making. 2 or 4 graduate hours. No professional credit.

FIN 502 Quantitative Finance credit: 2 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/FIN/502/**)**
Quantitative methods used for financial decision making. Topics include elements of statistics, mathematics, and specific analytical tools used in the study and practice of finance. Approved for letter or S/U grading. May be repeated in the same or separate terms to a maximum of 4 hours. Material may be split into two 8-week 2-hour modules, either across semesters or within the same semester; if so, credit is not given for taking the same half twice. Prerequisite: Graduate standing.

FIN 503 Quantitative Finance II credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/FIN/503/**)**
This course covers topics in time series analysis with an emphasis on applications. It is intended to prepare MSF students for more advanced courses in finance. This course provides some basic knowledge of financial time series data. It also introduces models and methods widely used by academics and practitioners. The purpose of this course is to understand proper use and limitations of econometric methods in applied time series analysis. 2 graduate hours. No professional credit. Credit is not given for FIN 503 and FIN 580: Section QM2, (68387). This course covers topics in time series analysis with an emphasis on applications. It is intended to prepare MSF students for more advanced courses in finance. This course provides some basic knowledge of financial time series data. It also introduces models and methods widely used by academics and practitioners. The purpose of this course is to understand proper use and limitations of econometric methods in applied time series analysis. Prerequisite: FIN 580 Section Q1M.

FIN 504 Accounting for Financial Analysis credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/FIN/504/**)**
This course will develop an understanding of the most fundamental accounting concepts and provide key building blocks necessary for intermediate and advanced financial statement analysis. It is designed to provide a basic but practical application of financial analyses commonly performed by industry professionals. 2 graduate hours. No professional credit. Credit is not given for FIN 504 and FIN 580 (58811), Section FS.

FIN 510 Big Data Analytics in Finance for Predictive and Causal Analysis credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/FIN/510/**)**
Recent trends in "big data" present both enormous challenges and opportunities for businesses. This course introduces concepts and techniques of data analytics and shows how they can be used for making predictions, and to distinguish between correlation and causation, in the context of financial and economic analysis. Covered tools include data visualization, machine learning, regression analysis, randomized trials, A/B testing, and quasi-experiments. Students will apply these tools using R programming within the Amazon Web Services cloud computing environment. 4 graduate hours. No professional credit. Credit is not given for FIN 510 and these sections of FIN 580: Section BD1, (50081); Section BD2, (48173); and Section BD3, (70398). Prerequisite: Consent of Instructor.

FIN 511 Investments credit: 2 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/FIN/511/**)**
Introduction to investment analysis, including the theory and implementation of portfolio theory; empirical evidence on the performance of financial assets; evaluation of portfolio investment strategies; and the extension of diversification to international markets. Prerequisite: FIN 520; or MBA 505 - Section G (Finance II); or consent of instructor.

FIN 512 Financial Derivatives credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/FIN/512/**)**
Introduction to options, futures, swaps and other derivative securities; examination of institutional aspects of the markets; theories of pricing; discussion of simple as well as complicated trading strategies (arbitrage, hedging, and spread); applications for asset and risk management. Prerequisite: FIN 520; or MBA 505 - Section G (Finance II); or consent of instructor.

FIN 513 Applications of Financial Engineering credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/FIN/513/**)**
Provides an introduction to modern techniques for pricing options, swaps, and related financial instruments; the use of such instruments in managing financial risk; and the measurement and management of their risks. Prerequisite: FIN 520; or MBA 505 - Section G (Finance II); or consent of instructor.

FIN 514 Valuation of Complex Derivative Securities credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/FIN/514/**)**
Presents the main ideas and techniques of modern option pricing theory, including: the Black-Scholes-Merton analysis; risk-neutral probabilities and the probabilistic solution; numerical techniques for computing option prices; an introduction to term structure modeling; and perhaps other topics, at the discretion of the instructor. Prerequisite: Prior or concurrent registration in FIN 513 or consent of instructor.

FIN 515 Fixed Income Portfolios credit: 2 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/FIN/515/**)**
Conceptual foundations and implementation of strategies for the selection, evaluation, and revision of portfolios of fixed-income financial assets (bonds); examination of related research. Prerequisite: FIN 520; or MBA 505 - Section G (Finance II); or consent of instructor.

FIN 516 Term Structure Models credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/FIN/516/)
Coverage of the fundamental models models of the term structure of interest rates, including their implementation, calibration, and use in valuing interest rate derivatives. Focus will be on the Black model and short rate models such as Black-Derman-Toy and Hull-White. 2 graduate hours. No professional credit. Approved for Letter and S/U grading. Prerequisite: FIN 512; IE 525 OR FIN 514 OR FIN 513.

FIN 517 Advanced Term Structure Models credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/FIN/517/)
This class is a continuation of FIN 516 Term Structure Models. Coverage of advanced term structure models with a focus on the LIBOR Market Model (LMM). Students will learn the theory behind the model, how to calibrate the model to data and how to to develop numerical algorithms in order to implement the model to price a variety of real world interest rate products. 2 graduate hours. No professional credit. Approved for Letter and S/U grading. Prerequisite: FIN 516.

FIN 518 Financial Modeling credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/518/)
The objective is to learn the fundamentals and practice building financial models using Microsoft Excel. By the end of the term, each student should be able to develop an understanding of any financial relationship and build that financial relationship into a model using the built-in function of Excel. Financial modeling, by definition, requires significant work outside of the classroom. Models are introduced, demonstrated, and reviewed in class, but each student is expected to research and collect data, and to construct the models, prior to each week's class meeting. Prerequisite: MSF students only.

FIN 519 Gen Equ Env Tax Policy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/519/)
Focuses on how to build and use analytical general equilibrium models to do research. Students will replicate and extend existing G.E. models with general production and demand functions that are differentiated to find closed-form solutions for the incidence of the tax, including changes in all factor prices, input quantities, outputs, prices, and welfare of each group. The primary examples are drawn from environmental tax policy, but the method is equally useful for analysis of non-tax policies and other economic problems. Same as ECON 546. Prerequisite: Microeconomics and Econometrics at graduate level.

FIN 520 Financial Management credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/520/)
Introduction to financial management and decision making. Course topics: financial statement analysis, time value of money, project analysis and investment criteria, discounted cash-flow analysis for investment decisions, capital budgeting and planning (short-term and long-term), working capital management, and risk management. The course target audience is assumed to be mid-level managers. Other corporate finance topics appropriate for the C-suite will be covered as time allows. 4 graduate hours. No professional credit. Prerequisite: Enrollment in the Executive MBA, MSBA, or MS program.

FIN 521 Advanced Corporate Finance credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/521/)
Addresses both the theoretical and applied aspects of firms' financing decisions; topics include capital structure and cost of capital theories; mergers, acquisitions and leveraged buyouts; options, warrants, and convertibles; venture capital and initial public offerings; and pensions. Prerequisite: FIN 520, plus either ECON 506 or BADM 572 or concurrent registration in either course; or MBA 505 - Section G (Finance II); or consent of instructor.

FIN 522 Cases in Financial Strategy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/522/)
Course focuses on financial management cases. Provides students with an active learning experience. Case work is based on concepts learned in introductory corporate finance. Topics discussed include measuring and interpreting cash flow performance, financial forecasting and turnaround management ; capital investment and cost of capital; and capital structure, dividend policy; and firm valuation. Prerequisite: FIN 520, plus either ECON 506 or BADM 572 or concurrent registration in either course; or MBA 505 - Section G (Finance II); or consent of instructor.

FIN 524 Mergers and Acquisitions credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/524/)
The primary objective of this course is to give students experience in valuing firms. While the primary focus of the course is on mergers and acquisitions, the course will also cover topics such as initial public offerings, leveraged buyouts, spin-offs, and divestitures. Prerequisite: FIN 520; or MBA 505 - Section G (Finance II); or consent of instructor.

FIN 526 Enterprise Risk Management credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/526/)
The application of basic risk management principles to all risks facing the organization. Integrates hazard, financial, strategic and operational risks under a single framework. Provides a conceptual framework for making risk management decisions to increase business value. The course will includes a review of the legal and regulatory environment that sets the stage for Enterprise Risk Management, cover the tools used for risk analysis, examine data integration processes and show how risk measurement relates to strategic and tactical business decisions.

FIN 527 Mergers & Acquisitions Topics credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/527/)
Focuses on identifying ways to increase firm value through mergers and acquisitions (M&A) and corporate restructurings. We will develop your skills in the design and evaluation of transactions. Specific topics addressed in the course are the valuation of companies, structuring of transactions, deal tactics and strategy, valuation of leveraged buyouts, and spin-offs/carve-outs. We will also delve into issues of law, accounting and taxation and how they affect the structuring and outcome of merger transactions. Knowledge about M&A is an important component of any corporate finance professional and is the foundation for effective work in a wide range of fields including corporate development, investment banking, consulting, and advising senior management. 2 or 4 graduate hours. No professional credit.

FIN 528 Cases in Financial Derivatives credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/528/)
This advanced elective course on financial derivatives explores the economic, legal, and regulatory concepts underlying these markets. It uses case studies to examine market weaknesses, design flaws, and regulatory breakdowns, many of which have resulted in major disasters. 4 graduate hours. No professional credit. Credit is not given for FIN 528 and FIN 580 (66393), Section ADF. Prerequisite: Graduate students only.

FIN 530 Foundations in Risk Management credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/FIN/530/)
This course introduces risk management including basic concepts and techniques of pure risk and financial risk management. Corporate hazard risk management including insurance and securitization of pure risks will be covered in detail. Insurer risk management will be examined including reinsurance, loss reserving, underwriting of risks, and catastrophic risk management. Students will also be introduced to Enterprise Risk Management (ERM). 2 graduate hours. No professional credit. Prerequisite: MSF and MBA students only.

FIN 535 Wealth Management credit: 2 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/FIN/535/**)**
This course studies personal wealth management techniques with an emphasis on life insurance products; covers life insurance policies, annuities, trusts, buy-sell arrangements, investing in stocks, bonds and mutual funds, banking and borrowing, purchasing residential and commercial real estate, income and estate taxation and management of personal financial portfolio. The course also allows students to build a wealth management plan based on a case scenario. 2 or 4 graduate hours. No professional credit.

FIN 536 Government Insurance Programs credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/FIN/536/**)**
Government insurance programs -- including Social Security, Medicare and Medicaid, unemployment and disability insurance, terrorism insurance, and disaster relief -- currently account for more than half of U.S. federal spending. These programs, which for decades have collectively been growing more quickly than the U.S. economy, represent a significant share of an employer's compensation expenses and significantly impact household budgets. This course will examine how the design of these programs affects economic efficiency, growth, business competitiveness, and social well-being. An important theme of the course will be the role of imperfect information and aggregate or long-term risks of insurance market failures, and conditions under which the government can or cannot remedy these failures. Prerequisite: MAS BPP Concentration.

FIN 541 Real Estate Fundamentals credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/FIN/541/**)**
Discusses the theory and practice of real estate and urban land economics; emphasizes real estate market analysis, finance, appraisal, and investment. 4 graduate hours. No professional credit. Prerequisite: FIN 520, plus ECON 302, ECON 500, or equivalent; or MBA 505 - Section G (Finance II); or consent of instructor.

FIN 543 Legal Issues in Real Estate credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/FIN/543/**)**
This course examines the fundamentals of real estate from a legal perspective. Students develop skills in using legal concepts in a real estate transactional setting that incorporates traditional course materials, case studies, real life transactions, and guest lectures designed to provide a practical "hands-on" approach to real estate law. We explore a broad range of current sophisticated real estate transactions relating to residential and commercial purchases, sales, leasehold interests, common interest communities, ownership, financing, brokerage, land use and development. We discuss the legal implications that contractual private and legislative public restrictions have on individuals' real property rights and discuss public policy arguments related to private owners' legal rights. 4 graduate hours. No professional credit. Prerequisite: Restricted to graduate students.

FIN 544 Urban Real Estate Valuation credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/FIN/544/**)**
The terminology, theory and techniques of real estate valuation (appraisal); a modern view of the three approaches to estimating value - sales comparison, cost and income. Special requirements include local field trips to appraise at least one single-family property and one income property. 4 graduate hours. No professional credit. Prerequisite: FIN 541 is recommended but not required.

FIN 545 Real Estate Investment credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/FIN/545/**)**
Real estate accounts for one-third of the world's capital assets. This course provides students with a comprehensive understanding of real estate valuation, cycles, markets, investments, and decision-making. The bulk of the course covers income-producing commercial property, although we will also discuss residential housing. This course provides a unified finance based framework to answer real estate investment decision making problems in the real world. 4 graduate hours. No professional credit. Prerequisite: FIN 541 is recommended but not required. Graduate students only.

FIN 546 Real Estate Financial Markets credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/FIN/546/**)**
This is an applied course in real estate investment that focuses on the U.S. mortgage and asset-backed securities markets. The course will review the multi-trillion dollar mortgage and asset-backed bond markets. We will discuss the fundamentals of securitization, and strategies to structure deals. We will also consider real estate investment trusts (REITs), collateralized debt obligations (CDOs) and credit default swaps (CDS). The course will develop analytical skills in deal structuring and pricing, and offer all students an opportunity to develop their business skills through case discussions. 4 graduate hours. No professional credit. Prerequisite: FIN 541 recommended but not required. Graduate students only.

FIN 547 Real Estate Development credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/FIN/547/**)**
Discusses key steps in the real estate development process, from market feasibility analysis to financing, legal issues, construction and asset management. Current issues in real estate development will also be presented by guest lecturers who are senior industry executives. 4 graduate hours. No professional credit. Prerequisite: FIN 541 recommended but not required. Restricted to graduate students only.

FIN 551 International Finance credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/FIN/551/**)**
Explores the characteristics of the international financial market and examines various aspects of corporate financial management. Topics may include international parity conditions, exchange rate risk management, country risk, cross-border investment analysis, multi national firm budgeting, hedging in foreign currency markets, accessing international financial markets for financing, and competitive strategy in a global marketplace. Prerequisite: FIN 520; or MBA 505 - Section G (Finance II); or consent of instructor.

FIN 552 Applied Financial Econometrics credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/FIN/552/**)**
The aim of this course is to equip students with a working knowledge of important econometric techniques necessary to understand and interpret financial market data. The course covers time-series and cross-sectional properties of asset returns, predictability of equity returns, empirical tests of asset pricing models, modelling time-varying volatility. The interplay between asset pricing theories, statistical assumptions and relevant econometric techniques is explored in the context of published empirical work, including classical papers as well as a more recent research. 4 graduate hours. No professional credit. Credit is not given for FIN 552 and FIN 580 Section DK2 (72033) or FIN 580 Section DK (70390). Prerequisite: FIN 511.

FIN 553 Machine Learning in Finance credit: 2 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/FIN/553/**)**
Machine Learning includes the design and the study of algorithms that can learn from experience, improve their performance and make predictions. In this course students will learn the foundations of Machine Learning and explore state of the art algorithms and tools. Topics include supervised learning (neural networks, support vector machines), unsupervised learning (clustering, dimensionality reduction) and reinforcement learning (dynamic programming, Q-learning, SARSA, policy gradient methods). Applications include option pricing, portfolio selection and credit card fraud detection. Students will gain practical experience implementing these models in Python with frequently used packages such as TensorFlow. 2 or 4 graduate hours. No professional credit. Credit is not given for FIN 553 and FIN 580: Section V2, (72206); or FIN 580: Section V1 (72205).

FIN 555 Financial Innovation credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/FIN/555/**)**
Recent years have seen the rapid development of the fintech sector, bringing together technology and data, startups and established firms in ways that are likely to shape and disrupt financial markets going forward. This course will involve a mix of lectures, guest speakers, and class discussion of breaking developments and new ventures. Some of the fintech sectors we will discuss include consumer finance, payments, investing and trading, cryptocurrencies and blockchain, and privacy and regulatory concerns. Because of the innovative and rapidly evolving nature of the fintech sector, this class will depend heavily on student engagement and class discussion. Students should be prepared to participate actively, and not just sit and listen to lectures. Each student will participate in two group presentations on the fintech sector, at the middle and end of the semester. A group project is due at the end of the semester, detailing a fintech startup idea, an analysis of an existing fintech business, or an analysis of a fintech sector. 4 graduate hours. No professional credit. Credit is not given for FIN 555 and FIN 580: Section FT2 (72037).

FIN 561 Banking and Financial Regulation credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/FIN/561/**)**
Survey of the structure, functions, regulation, and risk management activities of banks and nonbank financial institutions; central banking and monetary policy effects on financial institutions. 4 graduate hours. No professional credit. Prerequisite: FIN 520 or consent of instructor.

FIN 562 Macrofinance credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/FIN/562/**)**
Overview of the workings of the financial sector of the macro economy; includes the roles of financial institutions, financial markets, macroeconomic policies, interest rates, and the flows of funds. Prerequisite: FIN 520; or MBA 505 - Section G (Finance II); or consent of instructor.

FIN 563 Investment Banking credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/FIN/563/**)**
This course will provide key building blocks necessary for a career in investment banking, valuation and other related fields. It is designed to provide a practical application of financial statement analysis, modeling, valuation, and presentation skills commonly performed by industry professionals. The course has three major parts. The first focuses on the mechanics of financial statement analysis, ratio analysis, and financial model building. The second applies the financial statements and forecasts within the context of company valuation, utilizing common industry techniques. In the third part of the course, we will employ these valuation techniques in common investment-banking deliverables such as pitch books and fairness opinions. 4 graduate hours. No professional credit. Prerequisite: Previous introductory accounting and finance coursework recommended. Graduate students only.

FIN 564 Applied Financial Analysis credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/FIN/564/**)**
Provides key building blocks necessary for many careers in finance. Designed to provide a practical approach to analyzing and interpreting complex financial statements to make decisions from a range of user perspectives, including investment banks, equity investors and commercial banks. Advanced financial analysis and forecasting will be applied through assignments and casework. There will be an emphasis on business writing skills commonly applied by finance professionals. 4 graduate hours. No professional credit. Prerequisite: ACCY 501 or equivalent. A baseline understanding of financial accounting is expected of all students coming into this course.

FIN 566 Algorithmic Market Microstructure credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/FIN/566/**)**
This course introduces the modern theoretical, empirical and institutional foundations of market microstructure and trading activity, with an emphasis on applications to algorithmic and high-frequency trading. The first part of the course addresses market microstructure and the algorithmic implementation of traditional microstructure-inspired tasks such as minimizing execution costs. The second part of the course proceeds to examine actual algorithmic strategies, and ultimately high-frequency trading. Recurrent themes throughout the course will be the use of economic theory to simplify computationally challenging problems, and the use of theory-driven structural models to construct more robust trading algorithms. 4 graduate hours. No professional credit. Prerequisite: Restricted to students in the MS in Financial Engineering program.

FIN 567 Financial Risk Management credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/FIN/567/**)**
This course covers selected topics in financial risk management. The focus is on statistical techniques used in financial risk management rather than risk management practice, cases, or valuation issues. The course will cover the value-at-risk (VaR) measure and expected shortfall, statistical techniques useful to model financial market returns, and techniques used to model the joint distribution of defaults on fixed income instruments. The course will also cover additional topics such as retail credit risk, risk budgeting, and economic capital modelling. 4 graduate hours. No professional credit. Prerequisite: FIN 500 or 511; IE 522 or FIN 502; FIN 512 (concurrent enrollment allowed); or consent of instructor.

FIN 568 Behavioral Finance credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/FIN/568/)
There is increasing evidence that the financial decisions of at least some investors are affected by various behavioral biases that do not follow from traditional portfolio choice models. This course will highlight and analyze key findings from this research and consider implications of this observed behavior for individual investors and money managers. The results are also of interest for managers of firms and human resource departments. 2 graduate hours. No professional credit. Prerequisite: Restricted to MSF and MBA Students.

FIN 570 Business and Public Policy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/570/)
The role of government and its effects on business in a market economy; critical examination of tax rules, public spending and insurance programs, social security, health policy, environmental policy, and other regulations on businesses.

FIN 571 Retirement Policy credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/FIN/571/)
The retirement landscape in the US - including public policy, retirement plan design, and individual behavior - is constantly changing and evolving. This course will examine the economic, financial, legal, regulatory, political, and human resource issues involved with designing and implement both public and private retirement plans, including Social Security, pensions and retirement savings plans. Credit is not given for both FIN 434 and FIN 571. Prerequisite: MAS BPP Concentration.

FIN 572 Health Care Policy credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/FIN/572/)
Costly advances in health technology, together with an aging population, are making health care an increasingly important issue for individuals, firms, and governments. This course examines the economic, legal, and regulatory issues involved with implementing both public and private health plans, including Medicare, Medicaid, and employer-sponsored plans. Credit is not given for both FIN 434 and FIN 572. Prerequisite: MAS BPP Concentration.

FIN 573 Competition Policy credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/FIN/573/)
While perfect competition is a useful model, it often fails to capture much of what is observed in the real world. This course examines interaction of firms and consumers in markets that are not perfectly competitive and reviews policies that aim to increase efficiency in these markets. Topics covered will include oligopoly, anti-competitive practices, price discrimination, and antitrust regulation. Prerequisite: MAS BPP Concentration.

FIN 574 Individual Tax Policy credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/FIN/574/)
Contentious public debate surrounds how to tax individuals fairly and efficiently. This course will provide the tools to design and evaluate tax policies. Topics will include measuring how taxes affect individual behavior including labor supply, savings, and portfolio decisions; the efficiency cost of taxation; understanding who bears the true economic burden of taxes; measuring the progressivity of a tax system; and the pros and cons of alternative approaches to taxation. Prerequisite: MAS BPP Concentration.

FIN 575 Business Tax Policy credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/FIN/575/)
Government needs revenue and taxes people, but why also tax business? We review the pros and cons of a separate corporate taxes system, the interaction of corporate and personal taxes, the inefficiencies of capital misallocations, and economic incidence (who really bears the burden of a corporate income tax). We also review pros and cons of other taxes on capital income such as interest, dividends, capital gains, rental income, and foreign source-income. Prerequisite: MAS BPP Concentration.

FIN 576 Domestic Environmental Policy credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/FIN/576/)
Environmental regulation has become ubiquitous; Modern business leaders need to be aware of how it affects their businesses and how to operate within its constraints. The focus of this course is the design and critique of domestic environmental policies such as liability law, taxation, command-and-control regulations, and permit markets. We compare their effectiveness and distributional impacts, including effects on regulated firms, and discuss the differential effects these policies can have on technological process. Prerequisite: MAS BPP Concentration.

FIN 577 International Environmental Policy credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/FIN/577/)
As the business landscape becomes more and more global, international environmental policy is increasingly more relevant for the success of modern firms. In this course, we demonstrate how one country's policies can affect other countries and firms in those countries, the typical difficulties that arise in negotiating international environmental agreements and how these can be ameliorated, and the interaction between trade and the environment. Prerequisite: MAS BPP Concentration.

FIN 578 Govt Market Economy credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/FIN/578/)
Given the presumed efficiency of competitive markets, when might it be appropriate for government to intervene? This course reviews possible “market failures” like externalities, public goods, taxes, monopoly power, adverse selection, and moral hazard. We show how each can reduce efficiency of private markets. We then discuss whether, when and how government can improve economic welfare using well-designed tax policy, social insurance, environmental regulation, or health policy. Prerequisite: MAS BPP Concentration.

FIN 579 Applied Portfolio Management credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/579/)
Applies academic topics on financial markets, security analysis/valuation and portfolio management to hands-on investment management. Students will form and review objectives, constraints, and investment policy as it relates to the client's money under management. They will purchase securities, monitor performance of the portfolio, and make recommendations for any adjustments to the holdings. They will be fully educated and responsible for the fiduciary and ethical standards of professional money management as guided by the CFA Institute. May be repeated to a maximum of 8 hours. Prerequisite: Credit or concurrent enrollment in FIN 511.

FIN 580 Special Topics in Finance credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/580/)
Lectures and discussions relating to new areas of interest. See class schedule for topics and prerequisites. 0 to 4 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated to a maximum of 18 hours in a semester; may be repeated to a maximum of 32 hours in subsequent semesters. Credit is not given for FIN 528 and FIN 580 (66393), Section ADF. Prerequisite: Varies by section.

FIN 581 Professional Development credit: 0 to 2 Hours. **(**https://courses.illinois.edu/schedule/terms/FIN/581/**)**
Effective communication skills are one of the most sought-after traits of business leaders across industries and throughout the world. Understanding the world around you, as well as communicating clearly and persuasively is critical to your success as a student, as an employee and as a leader in the business world. These skills will help establish your own credibility and lead you to become an effective leader among your peers and colleagues. This course will introduce successful strategies for structuring both written and verbal communication in the business world, with an eye toward the specific outcomes listed below. 0 to 2 graduate hours. No professional credit. Approved for S/U grading only. Prerequisite: Restricted to MSF and MSFE students.

FIN 582 Project Management credit: 1 to 2 Hours. **(**https://courses.illinois.edu/schedule/terms/FIN/582/**)**
This course is all about learning by doing. It is designed to assist you in your real-world experience as you work in a team with a real organization to help solve a problem the organization is facing. In class, we will help you gain the skills you will need to successfully complete the project. If you work hard in this class, you will have a compelling story to tell as you interview for internships and jobs and you will gain skills that will help you succeed in your career. 1 to 2 graduate hours. No professional credit. Approved for S/U grading only. Prerequisite: Concurrent enrollment in FIN 583 is required. Restricted to MSF students.

FIN 583 Practicum credit: 1 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/FIN/583/**)**
A semester-long, typically corporate-sponsored, team project for MSFE and MSF students that is usually completed by the end of the third semester of study. The goals of the Practicum are: a) to use learned or new tools on real world projects of interest to the corporate sponsor; b) to replicate as closely as possible the environment of the working world where students will soon find themselves employed; c) to work cohesively with other members of a team so as to efficiently produce the desired project results; and d) to be able to communicate effectively with technical and non-technical audiences, which may include the sponsor and/or co-workers. 1 to 4 graduate hours. No professional credit. Prerequisite: Restricted to MSF and MSFE students.

FIN 584 Corporate Finance credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/FIN/584/**)**
In this course, you will learn how to use key finance principles to understand and measure business success as well as identify and promote true value creation. You will also learn financial management tools that allow us to determine the optimal financing and risk management strategies for corporations. In the first part of the course, you will learn how to use accounting information to form key financial ratios to measure a company's financial health and to manage a company's short-term and long-term liquidity needs. You will also learn how to use valuation techniques to make sound business investment and acquisition decisions. Finally, you will learn how to incorporate risk and uncertainty into investment decisions and evaluate the performance of existing investments. In the second part of the course, you will learn how companies choose how much debt to have and which type of debt to issue. You will also learn how payout decisions (dividends and share repurchases) affect firm value and how to determine a company's optimal payout policy. Finally, you will learn how to use risk management tools, such as derivatives, and liquidity to mitigate specific risks, such as currency risk. You will apply these tools to develop a financial management framework for M&A decisions, and R&D investments. 4 graduate hours. No professional credit. Credit is not given for FIN 584 and FIN 580 (CRNs 69355 or 69356). Prerequisite: Enrollment is often restricted to students in specialized programs.

FIN 590 Individual Study and Research credit: 0 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/FIN/590/**)**
Directed reading and research. 0 to 4 graduate hours. No professional credit. Approved for Letter and S/U grading. Course may be repeated up to 16 hours.

FIN 591 Theory of Finance credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/FIN/591/**)**
Examines theoretical frameworks for financial decision making under certainty and uncertainty, as well as perfect and imperfect capital markets; discusses state preference, mean-variance, and continuous time models; emphasizes the structure of individual utility functions. Prerequisite: ECON 502; STAT 400; and admission to doctoral program or consent of instructor.

FIN 592 Empirical Analysis in Finance credit: 2 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/FIN/592/**)**
Designed to train the student in the conduct of empirical work in Finance. Covers the major tools and databases needed to replicate the results of published academic papers and to conduct original research. Prerequisite: Enrollment in the doctoral program in Finance or consent of instructor.

FIN 593 Seminar in Investments credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/FIN/593/**)**
Investigates portfolio theory, CAPM, OPM, and arbitrage pricing theory theoretically and empirically; uses both mathematical statistics and modern econometric models to empirically analyze investment decisions and portfolio management. Prerequisite: FIN 591 and ECON 507.

FIN 594 Seminar in Corporate Finance credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/FIN/594/**)**
Theories, paradigms, and models of nonfinancial corporations; investigates the theoretical foundations and empirical evidence regarding corporate resource allocation, capital structure decisions, and dividend policies; covers in detail contingent claim analysis, signaling theory, and agency theory. Prerequisite: FIN 591 and ECON 507.

FIN 599 Thesis Research credit: 0 to 16 Hours. **(**https://courses.illinois.edu/schedule/terms/FIN/599/**)**
Required for those writing master's and doctoral theses in finance. 0 to 16 graduate hours. No professional credit. Approved for S/U grading only. May be repeated to a maximum of 16 hours.

FAA - FINE AND APPLIED ARTS

FAA Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/FAA/)

Courses

FAA 101 Arts at Illinois credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/FAA/101/)
Common Arts experience for FAA freshmen that explores contemporary issues in the arts, cross-disciplinary ingenuity navigating a comprehensive research intensive university, professional practices and exposures to FAA faculty and guest artists through lectures, discussion groups, and online components.

FAA 102 Design Beyond Boundaries credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FAA/102/)
This class surveys core issues and methods across a host of design disciplines, including industrial design, graphic design, interaction design, exhibition design, theatrical design, choreography, landscape architecture, and architecture. It explores the mindsets and methods with which designers develop innovative, user-oriented solutions to complex and persistent problems. Working individually and in diverse teams, students will deploy design process and design thinking to identify existing needs, frame and reframe problems, and ideate, iterate, and test original design solutions that defy conventional categories.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

FAA 110 Exploring Arts and Creativity credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FAA/110/)
High and street art, tradition and experimentation, the familiar and unfamiliar, international and American creativity provide this course's foundation. Students will attend performances and exhibitions, interact with artists, and examine core issues associated with the creative process in our increasingly complex global society. Faculty from the arts, sciences, humanities, and other domains will lead students through visual arts, music, dance, and theatre experiences at Krannert Center and Krannert Art Museum to spark investigation and dialogue.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

FAA 199 Undergraduate Open Seminar credit: 0 to 3 Hours. (https://courses.illinois.edu/schedule/terms/FAA/199/)
Various special topics in Fine and Applied Arts. See class schedule for offerings. Additional fees may apply. See Class Schedule. Approved for Letter and S/U grading. May be repeated in the same or separate semesters to a maximum of 6 hours if topics vary; some restrictions may apply.

FAA 202 Artsful Teaching through Integ credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FAA/202/)
Designed to provide elementary education majors with a philosophical and practical basis for integrating the arts [including visual art, music, & dance] in public schools. Lecture, discussion, arts practices and class activities will focus on the ever expanding role of the arts in children's lives and the role of the teacher in nurturing artistic expressions through the development of skills, processes, and the various knowledges of the multi-modalities of the arts. Additional fees may apply. See Class Schedule. Prerequisite: Completion of applicable Teacher Licensure Gateway requirements. Contact College of Education for further information. Admission to the Elementary Teacher Education Program.

FAA 220 Introduction to Fashion credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FAA/220/)
Same as ARTS 220. See ARTS 220.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

FAA 230 Sustainable Design of the Built Environment credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FAA/230/)
This seminar introduces fundamental readings in sustainability and resilient design. Presents diverse perspectives on sustainability, encouraging students to understand and critique different meanings of sustainability over time and geography. Approved for Letter and S/U grading. Prerequisite: Priority given for majors.

FAA 291 Civic Engagement Seminar credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/FAA/291/)
Designed to introduce students to community development practices and the participatory approach followed by Action Research.Illinois. Detailed information about the course is available at www.actionresearch.illinois.edu. Enrollment in this class requires attendance in two in-class sessions (one lecture, one discussion) and a two-day outreach event in Central Illinois, dates to be determined. Outreach event begins at 9 am Friday and ends by 9 pm Saturday. Lecture, discussion and outreach event will be offered with the one-week course period to be determined. Approved for S/U grading only. May be repeated in separate terms to a maximum of 2 hours.

FAA 299 FAA Study Abroad credit: 0 to 18 Hours. (https://courses.illinois.edu/schedule/terms/FAA/299/)
Provides campus credit for foreign study and/or travel. A detailed proposal for study abroad must be submitted for approval by the appropriate committee of the department in which the student is studying and the college dean's office prior to such study abroad. Final determination of credit and its application toward the degree is made after a review of the student's work abroad by the above committee and college office. (summer session, 0 to 6 undergraduate hours). Approved for Letter and S/U grading. May be repeated to a maximum of 36 hours. Prerequisite: Approval of the student's proposal by the departmental committee and the college office.

FAA 310 FAA Professional Development credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/FAA/310/)
Focuses on tailoring written, verbal, and online presentations to targeted audiences. Students will develop an application package including resume, letter, LinkedIn profile, elevator pitch, interview skills, and website. Course information: Prerequisite: Sophomore, junior or senior standing in FAA is required.

FAA 330 Making Sustainable Design credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/FAA/330/)
Introduction to techniques and tools for representing and realizing sustainable design ideas. Using a case study method, students are introduced to digital and analog means of representing concepts, data, and spatial forms. Through hands-on assignments, tutorials, and workshops, students learn basic skills to express ideas graphically and in three dimensions. Prerequisite: ARCH 171 and ARTD 225. Limited to majors.

FAA 391 Action Research Seminar credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FAA/391/)
Introduction to applied action research within the social sciences and humanities with the subject of research selected from partner organizations in Champaign-Urbana, Illinois, and surrounding communities. Students establish a research question, conduct fieldwork using qualitative and/or quantitative methods, and complete a project of sufficient quality for publication or presentation. May be repeated to a maximum of 12 hours in subsequent terms. Prerequisite: Junior standing or consent of instructor.

FAA 398 Sustainable Design Internship credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/FAA/398/)
Supervised field experience in a full-time or part-time internship position related to the field of Sustainable Design. Designed to introduce students to professional employment and actual practice. Full documentation and approval of internship activities required. Approved for S/U grading only. May be repeated in separate terms to a maximum of three times. Prerequisite: For Sustainable Design majors only. Registration only with instructor permission (sustaindesign@illinois.edu).

FAA 399 Special Topics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FAA/399/)
Various special topics in Fine and Applied Arts. See class schedule for offerings. Approved for Letter and S/U grading. May be repeated in the same or separate semesters to a maximum of 6 hours if topics vary; with permission of the unit advisor.

FAA 430 Capstone Seminar credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FAA/430/)
Introduces advanced research themes, methods, and techniques for seniors in the Bachelor of Science in Sustainable Design. Emphasis is placed on students developing their own research topics, using multiple representational forms, including writing, drawing, mapping, and modeling. 3 undergraduate hours. No graduate credit. Prerequisite: FAA 230 and FAA 330. Majors only. Senior standing required.

FAA 431 Capstone Studio credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/FAA/431/)
In design studio format, students work on capstone projects for the Bachelor of Science in Sustainable Design degree. Students receive regular feedback and critique throughout the semester in the form of desk critiques, pin-ups, and formal reviews with Illinois Faculty and guests from other institutions. 5 undergraduate hours. No graduate credit. Prerequisite: FAA 430. Limited to undergraduate majors.

FAA 499 Special Topics credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/FAA/499/)
Special topics in subject areas within the College of Fine and Applied Arts intended to augment the existing curriculum. 0 to 4 undergraduate hours. 0 to 4 graduate hours. Approved for letter and S/U grading. May be repeated for a maximum of 8 credit hours in separate terms if topics vary.

FSHN - FOOD SCIENCE & HUMAN NUTRITION

FSHN Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/FSHN/)

Courses

FSHN 101 The Science of Food and How it Relates to You credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/101/)
Discusses the evolution of the food system to meet the needs and desires of a complex, heterogeneous society. Provides an overview of food in relation to nutrition and health, composition and chemistry, microbiology, safety, processing, preservation, laws and regulations, quality, and the consumer.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences

FSHN 120 Contemporary Nutrition credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/120/)
Fundamental principles of human nutrition and their application to the selection of an adequate diet for health and wellness; current nutrition topics of importance. Credit is not given for FSHN 120 if credit has been given for FSHN 220.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Life Sciences

FSHN 125 Intro to Human Nutrition credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/FSHN/125/)
Introductory course for students in Human Nutrition. Explore department, college and campus resources. Learn about current issues, opportunities, and careers in the nutrition field. Prerequisite: FSHN major with a concentration in Human Nutrition only.

FSHN 130 Introduction to Food Science credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/FSHN/130/)
Introductory course for students in Food Science (FS) focused on student learning and success, current issues, and opportunities and careers in the field of food science. In addition, students will learn about how to enhance their learning strategies. Approved for S/U grading only. Prerequisite: For freshman majoring in FSHN with a concentration in Food Science only.

FSHN 140 Introduction to Hospitality credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/140/)
Overview of the hospitality industry with emphasis on organizational and operational structures of the major segments of the industry and career opportunities within each. Field trips required.

FSHN 145 Intro Hospitality Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/145/)
Explore the foodservice aspect of the hospitality industry by assisting Hospitality Management seniors taking FSHN 443 in the operation of the Spice Box. Course covers the planning, production, and service of meals in specialized settings.

FSHN 150 Introduction to Dietetics credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/FSHN/150/)
Introductory course for students in dietetics. Addresses current issues, opportunities and careers in the dietetics profession. Freshmen or transfer student into dietetics given priority.

FSHN 175 Science of Fermented Foods credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/175/)
Discusses the evolution and commercialization of fermented foods. Provides insight into the microbial processing, manufacturing, history, nutrition, safety, and chemistry of different fermented products such as beer, bread, wine, and cheese.

FSHN 195 Intro to Undergrad Research credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/FSHN/195/)
Introduce students to research and provide skill-building focused on the scientific process and nature of discovery. Help students define research topics, formulate research questions, prepare experimental plans, develop research proposals, and develop research communication skills. Approved for S/U grading only. Prerequisite: Restricted to FSHN majors only.

FSHN 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/199/)
Experimental course on a special topic in food science and human nutrition. Topic may not be repeated except in accordance with the Code. Approved for letter and S/U grading. May be repeated in the same or subsequent terms. No more than 12 hours may be counted toward graduation.

FSHN 201 Math for Food Science credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/201/)
Teaches mathematical concepts by solving the problems in food science related applications. Develops basic understanding of mathematical equations and simple models for solving real world food science problems. Provides instruction for writing simple computer codes using a numerical software package to solve the mathematical problem. Builds a foundation in critically analyzing physical food science problems and solving those using mathematics and coding. Prerequisite: MATH 220 and PHYS 101 or equivalent. Limited to the undergraduate students in the Food Science concentration.

FSHN 220 Principles of Nutrition credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/220/)
Course focuses on the nutritive value of foods and metabolism of essential nutrients, as well as the application of principles of nutrition to the requirements of normal individuals throughout the life cycle.

FSHN 230 Food Sci Professional Issues credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/FSHN/230/)
Discussion of current topics in food science and professional issues, including ethics, undergraduate research, study abroad, graduate school options and internships. Approved for S/U grading only. Prerequisite: Sophomore and Junior transfer students with a Food Science concentration only.

FSHN 231 Food Systems: Cacao & Chocolate credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/231/)
Focused on the entire food chain from growth of cacao through processing, production and marketing of chocolate, including the nutritional aspects/health benefits of consumption of chocolate and issues surrounding cacao farmers and fair trade. The focus of this course will be a mixture of hands-on activities with lectures based on student interaction and learning. Study Abroad optional. Prerequisite: Restricted to undergrad students.

FSHN 232 Science of Food Preparation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/232/)
Application of food preparation principles and techniques in the preparation of standard food products; principles of food management and their application in the planning and preparation of meals. Additional course fees may apply. See Class Schedule. Prerequisite: FSHN 101 or concurrent registration.

FSHN 249 Food Service Sanitation credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/FSHN/249/)
Examines the dangers, costs and prevention of foodborne illness as well as the training and motivation of food service employees in sanitary food handling and quality assurance practices. Upon completion of this course, student will be eligible to apply for the food service sanitation certificate issued by the State of Illinois. Credit is not given for FSHN 249 and FSHN 349.

FSHN 250 Nutritional Physiology I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/250/)
Anatomy and physiology of the digestive, circulatory, integumentary, skeletal, and muscular system. Special focus on the absorption, distribution, storage, and mobilization of macronutrients and micronutrients. Learn the necessary concepts on cell biology and biochemistry required to understand human physiology. The manifestation of disease as a result of nutritional imbalances in body systems. Evaluation of the effectiveness and potential toxicity of nutritional supplements commonly used in the US. Pharmacological interventions and current therapeutics against diseases related to nutritional disorders. Prerequisite: Credit or concurrent enrollment in FSHN 220.

FSHN 251 Nutritional Physiology II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/251/)
Anatomy and physiology of the respiratory, nervous, endocrine, immune, reproductive, and excretory systems. Special focus on the absorption, distribution, storage and mobilization of macronutrients and micronutrients. Learn the necessary concepts on cell biology and biochemistry required to understand human physiology. Manifestation of disease as a result of nutritional imbalances in body systems. Evaluation of the effectiveness and potential toxicity of nutritional supplements commonly used in the US. Pharmacological interventions and current therapeutics against diseases related to nutritional disorders. Prerequisite: FSHN 220.

FSHN 260 Raw Materials for Processing credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/260/)
Problems involved with procurement, harvesting, handling, and storage of fruits, vegetables, cereal grains, dairy products, red meat, poultry, fish, and eggs for the food-processing industry. Field trips to specialized operations. Additional fees may apply. See Class Schedule. Prerequisite: CHEM 104 and CHEM 105 and concurrent enrollment in CHEM 232.

FSHN 274 NonMajors Food Microbiology credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/FSHN/274/)
Introduction to food microbiology and the role of microorganisms in foodborne illness and food manufacture. Credit is not given for both FSHN 274 and FSHN 101. Prerequisite: Sophomore standing or higher.

FSHN 292 Hospitality Management: Professional Issues credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/FSHN/292/)
Explores career opportunities in the hospitality industry and prepares students for internship and job searches. Assists in developing professional skills and understanding best practices needed to be successful in the hospitality industry. Prerequisite: Hospitality Management majors only. Not intended for Freshman.

FSHN 293 Off Campus Internship credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/293/)
Supervised, off-campus experience in a field directly pertaining to the subject matter. Approved for Letter and S/U grading. May be repeated to a maximum of 10 hours.

FSHN 294 On Campus Internship credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/294/)
Supervised, on-campus, learning experience with faculty engaged in research. Approved for both letter and S/U grading. May be repeated in the same or subsequent terms to a maximum of 10 hours. Prerequisite: Sophomore standing, 2.0 GPA, consent of the advisor, and consent of the Department Teaching Coordinator.

FSHN 295 UG Research or Thesis credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/295/)
Individual research, special problems, thesis, development and/or design work under the supervision of an appropriate member of the faculty. Approved for letter and S/U grading. May be repeated in the same or subsequent terms. No more than 12 hours of special problems, research, thesis and/or individual studies may be counted toward degree. Prerequisites: Cumulative GPA of 2.5 or above at the time the activity is arranged and consent of instructor.

FSHN 302 Sensory Evaluation of Foods credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/302/)
This course is devoted to learning the 1) physiological and psychological basis of human subjects, 2) chemistry of aroma and taste, 3) basic sensory methodologies in food evaluation, and 4) analysis and interpretation of sensory data. Additional fees may apply. See Class Schedule. Prerequisite: Recommended to students in junior and senior levels. Recommended to have taken foundational statistics course, i.e., STAT 100, STAT 200 or FSHN 440.

FSHN 322 Nutrition and the Life Cycle credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/322/)
Examines physiological changes that occur during gestation, postnatal growth, and aging and the influence of these changes on nutritional requirements. Prerequisite: FSHN 220 or consent of instructor.

FSHN 329 Communication in Nutrition credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/329/)
Application and integration of the principles of nutrition and their transmission to groups and individuals. Students will learn individual counseling techniques as well as how to present nutrition information to groups. Open to Dietetics and Human Nutrition juniors and seniors only. Prerequisite: RHET 105, CMN 101, and FSHN 220 or equivalents.

FSHN 340 Food Production and Service credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/340/)
Introduction to the management of commercial and noncommerical foodservice systems through the operation of Bevier Cafe. Students experience managing the procurement, production and service of food, as well as the sanitation and maintenance of equipment and facilities. Prerequisite: FSHN 232 and credit or concurrent registration in FSHN 249 and FSHN 345.

FSHN 343 Foundations in Beverage Management: Introduction to Wine, Beer and Spirits credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/343/)
The course will focus on the application of principles and practices related to preparation and service of alcohol and specialty beverages in the hospitality industry. The course includes a study of management principles, study of bar operations, human resources and liability protection. Intrinsic to excellent service is having an understanding of proper tasting skills and knowledge to be able to verbalize nuances within the wine or spirit. Structured tastings will be utilized to discover, identify and describe attributes of the beverage. Successful completion of alcohol handler training required to maintain course enrollment. Additional fees may apply. See Class Schedule. Prerequisite: All registrants must be 21 years of age or older.

FSHN 344 Business Etiquette credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/FSHN/344/)
The fundamentals of business etiquette as they are applied to the modern multicultural and global business environments. Content includes the importance of the first impression, polite conversation, personal appearance, office politics, diplomacy, telephone and cell phone etiquette, high-tech etiquette, proper oral and written communication, and the protocol of meetings both in the United States and abroad. Students will also participate in a formal dining experience. Offered every other year. Prerequisite: Junior standing.

FSHN 345 Strategic Operations Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/345/)
Intended to promote an understanding of the managerial aspects of strategic operations. Strategic operations management examines facilities, capacity, process/work-force planning, organization, people, systems integration, and coordination between operations. An introduction to the principles and procedures for the purchasing, selection and procurement of food and non-food items in the hospitality industry is also included. Provides students with the management information needed to make operational decisions based on sound criteria.

FSHN 346 Foundations of Hotel Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/346/)
Provides a comprehensive examination of key areas in hotel operations and management; including, revenue management, accounting, housekeeping, engineering, front desk, food and beverage and marketing. The concepts and principles will be applied in interactive online hotel case simulations designed for an immersive and applied learning experience.

FSHN 396 UG Honors Research or Thesis credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/396/)
Individual research, special problems, thesis, development and/or design work under the direction of the Honors advisor. May be repeated in the same or subsequent terms. No more than 12 hours of special problems, research, thesis and/or individual studies may be counted toward the degree. Prerequisite: Junior standing, admission to the ACES Honors Program, and consent of instructor.

FSHN 398 Undergraduate Seminar credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/398/)
Group discussion on a special topic in a field of study directly pertaining to subject matter in food science and human nutrition. Approved for Letter and S/U grading. May be repeated if topics vary. Prerequisite: Sophomore standing.

FSHN 414 Food Chemistry credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/414/)
Examines the chemical aspects of major food components; water, carbohydrates, proteins, and lipids; properties of pigments, salts, and food dispersions. Undergraduate Food Science majors must enroll concurrently in FSHN 416. 3 undergraduate hours. 3 graduate hours. Prerequisite: CHEM 232.

FSHN 416 Food Chemistry Laboratory credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/416/)
Chemical and physical properties of water, proteins, lipids, carbohydrates, and other food components/additives are discovered in the context of their interactions and functional roles in foods. 3 undergraduate hours. 3 graduate hours. Prerequisite: CHEM 232 and credit or concurrent enrollment in FSHN 414.

FSHN 417 Neuroscience of Eating & Drinking credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/417/)
Same as NEUR 417 and PSYC 417. See PSYC 417.

FSHN 418 Food Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/418/)
Principles and application of the chemical, physical, and instrumental methods used to determine the constituents of foods; special considerations applicable to the analysis of certain foods. Lecture and lab. 4 undergraduate hours. 4 graduate hours. Prerequisite: CHEM 232; FSHN 414; FSHN 416 or consent of instructor.

FSHN 419 Food Ingredient Technology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/419/)
Explores the research, science and technology of the production of safe, high quality food ingredients through the application of food chemistry, food microbiology, and food processing principles. 3 undergraduate hours. 3 graduate hours. Prerequisite: FSHN 414 or consent of the instructor. FSHN majors only, junior standing required.

FSHN 420 Nutritional Aspects of Disease credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/420/)
Examines nutritional, biochemical, and physiological aspects of disease processes and studies the role of nutrition in prevention, management, and treatment of disease. Same as NUTR 420. 3 undergraduate hours. 3 graduate hours. Prerequisite: FSHN 220 or comparable course with a physiology prerequisite; MCB 450 or equivalent.

FSHN 421 Pediatric Clinical Nutrition credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/421/)
Examines physiological, biochemical and nutritional aspects of disease processes relevant to infants, children and adolescents. Topics covered include prematurity, developmental disabilities, inborn errors of metabolism, food allergy, obesity and eating disorders. The role of nutrition in prevention, management and treatment of disease is also covered. Offered every other year. 3 undergraduate hours. 3 graduate hours. Prerequisite: FSHN 420; FSHN 322 is highly recommended.

FSHN 422 Introduction to Personalized Nutrition credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/422/)
Explores the role of genetics and epigenetics in nutrition as a basis for differential responses of individuals to diet. Students will learn about how epigenetics and genetic variation affects individualistic responses to food and nutrients, and they will also learn about how food affects gene expression. Topics include genetics, epigenetics, and nutrigenetics; variation in taste, food selection, and eating behaviors; personalized nutrition; food intolerance and metabolic disorders; genetic variation in gut microbiota. This course is appropriate for students who wish to learn how to develop of better food products, optimize nutritional counseling, improve individualize diets, and better understand how to apply nutritional advice for the public generally. 3 undergraduate hours. 3 graduate hours. Prerequisite: FSHN 120 or FSHN 220 and CHEM 101; or consent of instructor.

FSHN 423 Advances in Foods & Nutrition credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/423/)
New developments in foods and nutrition; readings, lectures, and discussions. 2 undergraduate hours. 2 graduate hours. Prerequisite: FSHN 220 and FSHN 332, or equivalent.

FSHN 424 Biopsychology of Ingestive Behavior credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/424/)
Why do we eat what we eat? This course provides a taste of the science including both biological and psychological basis of ingestive behavior and the adoption of both healthy and maladaptive behaviors concerning eating and drinking. We will review and integrate historical theories with recent research on how we perceive flavor, the development of food preferences, and the biological basis of hunger, thirst, and satiety. Students will also have the opportunity to strengthen their critical thinking skills by participating on two debates in which equal number of arguments will be formulated to support or refute important issues in the field of food science and human nutrition. 3 undergraduate hours. 3 graduate hours.

FSHN 425 Food Marketing credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/425/)
Same as ACE 430. See ACE 430.

FSHN 426 Biochemical Nutrition I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/426/)
The dietary and hormonal regulation of carbohydrate, lipid and amino acid metabolism. Emphasizes the regulation of enzyme activity and the different roles the major organs have in whole animal energy balance. Same as NUTR 426. 3 undergraduate hours. 3 graduate hours. Prerequisite: FSHN 220; or FSHN 120 and FSHN 414.

FSHN 427 Biochemical Nutrition II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/427/)
Biochemistry and metabolism of the water and fat soluble vitamins and minerals. Emphasizes the digestion, transport, metabolism and intercellular functions of these nutrients and how diet/food intake and physiological states affect these processes. Same as NUTR 427. 3 undergraduate hours. 3 graduate hours. Prerequisite: FSHN 220; or FSHN 120 and FSHN 414.

FSHN 428 Community Nutrition credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/428/)
Application of nutrition principles to needs assessments, program planning, delivery and evaluation in local, national, and international settings using behavioral theory frameworks. Same as NUTR 428. 3 undergraduate hours. 3 graduate hours. Prerequisite: FSHN 220 or equivalent, one introductory statistics course, and one course in the social or behavioral sciences.

FSHN 429 Nutrition Assessment & Therapy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/429/)
Problem-based learning application (via cases) of the nutrition care process with emphasis on nutrition assessment, diagnosis, intervention, monitoring and evaluation, as related to the management and treatment of disease states. This course is the clinical capstone course for the dietetics curriculum. 3 undergraduate hours. 3 graduate hours. Prerequisite: FSHN 420, or concurrent enrollment required.

FSHN 440 Applied Statistical Methods I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/440/)
Same as ABE 440, ANSC 440, CPSC 440, NRES 440, and NUTR 440. See CPSC 440.

FSHN 441 Services Management credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/441/)
Focuses on a distinctive approach to communication, design, and operation that is required by service organizations (e.g., hotels, restaurants, professional services, banks, hospitals, etc.). Students will explore ways that firms can observe, measure, improve, and utilize service as a primary source of competitive advantage. Students will learn about the unique challenges of services and the different roles both employees and customers have in the creation and delivery of services. They will also practice how to develop and manage the service encounter in order to deliver service quality to the customer. 2 undergraduate hours. 2 graduate hours. Prerequisite: Previous exposure to marketing principles, management principles, and customer service scenarios is recommended. Restricted to Junior, Senior, or Graduate class standing.

FSHN 442 Hospitality Management & Leadership Skills credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/442/)
Application of behavioral science and management techniques, methods and strategies to the hospitality industry. Applied management techniques will focus on those managerial behaviors needed to develop and maintain positive and productive relationships with subordinates, peers, supervisors and individuals external to the hospitality organization. 3 undergraduate hours. 3 graduate hours.

FSHN 443 Management of Fine Dining credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/443/)
Advanced application of food production and management principles to specific food service demands; emphasis on artistry in preparation, serving, and merchandising high quality food in quantity. 4 undergraduate hours. 4 graduate hours. Prerequisite: FSHN 340 and credit or concurrent registration in FSHN 442.

FSHN 450 Dietetics: Professional Issues credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/450/)
Discussion of current topics in dietetics, professional issues (ethics, outcomes research, marketing, legislation, registered dietitian exam) and preparing for dietetic internships. Required of all dietetics students. 2 undergraduate hours. 2 graduate hours. Prerequisite: Senior standing in dietetics.

FSHN 453 Nutrition for Performance credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/453/)
Same as KIN 453. See KIN 453.

FSHN 459 Nutrition Focused Physical Assessment credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/459/)
Collect appropriate subjective and objective data associated with obtaining a health and diet history. An introduction to physical and diagnostic assessment of health status. The emphasis is on knowing normal findings and normal variations in the healthy adult, well child, and the well elder person. 2 undergraduate hours. 2 graduate hours. Prerequisite: FSHN 329 and FSHN 420 and credit or concurrent enrollment in FSHN 429.

FSHN 460 Food Processing Engineering credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/460/)
Examines application of process engineering principles to the conversion of raw agricultural materials into finished food products. Topics include basics of engineering analysis, units and dimensions, materials balances, energy balances, thermodynamics, heat transfer, psychrometry, refrigeration and mechanical separations. 3 undergraduate hours. 3 graduate hours. Prerequisite: PHYS 101 and MATH 220; or consent of instructor.

FSHN 464 Beverage Science & Technology credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/464/)
Explores the research, science and technology of the production of safe, high quality beverages through the application of food chemistry, food microbiology, and food processing principles. 2 undergraduate hours. 2 graduate hours. Prerequisite: FSHN 414 or consent of instructor. FSHN juniors, seniors and grad students only.

FSHN 465 Principles of Food Technology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/465/)
Overview of processing techniques in the food industry, including thermal/non-thermal processing, refrigeration, freezing, moisture removal, and separation. Presentations cover basic principles of each technology with examples of processing equipment. The changes of food components and nutrients caused by processing is also discussed. Lecture and field trips. 3 undergraduate hours. 3 graduate hours. Credit is not given for both FSHN 465 and the FSHN 461 - FSHN 462 sequence. Prerequisite: Food chemistry or biochemistry equivalent recommended. Undergraduate food science majors or graduate students specializing in food processing/engineering may not enroll in FSHN 465.

FSHN 466 Food Product Development credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/466/)
Principles of food product development: target market evaluation, concept development and presentation, formulation, manufacturing, packaging, product costs, pricing, safety, and marketing. May include a product in accordance with Institute of Food Technologists national competition guidelines. Products will be unveiled and presented for faculty evaluation. Additional fees may apply. See Class Schedule. 4 undergraduate hours. 4 graduate hours. May be repeated to a maximum of 8 hours in separate terms if topics vary. Prerequisite: FSHN 332 or FSHN 414; FSHN 471 or FSHN 472; concurrent registration or completion of FSHN 461 and FSHN 462, or FSHN 465. This capstone course is limited to seniors in the Food Science or Foods Industry and Business options in FSHN. Graduate students will be allowed to register pending sufficient space in the class.

FSHN 469 Package Engineering credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/469/)
Cross-disciplinary study of the materials, machinery, research, design, techniques, environmental considerations, ethics and economics used in the global packaging industry with emphasis on the implementation of improved technologies for the problems unique to food packaging. An emphasis on the broad, systems-based nature of packaging will be maintained throughout the course. Same as ABE 482. 3 undergraduate hours. 3 graduate hours. Prerequisite: MATH 220; one each of 100-level Chemistry and Physics courses or their equivalent; junior-senior standing or higher, or consent of instructor.

FSHN 471 Food & Industrial Microbiology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/471/)
Relationship of microorganisms to food manufacture and preservation, to food and industrial fermentation and processing, and to food-borne illness. Same as MCB 434. 3 undergraduate hours. 3 graduate hours. Credit is not given for FSHN 471 and FSHN 175. Prerequisite: Previous microbiology course such as MCB 100, MCB 250, or MCB 300.

FSHN 472 Applied Food Microbiology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/472/)
Explores experimental methods for studying microbial food safety, quality, and fermentation. Introduces basic microbiology techniques and uses them to study how to detect and control spoilage microorganisms and potential foodborne pathogens. Conduct and experimentally track the progress of classic food fermentations. 3 undergraduate hours. 3 graduate hours. Credit is not given for both FSHN 472 and FSHN 312. Prerequisite: MCB 100 and credit or concurrent enrollment in FSHN 471.

FSHN 480 Basic Toxicology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/480/)
Emphasizes basic toxicology principles and the pharmacokinetics, absorption, distribution, metabolism and excretion of drugs, non-nutrient dietary supplements and other compounds foreign to the body. Toxic effects on major target organ systems are discussed, including an introduction to how foreign compounds can initiate, enhance or prevent the carcinogenic process. Briefly surveys diverse areas of toxicology such as eco-, nano-, forensic, genetic, nutritional, clinical and reproductive toxicology; review the federal regulatory aspects of safety assessment and consumer protection. Same as CB 449, CPSC 433, and ENVS 480. 3 undergraduate hours. 3 graduate hours.

FSHN 481 Food Processing Unit Operations I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/481/)
Study the engineering principles that govern food processing and preservation unit operations, including evaporation, freeze-concentration, membrane separation, dehydration, centrifugation, and extrusion, and understand the effect of the process conditions of various unit operations on product characteristics and product quality. 2 undergraduate hours. 2 graduate hours. Prerequisite: FSHN 414 or equivalent; FSHN 460 or equivalent; FSHN 312 or FSHN 471 or equivalent. FSHN 260 is recommended.

FSHN 482 Food Processing Unit Operations I Lab credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/FSHN/482/)
Focus on topics discussed in Food Processing Unit Operations I (FSHN 481) in a food grade environment. Students will have opportunities to operate pilot scale food processing equipment for each unit operation. Additional fees may apply. See Class Schedule. 1 undergraduate hour. 1 graduate hour. Prerequisite: FSHN 481.

FSHN 483 Food Processing Unit Operations II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/483/)
Study the engineering principles that govern food processing and preservation unit operations, including evaporation, freeze-concentration, membrane separation, dehydration, centrifugation, and extrusion, and understand the effect of the process conditions of various unit operations on product characteristics and product quality. 2 undergraduate hours. 2 graduate hours. Prerequisite: FSHN 414 or equivalent; FSHN 460 or equivalent; FSHN 312 or FSHN 471 or equivalent. FSHN 260 is recommended.

FSHN 484 Food Processing Unit Operations II Lab credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/FSHN/484/)
Focus on topics discussed in Food Processing Unit Operations II (FSHN 483) in food grade environment. Students will have opportunities to operate pilot scale food processing equipment for each unit operation. Additional fees may apply. See Class Schedule. 1 undergraduate hour. 1 graduate hour. Prerequisite: FSHN 483.

FSHN 499 Cur Topics in FS & Human Nutr credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/499/)
Group discussion or an experimental course on a special topic in food science and human nutrition. 1 to 3 undergraduate hours. 1 to 3 graduate hours. Approved for Letter and S/U grading. May be repeated in the same or subsequent terms to a maximum of 12 hours as topics vary.

FSHN 502 Advanced Sensory Science credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/502/)
In-depth and current topics in sensory science beyond the scope of undergraduate sensory course, FSHN 302. The main course objectives are to 1) discuss the physiological and psychological basis for sensory evaluation, 2) discuss Thurstonian Modeling in Difference Tests, 3) utilize multivariate statistical methods in sensory studies, 4) critique current research papers and articles in the sensory science discipline, and 5) develop a proposal for research utilizing sensory methods. Prerequisite: Undergraduate sensory science course, such as FSHN 302. Graduate students only.

FSHN 510 Topics in Nutrition Research credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/510/)
Same as ANSC 525 and NUTR 510. See NUTR 510.

FSHN 511 Regulation of Metabolism credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/511/)
Same as ANSC 521 and NUTR 511. See NUTR 511.

FSHN 514 Advanced Food Chemistry credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/514/)
Emerging issues related to the chemistry of water, carbohydrates, lipids and proteins, as well as postharvest physiology and impact of processing on chemical reactions in foods. Prerequisite: Organic CHEM 232, or equivalent.

FSHN 517 Fermented &Distilled Beverages credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/517/)
The production technology, microbiology and chemistry (including the compositional chemistry, flavor chemistry, and chemistry of aging) of fermented and distilled beverages. Additional fees may apply. See Class Schedule. Prerequisite: Graduate student status, or a food microbiology course and a food chemistry or biochemistry course.

FSHN 518 Chemistry of Lipids in Foods credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/518/)
Detailed examination of the chemical and physical properties of lipids in foods. Offered every other year. Prerequisite: A food chemistry or biochemistry course is highly recommended.

FSHN 519 Flavor Chemistry and Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/519/)
Provides graduate students with the tools and understanding necessary for the study of complex food flavor systems. Students will learn: 1) modern techniques of analysis used in the chemical evaluation of food flavor systems, 2) accepted techniques for the sensory evaluation of food flavor, 3) approaches for combined sensory-analytical evaluation of food flavor and 4) principles of food flavor chemistry with emphasis placed on some well-understood flavor systems. Offered every other year. Prerequisite: FSHN 414 and FSHN 418 or equivalent.

FSHN 520 Advanced Clinical Nutrition credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/520/)
Same as NUTR 561. See NUTR 561.

FSHN 521 Molecular Basis of Metabolic Syndrome and Weight Management credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/521/)
The objective of the course is to help nutritionists and dietitians build a strong biochemical, physiological, clinical and epidemiological foundation in the areas of: 1. Metabolic adaptation to positive and negative energy balance 2. Progression and regression of metabolic syndrome 3. Principles of running a cost-effective dietary weight loss/maintenance program. Same as NUTR 521. 2 graduate hours. No professional credit. Prerequisite: MCB 450, MCB 244, MCB 246, and FSHN 420; or consent of instructor. May enroll in prerequisite courses concurrently. Priority is given to graduate students in FSHN and DNS programs.

FSHN 522 Function and Metabolism of Essential Fatty Acids and Cholesterol credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/FSHN/522/)
The goals of the course are to learn a biochemical and molecular basis of functions and metabolism of essential fatty acids and cholesterol, and the implications to chronic disease prevention and dietary recommendations. Same as NUTR 522. 1 graduate hour. No professional credit. Prerequisite: MCB 450, MCB 244, MCB 246, and FSHN 420; or consent of instructor. May enroll in prerequisite courses concurrently. Priority given to graduate students in FSHN and DNS programs.

FSHN 527 Advanced Vitamins and Minerals: Regulations of Metabolism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/527/)
Combined lectures and in-class case studies of vitamins and minerals as the regulators of nutrition, metabolism, and overall human health. Lectures include genetic, biochemical background information and basic epigenetic mechanisms. In-class case studies will involve body physiology, human development, and specific diseases. Same as NUTR 527. 3 graduate hours. No professional credit. Prerequisite: One biochemical course, such as FSHN 426, FSHN 427, MCB 450, or equivalent.

FSHN 530 Childhood Obesity I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/530/)
Same as CHLH 530, HDFS 551, KIN 530, NUTR 530, SOCW 570. See NUTR 530.

FSHN 531 Childhood Obesity II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/531/)
Same as CHLH 531, HDFS 552, KIN 531, NUTR 531, SOCW 571. See NUTR 531.

FSHN 550 Grantsmanship and Ethics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/550/)
Same as NUTR 550. See NUTR 550.

FSHN 563 Food Materials Science credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/563/)
Study of the structure of foods that confer attributes such as soft, crunchy, juicy, creamy, and many others. Foods will be probed at the micro and nano scales. The goal is to better understand, predict, and design food properties and functionalities. 2 graduate hours. No professional credit. Prerequisite: FSHN 414 (Food Chemistry) or equivalent.

FSHN 573 Advanced Food Microbiology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/573/)
Detailed examination of food microbiology topics including food-borne pathogens, food fermentation and microbial spoilage. Prerequisite: Graduate student standing or consent of instructor.

FSHN 574 Value Added Biotransformation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/574/)
Crop residues, renewable biomass, and agricultural wastes as sustainable and inexpensive substrates for producing value added products through enzymatic and microbial conversion processes. Concepts and applications of metabolic engineering. 3 graduate hours. No professional credit. Prerequisite: FSHN 471.

FSHN 575 Issues in Food Safety credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/575/)
Current issues affecting the safety of the food supply including emerging pathogens, food additives and pesticides, genetically modified organisms and new technologies will be evaluated in the context of current scientific knowledge, United States food law, and consumer opinions. Offered every other year. Prerequisite: Graduate standing.

FSHN 580 Ethics in Research, IRB and IACUC credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/580/)
The goals of this course are twofold. First, to provide graduate students with an introduction to knowledge and skills that will facilitate ethical behavior in research. Second, to increase their sensitivity to ethical issues. We will review rules, issues, options and resources to meet regulatory and institutional expectations (including Institutional Review Board (IRB) and Institutional Animal Care and Use Committee (IACUC). We will foster their ethical decision-making skills by discussing and analyzing real (or realistic) ethical cases. We will identify failures, justify decisions, and generate potential solutions to those errors. Same as NUTR 580. 3 graduate hours. No professional credit.

FSHN 590 Dietetic Internship I credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/590/)
Supervised learning experience in a variety of settings and locations related to clinical nutrition, community nutrition and health promotion, and food service management within Urbana/Champaign and surrounding areas. Additional fees may apply. See Class Schedule. Approved for letter and S/U grading. Prerequisite: Enrollment in dietetic internship program.

FSHN 591 Dietetic Internship II credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/591/)
Supervised learning experience in a variety of settings and locations related to clinical nutrition, community nutrition and health promotion, and food service management within Urbana/Champaign and surrounding areas. Additional fees may apply. See Class Schedule. Approved for letter and S/U grading. Prerequisite: FSHN 590.

FSHN 592 Graduate Internship Experience credit: 0 to 12 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/592/)
Supervised, off-campus experience in a field related to a students' option/concentration. Approved for letter and S/U grading. May be repeated in separate terms to a maximum of 12 hours.

FSHN 593 Seminar in Foods and Nutrition credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/593/)
Communication-based course that focuses on enhancing professional oral presentation skills, particularly with regard to communicating current food science and/or human nutrition topics. 2 graduate hours. No professional credit. Prerequisite: Undergraduate degree in foods, nutrition, or comparable background in chemistry, microbiology, physiology, or other biological science; consent of instructor.

FSHN 595 Advanced Topics in Food Science and Human Nutrition credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/595/)
Studies of selected topics in Food Science. Study may be on specialized topics in any one of the following fields: food chemistry, food microbiology, nutrition, food processing/engineering. Lectures and/or laboratory. 1 to 4 graduate hours. No professional credit. May be repeated if topics vary. Students may register only once for a given topic. Prerequisite: Graduate level status or consent of instructor.

FSHN 597 Graduate Seminar credit: 0 to 1 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/597/)
Discussions on specialized research topics and current literature relating to food science and human nutrition. Required of all graduate students. 0 to 1 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated in separate terms.

FSHN 598 Advanced Special Problems credit: 1 to 8 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/598/)
Supervised individual study on advanced special problems in food science and human nutrition. Approved for letter and S/U grading. May be repeated in the same or subsequent semesters. (Summer session: 1 to 4 graduate hours). Prerequisite: Written consent of instructor must be obtained prior to enrollment.

FSHN 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/FSHN/599/)
Original research designed and conducted under graduate faculty supervisor. Approved for S/U grading only. May be repeated.

FLTE - FOREIGN LANGUAGE TEACHER EDUCATION

FLTE Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/FLTE/)

Courses

FLTE 471 Introduction to Second Language Teaching credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/FLTE/471/**)**
Introduction to contemporary approaches to language teaching, teaching as a profession, and second language acquisition theory. Includes two teaching components and 45 hours of early field experience. 4 undergraduate hours. No graduate credit. Prerequisite: Admission to a qualifying teacher education curriculum. Early field experiences require Illinois State criminal background check and other training.

FLTE 475 Learning to Teach World Language credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/FLTE/475/**)**
Course focuses on pedagogy, teacher knowledge and efficacy, and the development of professional dispositions for use in K-12 teaching. Emphasis is on preparing for the edPTA through lesson planning and assessment development. Includes multiple teaching components and 55 hours of early field experience. 4 undergraduate hours. No graduate credit. Prerequisite: Successful completion of FLTE 471.

FLTE 478 Secondary World Language Teaching credit: 1 or 3 Hours. **(**https://courses.illinois.edu/schedule/terms/FLTE/478/**)**
Course focuses on practical aspects of high school teaching and learning in the 21st century. Emphasis on teaching world languages at the secondary level. Majors topics include teaching with technology, unit planning, instructional methods, assessment development and classroom management. 1 or 3 undergraduate hours. No graduate credit. May be repeated in separate semesters to a maximum of 4 hours. In the fall semester, students enroll for 3 hours with instruction occurring in the first 10 weeks. In the spring semester, students enroll for 1 hour with instruction occurring in the first 4 weeks. At the end of the fall semester, students will have completed all Early Field Experiences in accordance with the ISBE/CoTE requirement that teacher candidates fulfill all EFE hours prior to Student Teaching. Prerequisite: Successful completion of FLTE 471 and FLTE 475.

FR - FRENCH

FR Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/FR/)

Courses

FR 101 Elementary French I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FR/101/)
Four-skill course leading toward elementary proficiency in oral expression, listening comprehension, reading, writing, and cultural understanding. Online language laboratory and internet assignments required.

FR 102 Elementary French II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FR/102/)
Continuation of FR 101. Introduces cultural and supplementary enrichment materials; requires online laboratory sessions as in FR 101. Prerequisite: FR 101 or one year of high school French.

FR 103 Intermediate French I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FR/103/)
Continuation of FR 102. Introduces students to a full range of structures to complete their initial study of the grammatical system; emphasizes the development of all four skills and cultural understanding through readings and audiovisual enrichment materials. Online language laboratory and internet assignments required. Students planning to major or minor in French should take FR 133 in lieu of FR 103. Prerequisite: FR 102 or equivalent, or a placement score showing high school achievement equivalent to FR 102.

FR 104 Intermediate French II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FR/104/)
Continuation of FR 103. Comprehensive grammar review with emphasis on oral expression and the continued development of reading and written skills. Completion satisfies graduation requirement in the College of Liberal Arts and Sciences. Students planning to take advanced French courses should take FR 134 in lieu of FR 104. Prerequisite: FR 103 or equivalent, or a placement score showing high school achievement equivalent to FR 103.

FR 133 Accel Intermediate French I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FR/133/)
Similar to FR 103, but accelerated for those interested in pursuing French in advanced courses; includes comprehensive grammar review and readings in literature and culture. Prerequisite: FR 102, or two semesters of college French, or a placement score showing high school achievement equivalent to FR 102. Normally for students with a "B" average in French or with consent of instructor.

FR 134 Accel Intermed French II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FR/134/)
Continuation of FR 133. Comprehensive grammar review and readings in French literature and culture preparatory for continued work at the advanced level; emphasizes all four skills and culture. Prerequisite: FR 133, or FR 103 with department approval, or three semesters of college French, or a placement score showing high school achievement equivalent to FR 103.

FR 156 Exploring Paris credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FR/156/)
Examines the role of Paris in French culture through literature, art, and film. We will consider the city of Paris from its earliest beginnings to the modern era, as a physical, social, and symbolic reality. Through literature, art, and film we will explore the ways in which Paris is at the center of French political and intellectual life. Additionally, close attention will be paid to historical and political developments and their representation. All readings are in English and the course is conducted in English.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

FR 165 French in US Minority Cultures credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FR/165/)
Introduction to the sociolinguistic and cultural history of French as a heritage language in African-American, Native American, and Cajun American communities from early colonial to late modern times. It focuses on the lived experiences and lasting heritage of contact and segregation between colonizers, farmers, refugees, and free and enslaved populations in the American Midwest and South. It features readings, music, heritage sites, and discussions of prejudice and discrimination, language shift and language loss, and the linguistic outcomes of slavery and settler colonialism.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

FR 179 Migration & Fr Nat ID credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FR/179/)
Studies books and films that emphasize cultural difference and the complexities of the post-colonial world, focusing on the impact of migration and cultural interaction on contemporary France. Stresses themes of immigration and exile, tensions between relations of domination and exploitation and between colonizing and colonized peoples, and the cultural pluralities of community and nation.

FR 195 French Intellectual Tradition credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FR/195/)
Close reading and in-depth discussion of texts by major French intellectuals from the sixteenth to the mid-twentieth century. Aims to explore the centrality of epistemology (How can we know? Can we know that which we know is true? How can we reason in the face of evil?) in selected texts that will be discussed within their historical contexts, investigating why these issues were raised then and how their contemporaries might have responded to them, as well as their relationship to issues still debated in the twenty-first century. Taught in English.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil

FR 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/FR/199/)
Credit: 1 to 5 hours. May be repeated.

FR 205 Oral French credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/FR/205/)
Developing oral facility and aural comprehension, focusing on everyday events. Prerequisite: FR 104 or FR 134 or equivalent.

FR 207 Writing and Grammar Workshop credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FR/207/)
Practice-intensive grammar review and vocabulary-building, with an emphasis on strategies to improve accuracy of, and expressivity in, speaking and writing in French. Grammar textbook supplemented with readings and materials from French and Francophone culture (articles, social media, literary works, films). Prerequisite: Four years of high school French or equivalent, or FR 134 or, with departmental approval, FR 104.

FR 211 Introduction to Literary Studies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FR/211/)
Introduction to concepts of modernity and questions of representation, through French texts from the nineteenth through the twenty-first centuries. Analysis of diverse literary forms (poems, plays, narratives), and use of resources for literary, historical and cultural research. Strengthening of reading, writing and speaking skills in French through research projects, writing assignments and revisions, and oral presentations. Prerequisite: FR 207 or equivalent.

FR 212 Introduction to Cultural Analysis: French Identities credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FR/212/)
Introduction to concepts of and debates on French national identity. Materials are drawn from a multiplicity of media and from many spheres of modern life in France: political, artistic, the everyday, etc. Identification of major resources for the study of culture and analysis of diverse cultural texts. Strengthening of reading, writing and speaking skills in French through a wide range of exercises and projects. Prerequisite: FR 207.

FR 213 French Phonetics credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/FR/213/)
Practical introduction to French phonetics, stressing pronunciation. Prerequisite: FR 104 or FR 134 or equivalent.

FR 240 Constr Afr and Carib Identity credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FR/240/)
Introduces students to cultural pluralism by comparing and contrasting African and Caribbean identities, as they are represented in literature and film. Taught in English. Same as AFST 209, CWL 225, and LAST 240. Credit is not given towards the major or minor in French.

FR 299 Study Abroad credit: 0 to 18 Hours. (https://courses.illinois.edu/schedule/terms/FR/299/)
Lectures, seminars, and practical work in French language, literature, civilization, and in other academic areas appropriate to the student's course of study. Approved for Letter and S/U grading. May be repeated in the same term to a maximum of 18 hours; may be repeated in separate terms to a maximum of 36 hours; may be repeated in a summer session to a maximum of 8 hours; maximum of 34 hours per academic year. Prerequisite: FR 205; 2.75 overall average; 3.0 average in French courses.

FR 301 Medieval and Early Modern Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FR/301/)
Overview of French literature from the Middle Ages to the Revolution in its historical context. Taught in French. Credit is not given for FR 209 and FR 301. Prerequisite: FR 211 and FR 212.

FR 309 Poetry credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FR/309/)
The study of major movements and figures in French poetry. Traditions and innovations. Poetic genres. Introduction to versification and metrics. Close readings of individual poems. Topics will vary. May be repeated to a maximum of 6 hours. Prerequisite: FR 207, FR 211, and FR 212; or equivalents.

FR 311 Narrative Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FR/311/)
Reading and interpretation of selected French novels and short narratives from all periods. History and analysis of narrative literature as a genre. Topics will vary. May be repeated to a maximum of 6 hours. Prerequisite: FR 207, FR 211, and FR 212; or equivalents.

FR 312 Theater and Performance credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FR/312/)
Reading and interpretation of plays and other performative genres, with attention to historical development and critical analysis. Topics will vary. May be repeated to a maximum of 6 hours. Prerequisite: FR 207, FR 211, and FR 212; or equivalents.

FR 314 Advanced Grammar in Context credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FR/314/)
Advanced practical study of present-day French, with an emphasis on grammar, free composition and a consideration of various cultural contexts of language use. Prerequisite: FR 207.

FR 319 Francophone Worlds credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FR/319/)
Study of one or several Francophone countries and cultures around the world through language, texts, images, film, and/or other media. Same as CWL 317. May be repeated to a maximum of 6 hours if topics vary. Prerequisite: FR 207, FR 211, and FR 212; or equivalents.

FR 322 Movements and Perspectives credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FR/322/)
Focused study and discussion of a major literary movement or critical perspective. Topics will vary. May be repeated to a maximum of 6 hours. Prerequisite: FR 207, FR 211, and FR 212; or equivalents.

FR 323 Major Literary Figures credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FR/323/)
Presents the works of one or several major figures of French or francophone literary traditions in their cultural contexts. Topics will vary. May be repeated to a maximum of 6 hours. Prerequisite: FR 207, FR 211, and FR 212; or equivalents.

FR 324 Literature and the Other Arts credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FR/324/)
Explores relationships between French literature and such fields as art, architecture, and music. Topics will vary. May be repeated to a maximum of 6 hours. Prerequisite: FR 207, FR 211, and FR 212; or equivalents.

FR 335 French Cultural History to 1789 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FR/335/)
Survey of French cultural history from the Middle Ages to the French Revolution. Taught in French. Prerequisite: FR 211 and FR 212.

FR 336 French Cultural History 1789-1968 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FR/336/)
Survey of French cultural history from the French Revolution to 1968. Taught in French. Prerequisite: FR 211 and FR 212.

FR 337 Contemporary France credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FR/337/)
Overview of major cultural, social, and political issues and debates in late 20th- and 21st-century France. Topics may include: political life; definitions of the French Republic; the government and social policies; evolving views on sexuality, gender and the family; France and the European Union; professional life and labor laws; immigration; the cultural identity of France; new media. Some readings in English. Class discussion and written work in French. Prerequisite: FR 207, FR 211, FR 212.

FR 385 Politics of the European Union credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FR/385/)
Same as EURO 385, GER 385, and PS 385. See PS 385.

FR 387 French & Comparative Cinema I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FR/387/)
The art, techniques, sociology, politics of French cinema in the context of French culture, world history, and general film development from 1895 to approximately 1950. Selected trends studied through films from several countries with stress on major French filmmakers including Lumiere, Melies, Gance, Clair, Vigo, Renoir, Carne, Cocteau, Prevert, Clouzot. Knowledge of French not required. Same as CWL 387 and MACS 382.

FR 389 French & Comparative Cinema II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FR/389/)
The art, techniques, sociology, politcis of French cinema in the context of French culture, world history, and general film development from approximately 1950 to the present. Selected trends studied through films from several countries with stress on major French filmmakers such as Clouzot, Bresson, Chabrol, Resnais, Godard, Truffaut, Varda, Marker, Rohmer, Beineix, Kassovitz, and Assayas. Knowledge of French not required. Same as CWL 389 and MACS 383. Prerequisite: One college-level Media or Media and Cinema Studies course or consent of instructor.

FR 390 Indiv Study Major Tutorial credit: 1 to 12 Hours. (https://courses.illinois.edu/schedule/terms/FR/390/)
Tutorial taken by students during two of their last four terms of undergraduate study. Students read the works on a departmental reading list with the guidance of a tutor. Approved for Letter and S/U grading. May be repeated to a maximum of 12 hours. Prerequisite: FR 205, FR 207, or equivalent; a declared major in French; junior standing.

FR 413 French Phonetics and Phonology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FR/413/)
Introduction to theoretical aspects of French phonetics and phonology, research methods, and pronunciation exercises on speaking styles in French. 3 undergraduate hours. 3 graduate hours. Prerequisite: FR 213 or equivalent.

FR 416 Structure of French Language credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FR/416/)
General survey of the linguistic structure of modern standard French, including phonology, morphology, and syntax; emphasis on the differences between its spoken and written forms. Same as LING 416. 3 undergraduate hours. 3 graduate hours. Prerequisite: FR 413 or equivalent training in phonetics.

FR 417 Topics in the History of Romance Languages credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/FR/417/)
Introduction to the analysis of primary sources on the historical development of individual Romance languages from their Latin origins to the present. Examination of a variety of genres and media and the social role of the languages in the definition of national identities. Same as MDVL 417 and RMLG 417. 3 undergraduate hours. 4 graduate hours. May be repeated in the same or separate terms to a maximum of 6 undergraduate hours or 8 graduate hours. Prerequisite: Approval by instructor.

FR 418 Language & Minorities in Europe credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/FR/418/)
Introduction to political, judicial, linguistic, and cultural issues concerning indigenous and migrant/immigrant languages in the countries of the European Union. Focuses on political and judicial issues, such as legal aspects of bilingual education and minority language use, as well as linguistic and cultural aspects, such as assimilation, language-mixing, and language change. Taught in English. Same as EURO 418, GER 418, ITAL 418, LING 418, PS 418, SLAV 418, and SPAN 418. 3 undergraduate hours. 4 graduate hours.

FR 419 Techniques in Translation I credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/FR/419/)
Practical course in the techniques of translating technical, commercial, scientific, and literary texts from English into French and vice versa. Same as TRST 419. 3 undergraduate hours. 4 graduate hours. Prerequisite: FR 314 or consent of instructor.

FR 421 Techniques in Translation II credit: 2 or 3 Hours. (https://courses.illinois.edu/schedule/terms/FR/421/)
Continuation of FR 419. Practical exercises in translating from French to English and vice versa in a variety of texts, along with an introduction to theoretical aspects of translation. 3 undergraduate hours. 2 graduate hours. Prerequisite: FR 419 or consent of instructor.

FR 443 Studies in French credit: 3 to 4 Hours. (https://courses.illinois.edu/schedule/terms/FR/443/)
See Schedule for current topics. 3 undergraduate hours. 3 to 4 graduate hours. May be repeated in the same or separate terms to a maximum of 12 undergraduate hours or 16 graduate hours. Prerequisite: FR 314 or consent of instructor.

FR 460 Principles of Language Testing credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/FR/460/)
Same as EIL 460, EPSY 487, GER 460, ITAL 460, PORT 460, and SPAN 460. See EIL 460.

FR 462 Introduction to Romance Linguistics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/FR/462/)
Same as ITAL 435, LING 462, PORT 435, RMLG 435, and SPAN 435. See SPAN 435.

FR 479 Studies in Francophonie credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/FR/479/)
Study of various topics in French language, literature, and culture outside of France. Regions may include francophone Africa, the Americas, Europe, and the Middle East. Same as CWL 434. 3 undergraduate hours. 3 or 4 graduate hours. May be repeated to a maximum of 12 undergraduate hours or 16 graduate hours if topics vary. Prerequisite: FR 314 or consent of instructor.

FR 481 Theoretical Foundations of SLA credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/FR/481/)
Same as GER 489, ITAL 489, LING 489, PORT 489, and SPAN 489. See LING 489.

FR 485 Commercial & Econ French I credit: 2 or 3 Hours. (https://courses.illinois.edu/schedule/terms/FR/485/)
Studies French business practices: company structures, selling and buying techniques, banking, import/export and other commercial negotiations, employment, formalities, and conventions of letter-writing; involves both theory and practice. 3 undergraduate hours. 2 graduate hours. Prerequisite: FR 314 or equivalent, or consent of instructor.

FR 486 Commercial & Econ French II credit: 2 or 3 Hours. (https://courses.illinois.edu/schedule/terms/FR/486/)
Emphasizes business correspondence and simulation of business practices in the areas introduced in FR 485; also focuses on geographic and economic topics pertaining to France within the European community and Europe in general. 3 undergraduate hours. 2 graduate hours. Prerequisite: FR 485 or equivalent, or consent of instructor.

FR 492 Senior Thesis credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/FR/492/)
For candidates for honors in French and for other seniors. 3 undergraduate hours. No graduate credit. May be repeated to a maximum of 4 hours. Prerequisite: Senior standing.

FR 500 Beginning French Grads credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FR/500/)
Basic grammar, vocabulary, and reading practice; designed for graduate students desiring help in preparing for the French reading requirements for the Ph.D. Credit is not given toward a graduate degree.

FR 501 Reading French Grads credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FR/501/)
Grammar, vocabulary, and general and special reading; designed for graduate students desiring help in preparing for the French reading requirements for the Ph.D. Credit is not given toward a graduate degree. Prerequisite: FR 500, or FR 101 and FR 102, or equivalent.

FR 503 The Study of Culture I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FR/503/)
Study of major artistic, historical, political, and literary aspects of France up to the French Revolution with emphasis on the relationship between literature and other aspects of French culture.

FR 504 The Study of Culture II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FR/504/)
Study of major artistic, historical, political, and literary aspects of France from the French Revolution to the present with emphasis on the relationship between literature and other aspect of French culture.

FR 505 Teaching College and Secondary Foreign Language credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FR/505/)
Examination and discussion of classroom goals, procedures and techniques in teaching a foreign language (French, Italian) at the college and secondary level, associated with a demonstration class and supervision of teaching practice. Required of new teaching assistants in the Department of French and Italian. Same as ITAL 505. 4 graduate hours. No professional credit.

FR 529 Studies in French Linguistics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FR/529/)
Variable topics course dealing with both synchronic and diachronic aspects of the French language. May be repeated if topics vary.

FR 530 Introduction to Research and Text Criticism credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FR/530/)
Proseminar in literary studies: research and methods; approaches to the literary text. Required of all M.A. and Ph.D. candidates. Same as ITAL 530. 4 graduate hours. No professional credit.

FR 543 French Studies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FR/543/)
Flexible course limited only by the concentration of its material in French; may be activated by faculty proposal. May be repeated to a maximum of 16 hours if topics vary.

FR 552 Studies French & Comp Cinema credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FR/552/)
Historical, aesthetic, social, and technical studies of the French cinema; its development and relation to world cinema and to literature. Same as CWL 552. May be repeated to a maximum of 12 hours.

FR 559 Sem Romance Ling credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FR/559/)
Same as ITAL 559, LING 559, PORT 559, RMLG 559, and SPAN 557. See SPAN 557.

FR 570 Seminar Old French Literature credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FR/570/)
Discussion and research on a specialized topic in Old French literature. See Schedule for current topic. Same as MDVL 570. 4 graduate hours. No professional credit. May be repeated. Prerequisite: Consent of instructor.

FR 571 Seminar 16thC French Lit credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FR/571/)
Discussion and research on a specialized topic in sixteenth-century French literature. See Schedule for current topic. May be repeated.

FR 572 Seminar 17thC French Lit credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FR/572/)
Discussion and research on a specialized topic in seventeenth-century French literature. See Schedule for current topic. May be repeated.

FR 573 Seminar 18thC French Lit credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FR/573/)
Discussion and research on a specialized topic in eighteenth-century French literature. See Schedule for current topic. May be repeated.

FR 574 Seminar 19thC French Lit credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FR/574/)
Discussion and research on a specialized topic in nineteenth-century French literature. See Schedule for current topic. May be repeated.

FR 576 Seminar in Francophonie credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FR/576/)
Discussion and research on a specialized topic in literature in French outside of France. See Schedule for current topic. 4 graduate hours. No professional credit. May be repeated in separate terms if topics vary.

FR 578 Seminar 20thC French Lit credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FR/578/)
Discussion and research on a specialized topic in twentieth-century French literature. See Schedule for current topic. Same as CWL 578. May be repeated.

FR 579 Seminar in French Literature credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FR/579/)
Discussion and research on a specialized area in French literature. See Schedule for current topic. May be repeated.

FR 580 Classroom Language Acquisition credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FR/580/)
Same as EIL 580, GER 580, ITAL 580, PORT 580, and SPAN 580. See SPAN 580.

FR 584 Theories in Second Language Acquisition credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FR/584/)
Same as CI 584, EALC 584, EPSY 563, GER 584, ITAL 584, LING 584, PORT 584, and SPAN 584. See SPAN 584.

FR 588 Sem Second Lang Learn credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FR/588/)
Same as EALC 588, GER 588, ITAL 588, LING 588, PORT 588, and SPAN 588. See SPAN 588.

FR 591 Individual Topics credit: 1 to 8 Hours. (https://courses.illinois.edu/schedule/terms/FR/591/)
Prerequisite: Graduate standing with a major or minor in French.

FR 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/FR/599/)
Approved for S/U grading only. May be repeated.

GWS - GENDER AND WOMEN'S STUDIES

GWS Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/GWS/)

Courses

GWS 100 Intro Gender & Women's Studies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/100/)
Interdisciplinary introduction to the study of gender, women, and sexuality. Addresses issues such as social experience, representation and popular culture, femininities and masculinities, family structure, education, employment, economics, literature and the arts, religion, history, and technology. Explores interrelationships of race, ethnicity, sexuality, gender, ability, and age from a transnational perspective. Same as HDFS 140 and SOC 130.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

GWS 103 Black Women in the Diaspora credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/103/)
Same as AFRO 103 and AFST 103. See AFRO 103.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

GWS 150 Contemp Women's Issues credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/150/)
Explores the most recent debate and research related to contemporary issues which affect primarily women. Reviews issues related to sexual and domestic violence, gender socialization, feminization of poverty, women's health, sexual harassment, work and family, politics, and media influences from a multi-discipline and multi-cultural perspective.

GWS 199 Undergraduate Open Seminar credit: 0 to 5 Hours. (https://courses.illinois.edu/schedule/terms/GWS/199/)
Approved for letter and S/U grading. May be repeated.

GWS 201 Race, Gender & Power credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/201/)
Presents multiple windows into perceptions and perspectives upon gender, sexuality, power, identity and culture, and their multiple intersections. The concept of race in its many manifestations is used to examine relationships of self to society, state institutions and cultures. By paying greater attention to race and power, nuanced understandings of the way the gender systems are maintained, patrolled and formed will be examined. Topics may include: film, media, technology, culture, religion, identities, sexualities. Same as SOC 201.
This course satisfies the General Education Criteria for:
Cultural Studies - Western

GWS 202 Sexualities credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/202/)
Surveys sexualities from multiple perspectives, standpoints, disciplines, and theories. How have different cultures, different people, and different viewpoints understood, shaped, and interpreted sex, sexualities and genders? Course places the concept of sexuality at its core to examine citizenship, education, reproduction, science, tourism, urban/rural space, and politics. Topics may include: gender, race, identities, power, transformation, reproduction. Same as SOC 202.
This course satisfies the General Education Criteria for:
Cultural Studies - Western

GWS 204 Gender in Gaming credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/204/)
Examines the history of gender in videogames, focusing on how movements like #GamerGate, #RaceFail09, internet bullying, doxing and trolling emerged as the coordinated effort to consolidate and maintain videogames and geek culture as the domain of masculinity and whiteness. We also consider how the embodied elements of play as well as the spatial logics of games function to promote and resist representation, and we will end by looking at how games designed by women and people of color are transforming how and why we play games. Same as ENGL 277 and MACS 204.

GWS 215 US Citizenship Comparatively credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/215/)
Same as AAS 215, AIS 295, AFRO 215, and LLS 215. See AAS 215.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

GWS 218 Intro to Social Issues Theatre credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/218/)
Same as THEA 218. See THEA 218.

GWS 225 Women in Prehistory credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/225/)
Same as ANTH 225. See ANTH 225.

GWS 226 Black Women Contemp US Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/226/)
Same as AFRO 226 and SOC 223. See AFRO 226.

GWS 230 Latina/o Genders & Sexualities credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/230/)
Same as LLS 230. See LLS 230.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

GWS 235 Race and the Politics of Reproduction credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/235/)
Same as LLS 235. See LLS 235.

GWS 240 Gender & Sexuality in Greco-Roman Antiquity credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/240/)
Same as CLCV 240 and CWL 262. See CLCV 240.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

GWS 245 Wives, Workers and Witches in Pre-Modern Europe credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/245/)
Same as HIST 245 and MDVL 245. See HIST 245.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

GWS 250 Gender and Representation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/250/)
Focusing primarily on gender, race, sexuality, and their intersections, this introductory course analyzes the politics of representation drawn from popular culture, painting, television and film, literature, music, religion, and new media.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

GWS 255 Queer Lives, Queer Politics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/255/)
Investigates queer lives in relation to dominant ideas about "deviance" and "equal rights." Drawing on case studies, the course investigates questions related to nation, race, economy, bodies, drugs, health, identities, agency and action as they intersect with contemporary queer politics. Students will learn conceptual and qualitative methods to investigate issues related to queer lives. Same as SOC 255.

GWS 258 Sex in Nature and Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/258/)
Same as ANTH 258. See ANTH 258.

GWS 262 Women's Lives credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/262/)
Same as ANTH 262. See ANTH 262.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

GWS 263 History of Medicine in the United States credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/263/)
Same as HIST 263. See HIST 263.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

GWS 270 Sexuality and Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/270/)
Same as GER 270 and CWL 272. See CWL 272.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

GWS 272 Women and Politics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/272/)
Same as PS 272. See PS 272.

GWS 275 The Politics of Fashion credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/275/)
Clothing is a medium for fashioning identities from commodities, and it is hardly surprising that political and social tensions are embodied in its fabrications. The politics of dress indicates inseparable links between cultures, aesthetics, and politics, as demonstrated in debates about Muslim practices of veiling, the role of clothing in colonialism's "civilizing" mission, immigrant and "third world" sweatshop labor, fashion policing and subcultural style, and the fashion and modeling industries. Clearly manifest throughout these politics is the role of gender, race, nation, and sexuality, as relations of power and as critical factors for social life and creative imagination. This course requires weekly written reflections on the required readings; a written midterm; and a final project, which can be either a research paper or a creative project. The course also requires in-class participation (which will include pop quizzes, group discussion, and other exercises) and one individual or group presentation. The course thus provides students an opportunity to develop their critical skills in both oral and written form. Same as AAS 275.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

GWS 280 Women Writers credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/280/)
Same as ENGL 280. See ENGL 280.

GWS 281 Women in the Literary Imagination credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/281/)
Same as ENGL 281. See ENGL 281.

GWS 282 Feminist and Queer Activisms credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/282/)
From anti-lynching campaigns to Black Lives Matter, Wages for Housework to domestic worker organizing, ACT UP to queer migration politics, this course examines the history of feminist, queer, and anti-racist movements. We will pay particular attention to women of color theorists and activists, and the ways in which they develop interdisciplinary and intersectional approaches to activism and advocacy. Same as AAS 282 and LLS 282.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

GWS 285 US Gender History to 1877 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/285/)
Same as HIST 285. See HIST 285.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

GWS 286 US Gender History Since 1877 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/286/)
Same as HIST 286. See HIST 286.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

GWS 287 African-American Women credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/287/)
Same as AFRO 287 and HIST 287. See HIST 287.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

GWS 288 Global Islam and Feminisms credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/288/)
Examines gender and sexuality in Muslim-majority societies and diasporas. Introduces students to transnational feminist theories and methodologies in order to examine key issues and debates. Topics include constructions of femininity and masculinity, imperialism and neo-imperialism, Islamic feminisms and exegesis, nationalisms, war and violence, sexuality, diaspora and transnationalism, and race and racialization. Same as AAS 288.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West

GWS 295 Beginning Topics GWS credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/295/)
Approved for letter and S/U grading. May be repeated in the same term to a maximum of 9 hours; may be repeated in separate terms to a maximum of 12 hours.

GWS 305 Theories of Race, Gender, and Sexuality credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/305/)
Same as AAS 300 and LLS 305. See AAS 300.
This course satisfies the General Education Criteria for:
Advanced Composition

GWS 315 War, Memory, and Cinema credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/315/)
Same as AAS 315. See AAS 315.

GWS 320 Gender & Latina/o Migration credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/320/)
Same as LLS 320 and SOC 321. See LLS 320.

GWS 325 Lesbian/Queer Media Cultures credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/325/)
Discusses how various LGBT/Q communities were consolidated or drawn together by print and invented in the very acts of writing, distributing, purchasing, and reading print artifacts. Students examine early homophile publications, the rise of presses dedicated to LGBT/Q literature, independent bookstores and distribution networks, as well as the contemporary world of zines, blogs, chatrooms, fanfiction, and online journals, to see the intersection of sexuality, community, identity, and the print sphere. Students will learn how to historicize the rise of various LGBT/Q subcultures through a long history of print and how to navigate and understand the gregarious contemporary world of online publishing and social networking. Prerequisite: Previous course in GWS recommended.

GWS 333 Memoir & Autobiography credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/333/)
Explores the phenomenon of autobiography in the contemporary world. Students will read theories of autobiography, and ask questions about how writing about the self is gendered, and how representations of the self fare in the outside world. An important aspect of the course will be examinations of how changing media such as film, television talk shows and the Internet shape these representations. Students will be assigned to read and make a presentation on one of the supplementary texts of autobiographies chosen from authors in the First and Third worlds. Same as ENGL 333.

GWS 335 Film, TV, and Gender credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/335/)
Examines the history and theory of film, television, and their interrelationship through one or more specific case studies. Topics may include: film and feminist movements; girl films; queer TV; gender, sport and TV. Focuses attention on gender and related issues such as race, ethnicity, sexuality, age, ability and disability, class, and nationality. Addresses issues of representation, narrative, genre, industry, audience, exhibition, media convergence, new and mobile media, and social space. Same as MACS 335.

GWS 337 Interrogating Masculinities credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/337/)
Explores the social construction of gender as it pertains to masculinities in conjunction with analyses of race, class, gender, ability, and sexuality. Masculinities, in its various forms, shapes and lives of both women and men and this course will examine the construction, reproduction, and impact of masculinities on the institutions of politics, education, work, religion, sports, family, media, and the military to name a few. Paying careful attention to the conjunctions between materiality and culture, this course will interrogate how masculinities shape individual lives, groups, nationalisms, organizations, and institutions and will analyze the ways in which power functions within local transnational contexts. Above all, this course offers a road map for forging new, progressive models of masculinity.

GWS 340 Gender, Relationshps & Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/340/)
Same as HDFS 340 and SOC 322. See HDFS 340.

GWS 343 Criminalization and Punishment credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/343/)
Same as AAS 343, AFRO 343, AIS 343, and LLS 343. See LLS 343.

GWS 345 Digital & Gender Cultures credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/345/)
This interdisciplinary course uses the lens of gender critique and pairs it with social activism to provide students analytical tools to engage with, reshape, and create digital cultures. Examines recent research and public policies related to the gendered, raced, and classes dimensions of digital cultures and inequality; the broad range of labor issues embedded in the growing income disparity related to digital cultures; the various ways that digital inequality has been defined by public policy, sociologists, and activists, and real examples of collective activism and social change related to emerging technologies. Same as INFO 345, MACS 345, and SOC 345.

GWS 350 Feminist & Gender Theory credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/350/)
Interdisciplinary survey of feminist and gender theory. Traces developments in feminist theory and LGBT/Q approaches and explores contemporary debates.

GWS 355 Beauty and Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/355/)
Examines beauty and culture, in particular how tropes, ideologies, and politics bolster the construction of beauty as an aesthetic value. Looks at the ways in which beauty is imagined, visualized, narrated, naturalized, reproduced, privileged, and contested through various venues such as art, performance, philosophy, media, history, and popular culture. Attention will be given to race, class, gender, sexuality, and the implications thereof.

GWS 356 Sex & Gender in Popular Media credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/356/)
Same as MACS 356. See MACS 356.
This course satisfies the General Education Criteria for:
Cultural Studies - Western

GWS 357 Literatures of the Displaced credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/357/)
Same as AAS 357, AIS 357, ENGL 357, and LLS 357. See LLS 357.

GWS 360 Women and the Visual Arts credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/360/)
Same as ARTH 360. See ARTH 360.

GWS 361 Gender and Women in East Asia credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/361/)
Same as EALC 361. See EALC 361.
This course satisfies the General Education Criteria for:
Advanced Composition

GWS 363 Gender, Health & Pop Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/363/)
Aspects of popular culture, including television, magazines, newspapers, social networking sites, and internet sources to name a few, are ways that health information is disseminated. Students will examine how we define health and understand disease as related to popular culture. Discusses how people resist or reinforce these messages about health, well being, fitness, and diet. Also discusses how understandings of race, sexuality and class affect the ways that we think about sickness, health and constructions of gender.

GWS 366 Feminist Disability Studies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/366/)
Explores the complex relationship between gender and disability. Approaching disability as a social and political category rather than a strictly medical one, we will ask: how is the language of disability used to produce and police a variety of gender, sexual, and racial identities as non-normative? How might debates over medicine, technology, and the concept of "natural" pit gender and disability against one another? How have feminist, queer, and transgender scholarship and activism engaged disability? Prerequisite: One of the following: GWS 100, GWS 201, GWS 202.

GWS 370 Queer Theory credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/370/)
Traces the development of queer theory as a mode for understanding queer studies methodologies and the changing intellectual landscape of key issues in the field. As part of the course, students will review key concepts and theoretical schools of thought, navigating important debates guiding the field. Theories will engage questions of the social and cultural through topics including race, gender, nation, family, history, identity formation, sexology, the state, and capital. Same as SOC 320. Prerequisite: GWS 100, GWS 201, GWS 202, or consent of instructor.

GWS 376 Children and Youth Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/376/)
Same as CWL 376, EURO 376, and SCAN 376. See SCAN 376.

GWS 378 Fairy Tales & Gender Formation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/378/)
Discusses how femininity and gender formation are related through fairy tales. As children grow they are taught the difference between male and female roles. One of the main ways this instruction takes place is through the pleasurable media of fairy tales in books, poems, and more recently, films. Sleeping Beauty, Snow White, Beauty and the Best, and the Little Mermaid, among others, will be examined to understand how sexual identity is constructed differently in different cultures, and how issues such as rape and incest are addressed within the narratives. The readings explore the ways that fairy tales work to express psychological reactions to maturation while conditioning both characters and readers to adopt specific social roles in adulthood. Same as ENGL 378.

GWS 380 Black Women Hist & Cultures credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/380/)
Interdisciplinary study of black women's multiple histories and varied cultures including black women from North America, Africa, and the Caribbean. Same as AFRO 380. Prerequisite: AFRO 100 or GWS 100 or GWS 250 or consent of instructor.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West

GWS 382 Black Women & Popular Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/382/)
Explores how Black women have been are currently portrayed in popular media, such as television, internet, movies, and popular mediums such as magazines, popular fiction, newspapers, and other cultural phenomenon. Examines what these portrayals reveal about Black women's role in society and how black women as consumer and participants respond to these stereotypes, and create alternative oppositional images.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

GWS 383 Hist of Blk Women's Activism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/383/)
Same as AFRO 383 and HIST 383. See AFRO 383.

GWS 385 Transnational Sexualities credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/385/)
Investigates the ways in which sexual identities change as national contexts change, as borders are imagined, valued, and crossed, and as definitions of race, gender, and religion shift. Interrogates how national and transnational identities (at home and abroad), modernites, histories, and colonial and global narratives are built on ideas of racialized sexualities, and as such, is particularly interested in the study of queer diaspora. Importantly, this course utilizes transnational feminist frameworks for re-thinking issues related to sexuality, immigration, nation-building, race and gender. Areas of inquiry include imperialism, immigration, war, tourism and globalization. Same as HIST 385. Prerequisite: GWS 100, GWS 201 or GWS 202 or consent of instructor.

GWS 387 History of Sexuality in U.S. credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/387/)
Explores a wide variety of sources to understand how notions of sexuality have emerged and been contested at key moments in U.S. history. Our guiding questions include: How have "official" or governing discourses of sexuality (in law, medicine, religions, science) been formulated? In turn, how have "ordinary" people understood and practiced their sexuality? How has the meaning of particular sexual practices changed over time? How have ideas about race, gender, and/or class been embedded within the discourse of sexuality at different moments in U.S. history? What methods of reading and interpretation are most useful for the historical study of sexuality? Also emphasizes skills such as critically analyzing primary sources within their historical context; interpreting different types of primary sources; locating, understanding, and evaluating scholarly secondary sources; and presenting historical arguments, based on both primary and secondary sources. Same as HIST 387.

GWS 390 Individual Study credit: 0 to 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/390/)
Special topics not treated in regularly scheduled classes. Approved for letter and S/U grading. May be repeated to a maximum of 6 hours if topics vary. Prerequisite: One course in Gender and Women's Studies; consent of instructor.

GWS 392 Chicanas&Latinas: Self&Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/392/)
Same as LLS 392 and SOC 392. See LLS 392.
This course satisfies the General Education Criteria for:
Advanced Composition

GWS 395 Intermediate Topics GWS credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/395/)
Approved for letter and S/U grading. May be repeated in the same term to a maximum of 9 hours; may be repeated in separate terms to a maximum of 12 hours.

GWS 397 Sexuality in Modern Europe credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/397/)
Couse Information: Same as HIST 397. See HIST 397.

GWS 399 GWS Internship credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/399/)
Directed internship experience for GWS students. Students will complete course requirements in addition to holding a semester long internship. Students must have consent of the Internship Coordinator. Approved for Letter and S/U grading. Prerequisite: GWS major or minor; junior or senior standing and completion of six hours of coursework in GWS, or consent of the instructor.

GWS 403 Women in Muslim Societies credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/GWS/403/)
Same as ANTH 403, GLBL 403, HIST 434, REL 403 and SAME 403. See REL 403.

GWS 409 Women's Health credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/409/)
Same as CHLH 409. See CHLH 409.

GWS 415 Africana Feminisms credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/GWS/415/)
Same as AFRO 415 and AFST 420. See AFRO 415.

GWS 417 Leading Post-Perform Dialog credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GWS/417/)
Same as THEA 417. See THEA 417.

GWS 418 Devising Social Issues Theatre credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/GWS/418/)
Same as THEA 418. See THEA 418.

GWS 421 Sex Role Theory in Counseling credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GWS/421/)
Same as EPSY 421. See EPSY 421.

GWS 424 Gender & Race in Contemp Arch credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/424/)
Same as ARCH 424. See ARCH 424.

GWS 432 Gender Communication credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/GWS/432/)
Same as CMN 432. See CMN 432.

GWS 435 Commodifying Difference credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/GWS/435/)
Same as AAS 435, AFRO 435, LLS 435, and MACS 432. See LLS 435.

GWS 442 Body, Culture & Society credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/GWS/442/)
Same as KIN 442. See KIN 442.

GWS 445 Latina Literature credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/GWS/445/)
Same as LLS 442 and SPAN 442. See LLS 442.

GWS 450 Topics in Bodies and Genders credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/450/)
Same as CWL 450. See CWL 450.

GWS 453 Sex and Science credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/GWS/453/)
Same as HIST 453. See HIST 453.

GWS 454 Social Work with Women credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/GWS/454/)
Same as SOCW 455. See SOCW 455.

GWS 459 Gender, Sex, & Postcoloniality credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/GWS/459/)
Explores the relationship of imperialism, sexuality, and race through the lens of postcolonial theory. Same as HIST 459. 3 undergraduate hours. 4 graduate hours. Prerequisite: GWS 100 or GWS 250 and GWS 350 or GWS 370; or consent of instructor.

GWS 462 Hip Hop Feminism credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/GWS/462/)
Explores how hip hop has shaped the culture, aesthetics, experiences, and perspectives of an emergent generation of artists, scholars, and writers with several aims: 1) To challenge systemic social inequalities. 2) To articulate new visions of justice that depend on the power young people possess. To better understand how and why the relationship between hip hop and feminism is coherent, meaningful, and compelling, students will become familiar with artists working within and beyond various elements of hip hop (rap, graffiti, emceeing, dee-jaying, etc.), social critics concerned with documenting hip hop's cultural practices, and critical educator (broadly defined). 3 undergraduate hours. 4 graduate hours.

GWS 464 Theories & Theologies of Liberation credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/GWS/464/)
Examination of theories and theologies of liberation, from Latin American liberation theologies and Islamic feminisms and anticolonial movements to Third World liberation struggles, the Gay Liberation Front, and the Black Freedom movement. Uses an expansive feminist lens to discuss these histories, theories, and theologies in relation to issues of violence/nonviolence; religion/secularity; art and aesthetics; gender, sex, and sexuality; and power. Same as AAS 464, ANTH 464, and REL 464. 3 undergraduate hours. 4 graduate hours. Prerequisite: GWS 100 or GWS 250 and GWS 350 or GWS 370; or consent of instructor.

GWS 465 Race, Sex, and Deviance credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/GWS/465/)
Same as AAS 465, AFRO 465, and LLS 465. See LLS 465.

GWS 467 Locating Queer Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/467/)
Our goal is to learn different methods for researching "queer culture," with a special focus on the local context. Explores two research methods in depth: history and ethnography. Students will produce their own original research based on genuine gaps in existing knowledge. Provides an opportunity to learn both received knowledge about queer culture, as well as that which we do not yet know. By the end of this course, the class will collectively produce new knowledge about queer culture using local stories. Same as HIST 468. 3 undergraduate hours. No graduate credit.

GWS 470 Transgender Studies credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/GWS/470/)
What are the issues and politics related to transgender and transsexual identities? Students will examine and critically evaluate historical and contemporary debates that contest normative male/female binaries and traditional categorizations of sexuality. The course moves beyond these initial inquiries into gender theory to consider the effects of institutional discourses produced through stage and civil society. Taught with particular attention given to questions of race, national formations, medical, and legal discourses. Areas of inquiry may include gender theory, transnational identities, gendered and racial performances, medical and psychological diagnoses, violence, the law, and the Prison Industrial Complex. Through these topics, students will be asked to consider important questions over political and legal representation, autonomy, the rights of citizenship, and the practice of everyday life. 3 undergraduate hours. 4 graduate hours. Prerequisite: One course in Gender and Women's Studies at the 200- or 300-level, or consent of instructor.

GWS 475 Queering Legal Cultures credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/GWS/475/)
Exploration of the many forms of address that legal language can take, and how these legal forms affect subjects who are barely legible before the law. We will look at state laws, supreme-court decisions, policy publications, literature and social commentaries, fictional texts - as mobbed through social media platforms - to try to understand how queer (as verb, noun, adjective) emerges as a way in and out of legal spaces. Topics will include historical formations, current debates, and landmark cases in both national and transnational contexts. 3 undergraduate hours. 4 graduate hours.

GWS 478 Sex, Power and Politics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/GWS/478/)
Examines representations of the relationship between sex, power, and subjectivity and how they have shaped feminism. Explores critical approaches to feminist analyses of women's oppression and debates about sexuality, including issues such as consent, rape and prostitution. Same as PS 413. 3 undergraduate hours. 4 graduate hours. Prerequisite: One course in Gender and Women's Studies at the 200- and 300-level or consent of instructor.

GWS 490 Individual Study credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/GWS/490/)
Supervised reading and research in Gender and Women's Studies chosen by the student with instructor approval. 2 to 4 undergraduate hours. 2 to 4 graduate hours. May be repeated to a maximum of 6 hours. Prerequisite: Two courses in Gender and Women's Studies at the 200-400 levels; or junior standing; or consent of instructor.

GWS 495 Advanced Topics GWS credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/GWS/495/)
3 undergraduate hours. 4 graduate hours. Approved for letter and S/U grading. May be repeated in the same term to a maximum of 9 undergraduate hours or 12 graduate hours; may be repeated in separate terms to a maximum of 12 undergraduate or 12 graduate hours.

GWS 498 Senior Seminar credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GWS/498/)
Considers the relationship between theory and research in Women's Studies. Reviews and examines the key issues of feminist scholarship. Provides students with the methodological knowledge and opportunity to carry out a research project. 3 undergraduate hours. No graduate credit. Prerequisite: Senior standing and enrollment as a major in Gender and Women's Studies, or consent of instructor.
This course satisfies the General Education Criteria for:
Advanced Composition

GWS 501 Prob in Comp Women's Hist credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GWS/501/)
Same as HIST 503. See HIST 503.

GWS 508 Feminism, Gender and Sexuality credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GWS/508/)
Same as ANTH 508. See ANTH 508.

GWS 512 Gender Relations & Intl Dev credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GWS/512/)
Same as SOCW 581 and WGGP 581. See WGGP 581.

GWS 540 Intersectional Pedagogies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GWS/540/)
Examines the link between political movements and pedagogies, including feminist, critical, critical multicultural, critical race, and queer pedagogies. Students will analyze pedagogical theories and implement practical techniques and strategies. 4 graduate hours. No professional credit. Prerequisite: Graduate standing and previous coursework in Gender and Women's Studies; or consent of instructor.

GWS 550 Feminist Theories & Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GWS/550/)
Interdisciplinary study in diverse feminist theories and methods produced in and across various disciplines. Contemporary philosophical and theoretical developments in the study of gender to specific histories of class, race, ethnicity, nation and sexuality. Prerequisite: At least one graduate-level humanities course or consent of instructor.

GWS 560 Feminist Media Studies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GWS/560/)
Same as MDIA 560. See MDIA 560.

GWS 561 Race and Cultural Critique credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GWS/561/)
Same as AAS 561, AFRO 531, ANTH 565, and LLS 561. See AAS 561.

GWS 575 Transnational Feminisms credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GWS/575/)
Study of the terms, methodologies and theoretical interventions of transnational feminist studies. Transnational is a term that calls attention to circuits of political, economic, and social phenomena across the boundaries of nation-states. Emerging as a response to the shortcomings of overarching, economic theorizations of globalization as well as Western versions of "global feminism," transnational feminist studies is an interdisciplinary critical field that draws from the vocabularies of postcolonial studies, poststructuralism, Third World feminisms, race and ethnic studies feminism in self-reflexive and context-specific ways. Examines recent reconceptualizations of relations between woman and nation; gender and globalization; feminist theory and practice.

GWS 576 Children and Youth Literature credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GWS/576/)
Same as CWL 586, EURO 576, and SCAN 576.See SCAN 576.

GWS 580 Queer Theories & Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GWS/580/)
Interdisciplinary study in queer theories and methods produced in and across various disciplines. Contemporary philosophical and theoretical developments in queer studies specific to histories of class, race, ethnicity, nation and sexuality. Prerequisite: Graduate standing.

GWS 581 Topics in Queer Studies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GWS/581/)
Interdisciplinary graduate seminar on a current topic in the field of queer studies. May be repeated in separate terms to a maximum of 8 hours if topics vary. Prerequisite: Graduate standing and previous coursework in women's or gender studies, or consent of instructor. GWS 580 or previous coursework in queer studies is recommended.

GWS 590 Topics in GWS credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GWS/590/)
May be repeated. Prerequisite: Graduate standing and previous coursework in women's or gender studies, or consent of instructor.

GS - GENERAL STUDIES

GS Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/GS/)

Courses

GS 101 Exploring General Studies credit: 1 or 2 Hours. (https://courses.illinois.edu/schedule/terms/GS/101/)
An introduction to the opportunities and resources available to the "undeclared" students enrolled in the Division of General Studies at Illinois. Introduces students to the breadth of diverse fields of study available, prepares DGS students for myriad potential careers, and helps foster a sense of collaboration and engagement through campus orientation, study, and project-based assignments. May not be repeated.

GS 102 Preparation for 21st Century Challenges credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/GS/102/)
In this seminar, first-year students in the DGS Enrichment Experience Program will learn to develop their strengths, interests, and transferable skills while investigating current and evolving societal challenges. Through class discussion, readings, and a semester-long project, students will explore a variety of topics, including leadership, creativity, research and service. Students will also learn how to craft their own college experience by understanding the many opportunities available at Illinois. Prerequisite: Restricted to first-year students in the DGS Enrichment Experience Program with an 1DEE attribute.

GS 198 DGS Honors Seminar credit: 0 to 3 Hours. (https://courses.illinois.edu/schedule/terms/GS/198/)
Approved for both letter and S/U grading.

GS 199 Undergraduate Open Seminar credit: 0 to 5 Hours. (https://courses.illinois.edu/schedule/terms/GS/199/)
Approved for both letter and S/U grading. May be repeated for a maximum of 6 hours if topics vary.

GS 299 DGS Study Abroad credit: 0 to 18 Hours. (https://courses.illinois.edu/schedule/terms/GS/299/)
Provides credit toward the undergraduate degree for study at accredited foreign institutions or approved for overseas programs. Final determination of credit is made upon the student's completion of the work. (Summer session, 0 to 8 hours). Approved for Letter and S/U grading. May be repeated in separate terms to a maximum of 44 hours, all of which must be earned within one calendar year. Prerequisite: One year of residence at UIUC, good academic standing, and prior approval of the Division of General Studies.

GEOG - GEOGRAPHY

GEOG Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/GEOG/)

Courses

GEOG 100 Introduction to Meteorology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/100/)
Same as ATMS 100. See ATMS 100.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences

GEOG 101 Global Development&Environment credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/101/)
Introduces geographical perspectives on environment and development studies with case studies drawn from Africa, Asia, and Latin America. Investigates the origins of the global South in relation to the global North, especially the historical and contemporary processes driving environmental, economic, and cultural change.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West
Social Beh Sci - Soc Sci

GEOG 103 Earth's Physical Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/103/)
A basic introduction to the environmental systems of the Earth's surface, including landforms, soils, and ecosystems and how these systems are affected by global change. Emphasizes the importance of human-Earth relations and a holistic view of environmental systems. Same as ESE 103.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences

GEOG 104 Social and Cultural Geography credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/104/)
Introduces the basic concepts of social and cultural geography, and the application of these concepts to a variety of topics; mental maps, territoriality, cultural regions, cultural elements and their diffusion, population movement and migration, settlement patterns, environmental hazards, and spatial patterns of social problems.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

GEOG 105 The Digital Earth credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/105/)
Geospatial technologies such as global positioning systems (GPS) and geographic information systems (GIS) are becoming increasingly important tools in research and policy arenas and in everyday life. This course will provide an introduction to these emerging technologies and to the principles of mapping science that underpin them. At the same time, the course will explore how these innovative technologies are changing the spaces and places around us, including how we interact with the environment and each other. Lab exercises provide hands-on experience in collecting and mapping geospatial information, interpreting digital imagery and the Earth's environments, and critically thinking about the social implications of the digital Earth.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

GEOG 106 Geographies of Globalization credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/106/)
A survey of major world regions by systematically considering five themes: environment, population and settlement patterns, cultural coherence and diversity, geopolitical fragmentation and unity, and economic and social development. While examining the persistence of unique regions, the course will both scale up to global linkages and scale down to place-specific impacts of globalization processes. Same as ESE 106.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West
Social Beh Sci - Soc Sci

GEOG 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/199/)
May be repeated.

GEOG 204 Cities of the World credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/204/)
In-depth exploration of global urbanization. Using a comparative regional approach, discuss the recent history of global urbanization, dissect its problems, and offer possible solutions. Approximately ten major regions of the world will be examined, exploring the significant urban patterns and processes, built and natural environments, and social, economic, and cultural landscapes of each.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - Western

GEOG 205 Business Location Decisions credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/205/)
Analyzes location decision-making emphasizing industrial and commercial location patterns; identifies important institutional factors and their changing roles over the recent past; and focuses on plant closings, economic disruptions, and problems of structural change. Same as BADM 205. Prerequisite: ECON 102 or ECON 103, or equivalent.

GEOG 210 Social & Environmental Issues credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/210/)
Introduction to the complex relationship between people and the natural environment from a social science perspective. Explores different approaches to environmental issues, and examines the role of population change, political economy, technologies, environmental policymaking, and social institutions in causing and resolving contemporary social and environmental global issues. Same as ESE 210.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

GEOG 220 Landscapes, Ecosystems and Environmental Change: Science and Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/220/)
Addresses the fundamental question of how science can guide sustainable management of landscapes and the associated ecosystems in the era of rapid global environmental change. To achieve this goal, we will integrate basic concepts and methods from a range of disciplines, including earth sciences, ecology, environmental management, and environmental studies.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences

GEOG 221 Geographies of Global Conflict credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/221/)
Focuses on contemporary cultural conflicts, competition among nations for economic and mineral resources; treats territorial disputes from a cultural and geographic perspective. Case studies vary to illustrate types of contemporary conflicts. Same as GLBL 221. Credit is not given for GEOG 221 and GEOG 110.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

GEOG 222 Big Rivers of the World credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/222/)
An interdisciplinary approach to the study of big rivers, encompassing geomorphology, engineering, ecology, risk assessment and planning. Commencing with an assessment of the nature of big rivers; their hydrology and geomorphic setting; hazards associated with large rivers, and issues of river impoundment and management, then proceed to examine the geography, geomorphology, and ecology and management of a range of the World's greatest rivers, focusing on how a geomorphological understanding of such large rivers can aid study of riverine ecohabitats and inform decisions regarding water usage and engineering management. If the weather permits, a one day field-trip will be organized in the second half of the course to view aspects of a local river in Illinois/Indiana. Same as ESE 222.

GEOG 224 Environmental Data Science credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/224/)
Systematic analysis of the environmental and human processes shaping rural and urban Illinois through a data science lens.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

GEOG 254 American People, Places, & Environments credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/254/)
Students will broaden their understanding of how the United States' physical and human geography interact to produce unique cultural landscapes. Covers a dozen different regions of the U.S., exploring the significant spatial patterns and processes, built and natural environments, and social, economic, and cultural landscapes of each. Focuses on the experiences of minority cultures in the U.S. through specific themes that vary by semester, including: environmental justice, memory and memorials, music, and food. Same as ESE 254.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - US Minority

GEOG 280 Intro to Social Statistics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/280/)
Same as SOC 280. See SOC 280.
This course satisfies the General Education Criteria for:
Quantitative Reasoning I

GEOG 287 Environment and Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/287/)
Same as ESE 287, NRES 287 and PS 273. See NRES 287.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - Western

GEOG 350 Sustainability and the City credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/350/)
Examination of the tools, techniques, strategies, and rationales that can be used by urbanists to produce and sustain a productive, fair, and equitable city. Emphasis is placed on diagnosing, implementing, and sustaining an ideal U.S. city as a complex whole that embeds an array of interconnecting parts (neighborhoods, retail districts, downtowns, city economies). Lectures and discussion cover the broad background of theories, concepts, and principles that will be essential for imagining and implementing these ideals, strategies and plans.) Same as ESE 350.

GEOG 356 Sustainable Development in South Asia credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/356/)
Examination of sustainable development in the region of South Asia (India, Nepal, Pakistan, Afghanistan, Bangladesh, Sri Lanka). Geographic analysis of development processes since the colonial period, with particular emphasis on the interrelated processes of environment, society, and politics as related to sustainability. Prerequisite: Sophomore standing or consent of instructor.

GEOG 370 Water Planet, Water Crisis credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/370/)
Same as ESE 320 and GEOL 370. See ESE 320.

GEOG 371 Spatial Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/371/)
Overview of the spatial analysis (nomothetic) approach to geographic research, both physical and human; includes discussion of the scientific method, with explanations and uses of analytic geographic concepts in studying real world problems. Prerequisite: A course in geography.
This course satisfies the General Education Criteria for:
Quantitative Reasoning II

GEOG 379 Intro to GIS Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/379/)
Investigates the fundamentals of geographic information science as well as the basic skills in the execution of that theoretical knowledge with industry standard software packages. Student will learn the basics of projections and coordinate systems, how geographic information is stored and manipulated, and the theory and practice behind the production of thematic maps. Includes lecture and hands-on laboratory components. Same as ESE 379.

GEOG 380 GIS II: Spatial Prob Solving credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/380/)
Study of the analytical capabilities of geographic information systems with an emphasis on learning to solve spatial problems in both the vector and raster data formats. Students will develop the skills necessary to answer questions or solve problems in their areas of interest, with particular emphasis on problems and questions that require multiple steps to resolve. Students will learn the fundamental theory behind spatial problem solving, but also learn to execute these procedures with industry-standard software packages. Thus, this class contains both lecture/discussion elements and hands-on laboratory work. Same as ESE 380. Prerequisite: GEOG 379
This course satisfies the General Education Criteria for:
Quantitative Reasoning II

GEOG 384 Population Geography credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/384/)
Problems and issues surrounding the geographic distribution of populations at the world, regional, and local levels; emphasizes problems associated with population growth and decline, recent population redistribution, births and deaths, and elderly and minority populations.

GEOG 390 Individual Study credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/390/)
Supervised independent study of special topics or regions. May be repeated once. Prerequisite: Junior standing; at least one formal course in the topic or region of interest; consent of instructor.

GEOG 391 Honors Individual Study credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/391/)
Individual study and research projects for students who are working toward the degree with distinction in geography. May be repeated to a maximum of 8 hours. Prerequisite: Junior standing; consent of honors adviser.

GEOG 392 Geography & GIS Internship credit: 0 to 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/392/)
Supervised, off-campus experience in a field directly pertaining to Geography and/or GIS. A written report is required at the end of the internship relating work accomplishments to the student's program of study. Approved for Letter and S/U grading. May be repeated in separate terms up to 6 hours. Prerequisite: Consent of faculty sponsor and Director of Undergraduate Studies; at least two courses taken within Geography & GIS.

GEOG 401 Watershed Hydrology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/401/)
Same as NRES 401. See NRES 401.

GEOG 403 Geographic Information Science and Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/403/)
Introduces the conceptual and technical fundamentals of geographic information science as a gateway to advanced study in geographic information science, and cover geographic information science as an interdisciplinary scientific field and geographic information systems as a tool in many application domains. Students will be introduced to unique characteristics of geospatial data in the capture, processing, storage, analysis, communication, and interpretation of geospatial information, which will prepare them to utilize information science techniques and critical spatial-thinking skills to address geospatially-related challenges. 4 undergraduate hours. 4 graduate hours. Prerequisite: There are no prerequisites for this course, although familiarity with basic descriptive and inferential statistics as well as some experience with at least one computer scripting/programming language will be helpful.

GEOG 405 Geography Field Course credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/405/)
Field observation and mapping of human and/or physical phenomena using basic geographic field techniques, including pre- and post-trip meetings. Required field trip. Additional fees may apply. See Class Schedule. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated if topics vary. Prerequisite: Major or minor in Geography & GIS, or consent of instructor.

GEOG 406 Fluvial Geomorphology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/406/)
Systematic overview of the forms and processes associated with rivers and drainage basins; topics include basin hydrology, drainage networks, river hydraulics, sediment transport processes, channel morphology, channel change, and human impacts on fluvial systems. Same as GEOL 406, and NRES 406. 4 undergraduate hours. 4 graduate hours. Prerequisite: PHYS 101, and GEOG 103 or GEOL 107, or consent of instructor.

GEOG 407 Foundations of CyberGIS & Geospatial Data Science credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/407/)
Intended to introduce students to CyberGIS – Geospatial Information Science and Systems (GIS) based on advanced cyberinfrastructure as well as the state of the art in high-performance computing, big data, and cloud computing in the context of geospatial data science. Students will use CyberGISX, which is an innovative cyberGIS framework for conducting data-intensive, reproducible, and scalable geospatial analytics with Jupyter Notebook as its primary user environment. Students are expected to learn how to develop Jupyter notebooks to analyze and visualize geospatial data using leading-edge cyberGIS software and python libraries. Emphasis is placed on learning the cutting-edge advances of cyberGIS and its underlying geospatial data science principles. Same as GEOL 407. 4 undergraduate hours. 4 graduate hours.

GEOG 408 Humans and River Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/408/)
Systematic analysis of the biophysical processes operating in rivers and watersheds and the interaction of humans on these processes. The course will emphasize the importance of biophysical processes and human interaction with these processes in river and watershed management. Class discussion and a class project will focus on analysis of practical river and watershed problems. 4 undergraduate hours. 4 graduate hours. Prerequisite: GEOG 103 or an introductory course in earth or environmental science.

GEOG 410 Green Development credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/410/)
Theory and practice of sustainable development. Course materials draw upon theoretical and case study material from the social and natural sciences to analyze environment and development relations with emphasis on the Global South. Same as ESE 410. 4 undergraduate hours. 4 graduate hours.

GEOG 412 Geospatial Tech & Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/412/)
Examines the use of geographic information systems (GIS), geographical positioning systems (GPS), and other geospatial technologies in everyday life with emphasis on their implications for social, economic, and environmental change. Topics include critical cartography, GIS, and social theory, crime and health, environmental justice, feminism, economic development and environmental change. 3 undergraduate hours. 3 graduate hours. Prerequisite: GEOG 105 or consent of instructor.

GEOG 421 Earth Systems Modeling credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/421/)
Same as ATMS 421, ESE 421, GEOL 481 and NRES 422. See ATMS 421.

GEOG 423 Politics of International Conservation and Development credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/423/)
Same as NRES 423. See NRES 423.

GEOG 436 Biogeography credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/436/)
Same as ANTH 436, ESE 439, IB 439 and NRES 441. See IB 439.

GEOG 438 Geography of Health Care credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/438/)
Methods and perspectives of health care. Emphasizing the spatial analysis of health and health care. The organization, provision and competition of health care will be highlighted. Same as SOC 478. 3 undergraduate hours. 4 graduate hours. Prerequisite: GEOG 384 or SOC 274 or consent of instructor.

GEOG 439 Health Applications of GIS credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/439/)
Same as CHLH 439 and PATH 439. See PATH 439.

GEOG 440 Business Applications of GIS credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/440/)
Design and implementation of GIS for business and strategic planning applications. Course goals include: (1) provide students with an understanding of Geographic Information Systems; (2) provide students with an understanding of how GIS can be applied in various business applications; (3) familiarize students with GIS and modeling techniques; (4) provide students with opportunities to work with various data sources through a project related to their own interest in business. Same as BADM 440. 3 undergraduate hours. 4 graduate hours.

GEOG 446 Sustainable Planning Seminar credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/446/)
Same as LA 446, NRES 446, and UP 446. See LA 446.

GEOG 455 Geog of Sub-Saharn Africa credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/455/)
Regional geography of Africa south of the Sahara. Geographic analysis of Africa which includes topics in both physical and human geography and provides a general overview of the processes and interactions between human and environmental factors that shape Africa's physical and human geography. 3 undergraduate hours. 3 graduate hours.

GEOG 459 Ecohydraulics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/459/)
Interactions between hydraulic, ecological, and geomorphic processes in river environments at a wide range of both spatial and temporal scales. Draws upon and synthetize fundamental concepts from biology, ecology, fluid mechanics and morphodynamics, to apply them to truly interdisciplinary problems. Such an approach, coupled with hands-on experience involving planning, conducting and analyzing hands-on experiments at the Ven Te Chow Hydrosystems Laboratory and field surveys on local natural waters will provide the students with a broad perspective on the interconnections between physical and ecological systems. Students will apply their knowledge of fundamental processes to assess complex problems involving monitoring, management, conservation and restoration of ecosystems. 4 undergraduate hours. 4 graduate hours.

GEOG 460 Aerial Photo Analysis credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/460/)
Review of methods for extracting quantitative and qualitative information from aerial photographs using computer-based techniques and visual interpretation. The first part of the course will cover basic photogrammetry and mapping. The second part will focus on interpretation of physical, biological, and cultural features. Same as NRES 460. 3 undergraduate hours. 4 graduate hours. Prerequisite: Knowledge of trigonometry (MATH 014 or equivalent) and basic physical geography (GEOG 103 or equivalent).

GEOG 465 Transportation & Sustainability credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/465/)
Descriptors of transportation systems; transportation as an industrial activity and public good; and transportation and spatial development, including the role of transportation in urban and regional development. Emphasis on the economic, environmental, and social aspects of sustainability as they apply to transportation systems and the activities they enable at local, regional, national and global levels. Field trip required. Same as ESE 465. Additional fees may apply. See Class Schedule. 3 undergraduate hours. 4 graduate hours.
This course satisfies the General Education Criteria for:
Advanced Composition

GEOG 466 Environmental Policy credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/466/)
Examination of the geographical and political aspects of human-environmental relations; focusing on how environmental problems are defined, negotiated, and addressed through policy formulation. Specific approaches to environmental policy will be considered at different geographical scales. Same as ESE 466. 3 undergraduate hours. 4 graduate hours. Prerequisite: One course in Geography or Political Science or consent of instructor.

GEOG 468 Biological Modeling credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/468/)
Interdisciplinary modeling course for students interested in dynamic system modeling of living processes; each student will build a model by the end of the course. No special mathematical background required. Same as ANSC 449, CPSC 448, and IB 491. 3 undergraduate hours. 4 graduate hours. Prerequisite: IB 444 or equivalent, depending on curriculum.

GEOG 471 Recent Trends in Geog Thought credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/471/)
Examination of recent trends in human and physical geography. Themes include empiricism, logical positivism, regionalism, Marxism, realism, phenomenology, and post-modernism as applied to geographic research. Emerging geographic literature is explored to identify the latest conceptual developments. 4 undergraduate hours. 4 graduate hours.

GEOG 473 Digital Cartography & Map Design credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/473/)
Instruction and practice in the basic techniques of map making followed by a consideration of problems involved in the construction of maps for presentation in a reproduced form (i.e., printed, photographed); the selection of proper source materials for the base and body of the map, the compilation and correlation of these materials, and methods of mechanical and photographic reproduction. 4 undergraduate hours. 4 graduate hours.

GEOG 476 Applied GIS to Environ Studies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/476/)
Demonstrates how geographic information systems (GIS) have become a major technology ubiquitously applied to solve important problems encountered in geospatial and environmental applications. Same as IB 476. 3 undergraduate hours. 3 graduate hours. Prerequisite: GEOG 103 or GEOG 104, consent of instructor.

GEOG 477 Introduction to Remote Sensing credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/477/)
Fundamentals of energy-matter interaction mechanisms, and the manifestation of reflected and emitted radiation on photographs and images; introduces characteristics of aerial films and filters, electro-optical scanners, and digital processing; and emphasizes applications in environmental problems. Same as NRES 477. 3 undergraduate hours. 3 graduate hours. Prerequisite: GEOG 280 (beginning statistics) or equivalent, or consent of instructor.

GEOG 478 Techniques of Remote Sensing credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/478/)
Introduce remote sensing techniques to identify features and phenomena at the surface of Earth with aircraft and satellite platforms. The covered topics include remotely sensed data and major sensor systems, optical, thermal, LiDAR, and hyperspectral remote sensing, techniques for image enhancement and image classification, and applications of remote sensing in various domain fields. 3 undergraduate hours. 3 graduate hours. Prerequisite: GEOG 477 or equivalent.

GEOG 479 Advanced Topics in GIS credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/479/)
Introduces advanced concepts in Geographic Information Science. Course topics may vary. 3 undergraduate hours. 3 graduate hours. May be repeated, if topics vary, in separate terms to a maximum of 9 hours, but not more than 6 hours in any one term. Prerequisite: GEOG 379 or equivalent.

GEOG 480 Principles of GIS credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/480/)
Focuses on Geographic Information Science (GIScience) principles that underlie the development of Geographic Information Systems (GIS) software and its intelligent use. Helps students adapt to rapidly changing geospatial technologies. Knowledge gained in this course will be general and, thus, not be limited to any specific software product that may be revised in the future. 3 undergraduate hours. 3 graduate hours. Prerequisite: GEOG 379 and GEOG 380 or equivalent, or consent of instructor.

GEOG 482 Challenges of Sustainability credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/482/)
Same as ESE 482 and GEOL 483. See ESE 482.

GEOG 483 Urban Geography credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/483/)
Broad background of theories, concepts, and methods of research for understanding how and why our cities have reached their current status. Focus on examining the internal structure of the North American city, including analysis of the commercial, industrial, and residential sectors of the urban environment. Particular emphasis is placed on the range of urban theories developed to explain both urban structure and contemporary urban ills. 3 undergraduate hours. 3 graduate hours.

GEOG 484 Cities, Crime, and Space credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/484/)
Focusing on US cities, this theory-intensive course surveys traditional and critical perspectives on relations between crime, space, and place. We will explore this interplay within broader contexts of industrial and post-industrial urbanization, concentrating on dynamics including governances, economic processes, and social transformations. Emphasis will be placed on the extent to which these interwoven processes generate, classify, organize, and react to crime across cityscapes. 3 undergraduate hours. 4 graduate hours.

GEOG 489 Programming for GIS credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/489/)
Introduction to programming to customize and extend the capabilities of geographic information systems. Topics include the principles of programming, advanced function and tools coding, visualization, fundamental spatial data structures, and spatial algorithms. 4 undergraduate hours. 4 graduate hours. Prerequisite: GEOG 379 and GEOG 380 or equivalents, or consent of instructor.

GEOG 491 Research in Geography credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/491/)
Detailed examination and discussion of the methods of initiating and executing research projects in human or physical geography (taught in separate sections); requires students to write a research proposal of a quality suitable for a graduate thesis. 2 undergraduate hours. 2 graduate hours. Prerequisite: GEOG 471; either graduate standing in geography or senior standing as a geography major and consent of department.

GEOG 495 Advanced Topics in Geography credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/495/)
Explores special topics not covered in regularly scheduled Geography courses. 3 or 4 undergraduate hours. 3 or 4 graduate hours. May be repeated if topics vary in the same term to a maximum of 9 undergraduate hours or 12 graduate hours or in separate terms to a maximum of 12 undergraduate hours or 12 graduate hours.

GEOG 496 Climate & Social Vulnerability credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/496/)
Existing climate variability and likely climate change call for policies to protect vulnerable people who make their livelihoods in a changing environment. Students will explore: 1) causes of climate related stress and disaster; 2) theories of vulnerability and adaptation; 3) practices and policies designed to reduce economic loss, hunger, famine and dislocation in the face of climate trends and events. Focus on multiple policy scales affecting poor and marginal populations, who are disproportionately vulnerable when facing climate stress, drawing on case examples primarily from the developing world. Same as ATMS 446 and SOC 451. 3 undergraduate hours. 4 graduate hours. Prerequisite: GEOG 410, GEOG 466, GEOG 471, GEOG 520, or consent of instructor.

GEOG 507 High-Performance Geospatial Computing credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/507/)
Intended to introduce students to high-performance geospatial computing using python to resolve computational bottlenecks and produce faster and scalable solutions. Students will learn how to use Python on high-performance and parallel computing architecture. Specifically, NumPy, SciPy, Numba, and Cython will be covered to optimize and speed up geospatial computation. Students will use CyberGISX as the primary learning environment, and be expected to learn how to develop such notebooks to address computational challenges in solving geospatial problems. By the end, students will have gained solid knowledge of common Python tools for developing high-performance geospatial computing solutions that can be applied to many applications. 4 graduate hours. No professional credit. Prerequisite: GEOG 407 or equivalent.

GEOG 517 Geospatial Visualization & Visual Analytics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/517/)
Intended to introduce students to geospatial visualization and visual analytics as well as the state-of-the-art of cartographic mapping and visualization technologies in the context of cyberGIS (cyber geospatial information science and systems) and geospatial data science. Students will learn open source mapping and visualization libraries such as Leaflet, D3 and Plotly and how to mash up these libraries to create interactive and dynamic visualization tools and GIS applications. Students are expected to learn how to visualize not only geospatial data but also results of spatial analysis. Emphasis is placed on learning the cutting-edge advances of geospatial visualization and visual analytics and practical skills to create geospatial applications based on such advances. 4 graduate hours. No professional credit.

GEOG 520 Political Ecology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/520/)
Political ecology integrates social and biophysical processes in the study of nature-society relations. Examination of the conceptual origins of the field of political ecology and identification of influential bodies of research and promising research directions. Readings focus on recent advances, debates, and the ongoing evolution of political ecology as an integrative approach to Geography and environment-development studies. 4 graduate hours. No professional credit. Prerequisite: One of the following courses, or consent of the instructor: GEOG 410, GEOG 466, SOC 447, HIST 460, or equivalent.

GEOG 527 Geospatial Artificial Intelligence and Machine Learning credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/527/)
The field of Artificial Intelligence (AI) has made significant progress in recent years, and a number of AI algorithms have even surpassed human ability at tasks such as computer vision, natural language processing and machine translation. The intersection of AI and geospatial analysis is creating massive and unprecedented opportunities for knowledge discovery and innovative applications. A growing number of Geospatial AI and machine learning applications have emerged in a diverse set of disciplines such as geography and geographic information science, agriculture, business, economics, sustainable development, and urban planning. In this course, students will learn a variety of Geospatial AI and Machine Learning (ML) algorithms (e.g., decision trees, and support vector machine) and tools that allow us to investigate and identify patterns, clusters, classes, and anomalies based on various types of geospatial data. The course will include extensive hands-on interactions with geospatial data and applications based on cutting-edge AI and ML techniques. 4 graduate hours. No professional credit. Prerequisite: GEOG 407 or equivalent.

GEOG 560 Spatial Epidemiology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/560/)
Same as PATH 560. See PATH 560.

GEOG 561 Landscapes and Human Health credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/561/)
Same as CHLH 580 and LA 570. See LA 570.

GEOG 570 Advanced Spatial Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/570/)
Advanced techniques of spatial analysis, including spatial autocorrelation, trend surface analysis, grouping and regionalization procedures, and point pattern analysis.

GEOG 575 Alluvial Boundary Layer Dynam credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/575/)
Examination of the structure of turbulent boundary layers in rivers and how turbulent flow, sediment transport and channel forms interact over a wide range of spatial and temporal scales. Explores these interactions through critical analysis of contemporary research in fluvial geomorphology, fluid mechanics, hydraulics and sedimentology. Same as GEOL 575. Prerequisite: Consent of instructor.

GEOG 587 Qualitative Research Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/587/)
Same as UP 587. See UP 587.

GEOG 594 Seminar in Social Geography credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/594/)
Advanced study of a current research topic in social geography. Topic varies from term to term; prepares students for dissertation and thesis research through study of advanced literature and the completion of a research paper. Prerequisite: GEOG 471 or equivalent; graduate coursework in social geography or in one of the social sciences.

GEOG 595 Advanced Studies in Geography credit: 0 to 8 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/595/)
Seminar and directed individual investigation of selected problems or regions; designed to develop ability to conduct independent investigation. Scheduled seminars are detailed in each term's Class Schedule. Approved for both letter and S/U grading. May be repeated.

GEOG 598 Graduate Capstone Project credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/598/)
Major individual project that demonstrates a PSM in GIS student's ability to solve an advanced geospatial problem or develop a GIS-based application. Student will work closely with a faculty capstone adviser to determine the project focus and expected outcome(s). 4 graduate hours. No professional credit. Prerequisite: Restricted to second-year PSM in GIS students.

GEOG 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/GEOG/599/)
Approved for S/U grading only. May be repeated.

GEOL - GEOLOGY

GEOL Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/GEOL/)

Courses

GEOL 100 Planet Earth credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/100/)
Introduces non-science majors to physical aspects (earthquakes, volcanoes, floods, tsunamis, mountains, plate tectonics) and historical aspects (formation of earth and life, dinosaurs, ice age, evolution of climate) in earth science. Presents information on earth resources, natural hazards, and development of natural landscapes. Focuses on humanistic issues; provides context for understanding environmental change. Optional lab demonstrations and field trips with co-registration in GEOL 110. Credit is not given for both GEOL 100 and GEOL 101, GEOL 103 or GEOL 107.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences

GEOL 104 Geology of the National Parks credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/104/)
Develops geologic background, concepts, and principles through study of selected national parks and monuments. Examines the geologic framework and history, modern geologic processes, and factors influencing the present day landscape for each park area. Same as ESE 104.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences

GEOL 107 Physical Geology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/107/)
Introduces Earth phenomena and processes. Includes minerals and rocks, continental drift, plate tectonics, rock deformation, igneous and sedimentary processes, geologic time, landscape evolution, internal structure and composition of the earth, groundwater, seismology and earthquakes, and formation of natural resources. Emphasizes the chemical and physical aspects of the Earth, and the basis for geological inference. Field trip required. Additional fees may apply. See Class Schedule. Credit is not given for both GEOL 107 and GEOL 100, GEOL 101 or GEOL 103. Prerequisite: Intended for science and science-oriented students.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences

GEOL 110 Exploring Geology in the Field credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/GEOL/110/)
Introduces practical techniques for identification of rocks, minerals, and fossils; interpretation of geologic maps and cross-sections; appreciation of Midwestern geologic history and geologic features and landforms in the field. Additional fees may apply. See Class Schedule.

GEOL 111 Emergence of Life credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/111/)
Examines important theoretical and practical questions regarding the origin and evolution of life, as well as the search for life elsewhere in the universe. Uses the pioneering work of Carl Woese, whose "Tree of Life" revolutionized our understanding of the fundamental structure and evolutionary relatedness of all living entities on Earth. Same as ESE 111. Additional fees may apply. See Class Schedule.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Life Sciences

GEOL 117 The Oceans credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/117/)
Integrated introduction to oceanography and marine geology and geophysics. Topics include ocean-basin formation and evolution (in the context of plate tectonics), ocean ecology, the hydrologic cycle, water chemistry, currents and waves, the interaction of oceans with climate, coastal hazards, resources, pollution, and the Law of the Sea. Course is oriented toward students not majoring in science. Same as ESE 117.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences

GEOL 118 Natural Disasters credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/118/)
Introduces the nature, causes, risks, effects, and prediction of natural disasters including earthquakes, volcanoes, landslides, subsidence, global climate change, severe weather, coastal erosion, floods, mass extinctions, and meteorite impacts; covers scientific principles and case histories of natural disasters as well as human responses (societal impact, mitigation strategies, and public policy). Same as ESE 118 and GLBL 118.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences

GEOL 143 History of Life credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/143/)
Evolution of life from its beginning, illustrating changing faunas and floras through time; the invasion of land and of the skies; the effects of a changing atmosphere, changing climates, and continental drift. Emphasis on dinosaur evolution, ecology, and extinction; also other vertebrates, including mammal-like reptiles, mammals, and the emergence of humans, as well as plants and invertebrates. Same as ESE 143.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Life Sciences

GEOL 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/199/)
May be repeated.

GEOL 201 History of Geology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/201/)
Traces the development of key ideas in the science, beginning with musings of the ancient Greek and Roman philosophers and early observations of the Earth by European and Arab scholars. Considers advances in mapmaking that span thousands of years and examines the origins of the Geologic Time Scale, including determination of the ages of rocks. Looks at early geologists from around the world, in the US, in Illinois, and at the U of I. Reads some classic papers establishing the grand unifying theory of geology: plate tectonics. Prerequisite: A 100-level geology course (excluding GEOL 110 and GEOL 143). Intended for both non-science students and geology majors.
This course satisfies the General Education Criteria for:
Advanced Composition
Humanities - Hist Phil

GEOL 208 History of the Earth System credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/208/)
Presents systematic analysis of formation and evolution of the Earth and its dynamic systems (lithosphere, hydrosphere, atmosphere, and biosphere). Also introduces methods of reconstructing Earth's history through use of geochronology, paleontology, and the stratigraphic records. Introduces the geological history of life evolution, mountain belts and continents, geochemical systems, climate, sea level, and the Earth's interior. Field trip required. Same as ESE 208. Additional fees may apply. See Class Schedule. Prerequisite: One of GEOL 100, GEOL 101, GEOL 103, GEOL 104 or GEOL 107; or consent of instructor.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences

GEOL 333 Earth Materials and the Env credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/333/)
Studies the origin, identification, and environmental significance of earth materials (minerals, rocks, and soil). Environmental topics include: mineral resources; acid mine drainage; volcanic hazards; swelling soils; engineering strength, porosity/permeability, and architectural uses of earth materials; and asbestos. One day field trip is required. Same as ESE 333. Additional fees may apply. See Class Schedule. Credit is not given for both GEOL 333 and GEOL 432. Prerequisite: CHEM 102 and CHEM 103; GEOL 100 and GEOL 110, or one of GEOL 101, GEOL 103, GEOL 104 or GEOL 107; or consent of instructor.

GEOL 350 Volcanoes credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/350/)
Explores volcanoes from a hazards standpoint by investigating case studies of volcanic disaster, evaluating important controls of volcanism such as magma viscosity and behavior of bubbles, and introducing the monitoring of active volcanoes with cutting edge methods such as seismicity, gravity, and remote sensing. Understanding the interactions among these complex parameters plays a critical role in assessing the evolution of shallow magma systems and investigating their potential for remaining stable or developing into hazardous eruptive systems, which can threaten nearby populations. Prerequisite: Any 100-level Geology course (excluding GEOL 106, GEOL 111, and GEOL 143).
This course satisfies the General Education Criteria for:
Quantitative Reasoning II

GEOL 370 Water Planet, Water Crisis credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/370/)
Same as ESE 320 and GEOG 370. See ESE 320.

GEOL 380 Environmental Geology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/380/)
Increases student understanding of environmental issues of water supply and pollution, waste disposal, energy, environmental health, global change, and land evaluation and use by emphasizing the role of geology and its relationships to human activities. Course requires a one-day field trip. Same as ENVS 380. Additional fees may apply. See Class Schedule. Credit is not given for both GEOL 380 and ESE 445. Prerequisite: CHEM 102 and CHEM 103; and GEOL 100 and GEOL 110, or one of GEOL 101, GEOL 103, GEOL 104 or GEOL 107; or consent of instructor.

GEOL 390 Individual Study credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/390/)
Research and individual study in geology. May be repeated. A maximum of 8 hours of GEOL 390 plus GEOL 391 may be counted toward graduation. Prerequisite: GEOL 208 or equivalent; consent of supervising faculty member; advance approval by Department of Geology.

GEOL 391 Individual Honors Study credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/391/)
Research and individual study in geology for honors credit. May be repeated. A maximum of 8 hours of GEOL 390 plus GEOL 391 may be counted toward graduation. Prerequisite: GEOL 208 or equivalent; consent of supervising faculty member and of departmental honors advisor; advance approval by Department of Geology.

GEOL 401 Geomorphology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/401/)
History, origin, and characteristics of land forms produced by weathering, fluvial, glacial, wind, and wave processes or by a combination of these acting upon the major kinds of geologic materials and structures. Lectures, laboratory, and field trips. Same as ESE 411. Additional fees may apply. See Class Schedule. 4 undergraduate hours. 4 graduate hours. Prerequisite: GEOL 208 or consent of instructor.

GEOL 406 Fluvial Geomorphology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/406/)
Same as GEOG 406 and NRES 406. See GEOG 406.

GEOL 407 Foundations of CyberGIS & Geospatial Data Science credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/407/)
Same as GEOG 407. See GEOG 407.

GEOL 411 Structural Geol and Tectonics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/411/)
Introduction to principles of rock deformation, stress, and strain; description and interpretation of geologic structures; study of methods for structural analysis; outline of geotectonic processes; three hours of lecture and a three-hour lab per week. Required four-day field trip. Additional fees may apply. See Class Schedule. 4 undergraduate hours. 4 graduate hours. Prerequisite: GEOL 107 or consent of instructor.

GEOL 415 Field Geology credit: 2 to 8 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/415/)
Group field study in a prominent geologic locality; includes in-class meetings, student-led presentation, and field trip; trips run during spring break, winter break, in mid-end May or intercession; dates depend on location. Additional fees may apply. See Class Schedule. 2 to 8 undergraduate hours. 2 to 8 graduate hours. May be repeated. Prerequisite: Consent of instructor.

GEOL 416 Applied Digital Geosciences credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/416/)
Applied digital field methods. Students develop research strategies, collect remote field observations, compile unit descriptions, measure stratigraphic sections, evaluate and interpret uncertainty in data, construct geologic maps and cross sections, and interpret natural hazard maps. Uses digital topographic overlays in Google Earth and remote data imported into GIS. Designed to prepare students for successful careers in the geosciences. 3 undergraduate hours. 3 graduate hours. May be repeated up to 6 hours, in separate terms if topics vary. Prerequisite: GEOL 411, GEOL 208 or GEOL 440, and one additional 400-level geology course, or permission of the instructor.

GEOL 417 Geol Field Methods, Western US credit: 6 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/417/)
Field course based in the mountains of the western United States. Provides intensive practical experience in geologic mapping, as well as instruction in field structural, stratigraphic, geomorphologic, and petrologic analysis. Offered during summer session only. Additional fees may apply. See Class Schedule. 6 undergraduate hours. 6 graduate hours. Prerequisite: Eight hours of 400-level credit in geology, or consent of instructor; GEOL 411, GEOL 432, and GEOL 440 are recommended.

GEOL 432 Mineralogy and Mineral Optics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/432/)
Introduction to: crystallography; crystal optics; structure, composition, properties, stability and geological occurrences of minerals; and mineral identification. Additional fees may apply. See Class Schedule. 4 undergraduate hours. 4 graduate hours. Credit is not given for both GEOL 333 and GEOL 432. Prerequisite: GEOL 208 and CHEM 104 and CHEM 105.

GEOL 436 Petrology and Petrography credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/436/)
Study of the minerals, compositions, textures, structures, classifications, and origins of igneous and metamorphic rocks; lectures emphasize rock forming processes (petrology), and laboratories emphasize use of the petrographic microscope (petrography). Additional fees may apply. See Class Schedule. 4 undergraduate hours. 4 graduate hours. Prerequisite: GEOL 432.

GEOL 440 Sedimentology and Stratigraphy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/440/)
Introduces dynamics of sedimentation, geology of sedimentary basins, the distribution of geologic processes through time, definition and correlation of stratigraphic units, principles of paleogeography, stratigraphy and tectonics. Additional fees may apply. See Class Schedule. 4 undergraduate hours. 4 graduate hours. Prerequisite: GEOL 208 or consent of instructor.

GEOL 450 Probing the Earth's Interior credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/450/)
Overview of how seismology, magnetics, gravity, geodesy, and surface geology can help us understand the Earth from its surface to its core as well as its temporal evolution. Topics include the internal composition and dynamics of Earth, generation of Earth's gravitational and geomagnetic fields, driving mechanisms for tectonic plate motion, continental deformation, and surface topography. Students wanting a more quantitative treatment of geophysics should enroll in GEOL 452. 3 undergraduate hours. 3 graduate hours. Credit is not given for both GEOL 450 and GEOL 452. Prerequisite: PHYS 102 or 212, GEOL 107 or 101, or consent of instructor.

GEOL 451 Env and Exploration Geophysics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/451/)
Discusses geophysical methods to reveal subsurface structures. Topics include seismic methods, gravity, magnetics, electrical methods, ground penetrating radar, borehole geophysics, and their applications to hydrocarbon and mineral exploration as well as engineering and environmental investigations. 4 undergraduate hours. 4 graduate hours. Several required local trips for field experiments. Prerequisite: MATH 241 and PHYS 212; or consent of instructor.

GEOL 452 Introduction to Geophysics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/452/)
Provides a broad overview of basic concepts and fundamental knowledge of the physics of the Earth. Topics include seismology, gravity, geomagnetism, Earth's thermal state, and geodynamics. Intended for undergraduates in the geophysics concentration and other students who want a more quantitative treatment of the subject than GEOL 450. 4 undergraduate hours. 4 graduate hours. Credit is not given for both GEOL 452 and GEOL 450. Prerequisite: MATH 241 and PHYS 211; or consent of instructor.

GEOL 454 Introduction to Seismology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/454/)
Introducing the basic theory of seismic wave generation and propagation and its application to Earth structure and earthquakes, including body waves, surface waves, inference of Earth structure, seismic prospecting, earthquake mechanisms, and strong ground motions. 3 or 4 undergraduate hours. 3 or 4 graduate hours. Students participating in optional class projects receive an additional hour of credit. Prerequisite: MATH 285 or consent of instructor.

GEOL 460 Geochemistry credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/460/)
Fundamental chemical and physical concepts applied to geological processes; topics include: origin, distribution, and geochemical behavior of elements; chemical evolution of the Earth; geochemistry of natural waters and sedimentary rocks; isotope geochemistry, crystal chemistry, trace element geochemistry and organic geochemistry. 3 undergraduate hours. 3 graduate hours. Prerequisite: GEOL 101 or GEOL 107; CHEM 104; CHEM 105; MATH 220 or MATH 221; or consent of instructor.

GEOL 470 Introduction to Hydrogeology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/470/)
Introduction to the occurrence and movement of groundwater through the earth's crust; topics include aquifers and porous media, fluid flow and solute transport, well installation, groundwater contamination, recharge/discharge, irrigation and hydrocarbon resources. Same as ESE 470. 4 undergraduate hours. 4 graduate hours. Prerequisite: MATH 220 or MATH 221; senior standing is recommended; or consent of instructor.

GEOL 481 Earth Systems Modeling credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/481/)
Same as ATMS 421, ESE 421, GEOG 421 and NRES 422. See ATMS 421.

GEOL 483 Challenges of Sustainability credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/483/)
Same as ESE 482 and GEOG 482. See ESE 482.

GEOL 484 Paleoclimatology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/484/)
Survey of Earth's past climate variability, ranging from million-year to interannual time scales. Introduction to paleoclimate proxies including tree rings, marine and lake sediment cores, ice cores, corals, and speleothems. Focus on the drivers of climate change, major modes of climate variability, and how paleoclimate data can inform projections of future climate change. Same as IB 484. 4 undergraduate hours. 4 graduate hours. Prerequisite: Junior standing required.

GEOL 485 Risk Analysis in Earth Science credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/485/)
Same as ATMS 404. See ATMS 404.

GEOL 486 Environmental Consulting credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/486/)
Survey of the fundamental science and US policy underpinning the practices of environmental consultancy. Environmental consulting is an interdisciplinary field drawing together engineers, geologists, environmental scientists, biologists, chemists, lawyers, social workers, social scientists, lobbyists and analysts. This course describes the myriad of pathways into environmental consulting and prepares students with the fundamental policy and science concepts. Subjects covered are the framework of environmental policy, chemicals of concern and their properties, environmental site assessment, site remediation, land use and ecosystem restoration as well as indoor environmental concerns. Same as ESE 486. 3 undergraduate hours. 3 graduate hours.

GEOL 490 Undergraduate Research credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/490/)
Students will conduct research under the direct supervision of a geology faculty member. Research topics will vary, and either a summary paper or a poster presentation at a regional or national science conference is required. 1 to 3 undergraduate hours. No graduate credit. Approved for Letter and S/U grading. May be repeated up to six hours. A maximum of 6 credit hours of GEOL 490 and GEOL 491 may be counted toward graduation. Prerequisite: GEOL 208 or equivalent; Consent of supervising faculty member; advance approval by Department of Geology. Intended primarily for sophomores and juniors; not available to freshman students.

GEOL 491 Honors Undergraduate Research credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/491/)
Students will conduct research for honors credit under the direct supervision of a geology faculty member. Research topics will vary, and either a summary paper or a poster presentation at a regional or national science conference is required. 1 to 3 undergraduate hours. No graduate credit. May be repeated up to 6 hours. A maximum of 6 credit hours of GEOL 490 and GEOL 491 may be counted toward graduation. Prerequisite: GEOL 208 or equivalent; Consent of supervising faculty member and of departmental honors advisor; advance approval by Dept. of Geology. Intended primarily for sophomores and juniors who are James Scholars or Chancellor's Scholars; not available to freshman students.

GEOL 492 Senior Thesis credit: 2 to 8 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/492/)
Research in geology, with thesis; a thesis must be submitted for credit to be received. 2 to 8 undergraduate hours. No graduate credit. May be repeated. A maximum of 10 hours of GEOL 492 plus GEOL 493 may be counted toward graduation. Prerequisite: Consent of supervising faculty member.

GEOL 493 Honors Senior Thesis credit: 2 to 8 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/493/)
Research in geology with honors thesis; a thesis must be submitted for credit to be received. 2 to 8 undergraduate hours. No graduate credit. May be repeated. A maximum of 10 hours of GEOL 492 plus GEOL 493 may be counted toward graduation. Prerequisite: Consent of supervising faculty member and of departmental honors advisor.

GEOL 497 Special Topics in Geology credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/497/)
Seminar or lectures in subjects not covered by regular course offerings; for advanced undergraduates and graduate students. Additional fees may apply. See Class Schedule. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated if topics vary. Prerequisite: Consent of instructor.

GEOL 506 Landscape Evolution Models credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/506/)
History and significance of conceptual, analog and numerical models of landscape evolution with discussion of philosophical and practical considerations for numerical modeling of coupled geomorphic, geodynamic, ecological and climatic processes. Students will develop and test numerical models of geomorphic settings of their choosing and critique recent publications presenting landscape evolution models. 4 graduate hours. No professional credit. Prerequisite: GEOL 401 and MATH 285.

GEOL 507 GIS for Geology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/507/)
Common applications of geographic information science in geology including examples involving environmental geology, geomorphology, water quality, natural hazards, and structural geology. Develops practical skills using industry-standard GIS software. Case studies requiring GIS analyses will be completed to produce written reports, maps and oral presentations for a range of audiences. 4 graduate hours. No professional credit. Prerequisite: GEOL 401, GEOL 411, and GEOL 470, or consent of the instructor. Restricted to undergraduate majors with permission of instructor and M.S. and Ph.D. students in SESE (Geology, GGIS, and Atmospheric Science) only.

GEOL 510 Integrated Graduate Geology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/510/)
Study of broad range of disciplines in geology including geochemistry, geophysics, and geobiology relating to the deep Earth, the crust/lithosphere and hydrosphere through readings of classic papers and presentations by current department faculty. Prerequisite: Consent of Instructor.

GEOL 511 Advanced Structural Geology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/511/)
Study of selected topics concerning rock deformation processes and products. Introduces current research literature and methods, and the techniques of structural analysis. May include an optional field trip. Additional fees may apply. See Class Schedule. Prerequisite: GEOL 411 or equivalent; consent of instructor.

GEOL 512 Geotectonics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/512/)
Discussion of plate tectonics theory, and nature and distribution of regional-scale earth structures, such as mountain belts; includes study of geological and geophysical evidence that led to modern interpretations of evolution of earth's lithosphere. Field trip required. Additional fees may apply. See Class Schedule. Prerequisite: GEOL 411 or consent of instructor.

GEOL 515 Advanced Field Geology credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/515/)
Group field study in a prominent geologic locality; includes in-class meetings, student-led presentation, and field trip; trips run during spring break, winter break, mid-end May or intercession; dates depend on location. Additional fees may apply. See Class Schedule. May be repeated. Prerequisite: Consent of instructor.

GEOL 517 Data Science for the Geosciences credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/517/)
Same as ATMS 517. See ATMS 517.

GEOL 540 Petroleum Geology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/540/)
Application of geoscience to understanding the nature and occurrence of hydrocarbon resources. Emphasizes: source-rock geology and geochemistry, process of petroleum migration, nature of reservoirs and traps, exploration and drilling procedures, interpretation of seismic-reflection profiles, cross-section and sub-surface map construction, classification and tectonics of petroleum-bearing sedimentary basins, application of sequence stratigraphy to exploration, and petroleum-related environmental issues. Prerequisite: GEOL 411 and GEOL 440, or equivalent.

GEOL 552 Geodynamics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/552/)
Explores dynamic characteristics of the solid earth. Covers physical and mathematical theories of deformation occurring on the surface and within the lithosphere and mantle. Discusses observations that can help us understand past and ongoing earth dynamics; these observation include topography, gravity, heat flow, geology, mineral physics, and seismic and magnetotelluric images, as well as plate tectonics theory. Includes regular lectures and tutorials on geodynamic modeling. Prerequisite: MATH 285, PHYS 211, GEOL 452, or consent of instructor.

GEOL 553 Chemistry of Earth's Interior credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/553/)
The state of Earth's interior, emphasizing its chemical composition and mineralogy. Focuses on the interpretation of geochemical, petrologic, and laboratory geophysical data related to deep Earth composition, thermal state, structure, and evolution. Prerequisite: GEOL 450, GEOL 452, or consent of instructor.

GEOL 560 Aqueous Geochemistry credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/560/)
Introduction to geochemical processes occurring in natural waters, with emphasis on the thermodynamic and kinetic controls governing chemical speciation, surface complexation, redox cycling and mineral formation and stability. Applications to a variety of soil and groundwater systems will be presented. 4 graduate hours. No professional credit. Prerequisite: CHEM 104; CHEM 105; MATH 220 or 221; GEOL 460; or equivalents; or consent of instructor.

GEOL 561 Geomicrobiology & Geochemistry credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/561/)
Covers geomicrobiology as it relates to geochemistry with a primary focus on groundwater environments. Topics include energetics of microbial metabolism, influence of microorganisms on geochemistry, geochemical influences on microbial ecology, biogeochemical cycles and molecular biology tools in groundwater. Prerequisite: One year of college-level chemistry or consent of instructor required; one semester of college level biology recommended.

GEOL 562 Isotope Geology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/562/)
Introduction to the theoretical basis for isotopic fractionation in nature; survey of isotopic variations in natural materials; and application of isotopic variations to problems of geological and environmental significance. Prerequisite: Consent of instructor.

GEOL 563 Analytical Geochemistry credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/563/)
Introduces principles and applications of chemical and isotopic analysis of geological materials, including x-ray spectroscopy, mass spectrometry and atomic spectroscopy. Lectures cover theory of analysis while practical laboratory based exercises focus on how instruments work and instrument operation. Individually tailored analysis project constitutes a major part of assessment. Prerequisite: Consent of instructor.

GEOL 564 Geochronology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/564/)
Geochronology encompasses study of the dates and rates of geologic processes, and development of geochemical clocks used to time these events. Covers important geochronologic methods and discusses prominent geochronology-related questions. Focus on three areas: geochronology of the crust, mantle, and core; thermochronology; Quaternary geochronology, or study of dates and rates of geologic processes affecting Earth's surface and atmosphere in recent geologic past. 4 graduate hours. No professional credit. Prerequisite: Familiarity with differential equations, introductory-level geochemistry.

GEOL 565 Water Chemistry & Bioremediation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/565/)
Introduces surface water and groundwater remediation in the context of chemistry and microbiology using real-world problems and geochemical modeling software. Provides a foundational understanding of microbial metabolism as it relates to bioremediation including specific chemical reactions that are critical to contaminated water clean-up. Emphasis is placed on the integral roles of both abiotic and biotic chemical reactions that are critical to remediation of inorganic and organic contaminants. Uses geochemical modeling to apply chemical and biological principles to the analysis of remediation case-studies. 4 graduate hours. No professional credit. Prerequisite: One year of college-level chemistry or consent of instructor.

GEOL 571 Contaminant Fate and Transport credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/571/)
Quantitative study of the chemical, physical, and microbiological processes controlling the mobility, reaction, and transformation of pollutants in flowing groundwater. Prerequisite: GEOL 460 or GEOL 560 or CEE 443 or CEE 534; and GEOL 470 or GEOL 570 or CEE 457 or CEE 557; or consent of instructor.

GEOL 572 Hydrogeology with Python credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/572/)
Hydrogeologic concepts and real-world datasets are explored using the coding language Python and associated packages (SciPy, NumPy, Pandas, Matplotlib, FloPy). Data will be imported from a variety of sources, then analyzed to develop scientific models, and finally visualized. There will be hands-on experience with: 1) evaluating well tests to determine aquifer properties, 2) developing geologic and potentiometric surfaces from observed data, and 3) understanding implications of boundary conditions (surface waters, faults) on regional groundwater flow. 4 graduate hours. No professional credit. Prerequisite: GEOL 470, CEE 457, or consent of instructor.

GEOL 573 River Morphodynamics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/573/)
Same as CEE 553. See CEE 553.

GEOL 575 Alluvial Boundary Layer Dynam credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/575/)
Same as GEOG 575. See GEOG 575.

GEOL 579 Isotope Hydrogeology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GEOL/579/)
Application of isotope measurements in hydrogeology. Groundwater age dating, stable isotope ratios and anthropogenic radionuclides will be considered in the context of studying a broad range of hydrologic problems, from siting of nuclear waste disposal to understanding the migration of groundwater in sedimentary basins. Prerequisite: GEOL 470 or GEOL 562; CEE 457; or consent of instructor.

GEOL 591 Current Research in Geoscience credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/GEOL/591/**)**
Brings students up-to-date with current research over a broad spectrum of geoscience; improves students' oral presentation skills by practice and example. Required for all graduate students in Geology. Approved for S/U grading only. May be repeated to a maximum of 12 hours. Prerequisite: Graduate standing in Department of Geology or consent of instructor.

GEOL 593 Advanced Studies in Geology credit: 1 to 8 Hours. **(**https://courses.illinois.edu/schedule/terms/GEOL/593/**)**
Work may be taken in the following fields: (a) general geology; Field trip fee may be required for this section. (b) engineering geology; (c) geomorphology and glacial geology; (d) clay mineralogy; (e) ground-water geology; (f) geomicrobiology; (g) geological fluid dynamics; (h) mineralogy and crystallography; (i) paleontology; (j) geochemistry: (k) geophysics; (l) petrography and petrology; (m) sedimentology; (n) stratigraphy; (o) oceanography; (p) submarine geology; (q) structural geology and geotectonics; (r) mathematical geology; (s) sedimentary petrography; (t) petroleum geology; (u) coal geology; (v) isotope geology and geochronology; (w) electron beam analysis; (x) vulcanology; (y) environmental geology; and (z) planetology. Additional fees may apply. See Class Schedule. Approved for both letter and S/U grading. May be repeated.

GEOL 598 Capstone Research Project credit: 4 to 8 Hours. **(**https://courses.illinois.edu/schedule/terms/GEOL/598/**)**
Supervised individual research project in applied geology as a final requirement for non-thesis master's degree in Geology. Applies theory and knowledge from program course work in applied Geology to a project in their profession through planning, research, and the collection, analysis, modeling, assimilation, and presentation of data. Student work closely with faculty capstone advisor to determine project focus and expected outcome(s). 4 to 8 graduate hours. No professional credit. May be repeated in separate terms to a maximum of 8 graduate hours. Prerequisite: Consent of academic advisor and research advisor and acceptance of the GEOL 598 Application, prior to enrollment. Restricted to students in the non-thesis M.S. in Geology program.

GEOL 599 Thesis Research credit: 0 to 16 Hours. **(**https://courses.illinois.edu/schedule/terms/GEOL/599/**)**
Individual research under supervision of members of the faculty in their respective fields. Approved for S/U grading only. May be repeated.

GER - GERMAN

GER Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/GER/)

Courses

GER 101 Beginning German I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GER/101/)
Introductory course focusing on listening comprehension, oral skills, reading, writing, and culture.

GER 102 Beginning German II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GER/102/)
Continuation of GER 101. Continued focus on listening comprehension, oral skills, reading, writing, and culture at an introductory level. Prerequisite: One semester of college German or equivalent.

GER 103 Intermediate German I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GER/103/)
Continuation of GER 102. Intermediate course focusing on listening comprehension, oral skills, reading, writing, and culture. Prerequisite: Two semesters of college German or equivalent.

GER 104 Intermediate German II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GER/104/)
Continuation of GER 103. Continued focus on listening comprehension, oral skills, reading, writing, and culture at an intermediate level. Prerequisite: Three semesters of college German or equivalent.

GER 191 Freshman Honors Tutorial credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/GER/191/)
Study of selected topics on an individually arranged basis. Open only to honors majors or to Cohn Scholars and Associates. May be repeated once. Prerequisite: Consent of departmental honors advisor.

GER 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/GER/199/)
Credit: 1 to 5 hours. May be repeated.

GER 200 German Literature in Trans credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GER/200/)
Introduction to German literature for students with no knowledge of German. Same as CWL 224. May be repeated if topics vary.

GER 201 German Popular Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GER/201/)
Introduction to the study of modern and contemporary german culture through examining examples of popular culture from the late-eighteenth century to the present. Looks at texts and films as a mirror and critique of modern German society. Topics to be discussed: nationalism, gender, ethnicity, minority cultures, Jewish life in Germany, German images of other cultures, etc. Course taught in English.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

GER 205 Germany and Europe credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GER/205/)
Introduction into major issues in contemporary German society with a special focus on Germany's functioning within Europe and the European Union through novels, films, essays, interviews etc. Course taught in English.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

GER 211 Conversation and Writing I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GER/211/)
Prerequisite: GER 104 or equivalent, or consent of instructor.

GER 212 Conversation and Writing II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GER/212/)
Continuation of GER 211. Prerequisite: GER 211 or equivalent, or consent of instructor.

GER 250 Grimms' Fairy Tales - ACP credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GER/250/)
Special attention is paid to the Grimms' tales in terms of traditional narrative genres, elements of life in early modern Europe, and versions from Italy and France as well as Germany. Course is conducted in English. Same as CWL 250 and ENGL 267. Credit is not given for both GER 250 and GER 251. Prerequisite: Completion of the Campus Composition I requirement.
This course satisfies the General Education Criteria for:
Advanced Composition
Humanities - Lit Arts
Cultural Studies - Western

GER 251 Grimm's Fairy Tales in Context credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GER/251/)
Special attention is paid to the Grimms' tales in terms of traditional narrative genres, elements of life in early modern Europe, and versions from Italy and France as well as Germany. Course is conducted in English. Same as CWL 254 and ENGL 266. Credit is not given for both GER 251 and GER 250.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

GER 260 The Holocaust in Context - ACP credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GER/260/)
Jewish contributions to German Literature from 1200 to the present day. Includes trips to the University Library's Rare Book Room. Same as CWL 271 and ENGL 268. Credit is not given for both GER 260 and GER 261. Prerequisite: Completion of the Campus Composition I general education requirement.
This course satisfies the General Education Criteria for:
Advanced Composition
Humanities - Lit Arts
Cultural Studies - Western

GER 261 The Holocaust in Context credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GER/261/)
Examines cultural representations of the Holocaust in literature, film, and critical essays. Same as CWL 273, ENGL 269, and JS 261. Credit is not given for both GER 261 and GER 260.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

GER 270 Sexuality and Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GER/270/)
Examination of the historical contexts in which sexuality has been debated during the past three centuries, and to what extent sexuality is perceived differently in diverse cultures. Part one will look at the Western tradition, especially Germany. Part two will shift focus to the non-Western world, especially to the colonial history of Indonesia. Same as CWL 272 and GWS 270.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

GER 299 Study Abroad credit: 0 to 18 Hours. (https://courses.illinois.edu/schedule/terms/GER/299/)
Lectures, seminars, and practical work in German language, literature, civilization, and in other academic areas appropriate to the student's course of study. Approved for letter and S/U grading. May be repeated in the same term to a maximum of 18 hours; may be repeated in separate terms to a maximum of 36 hours. Prerequisite: GER 104 or equivalent; 2.75 overall average; 3.0 average in German courses.

GER 320 German for Business credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GER/320/)
Introduces German business language as used in basic operations in retail/wholesale, export/import, banking transactions. Prerequisite: GER 211 or consent of instructor.

GER 321 German for Economics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GER/321/)
German language as used in professional contexts involving economic matters: texts and documents relating to forms of enterprises and their financing, to macroeconomic structures of domestic and foreign trade, and to reports on the economies of German-speaking countries. Prerequisite: GER 320 or consent of instructor.

GER 331 Intro to German Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GER/331/)
Introductory study of representative works (prose, drama, lyric) by outstanding German, Austrian, and Swiss writers of the modern period. Prerequisite: Two years of college German or equivalent.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

GER 332 German Literature and Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GER/332/)
In German. Seminar in the literature and culture of German-speaking countries since 1750. Topic varies. Format: lecture; discussion; film screenings. Prerequisite: GER 331 or equivalent.

GER 385 Politics of the European Union credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GER/385/)
Same as EURO 385, FR 385, and PS 385. See PS 385.

GER 396 Special Topics German Studies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GER/396/)
Introductory study in such topics as individual authors, selected literary movements or periods, modes of inquiry in literary study, minor genres, subgenres, extraliterary influences, etc. Same as CWL 328. May be repeated to a maximum of 6 hours if topics vary. Prerequisite: Reading fluency in German beyond the fourth-semester college level.

GER 401 Global Issues in German credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GER/401/)
Introduction to global issues in German media. Taught in German. 3 undergraduate hours. 3 graduate hours. Prerequisite: GER 212 or equivalent.

GER 403 German-English Translation: Theory & Practice credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GER/403/)
Theory and practice of translating technical, commercial, scientific, and literary texts from German into English and vice versa. Same as TRST 403. 3 undergraduate hours. 3 graduate hours. Prerequisite: GER 401 or consent of instructor.

GER 405 History of Translation credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/GER/405/)
Same as CLCV 430, CWL 430, ENGL 486, SLAV 430, SPAN 436, and TRST 431. See SLAV 430.

GER 418 Language & Minorities in Europe credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/GER/418/)
Same as EURO 418, FR 418, ITAL 418, LING 418, PS 418, SLAV 418, and SPAN 418. See FR 418.

GER 420 German Cultural History credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GER/420/)
A general introduction to German culture from the pre-Christian period to the twenty-first century, focusing on the tension between forces of history and modernization in German culture. Course materials include literary and philosophical texts, film, painting, and music. Particular attention will be paid to the role of art in society. 4 undergraduate hours. 4 graduate hours. Prerequisite: One 200-level German course and GER 331; or consent of instructor.

GER 460 Principles of Language Testing credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/GER/460/)
Same as EIL 460, EPSY 487, FR 460, ITAL 460, PORT 460, and SPAN 460. See EIL 460.

GER 465 German Linguistics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GER/465/)
Linguistic analysis of Germanic languages in historical, geographic, and social context. Taught in German or English, depending on topic. 3 undergraduate hours. 3 graduate hours. May be repeated in separate terms, as topics vary, to a maximum of 6 hours. Prerequisite: When the course is taught in English, there are no prerequisites. When the course is taught in German, the recommendation is GER 212 or consent of the instructor.

GER 470 Middle Ages to Baroque credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GER/470/)
Literary, thematic, cultural, and bibliographical analysis of the major authors, works, genres, and movements in German literature from 750-1720. Same as MDVL 470. 3 undergraduate hours. 3 graduate hours. May be repeated in separate terms to a maximum of 6 hours if topics vary.

GER 471 Enlightenment to Romanticism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GER/471/)
Literary, thematic, cultural, and bibliographical analysis of the major authors, works, genres, and movements in German literature from 1720 to 1830. 3 undergraduate hours. 3 graduate hours. May be repeated to a maximum of 6 undergraduate hours or 6 graduate hours if topic varies.

GER 472 Realism to Expressionism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GER/472/)
Literary, thematic, cultural, and bibliographical analysis of the major authors, works, genres, and movements in German literature from 1830 to 1920. 3 undergraduate hours. 3 graduate hours. May be repeated to a maximum of 6 undergraduate hours or 6 graduate hours if topic varies.

GER 473 1920s to Today credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GER/473/)
Literary, thematic, cultural, and bibliographical analysis of the major authors, works, genres, and movements in German literature from 1920 to the present. 3 undergraduate hours. 3 graduate hours. May be repeated to a maximum of 6 undergraduate hours or 6 graduate hours if topic varies.

GER 489 Theoretical Foundations of SLA credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/GER/489/)
Same as FR 481, ITAL 489, LING 489, PORT 489, and SPAN 489. See LING 489.

GER 491 Honors Senior Thesis credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/GER/491/)
Intended primarily for candidates for honors in German, but open to other seniors. 1 to 4 undergraduate hours. No graduate credit. May be repeated to a maximum of 4 hours. Prerequisite: Senior standing; consent of instructor.

GER 493 German Cinema I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GER/493/)
Focus on the rise of German film from its earliest beginnings until 1945. Same as MACS 493. 3 undergraduate hours. 3 graduate hours.

GER 494 German Cinema II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GER/494/)
Study of German film from 1945 until the present. Same as MACS 494. 3 undergraduate hours. 3 graduate hours.

GER 496 Special Topics German Studies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GER/496/)
Intensive study of restricted topics in German language, literature, and culture. 3 undergraduate hours. 3 graduate hours. May be repeated as topics vary to a maximum of 9 undergraduate hours or 8 graduate hours. Prerequisite: Three years of college German or equivalent.

GER 500 Readings in German Grads I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GER/500/)
Introduction to the reading of German texts in the sciences and the humanities. Credit is not given towards a graduate degree.

GER 501 Readings in German Grads II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GER/501/)
Designed for graduate students preparing for the German reading requirements for the Ph.D. Credit is not given towards a graduate degree. Prerequisite: GER 500 or equivalent.

GER 510 Introduction to Graduate Study credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GER/510/)
Bibliography and methodology of the study of the Germanic languages and literatures, with particular regard to German literature and Germanic linguistics; introduction to scholarship in general and the German profession in particular, including the modes and methods of scholarly endeavor.

GER 511 Applied Literary Translation I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GER/511/)
Same as CWL 511, EALC 511, SLAV 501, and TRST 501. See TRST 501.

GER 512 Applied LiteraryTranslation II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GER/512/)
Same as CWL 512, EALC 512, SLAV 502, and TRST 502. See TRST 502.

GER 515 Middle High German credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GER/515/)
Same as MDVL 515.

GER 520 History of the German Language credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GER/520/)
Internal and external history of German from prehistoric times to the present. Prerequisite: GER 465 or equivalent.

GER 530 Old High German credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GER/530/)
Grammar and interpretation of the oldest literary documents. Same as MDVL 530. Prerequisite: GER 465.

GER 570 Modern Critical Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GER/570/)
Comprehensive introduction to the foundational thinkers, texts, and schools that orient contemporary work in the humanities, from German Idealism to Cultural Studies, Queer Theory, and Postcolonial Theory, among others. The course is intended primarily for beginning graduate students, but also for those who feel they have not covered the development of critical theory in a systematic way. The course will include significant discussion of figures including: Kant, Hegel, Marx, Nietzsche, Freud, Adorno, Lacan, Derrida, Foucault, Said, Spivak. Among the topics we will address are: history, the subject, aesthetics, value, power, language, ideology, materiality, gender, sexuality, race, and technology/media studies. 4 graduate hours. No professional credit.

GER 571 Medieval German Studies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GER/571/)
Seminar in selected genres, themes, or authors of the Middle Ages. Epic, lyric, and didactic works in prose and verse are read in the original language. Same as MDVL 571. 4 graduate hours. No professional credit. May be repeated to a maximum of 12 hours if topics vary.

GER 572 Early Modern German Studies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GER/572/)
Seminar in selected genres, themes, or authors of the early modern period (1500-1700). 4 graduate hours. No professional credit. May be repeated to a maximum of 12 hours if topics vary.

GER 573 18thC German Studies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GER/573/)
Seminar in selected genres, themes, or authors of the eighteenth century. 4 graduate hours. No professional credit. May be repeated in separate semesters to a maximum of 12 hours if topics vary.

GER 574 19thC German Studies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GER/574/)
Seminar in selected genres, themes, or authors of the nineteenth century. 4 graduate hours. No professional credit. May be repeated in separate semesters to a maximum of 12 hours if topics vary.

GER 575 20thC German Studies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GER/575/)
Seminar in selected genres, themes, or authors of the twentieth century. 4 graduate hours. No professional credit. May be repeated in separate semesters to a maximum of 12 hours if topics vary.

GER 576 Open Seminar in German Studies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GER/576/)
Seminar in literary phenomena (such as movements, genres and forms, relations, themes and types, interdisciplinary studies, women's studies) that go beyond the confines of a particular century. 4 graduate hours. No professional credit. May be repeated in separate semesters to a maximum of 12 hours if topics vary.

GER 580 Classroom Language Acquisition credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GER/580/)
Same as EIL 580, FR 580, ITAL 580, PORT 580, and SPAN 580. See SPAN 580.

GER 582 German Language Teaching credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GER/582/)
In-depth exploration of fundamental concepts of teaching German at the college level; designed for Teaching Assistants. Topics include teaching approaches, lesson planning, vocabulary, grammar, listening, speaking, reading, writing, culture, assessment, instructional technology, and curriculum design. 4 graduate hours. No professional credit.

GER 584 Theories in Second Language Acquisition credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GER/584/)
Same as CI 584, EALC 584, EPSY 563, FR 584, ITAL 584, LING 584, PORT 584, and SPAN 584. See SPAN 584.

GER 588 Sem Second Lang Learn credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GER/588/)
Same as EALC 588, FR 588, ITAL 588, LING 588, PORT 588, and SPAN 588. See SPAN 588.

GER 593 Research in Special Topics credit: 1 to 8 Hours. (https://courses.illinois.edu/schedule/terms/GER/593/)
May be repeated to a maximum of 8 hours.

GER 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/GER/599/)
Approved for S/U grading only. May be repeated.

GMC - GERMANIC

GMC Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/GMC/)

Courses

GMC 199 Undergraduate Open Seminar credit: 1 to 5 Hours. **(**https://courses.illinois.edu/schedule/terms/GMC/199/**)**
May be repeated.

GMC 562 Germanic Linguistics credit: 4 to 8 Hours. **(**https://courses.illinois.edu/schedule/terms/GMC/562/**)**
Varying topics dealing with problems in diachronic and synchronic Germanic linguistics. May be repeated if topics vary. Prerequisite: Consent of instructor.

GLBL - GLOBAL STUDIES

GLBL Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/GLBL/)

Courses

GLBL 100 Intro to Global Studies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GLBL/100/)
Foundation course for understanding a range of contemporary issues and learning to analyze them from multiple disciplinary perspectives. Students consider globalizing trends within themes of wealth and poverty; population, cultures, and human rights; environment and sustainability; and governance, conflict, and cooperation. Course objectives are to enhance knowledge of human cultures, their interactions and impacts on the world; develop skills for successfully negotiating realities of contemporary societies; and promote values for global learning, diversity, and sustainable futures.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - Western

GLBL 118 Natural Disasters credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GLBL/118/)
Same as ESE 118 and GEOL 118. See GEOL 118.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences

GLBL 130 Resistance Movements credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GLBL/130/)
Is it possible for a group of people to have secure human rights when the same rights are being denied to large groups of people based on their identity? This course takes a comparative survey approach to social movements of U.S. groups seeking to overcome discrimination across political, economic, and social spheres. The cases covered take place over the course of centuries and represent a wide range of racial, ethnic, and gender groups, but they also contain many similar ideological features rooted in social movement literature. A close study of these movements demonstrates that human rights are not freely recognized or bestowed, but must be achieved by struggle.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

GLBL 199 Undergraduate Open Seminar credit: 0 to 6 Hours. (https://courses.illinois.edu/schedule/terms/GLBL/199/)
See Class Schedule for topics. Approved for Letter and S/U grading. May be repeated in the same or separate terms to a maximum of 6 hours.

GLBL 200 Foundations of Research credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GLBL/200/)
Introduction to the foundations of interdisciplinary social science research. Topic include understanding the purpose for research, identifying researchable issues, finding evaluating and using sources effectively, recognizing methods associated with different types of data and disciplines, and writing a literature review. Prepares students for course-based research papers and advanced research methods courses. Guest faculty present their Global Studies-relevant research as students (b)log their own research interests.
This course satisfies the General Education Criteria for:
Quantitative Reasoning II
Social Beh Sci - Soc Sci

GLBL 201 Energy Systems credit: 2 or 3 Hours. (https://courses.illinois.edu/schedule/terms/GLBL/201/)
Same as NPRE 201. See NPRE 201.

GLBL 220 Governance credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GLBL/220/)
Gateway course into the Governance thematic area for Global Studies majors providing an introduction to important themes, problems and approaches to global governance in a series of issue areas, including security, economics, migration, and the environment. Covers the historical development of the international system as well as contemporary controversies. Case studies are used to explore the strength and weaknesses of current governance approaches, and students will conduct independent research into existing structures. Prerequisite: GLBL 100.

GLBL 221 Geographies of Global Conflict credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GLBL/221/)
Same as G 221. See GEOG 221.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

GLBL 225 Career Development:Internships credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/GLBL/225/)
Teaches students with global studies academic interests how to identify internships and service-learning learning opportunities relevant to their major. Students prepare application materials, conduct informational interviews, participate in mock job interviews, explore networking strategies, and create a career narrative that represents their academic interests and skills. Prepares students on what to expect from their internships and how to develop and apply leadership skills.

GLBL 228 Terrorism, Past and Present credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GLBL/228/)
Same as HIST 257. See HIST 257.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil

GLBL 240 Global Health credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GLBL/240/)
Introduction to issues and problems in global health. As the world becomes more and more interconnected it is important for students to be aware of health issues from a global perspective. We will consider a variety of issues that influence the health of different population and countries. The topics to be discussed include: the environment, nutrition, education, the medical system, culture, and agency involvement in health. Case studies will be used to demonstrate some successes at addressing these issues and problems that were encountered.

GLBL 250 Development credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GLBL/250/)
An interdisciplinary introduction to the theory and practice of international development. Topics include: defining development, how ideas have changed over time, and the interventions used in development work and their impacts.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West

GLBL 251 Warfare Milit Insts & Soc credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GLBL/251/)
Same as HIST 251. See HIST 251.

GLBL 260 Global Human Rights credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GLBL/260/)
Examines how ideas about human rights are defined and how they are differentially deployed. Looks at human rights claims and crises, and examines how governmental and non-governmental individuals and organizations have sought to deal with human rights violations in order to address problems of justice, retribution, and reconciliation at personal, national, and international levels.

GLBL 270 Introduction to Global Markets and Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GLBL/270/)
Introduction to global markets and economic systems and their evolving relationship with societies in the global North and South. Presents interdisciplinary perspectives on business structures and conduct with emphasis on (1) the philosophical foundations of economic systems; (2) international business networks and technological innovation; (3) business environments in non-Western settings; (4) global workforce composition and divisions of labor; (5) the relationships between business, development and the environment; and (6) international organizations that support the spread of global business.

GLBL 272 Language and Culture in Turkey credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GLBL/272/)
Same as ANTH 272, SAME 272, and TURK 270. See TURK 270.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West

GLBL 280 Nuclear Weapons & Arms Control credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GLBL/280/)
Same as PHYS 280. See PHYS 280.
This course satisfies the General Education Criteria for:
Advanced Composition

GLBL 283 Intro to Intl Security credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GLBL/283/)
Same as PS 283. See PS 283.

GLBL 296 Global St Foundation Seminar credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/GLBL/296/)
Examination of current controversies and larger ethical issues in today's global society. Topics could include: immigration, global environmental debates, and population issues. May be repeated in the same or separate terms to a maximum of 3 hours if topics vary.

GLBL 298 Global Studies Seminar Abroad credit: 3 or 6 Hours. (https://courses.illinois.edu/schedule/terms/GLBL/298/)
Seminars introduce students to aspects of globalization through a case study of a particular location abroad. On campus, students explore historical and contemporary aspects of the location abroad to prepare for their field visit. Abroad, students engage with local resources and people to better understand how the local site contributes to and is impacted by relevant global processes under focus. Course activities will include a field site visit abroad, discussions, lectures, short essays, student presentation, and final projects. Topics vary according to site location and instructor expertise. May be repeated in separate terms to a maximum of 6 hours.

GLBL 328 First Person Global credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/GLBL/328/)
A writing workshop for students who have studied abroad and want to deepen their understanding of globalization and improve their nonfiction prose by writing about their own experiences. Writing in the first person raises fundamental questions about identity, power, cultural understanding, and representation. Students will read and discuss first person literary nonfiction by contemporary writers and chronicle their own global encounters in ethical, insightful, and creative ways. Prerequisite: A study abroad experience.

GLBL 340 Global Health: Policy & Governance credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GLBL/340/)
Identifies central and emerging global health issues and analyzes them through the lenses of governance, policy and gender. Focuses on structural, policy, and institutional perspectives on global health, with emphasis on how decisions are influenced and made. Prerequisite: GLBL 240.

GLBL 350 Poverty in a Global Context credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GLBL/350/)
Examines global poverty in the context of international development debates an practice. Despite global commitments (for example, the Millennium Development Goals), decades of research, and new and innovative policies, the "solution" to widespread and lasting poverty alleviation remains elusive. Class will define poverty and how it is measured, considered who is poor and why some people are more vulnerable to the negative effects of poverty than others, and examine what causes some countries to remain poor. Prerequisite: GLBL 250 or consent of instructor.

GLBL 356 Comparative Political Economy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GLBL/356/)
Same as PS 356. See PS 356.

GLBL 357 Ethnic Conflict credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GLBL/357/)
Same as PS 357. See PS 357.
This course satisfies the General Education Criteria for:
Advanced Composition

GLBL 392 Int Diplomacy and Negotiation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GLBL/392/)
Examines the complexities of international diplomacy and negotiations among states and other actors. Focuses on three main subject areas: negotiation analysis, applied negotiation, and the interaction of practical considerations that affect negotiations. Utilizes theoretical, case-based, and active-learning approaches during the semester as topics are explored in detail. Issues and topics include security, public health, economic development, human rights, and the environment.
This course satisfies the General Education Criteria for:
Advanced Composition

GLBL 403 Women in Muslim Societies credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/GLBL/403/)
Same as ANTH 403, GWS 403, HIST 434, REL 403, and SAME 403. See REL 403.

GLBL 440 Global Health: Interventions & Evaluations credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GLBL/440/)
Focuses on the process of crafting a solution and evaluation plan related to a specific global health problem identified by students. Requires students to work in teams to integrate content learning on global health with applied project design skills developed in this course. 3 undergraduate hours. No graduate credit. Prerequisite: GLBL 340. Junior standing or higher required.

GLBL 450 Poverty Interventions and Evaluation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GLBL/450/)
Over the last few decades a wide range of strategies and initiatives have been applied to alleviate poverty in developing countries. The record of these initiatives is mixed. While millions of people may have moved out of poverty, over a billion remain persistently impoverished. We will examine a range of anti-poverty approaches that have been implemented and evaluates their effectiveness. Students will gain a familiarity with the interventions and an understanding of the techniques used to evaluate them. 3 undergraduate hours. No graduate credit. Prerequisite: GLBL 250 and 350 or consent of instructor.

GLBL 480 Energy and Security credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GLBL/480/)
Same as NPRE 480 and PS 480. See NPRE 480.

GLBL 481 Writing on Technol & Security credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/GLBL/481/)
Same as NPRE 481. See NPRE 481.
This course satisfies the General Education Criteria for:
Advanced Composition

GLBL 483 Seminar on Security credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/GLBL/483/)
Same as NPRE 483. See NPRE 483.

GLBL 492 UG Research Assistance credit: 0 to 3 Hours. (https://courses.illinois.edu/schedule/terms/GLBL/492/)
Assist Global Studies and program-affiliated faculty in ongoing research. Topics and nature of assistance vary. Capstone paper required. 0 to 3 undergraduate hours. No graduate credit. May be repeated in separate terms up to 6 hours. No more than 6 hours may be counted toward completion of the Global Studies major from any combination of GLBL 492 and other independent study, internship, or research assistance coursework. This includes coursework from other departments on campus or during study abroad. Prerequisite: GLBL 200; evidence of adequate preparation for such study; consent of faculty member supervising the work; and approval of Global Studies program. Global Studies majors only. Not available to freshman. Instructor approval required.

GLBL 494 Research Methods I credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/GLBL/494/)
Optional Capstone experience for Global Studies students. Students will develop research, communication and presentation skills and develop a proposal for an independent research project, goals and timeline. The proposal will include a literature review and methods section for their final project. Topics include: research approaches, design and implementation, as well as methods, analysis and ethics of data collection. 1 undergraduate hour. No graduate credit. Prerequisite: GLBL 200.

GLBL 495 Research Methods II credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/GLBL/495/)
Second semester of the optional Capstone experience for International/Global Studies students. Designed to guide the interpretation of the data, development of conclusions and implications. In addition to the final project, students will learn how to write a paper abstract and conference proposal, as well as acquire presentation skills. 1 undergraduate hour. No graduate credit. Prerequisite: GLBL 494.

GLBL 499 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/GLBL/499/)
Selected reading and research in Global Studies. See schedule for current topics. 3 undergraduate hours. 1 to 4 graduate hours. May be repeated, if topics vary, in the same or separate terms to a maximum of 6 undergraduate or 8 graduate hours. Prerequisite: GLBL 100 or six hours of global studies, anthropology, social geography, political science, sociology, or economics; consent of instructor.

GLBL 500 Global Society credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GLBL/500/)
Students will examine three propositions: (1) the existence of a global society; (2) the flaws of its principal, global institutions – the state, markets, and democracy; and (3) absent their reform, whether the global society is at risk. Prerequisite: Instructor Approval Required.

GLBL 501 Perspectives on Global Studies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GLBL/501/)
Provides graduate students in a variety of fields with an understanding of key global concepts and methods, and introduces them to different perspectives on globalization and transnational social relations. 4 graduate hours. No professional credit. Prerequisite: Graduate Standing.

GLBL 520 Institutions of Global Governance credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GLBL/520/)
Provides students with a conceptual and practical understanding of the scholarly and societal debates that relate to the interdisciplinary study of global governance and the challenges faced in achieving fair and sustainable outcomes. Required for students in the Global Governance concentration of the Master's of Global Studies. 4 graduate hours. No professional credit. Prerequisite: GLBL 500 or consent of instructor.

GLBL 570 Methodologies of Global Studies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GLBL/570/)
Explores research methodologies within the social sciences and humanities that are often used for research concerning global and globalized problems. Examines both qualitative and quantitative methods with the aim of introducing students to tools and techniques that can be used in professional settings. Focuses on modeling, GIS, statistics, and other quantitative methods and also examines qualitative research methods. Rather than mastery of any one technology or method, this course seeks to build conversance with a variety of methods. 4 graduate hours. No professional credit.

GLBL 572 Global Studies Practicum credit: 1 to 8 Hours. (https://courses.illinois.edu/schedule/terms/GLBL/572/)
Open to students in each of the concentrations for the MS in Global Studies degree. Awards credit for professional field experience combined with faculty-driven inquiry and reflection. Designed to provide students with experience of professional-level duties in an approved organization, in the form of internship, work, or volunteer service. This opportunity allows students to integrate the theory and knowledge of course content with the application of principles and practices in a work environment. 1 to 8 graduate hours. No professional credit. May be repeated in separate terms up to a maximum 8 graduate hours. Prerequisite: GLBL 500 or consent of instructor.

GLBL 573 Global Studies Project credit: 1 to 8 Hours. (https://courses.illinois.edu/schedule/terms/GLBL/573/)
Available to students in each of the concentrations for the MS in Global Studies. Students will consult with a Global Studies faculty member approved by their program advisor to select and develop a project on a topic of their interest. Students and their faculty advisors will agree on the topic and scope of the project, which take the form of a policy analysis and proposal, system-level or conceptual design studies, feasibility studies, experimental work, detailed numerical simulations, or detailed theoretical analyses. 1 to 8 graduate hours. No professional credit. May be repeated in separate terms up to a maximum 8 graduate hours. Prerequisite: GLBL 500 or consent of instructor.

GC - GRADUATE COLLEGE

GC Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/GC/)

Courses

GC 295 URAP Research Apprenticeship credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GC/295/)
The Office of Undergraduate Research and the Graduate College offer the opportunity for freshmen, sophomore, and transfer students with little to no research experience to assist advanced graduate students with their research projects. Through an application, selection, and matching process, undergraduate students are provided a research experience with their graduate student mentor. In addition, regular class meetings will offer a comprehensive introduction to research methods and practices. Approved for S/U grading only. Prerequisite: Consent of instructor. Freshmen, Sophomores, and first-year transfer students by application only.

GC 298 Special Topics: Graduate School Exploration credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GC/298/)
Offers the opportunity for students with limited research experience to explore the fundamentals of graduate education across various disciplinary fields. Course content provides an introduction for processes of knowledge generation across the humanities, social sciences, and natural sciences. Case studies will be used to contextualize the scientific processes. In addition, students learn how to plan for an advanced degree. Approved for S/U grading only. Prerequisite: Consent of instructor. Restricted to students enrolled in Graduate School Exploration Program. Juniors and first-year transfer students by application only.

GC 498 Graduate Domestic Study Away credit: 0 to 12 Hours. (https://courses.illinois.edu/schedule/terms/GC/498/)
Provides campus credit for study at accredited domestics institutions outside the CIC. 0 to 12 graduate hours. Approved for both letter and S/U grading. May be repeated to a maximum of 12 graduate hours in separate terms. Credit received will depend on transfer approved from visited institution. Prerequisite: Registration will be controlled by Graduate Records.

GC 499 Graduate College Study Abroad credit: 0 to 18 Hours. (https://courses.illinois.edu/schedule/terms/GC/499/)
Provides campus credit for study at accredited foreign institutions or approved overseas programs. Final determination of credit granted is made after the student's successful completion of work. Credit will not count toward residence requirements. No undergraduate credit. 0 to 18 graduate hours. Approved for Letter and S/U grading. Prerequisite: Full academic standing in the Graduate College and consent of major department and Graduate College.

GC 500 URAP Graduate Mentor Practicum credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/GC/500/)
The Office of Undergraduate Research (OUR) and the Graduate College offer the opportunity for first and second-year undergraduate students to assist advanced graduate students with their research projects. Through a one-on-one research experience with their graduate student mentor, undergraduate students will have the opportunity to learn what it means to do research, create knowledge, and produce scholarship. This course will serve as a formal record of the graduate mentoring side of the apprenticeship (i.e., "practicum"). 0 graduate hours. No professional credit. Approved for S/U grading only. May be repeated.

GC 599 Thesis Research credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/GC/599/)
For doctoral students who have a guaranteed student loan that needs deferral, have completed the credit requirements for the doctorate, have passed the preliminary examination, do not have any financial assistance that would cover tuition and fees, and are eligible to register for 599 in their own academic units. Approved for S/U grading only. May be repeated.

GRK - GREEK

GRK Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/GRK/)

Courses

GRK 101 Elementary Greek I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GRK/101/)
Introduces ancient Greek (both classical and koine), including the reading of simple prose. Same as REL 111.

GRK 102 Elementary Greek II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GRK/102/)
Continuation of GRK 101. Grammar and reading in classical and koine Greek. Same as REL 112. Prerequisite: GRK 101.

GRK 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/GRK/199/)
May be repeated.

GRK 201 Classical & Koine Greek I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GRK/201/)
Readings in classical Greek prose, and narrative and epistolary New Testament texts. Same as REL 200. Prerequisite: GRK 102.

GRK 202 Classical & Koine Greek II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GRK/202/)
Continuation of GRK 201. Further readings in classical Greek prose, and narrative and epistolary New Testament texts. Same as REL 204. Prerequisite: GRK 201 or equivalent.

GRK 251 Elementary Modern Greek I credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/GRK/251/)
Same as GRKM 201. See GRKM 201.

GRK 252 Elementary Modern Greek II credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/GRK/252/)
Same as GRKM 202. See GRKM 202.

GRK 401 Survey of Greek Literature credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/GRK/401/)
Advanced level readings in Ancient Greek literature. 3 undergraduate hours. 4 graduate hours. May be repeated if topics vary. Prerequisite: GRK 202 or equivalent.

GRK 403 Intermediate Modern Greek I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GRK/403/)
Same as GRKM 403. See GRKM 403.

GRK 404 Intermediate Modern Greek II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GRK/404/)
Same as GRKM 404. See GRKM 404.

GRK 411 Greek Prose Composition credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/GRK/411/)
Practice in the writing of Greek prose. 3 undergraduate hours. 3 graduate hours. Prerequisite: GRK 201 or equivalent.

GRK 491 Readings in Greek Literature credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/GRK/491/)
Readings in authors or special topics chosen by the instructor from the entire extant literature in Greek. 3 undergraduate hours. 3 or 4 graduate hours. May be repeated. Prerequisite: GRK 401 or equivalent.

GRK 492 Senior Thesis credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/GRK/492/)
Thesis and honors. Open to candidates for distinction in Greek. 2 to 4 undergraduate hours. No graduate credit. Prerequisite: Senior standing and consent of Classics Honors Program.

GRK 493 Independent Reading credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/GRK/493/)
1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated to a maximum of 8 undergraduate hours or 12 graduate hours. Prerequisite: GRK 401 and consent of instructor.

GRK 511 Advanced Composition credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/GRK/511/)
Practice in writing continuous Greek prose, with special attention to stylistic problems.

GRK 520 Proseminar credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GRK/520/)
Alternating poetry and prose, concentrates on a major author from one of the following areas: epic, history, lyric poetry, oratory, drama, or philosophy. Areas normally follow this sequence in successive years. May be repeated to a maximum of 20 hours if topics vary. Prerequisite: GRK 491 or equivalent.

GRK 531 Special Disciplines credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GRK/531/)
Variable content course concentrating on an area such as comparative grammar, epigraphy, metrics, palaeography, or papyrology. Same as LAT 531. May be repeated if topics vary. Prerequisite: GRK 491 and LAT 491, or equivalent.

GRK 580 Greek Seminar credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GRK/580/)
Research on special problems of Greek literature; required of all majors in classical philology. May be repeated if topics vary. Prerequisite: A Greek proseminar.

GRK 595 Intro to Classical Studies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/GRK/595/)
Introductory survey for graduate students in classics; prepares students for work at the graduate level and surveys basic bibliography and methodology. Same as LAT 595. Prerequisite: Graduate standing in classics.

GRK 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/GRK/599/)
Guidance in writing theses for advanced degrees. Approved for S/U grading only. May be repeated.

HT - HEALTH TECHNOLOGY

HT Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/HT/)

Courses

HT 501 Understanding Users of Health Technology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HT/501/)
The purpose of this course is to provide a broad overview of human characteristics related to health technology. Topics will include physical (e.g., anthropometry, biomechanics); sensory (e.g., vision, hearing), cognitive (e.g., learning capabilities, memory limitations); attitudinal (e.g., technology acceptance, behavior change), socioemotional (e.g., personality, motivation), and organizational (e.g., workplace policies, culture) characteristics. Students will learn to apply theories of human behavior related to health technology use such as behavior change, reasoned action, self- determination, person-environment fit to guide design and deployment of health technology. 4 graduate hours. No professional credit. Prerequisite: Priority is given to Health Technology graduate students. Other students please contact the instructor.

HT 502 Human Factors Methods for Health Technology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HT/502/)
The purpose of this course is to introduce students to the basic tenets of human factors methods to enable successful user-centered design of healthcare technologies. Students will learn about socio-technical systems and develop an understanding of interactions among humans and other elements of a system. Students will acquire skills to apply theory, principles, data, and methods to design that will optimize human well-being and overall system performance. Students will learn how to find information to guide design through literature review, standards evaluation, and comparative assessments. 4 graduate hours. No professional credit. Prerequisite: Priority will be given to Health Technology graduate students. Other students please contact the instructor.

HT 503 Hardware Engineering for Health Technology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HT/503/)
In this course, students will explore the role of hardware in developing health technologies. Students will understand how various health technologies are developed and how they operate. HT 503 surveys hardware-engineering topics for health technology and will include exposure to and initial examination of topics. Topics may include: Sensors and Actuators in Healthcare; Common Prototyping platforms (Arduino, Raspberry Pi, Jetson Nano); Robot Operating System (ROS) Platforms; Cameras, LIDARs, Motion-Detection Systems (Microsoft Kinect, etc); Haptic Sensors; Dynamics of Wheeled Personal Transport Systems (Wheelchairs, etc.); Integrative Final Course-Project. Although there is not a traditional lab associated with this class, the course will include lectures, discussion, and hands-on activity based projects. 4 graduate hours. No professional credit. Registration priority will be given to Health Technology graduate students. Other students please contact the instructor.

HT 504 Software Engineering for Health Technology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HT/504/)
In this course, students will be introduced to aspects of software engineering to become familiar with rapid prototyping software, programming languages, and app development tools. HT 504 surveys software engineering topics for health technology and will include exposure to and initial examination of topics. Topics may include: Integrated Development Environments (IDEs) for Android/iPhone applications; Virtual Reality (VR) Environments; Basics of AWS-Lambda functions for voice-applications; Software for Analytics and Data-analytics overview; Software for Machine-Learning; MATLAB, SIMULINK and associated packages; User Interface Compilers (UIC); JAVA; PYTHON; MATLAB; ROS; Integrative Final Course-Project. Although there is not a traditional lab associated with this class, the course will include lectures, discussion, and hands-on activity based projects. 4 graduate hours. No professional credit. Registration priority will be given to Health Technology graduate students. Other students please contact instructor.

HT 510 Health Technology Capstone Orientation credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/HT/510/)
In this course, students will be exposed to a variety of industry, community organization, government, and academic environments with health technology projects/challenges needing solutions. Guest speakers will acquaint students with their unique needs to match students with community /industry/ government/ academic partners. Students will explore possible Capstone Project topics and will decide on their capstone project by the end of the semester. HT 510 prepares students and is a prerequisite of HT 511. 1 graduate hour. No professional credit. Prerequisite: Restricted to majors only.

HT 511 Health Technology Capstone Development credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HT/511/)
In this course students will be introduced to topics critical to their success in developing their Capstone Project in the area of health technology. These topics include: ethics and IRB, government regulations and policies in devices, and design thinking. Students will finalize the details of their Capstone Project topic, connect with community/ industry/ government/ academia, and identify a faculty mentor for their project. HT 511 prepares students and is a prerequisite for HT 512. 3 graduate hours. No professional credit. Prerequisite: HT 510. Restricted to majors only.

HT 512 Health Technology Capstone Implementation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HT/512/)
In this course, students will engage in health technology design activities to develop solutions to projects provided by industry, government, or community partners. Students will incorporate human factors, design thinking, and engineering principles to develop their projects. The course is designed to provide students with capstone project design experiences and professional insights to prepare them for work in the broad field of health technology. Students are encouraged to share their experiences with fellow students and learn from each other. Prerequisites: HT 511 and completion of Affiliation Agreement 4 graduate hours. No professional credit. Prerequisite: HT 511 and completion of an affiliation agreement. Restricted to majors only.

HT 594 Special Topics in Health Technology credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/HT/594/)
Lecture course in topics of current interest in Health Technology; specific subject/topic will be announced in the Class Schedule. 1 to 4 graduate hours. No professional credit. May be repeated up to 8 hours in the same semester to a maximum of 12 hours in subsequent semesters, if topics vary.

HEBR - HEBREW, MODERN AND CLASSICAL

HEBR Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/HEBR/)

Courses

HEBR 199 Undergraduate Open Seminar credit: 1 to 5 Hours. **(**https://courses.illinois.edu/schedule/terms/HEBR/199/**)**
May be repeated.

HEBR 201 Elementary Modern Hebrew I credit: 5 Hours. **(**https://courses.illinois.edu/schedule/terms/HEBR/201/**)**
Acquaints students with the fundamental principles of the Hebrew language. Develops all four language skills; reading, writing, listening and speaking. Grammar and comprehension are exercised through the textbook, the audio-visual materials and the computer. Easy stories will be used during the term to strengthen reading comprehension. Participation in the language laboratory is required.

HEBR 202 Elementary Modern Hebrew II credit: 5 Hours. **(**https://courses.illinois.edu/schedule/terms/HEBR/202/**)**
Continuation of HEBR 201, with introduction of more advanced grammar, and with emphasis on more fluency in speaking and reading. Participation in the language laboratory is required. Prerequisite: HEBR 201 or equivalent.

HEBR 205 Intensive Biblical Hebrew credit: 5 Hours. **(**https://courses.illinois.edu/schedule/terms/HEBR/205/**)**
Same as REL 205. See REL 205.

HEBR 403 Intermediate Modern Hebrew I credit: 4 or 5 Hours. **(**https://courses.illinois.edu/schedule/terms/HEBR/403/**)**
Advanced examination of the fundamental principles of the Hebrew language. Develops all four language skills: reading, writing, listening and speaking. Grammar and comprehension are exercised through the textbooks, the audio-visual materials and the computer. Examples of Hebrew fiction, largely easy stories, will be used during the term to strengthen reading comprehension. Participation in the language laboratory is required. 5 undergraduate hours. 4 graduate hours. Prerequisite: HEBR 202 or equivalent.

HEBR 404 Intermediate Modern Hebrew II credit: 4 or 5 Hours. **(**https://courses.illinois.edu/schedule/terms/HEBR/404/**)**
Continuation of HEBR 403. Concentration on ability to engage in reasonable fluent discourse in Hebrew, comprehensive knowledge of formal grammar, and an ability to read easy Hebrew texts. Israeli television programs and movies are used to develop communicative skills and cultural knowledge. Participation in the language laboratory is required. 5 undergraduate hours. 4 graduate hours. Prerequisite: HEBR 403 or equivalent.

HEBR 405 Advanced Modern Hebrew I credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/HEBR/405/**)**
For students who have mastered the fundamental principles of the Hebrew language. Develops competence through reading Hebrew fiction and studying Israeli newspapers and television programs. Communication skills are exercised by means of class discussions, oral presentations, compositions and written reports on stories. 3 undergraduate hours. 3 graduate hours. Prerequisite: HEBR 404 or equivalent.

HEBR 406 Advanced Modern Hebrew II credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/HEBR/406/**)**
Course for advanced knowledge of spoken and written standard Modern Hebrew with emphasis on Modern Hebrew literature and language, Israeli newspapers and Israeli television programs. Communication skills are exercised by means of class discussions, oral presentations, compositions and written reports on stories. 3 undergraduate hours. 3 graduate hours. Prerequisite: HEBR 405 or equivalent.

HEBR 407 Topics Hebrew Lang & Lit credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/HEBR/407/**)**
Study of advanced topics in the Hebrew language, based upon a selection of Hebrew literature from either the Bible or the modern period. Historical and cultural background of the material will be stressed, together with literary analysis. In certain years, the course will be offered as a course using English translation of texts, with separate discussion section for students who want to read texts in the original. 3 undergraduate hours. 3 graduate hours. May be repeated in the same or subsequent semesters to a maximum of 9 hours, if topics vary. Prerequisite: HEBR 205 or HEBR 406 or consent of instructor.

HEBR 414 Advanced Biblical Hebrew credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/HEBR/414/**)**
Same as REL 414. See REL 414.

HNDI - HINDI

HNDI Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/HNDI/)

Courses

HNDI 115 Language and Culture in India credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HNDI/115/)
Same as LING 115 and REL 115. See LING 115.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West

HNDI 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/HNDI/199/)
May be repeated.

HNDI 201 Elementary Hindi-Urdu I credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/HNDI/201/)
Introduction to the Hindi/Urdu language; includes conversation with a native Hindi/Urdu-speaking tutor under the direction of a linguist instructor, and a minimum of formal grammar and Devanagari writing; introduction to Arabic-Persian script by arrangement. Participation in the language laboratory is required.

HNDI 202 Elementary Hindi-Urdu II credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/HNDI/202/)
Second term of spoken Hindi/Urdu; includes conversation with a native Hindi/Urdu-speaking tutor under the direction of a linguist instructor, formal grammar based on conversational materials, and work on written Hindi; concentration on written Urdu by arrangement. Participation in the language laboratory is required. Prerequisite: HNDI 201.

HNDI 403 Intermediate Hindi I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HNDI/403/)
First term of second year of the Hindi language, including drill for more advanced conversational fluency; introduction to a greater variety of styles and levels of discourse and usage; and increasing study of the written language and more formal grammar. 4 undergraduate hours. 4 graduate hours. Prerequisite: HNDI 202 or equivalent.

HNDI 404 Intermediate Hindi II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HNDI/404/)
Concentration on ability to engage in reasonably fluent discourse in Hindi, on comprehensive knowledge of formal grammar, and on ability to read ordinary texts in Hindi. 4 undergraduate hours. 4 graduate hours. Prerequisite: HNDI 403 or equivalent.

HNDI 405 Advanced Hindi I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HNDI/405/)
Course for advanced knowledge of spoken and written Hindi. Participation in the language laboratory is required. 3 undergraduate hours. 3 graduate hours. Prerequisite: HNDI 404 or consent of instructor.

HNDI 406 Advanced Hindi II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HNDI/406/)
Course for advanced knowledge of spoken and written Hindi with emphasis on modern Hindi literature and language. Participation in the language laboratory is required. 3 undergraduate hours. 3 graduate hours. Prerequisite: HNDI 405 or consent of instructor.

HNDI 408 Intro to South Asian Lit credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HNDI/408/)
Introduces selected literatures of South Asia in a cross-cultural and comparative perspective: emphasizes relating literary texts and trends to the historical, sociocultural, political, and literary contexts of the subcontinent. Texts for South Asian languages are offered in English translation; in addition, there will be texts by South Asian authors written in English. Knowledge of a South Asian language not required. 3 undergraduate hours. 3 graduate hours. Prerequisite: Consent of course coordinator.

HNDI 412 Business Hindi credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HNDI/412/)
Study and analysis of Business Hindi in a wide variety of contexts and settings (from Metropolitan to rural). 3 undergraduate hours. 3 graduate hours. Prerequisite: HNDI 403 or higher or consent of instructor.

HIST - HISTORY

HIST Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/HIST/)

Courses

HIST 100 Global History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/100/)
Broad introduction to global history, by exploring the global structures and transnational forces that have shaped human history, from the emergence of agriculture and urban centers to our contemporary global village.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

HIST 101 History Now! credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/101/)
Teaches students how to apply historical thinking to present day problems. Each version starts with contemporary headlines about a current issue, moves to an investigation of its historical roots and legacies, and pivots back to the present to assess the impact of past history on present reality and to capture those relationships in a collaborative student project. It aims to show, in short, how and why history matters NOW.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil

HIST 103 A History of Everything: The Big Bang to Big Data credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/103/)
This introductory survey in "Big History" explores different scales of time as it places human history in larger geological, ecological, and cosmic contexts. Topics include the big bang, planet formation, the origin and development of life, mass extinctions, the emergence of Homo sapiens, the development of agriculture and cities, wars, plagues, and natural disasters, the advent of religion and science, political revolutions, industrialization and globalization, and human impact on the environment.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

HIST 104 Black Music credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/104/)
What is black music, and how do we know what we think we know about it? Together, we will examine musical creations pioneered by Africans and individuals of African descent over several centuries and across hemispheres. Doing so will allow us to consider the unity of the African Diaspora and its music, and also examine internal differences and diversity. Special focus is given to Latin America and the U.S., but, depending on the semester, we will also read about, listen to, and talk about music and musicians in Asia, Africa, and Europe.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

HIST 105 Latin America to Independence credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/105/)
Survey of Latin American history from the discovery of America to 1824.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

HIST 106 Modern Latin America credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/106/)
History of the Latin American republics from their independence to the present; emphasis on Argentina, Brazil, Chile, Colombia, Cuba, and Mexico.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

HIST 111 History of Africa to 1800 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/111/)
Survey of African history to 1800, or rather African "histories." Along with historical knowledge, it seeks to give students a basic familiarity with the geography of the continent, as well as to provide an overview of African languages. Through the analysis of secondary as well as of primary sources, students will be introduced to and further examine the development of pre-colonial African societies. Same as AFST 111.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

HIST 112 History of Africa from 1800 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/112/)
Survey of Africa's history from 1800 to the present day. Topics include the Atlantic slave trade, agricultural exchange, growth of Christianity, origins and effects of nineteenth-century European expansion culminating in the "Scramble for Africa," the transformations wrought by European colonial rule during the twentieth century, anticolonial nationalism, decolonization, and postcolonial political, economic, social, and cultural developments. Same as AFST 112.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

HIST 120 East Asian Civilizations credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/120/)
Surveys the three major East Asian civilizations from ancient and classical times, through the period of Western influence, political revolution, and modernization, to the contemporary age and the emergence of East Asian superpowers. Same as EALC 120. Credit is not given for both HIST 120 and EALC 135.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

HIST 130 History of South Asia credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/130/)
Multidisciplinary introduction to the history of modern South Asia from the consolidation of early modern state formations, the negotiation of religious, cultural and linguistic formations, European colonial interactions, and the rise of the modern nation states of Bangladesh, India, Pakistan and Sri Lanka. Same as ANTH 130.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

HIST 135 History of Islamic Middle East credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/135/)
Introduction to fourteen centuries of Middle East history from the rise of Islam to modern times. Examines the development of Islamic thought, and of religious, social, and political institutions; as well as the transformations of the 19th and 20th centuries in the area consisting of Egypt, the Fertile Crescent, Arabia, Turkey, and Iran.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

HIST 140 Western Civ to 1660-ACP credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/140/)
Course is identical to HIST 141 except for the additional writing component. See HIST 141. Credit is not given for both HIST 140 and HIST 141. Prerequisite: Completion of campus Composition I General Education requirement.
This course satisfies the General Education Criteria for:
Advanced Composition
Humanities - Hist Phil
Cultural Studies - Western

HIST 141 Western Civ to 1660 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/141/)
Fundamental developments in the history of Western societies from antiquity to early modern Europe; includes the Greek and Roman worlds, the influence of Christianity and Islam, the emergence of medieval monarchies, the rise of cities, the commercial and intellectual revolutions of the Middle Ages, the birth of the university, the conquest and colonization of the Atlantic world, the Renaissance and Reformation, the political and religious upheavals of the sixteenth and seventeenth centuries. Credit is not given for both HIST 141 and HIST 140.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

HIST 142 Western Civ Since 1660 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/142/)
Fundamental developments - social, economic, cultural, intellectual, and political - in the history of mankind and Western society since 1660; includes the rise of modern science, the French and Industrial revolutions, the Romantic movement, the growth of nationalism and socialism, imperialism, urbanization, the Russian Revolution, Nazi Germany, the world wars, and the West and the developing world. Credit is not given for both HIST 142 and HIST 143.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

HIST 143 Western Civ Since 1660-ACP credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/143/)
Course is identical to HIST 142 except for the additional writing component. Credit is not given for both HIST 143 and HIST 142. Prerequisite: Completion of campus Composition I General Education requirement.
This course satisfies the General Education Criteria for:
Advanced Composition
Humanities - Hist Phil
Cultural Studies - Western

HIST 164 The Automobile credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/164/)
Interdisciplinary examination of the automobile industry, its production systems, its marketing strategies, and the way automobiles reflect the changing landscapes of consumer tastes and value over time.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

HIST 168 A History of Judaism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/168/)
Same as JS 120 and REL 120. See REL 120.
This course satisfies the General Education Criteria for:
Advanced Composition
Humanities - Hist Phil

HIST 170 US History to 1877-ACP credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/170/)
Course is identical to HIST 171 except for the additional writing component. Credit is not given for both HIST 170 and HIST 171. Prerequisite: Completion of campus Composition I General Education requirement.
This course satisfies the General Education Criteria for:
Advanced Composition
Humanities - Hist Phil
Cultural Studies - US Minority

HIST 171 US History to 1877 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/171/)
U.S. history survey beginning with the diverse peoples who have populated North America since before the age of contact with Europeans and extending forward through the advent of European colonialism, the movement for independence, the foundation of the republic, the Civil War, and Reconstruction, ending in 1877. The course provides an introduction to historical interpretation, with particular attention to racialized and other forms of social, political, and economic inequality and struggles for freedom and democracy. Credit is not given for both HIST 171 and HIST 170.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

HIST 172 US History Since 1877 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/172/)
Survey of U.S. history from the end of the Civil War to the present, focusing on struggles to achieve a multiracial democracy, the evolution of an industrial, urbanized, and pluralistic society, the intersections between domestic and global affairs, and the practice of historical interpretation. Epoch-making events and elites are considered in light of their relation to the activities and lives of ordinary people, including people of color, immigrants, women, and the working and middle classes. Credit is not given for both HIST 172 and HIST 173.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

HIST 173 US History Since 1877-ACP credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/173/)
Course is identical to HIST 172 except for the additional writing component. Credit is not given for both HIST 173 and HIST 172. Prerequisite: Completion of campus Composition I General Education requirement.
This course satisfies the General Education Criteria for:
Advanced Composition
Humanities - Hist Phil
Cultural Studies - US Minority

HIST 174 Black America, 1619-Present credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/174/)
Same as AFRO 101. See AFRO 101.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

HIST 191 Freshman Honors Tutorial credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/191/)
Study of selected topics on an individually arranged basis. Open only to honors majors or to Cohn Scholars and Associates. May be repeated once. Prerequisite: Consent of departmental honors advisor.

HIST 198 Freshman Seminar credit: 3 to 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/198/)
Through research, reports, and discussion in a selected field of historical study, the seminar provides a thorough understanding of the problems of that field and of the methods of history as a discipline. May be repeated to a maximum of 6 hours. Prerequisite: James Scholar standing or other designation as a superior student; consent of instructor.

HIST 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/HIST/199/)
May be repeated.

HIST 200 Intro Hist Interpretation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/200/)
Through the careful examination of a specific topic or theme, this course provides a thorough introduction to historical interpretation. Particular attention will be devoted to research strategies, writing practices, handling primary and secondary sources, and the analysis of historiography. May be repeated to a maximum of 6 hours with permission of the Director of Undergraduate Studies.

HIST 202 American Environmental History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/202/)
Introduction to the historical study of Americans' relationship with the natural world. Examination of the ways that "natural" forces have helped to shape American history; the ways that human beings have shaped, altered, and interacted with nature over time; and the ways that cultural, philosophical, scientific, and political attitudes toward the environment have changed from pre-history to the present. Same as ESE 202 and NRES 202.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

HIST 203 Reacting to the Past credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/203/)
An introduction to history through participation in role-playing games set in the past. Topics will vary each time the course is taught. Students will take on the roles of historical figures (famous or obscure) engaged in difficult and complicated situations, and will be obliged to adhere to the beliefs and circumstances of those figures while attempting to pursue a course of action that will help them win the game -- and possibly alter the course of history.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil

HIST 205 Lived Experience in Latin America credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/205/)
Examining the history through the primary texts written by Latin Americans, this course introduces students to theories, contents and methods of historical inquiry, as well as the nuances and the complexities of Latin American history. Reading primary texts written by all strata of society, students will look through the eyes of the diverse populations in Latin America. Students will analyze the traditional narrative of Latin America and gain insight into the lived experience of Latin Americans. Together we will advance our individual and collective understanding of Latin America's rich and complex past.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

HIST 207 Digital Documentary Publishing credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/207/)
Introduction to the craft of publishing historical materials, with a special focus on how to publish the past in the digital age. Assignments will include historical and methodological readings, as well as hands-on instruction in digital publishing techniques. Skills taught include historical research, content development, project management, and copyright analysis.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil

HIST 211 History of Southern Africa credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/211/)
Survey of major themes and events in Southern African history, with emphasis on the period after World War II: the inception and development of apartheid in South Africa, the growth of contests over African nationalism in the subcontinent, wars of liberation and the demise of white domination.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

HIST 212 History of Eastern Africa credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/212/)
Introduction to the history of Eastern Africa from the nineteenth century to the present. Attention to the region's pre-colonial history and institutions is stressed, in order to understand both the transformations brought by European colonialism as well as its limits. The final weeks of the course will examine the differing political, economic, and religious trajectories of the new nation-states since independence in the 1960s.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

HIST 213 African Muslim Societies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/213/)
Focuses on the history and historiography of Muslim societies in Africa. Investigates the dynamics of the spread of Islam in Africa, and explores differences in Islam in Africa from other areas of the Islamic world, with attention to the image in Western scholarship of Islam in Africa. Provides students with the knowledge and skills they need to understand this central phenomenon in modern world history. Same as AFST 213 and REL 215.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

HIST 219 History of the Prison credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/219/)
Same as AFRO 221 and LA 221. See LA 221.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

HIST 220 Traditional China credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/220/)
Historical background to the modern age, tracing the Chinese state and empire from the earliest times until 1644 A.D. Basic political, social, and economic patterns; cultural, intellectual, and technological achievements; and China's impact on Asia and the world. Same as EALC 220.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

HIST 221 Modern China credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/221/)
General introduction to the major themes of the Chinese Revolution from 1840 to the present, emphasizing the interplay between politics, ideas, and culture. Themes include the tension between cultural integrity and Western ideologies, between democratic participation and the tradition of centralized control, and the representation of cultural identity in high and mass cultures. Same as EALC 221.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West

HIST 222 Chinese Thought and Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/222/)
Same as EALC 222 and REL 224. See EALC 222.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

HIST 226 Premodern Japanese History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/226/)
Introduction to the history of the Japanese people, their social and cultural systems, politics, and economy, from the earliest times to the sixteenth century. Same as EALC 226.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

HIST 227 Modern Japanese History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/227/)
Introduction to the history of the Japanese people, their social and cultural systems, politics, and economy, from the mid-sixteenth century to the mid-twentieth century. Same as EALC 227.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

HIST 236 Madness and Modern Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/236/)
This course provides a broad overview of the development of the mind sciences in modern Europe from the beginning of state-regulated asylums to the advent of pharmaceutical treatment and care in the community. Using a combination of primary sources and secondary texts, we will examine how the diagnosis and treatment of "madness" in its many forms has been shaped through the interaction of social, political, economic, and cultural factors from roughly 1750 to the 1990s. Same as PSYC 236.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

HIST 240 Ancient Greek Civilization credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/240/)
The history of ancient Greece and neighboring civilizations from the Archaic Period to the conquests of Alexander.

HIST 241 History of Ancient Rome credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/241/)
Survey of the political, social, economic, military, institutional, religious and cultural development of Rome from 753 BCE until 480 CE.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

HIST 245 Wives, Workers and Witches in Pre-Modern Europe credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/245/)
Examines the history of women and the evolution of concepts of gender in western Europe from roughly 400 to 1700. Topics include the interactions of class and ethnicity with women's experiences, the social construction of sexuality and gender, the misogynist tradition, and women's self-images. Same as GWS 245 and MDVL 245.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

HIST 247 Medieval Europe credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/247/)
From the fragmentation of the Roman Empire to the formation of territorial monarchies, this course surveys the events, innovations, crises, and movements that shaped western Europe in a pivotal era known as "the Middle Ages." Topics will include the spread of Christianity, the migration of peoples, fundamental changes in economic and social structures, the development of political institutions, the role of women, and the cultural achievements of different communities (the monastery, the town, the court). Same as MDVL 247.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

HIST 251 Warfare Milit Insts & Soc credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/251/)
History of warfare and its relationship to changing technologies, tactics, and political structures, with an emphasis on the ways that military institutions are integrated with society as a whole. Same as GLBL 251.

HIST 252 The Holocaust credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/252/)
Exploration of the Holocaust in historical perspective by examining European anti-Semitism, political developments in Germany, the rise to power of the Nazis, and the origins of the Holocaust with first-hand accounts, films, and historical texts, concluding with the legacy of the Holocaust in the contemporary world. Same as JS 252.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

HIST 253 Enlightenment to Existentialism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/253/)
Survey of the major authors, ideas, events, and styles in the cultural and intellectual history of Europe from the seventeenth to the mid-twentieth centuries, focusing on the intellectual traditions of France, Germany, and Great Britain.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

HIST 254 Vikings to Volvos: Scandinavia credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/254/)
Same as SCAN 225. See SCAN 225.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

HIST 255 British Isles to 1688 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/255/)
Survey of the political, social and economic, religious, and cultural history of the British people from the "prehistoric" era through the revolution of 1688. Same as MDVL 255.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

HIST 256 Britain and World Since 1688 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/256/)
Historical survey of the British Isles and the British Empire since the late seventeenth century.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

HIST 257 Terrorism, Past and Present credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/257/)
Explores the history of terrorism, its goals and practices. We recognize that it is not specific to any one ideology, religion, or people. Terrorism is political violence, psychological warfare meant to manipulate a large target audience. Same as GLBL 228.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil

HIST 258 20thC World to Midcentury credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/258/)
Economic, social, political, and cultural developments in twentieth-century world history from late nineteenth-century to Second World War era.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

HIST 259 20thC World from Midcentury credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/259/)
Economic, social, political, and cultural developments in twentieth-century world history from Second World War era to the present.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

HIST 260 History of Russia credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/260/)
Main themes and problems of Russian history from earliest times to the present.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

HIST 261 Intro Russian-Jewish Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/261/)
Same as RUSS 261. See RUSS 261.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

HIST 262 Zionism: A Global History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/262/)
Examines the history of the Zionist movement. The course is designed for students with no prior knowledge of Jewish, European, or Middle Eastern history. The goal is to survey how Zionism emerged as a widespread political movement and, in the process, helped create an independent state for the Jewish people. In addition to familiarizing students with the backstory of a globally significant movement, this class will teach students historical interpretation skills. Same as JS 262.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

HIST 263 History of Medicine in the United States credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/263/)
Medicine and public health in the United States from the colonial period through the twentieth century. Topics include medical theories, therapeutic practices, and institutions as determined by science, culture, politics, law, and social structures. Additional attention will be paid to illness and epidemics; health care providers, patients, and public policy. Throughout, the course will highlight race, sex, (dis)ability, and other social categories that have affected medical care and been defined in medical terms. Same as GWS 263.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

HIST 264 Technology in Western Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/264/)
Explores the role of technology as a transforming social force; examines innovations from the stirrup and heavy plow to the airplane and computer, that restructured economic and political life and realigned values; examines cultural representations of technology.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

HIST 265 Science in Western Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/265/)
Topics in the intellectual and social history of science in the West.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

HIST 268 Biology and Society from Darwin to the Human Genome credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/268/)
The ideas of Charles Darwin initiated a profound transformation in human thought, science, and culture. This course examines the intellectual origins, scientific content, and social, cultural, and religious context and impacts of Darwinian evolutionary theory. Topics include the conflict between science and religion, the eugenics movement and Social Darwinism, the biology of race and gender, and the rise of modern genetics and genomics.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

HIST 269 Jewish History Since 1700 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/269/)
Explores how life was lived by Jewish women and men through the past three centuries. Will also focus on wider place of the Jews in European society, and the achievements and tragedies of the modern Jewish-non-Jewish relationship. Same as JS 269 and REL 269.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

HIST 270 United States History to 1815 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/270/)
Social, economic, and political survey of the region and its relation to the evolving Atlantic community.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

HIST 271 Nineteenth Century America credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/271/)
History of the United States from 1815 to 1900.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

HIST 272 Twentieth Century America credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/272/)
One major emphasis on foreign policy, including the emergence of the United States as a great power after 1898; a second emphasis on the Progressive movement and recurrent attempts at the reform of American society; and racial and urban problems and the conservation of natural resources included.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

HIST 273 Illinois History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/273/)
History of Chicago and Illinois from prehistoric times to the present, illustrating the jarring conflicts and great achievements of peoples from all over the world. Politics, economics, popular and high culture, education, mass media, racial problems, and ethnic diversity are especially featured. There is an emphasis on the relation of city, state, and region to one another.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil

HIST 274 US Foreign Relations Since 1917 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/274/)
Over the course of the twentieth century the United States rose to superpower status, in the process profoundly shaping world affairs. Students will study the connections between U.S. and global history in this pivotal period. Explores the impact of the United States on world affairs from roughly 1917 through the end of the Cold War. Attention given to the perspectives of people affected by U.S. policies and the limits of U.S. power in the face of developments such as anticolonial nationalism and great power rivalries.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

HIST 275 Afro-American History to 1877 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/275/)
History of Africans in the Americas, surveying the African slave trade, slavery in the European colonies of the Americas, early United States slavery, and the Afro-American in the Civil War and Reconstruction. Same as AFRO 275.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

HIST 276 Afro-American Hist Since 1877 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/276/)
History of Afro-Americans in the age of white supremacy; the rise of modern protest organizations; the era of integration; and the black power movement. Same as AFRO 276.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

HIST 277 Encounters in Native America credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/277/)
An examination of pivotal events in the history of Native peoples in North America. Students will explore the complexity of encounters between American Indians and others through a focus on key moments. These will include religious encounters, military confrontations, and legal struggles as well as social and artistic interactions. Same as AIS 277.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

HIST 278 Native American History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/278/)
A survey of the Native American experience in North America from the time of first contact to the present. The course will examine the dynamics and consequences of Native dispossession as well as the continuities in American Indian life and culture. Course materials will include writing and testimony by Native people as well as historical narratives, court decisions and government documents. Same as AIS 278.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

HIST 279 Mexican-American History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/279/)
Same as LLS 279. See LLS 279.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

HIST 280 Caribbean Latina/o Migration credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/280/)
Study of the economic, political, and social forces which shaped migration, settlement, and community formation of Puerto Ricans, Cubans, and Dominicans living in the United States. Same as LLS 280.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

HIST 281 Constructing Race in America credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/281/)
Interdisciplinary examination of the historical, cultural, and social dimensions of race and ethnicity in the United States. Explores the complex and intricate pursuit of multiracial and multicultural democracy. Same as AAS 281, AFRO 281, and LLS 281.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

HIST 283 Asian American History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/283/)
Exploration of the migrations of peoples from the Asian continent into the United States, their attempts to build family and community, and their subsequent impact on American history. Same as AAS 283.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

HIST 284 Af Am Urban Hist Since 1917 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/284/)
Same as AFRO 290. See AFRO 290.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

HIST 285 US Gender History to 1877 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/285/)
This course surveys the history of gender formations in the United States to 1877. Although it pays some attention to manhood and masculinity, it focuses on the history of women from a variety of social groups and on gender ideas pertaining to women. Throughout, it considers the ways gender intersected with categories such as race and class as it placed women of different backgrounds in differential positions. Same as GWS 285.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

HIST 286 US Gender History Since 1877 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/286/)
This course examines the historical construction of gender in the United States since 1877 with particular attention to women's history. It considers how ideas about proper roles for men and women intersected with social categories such as class, race, (dis)ability, and ethnicity to shape lives, bodies, opportunities, politics, and power. Topics include work, family roles, leisure, political participation, health, sexuality, religion, popular culture, and struggles for influence, equality, self-expression, and rights. Same as GWS 286.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

HIST 287 African-American Women credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/287/)
Examines the history of African American women, beginning with the West African background during the transatlantic slave trading era, emphasizing the experiences of black women in the United States during slavery and their political, civic, community and reform activities from slavery to the present, analyzed within the context of racism, sexism, and economic deprivation. African women in the diaspora, and the impact of feminism/womanism, Afrocentrism, and multicultural diversity on the African American woman are considered. Same as AFRO 287 and GWS 287.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

HIST 288 American Indians of Illinois credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/288/)
Same as ANTH 288 and AIS 288. See ANTH 288.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

HIST 289 History of Religion in America credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/289/)
Same as REL 235. See REL 235.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil

HIST 290 Religion, Violence & America credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/290/)
Same as REL 236. See REL 236.
This course satisfies the General Education Criteria for:
Cultural Studies - Western

HIST 292 Latina/o Social Movements credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/292/)
Same as LLS 238. See LLS 238.

HIST 293 The President and the People credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/293/)
A chronological survey of the American presidency that examines individual presidents and the times in which they lived. Major themes include: The creation and development of the office of the president; the nature of presidential power; Americans' evolving relationship with presidents; the impact of party politics, campaigning, and the media on the office.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

HIST 295 Honors Colloquium credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/295/)
Topics will vary. May be repeated. Prerequisite: Chancellor's Scholar or consent of department and director of Campus Honors Program.

HIST 300 Topics in Film and History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/300/)
Examines films as a significant medium of commentary on society and history. Explores the motives and careers of moviemakers, the ways in which films are influenced by their audiences, and how audiences' perception of historical processes are affected by films. Topics will vary. Same as MACS 300. May be repeated to a maximum of 6 hours if topics vary. Students may register in more than one section per term. May be repeated to a maximum of 6 hours.

HIST 305 Andean Countries of S America credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/305/)
The history of Colombia, Ecuador, Peru, Bolivia, and Chile; emphasizes common problems and diverse responses, from European conquest in the sixteenth century to the struggles for development in the twentieth.

HIST 307 History of Mexico from 1519 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/307/)
Development of Mexico from the conquest to the postrevolutionary present.

HIST 308 The Caribbean Since 1492: From Columbus to Castro credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/308/)
Conquistadors – Planters – Pirates – Indigenous Peoples – Enslaved Africans – Religious Reformers – Independence Leaders – Radical Revolutionaries - US Marines - canal builders. Together these people built a new world – a world forged at the intersection of imperial ambitions and international contact, where the peoples and cultures of the Americas, Africa, and Europe collided. This class examines how colonialism, plantation slavery, the age of abolition, and the emergence of national independence movements made the modern Caribbean. Same as LAST 308.

HIST 310 Global Capitalism in History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/310/)
Explores the historical relations between multinational corporations and host countries focusing on political and economic issues.

HIST 311 Global History of Intelligence credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/311/)
Examines the role of both diplomatic and military intelligence in the political history of major global events and developments from the nineteenth century to the present day. Studies the histories of several major intelligence organizations, as well as the roles played by smaller and non-institutional actors in the global production of intelligence. Focuses on the interplay between intelligence, state policy, and information environments to understand not only the role intelligence played in major events, but also how intelligence practices shaped and reflected political cultures across the world.

HIST 312 Immigrant America credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/312/)
History of immigration and immigrant groups in the United States from 1830 to 1980. Covers major waves of immigration and focuses on the diverse cultural heritage, social structure, and political activism of immigrants from Europe, the Americas, and Asia.

HIST 313 Cultural Histories of the University of Illinois credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/313/)
This course explores the history of the University of Illinois from its establishment in 1867 to the present day. Developed around a theme chosen by the instructor, for example, the built environment, literary history, disability, sexuality, or crime, it will consider how the university, its student body, and local communities responded to and shaped local attitudes. The course will contextualize these attitudes within larger trends in United States history, specifically the history of race, sexuality, gender, and class. A research component will draw on the university's archives.

HIST 314 Material Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/314/)
Historical and theoretical investigation of everyday objects, artifacts, structures, landscapes, built environments. Students will learn to question existing perceptions of material phenomena, will engage in the work of historicizing and contextualizing them, and will arrive at a more informed understanding of the ways that they influence, shape, and reflect human history.

HIST 317 Birth of US Empire credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/317/)
Examines the early history of U.S. expansion of territory and influence, from the birth of the nation to the end of Reconstruction. These decades saw the formal additions of continental territory, coupled with the annexation of islands in the Pacific and Caribbean. Private and official attempts were also made to invade Central America and the Caribbean to extend slavery. Attention is paid to the intersections of U.S. expansion with race, gender, and sexuality.

HIST 325 History of Korea credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/325/)
Same as EALC 367. See EALC 367.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

HIST 334 Modern Palestinian History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/334/)
Examines the main themes of Palestinian history since 1800. The Israeli-Palestinian conflict frames the latter part of this history, but it is not the central issue. The focus of the course is Palestinian political, social, and cultural history.

HIST 335 Middle East 1566-1914 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/335/)
Political, social, cultural, and ideological developments in Egypt, Arabia, the Fertile Crescent, Iran and Turkey from the mid 16th century to the eve of World War I. Premodern society and institutions, the question of "decline" and "awakening", encounters with Europe and self-strengthening reforms, relations between Muslims, Christians, and Jews, the role of women and the family, class formation, and religion and nationalism. Same as JS 335.

HIST 337 Middle East Since World War I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/337/)
Political-economic, social and ideological developments in Egypt, Arabia, and Fertile Crescent (including Israel), Iran and Turkey since 1918 to the present, including U.S. involvement.

HIST 338 Egypt Since World War I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/338/)
Examines the twentieth-century history of Egypt, emphasizing the internal social, political, economic, and ideological developments, with attention to Egypt's role in regional and international politics. Readings include novels and short stories to introduce students to modern Egyptian culture. Same as AFST 338.

HIST 339 The Early Russian Empire credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/339/)
Introduction to one of the most transformative events in early modern world history: the creation of the Russian Empire. We will study how Moscow, a modest medieval kingdom, suddenly expanded into the world's largest state, fated to play an outsized role in world politics and culture. Chronologically, the course extends from 1500-1750, and considers topics ranging from religion and rebellion to material culture and everyday life.

HIST 344 Early Modern British Isles credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/344/)
Social, economic, cultural and political history of the "four Kingdoms" of England, Scotland, Wales, and Ireland between 1450 and 1800. Covers the Tudor and Stuart dynasties, Shakespeare, the English Civil War, the development of British colonial holdings across the globe, and the effects of empire at home.

HIST 345 Medieval Civilization credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/345/)
The architectural, artistic, philosophical, political, and religious components of medieval culture, thought, and patterns of behavior; includes monasticism and society and the individual. Same as MDVL 345 and REL 345.

HIST 346 The Age of the Renaissance credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/346/)
An introduction to the cultural history of Europe in the fifteenth and sixteenth centuries, embracing the Renaissance movements in Italy and in Northern Europe. Same as MDVL 346 and REL 346.

HIST 347 Protestant & Catholic Refs credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/347/)
New sources of secular power and spiritual authority define the age of the Protestant and Catholic Reformations. In this advanced European history course students expand their knowledge of the people, events, and ideas of the fifteenth and sixteenth centuries while deepening their understanding of a wide range of primary sources created by theologians and peasants, nuns and monarchs, and artists and rebels. Key works by Luther, Calvin, and Loyola are placed in their intellectual and social contexts. Same as REL 347.

HIST 348 Early Euro Absolut & Expansion credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/348/)
In the seventeenth and eighteenth centuries Europeans transformed political relations within Europe and their economic relationships with the wider world. This course examines continuities and change from 1600 to 1789, following the themes of authority and power. Topics include the rise of "absolute monarchy" and its alternatives in countries like, England and the Netherlands, as well as European trade and consumption, popular culture, the family, food, clothing, sexuality, and labor.

HIST 349 Age of Revolution, 1775-1815 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/349/)
Comparative survey of domestic upheavals in the North Atlantic world: America, Haiti, England, Prussia, and France; the rise of Napoleon and the response of Europe; and the fate of innovation and reform in the immediate aftermath.

HIST 350 19thC Romanticism & Politics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/350/)
Among the topics of this course will be Romanticism, which is still the basic form of modern culture today, with its emphasis on feeling, imagination, and self-expression; the nation-state, a new form of political organization; and the creation of a globalized world for the first time in human history.

HIST 352 Europe in the World credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/352/)
Colonial encounters between Europe and today's Third World viewed in comparative historical perspective. Equal emphasis placed on (colonizing) Europe and colonial experience of Asia, Africa, and South America.

HIST 353 European History 1918 to 1939 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/353/)
Survey of European society from 1918 to 1939, with emphasis on the impact of World War I, the Russian Revolution, fascism, and the intellectual trends of the twenties and thirties.

HIST 354 Twentieth Century Europe credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/354/)
Cultural history of Europe in an age of global warfare and political, social, and economic upheaval.

HIST 355 Soviet Jewish History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/355/)
An examination of how Jewish life and culture contributed to the creation of the world's first socialist society. Makes use of primary sources, scholarly essays and monographs, archival documents, literature, memoirs, film, and visual culture as a way of introducing students to Soviet Jewish History, from the reign of the last tsar, Nicholas II, to the dissolution of the Soviet Union in 1991. Special topics to be examined include: the breakup of the Pale of Settlement during the Great War; the role of Jews in revolution and revolutionary culture; Soviet nationality policy; shtetl culture; antisemitism; everyday life; the purges of the 1930s; the Jewish experience in World War II; the Holocaust; and mass emigration. Same as JS 355.

HIST 356 The Modern Balkans through Literature and Film credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/356/)
History of the creation and development of the independent Balkan states during the 19th and 20th centuries. Special attention is given to Balkan nationalism, its roots, evolution and various manifestations. Other topics cover the modernization of the rural societies, ethnic conflict and/or accommodation, inter-Balkan relations, and the role of the great powers. Finally, a close look will be taken on contemporary developments in the Balkans, especially the Yugoslav crisis, the fall of communism and post-communist development. By discussing fictional work and films by Balkan authors, students will be introduced to the intellectual production of the region.

HIST 357 Modern France credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/357/)
The development of modern France, with special attention to social and cultural phenomena.

HIST 358 History Harvest: Collaborative Digital Public History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/358/)
Students work with instructor and community collaborators to host a "History Harvest," an event during which community members share personal stories about and artifacts related to a particular event, historical development, and/or place. The class will catalog the images and recordings gathered and use them to present digital exhibits. Readings include relevant historical works for context and methodological works on public and digital history skills needed for the project. Students will develop hands-on experience with these skills. May be repeated to a maximum of 6 undergraduate hours, if topics vary.

HIST 360 European Culture in a Global Context credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/360/)
Railways, steamships, telegraph, quinine, machine guns: these were some of the European innovations that created a unified world between 1850 and 1914. The transforming force of new technologies, global commerce and Western imperialism also had a profound impact on the arts. We will study this globalization of culture in world spectacles, the visual arts, music, and literature.

HIST 361 Euro Thght & Soc Since 1789 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/361/)
Examines the reciprocal relationship between thought and society in western Europe from the French Revolution to the present.

HIST 364 The Science of Human Nature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/364/)
Examines the history of scientific arguments about race, heredity, gender, and human biological difference. We will explore the historical, cultural, and ethical dimensions of biological thought through a discussion of topics including racial typology, eugenics, intelligence testing, modern genetic theory, sex and gender, and the human genome project.

HIST 365 Fict & Historical Imagination credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/365/)
Explores the relationship between history and fiction by focusing on specific cultural locations.

HIST 367 History of Western Medicine credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/367/)
Rise and development of medicine in the West since the sixteenth century; interrelations of physiology, pathology, and social demands with the theory and practice of medicine; pattern of professionalization; social role of the physician; conflict among ideas of medicine as an art, a science, and a social service; and problems of mental illness, medical ethics, and nontraditional forms of practice.

HIST 369 Spain and Portugal from 1808 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/369/)
A modern history of Spain and Portugal.

HIST 370 Colonial America credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/370/)
An interpretive survey of American colonial history from 1492 through 1763. Themes include encounters between Natives and Europeans in the New World, contests for colonization, settler societies and the development of various colonial social patterns in North America and the Caribbean, the beginnings of slavery, and the gradual emergence of distinctive provincial cultures in the North American colonies of the British Empire. Throughout all of this, there is an examination of colonial American history as part of the larger Atlantic World, understanding early American history as a process of exchange and interaction which included Europe, Africa, the Caribbean, and North America.

HIST 371 The American Revolution credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/371/)
Examines the momentous founding age of United States history. Explores the growing estrangement of the American colonies from Great Britain and the culmination of this process in the Declaration of Independence. It then examines the controversial process of creating a new nation, and the government of the United States. Intense focus on primary source materials from the period.

HIST 372 America's Republic, 1780-1880 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/372/)
A study of political life in the U.S. during the century following the Revolution. The course covers the appearance and evolution of republican government, the Constitution, the expansion of voting rights, the rise and fall of political parties, and the relationship of all these things to the development of economic and social relationships.

HIST 373 Origins of the Civil War credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/373/)
Examination of changes in economic, social, cultural, and political life in the United State that ultimately plunged the national into the bloodiest and most important war in its history. Particular attention is paid to the way in which diverse segments of the country's population - North and South, urban and rural, rich and poor, slave and free, black and white, male and female - affected and were affected by these changes.

HIST 374 Civil War and Reconstruction credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/374/)
The United States' civil war (1861-1865) and the years of postwar "reconstruction" (conventionally dated as 1865-1877). During this period as a whole, the nation underwent its second revolution -- a revolution more radical in its impact than the one that freed it from the British Empire. Much about U.S. history for the next century and more was decided during these critical years.

HIST 375 Soc History Indus Am to 1918 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/375/)
The impact of industrialization, immigration, and urbanization on American society to the end of World War I.

HIST 376 Soc History Indus Am from 1918 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/376/)
Study of the impact of industrial technology, business enterprise, immigration, and urbanization on American society.

HIST 377 United States since 1932 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/377/)
Discusses the New Deal, the Cold War, Franklin D. Roosevelt and subsequent presidents, the structure of American imperialism, and America's role in world politics.

HIST 379 Latina/os and the City credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/379/)
Same as LLS 379. See LLS 379.

HIST 380 US in an Age of Empire credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/380/)
Study of the imperial dimensions of U.S. history from about 1877 to 1920. This was an era marked by an imperial world system, unprecedented levels of international trade and investments, massive labor migrations, significant missionary endeavors, and consolidation of U.S. power over Native Americans, and growing U.S. political and military assertion in the international arena. Considers how the United States and its peoples positioned themselves in an international context by investigating not only government policies but also commercial endeavors and cultural practices.

HIST 381 Urban History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/381/)
Examines the history of urban centers, paying special attention to the relationship between the city and its surrounding territory, the impact of migration and immigration, the delineation of space and the transformation of the built environment, and the role of a city's inhabitants in creating social networks, political structures, and cultural institutions. May be repeated in separate terms to a maximum of 6 hours if topics vary.

HIST 382 Race and Migration in Chicago credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/382/)
Same as LLS 382. See LLS 382.

HIST 383 Hist of Blk Women's Activism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/383/)
Same as AFRO 383 and GWS 383. See AFRO 383.

HIST 384 Class Politics & Blk Community credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/384/)
Same as AFRO 372. See AFRO 372.

HIST 385 Transnational Sexualities credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/385/)
Same as GWS 385. See GWS 385.

HIST 386 Public History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/386/)
An examination of major genres historians have employed to present history in the public arena, including documentary films, public memorials, legal testimony and museum exhibits. Students will explore both the social dynamics of public commemoration and the techniques historians employ when communicating complex ideas and events to a general audience.

HIST 387 History of Sexuality in U.S. credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/387/)
Same as GWS 387. See GWS 387.

HIST 389 Race and Revolutions credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/389/)
Same as AFRO 378. See AFRO 378.

HIST 390 Sport and Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/390/)
In various societies, organized sport has operated as site of nation-building, the struggle for inclusion, and indicator of societal advancement. Examines the history of the roles that sport has played in society through a series of topical foci, as selected by the professor each semester. Course readings revisit popular and scholarly debates about sport and discuss the different actors and social forces that shaped those discussions. Same as KIN 345. May be repeated in separate terms to a maximum of 6 hours if topics vary.

HIST 391 Oral History Methods credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/391/)
Introduces students to the ethical discourses and practical methods in oral history. Its primary purpose is to prepare students with oral and archival research skills that are crucial for the examination of the history and memory of communities. Among the questions that the class will consider are: what is the connection between the historical record and the remembered past? How reliable are these memories and does reliability matter? How do people mobilize and manipulate accounts of the past for purposes of community building, historic preservation, and political development? Same as LLS 391.

HIST 392 The 1960s in the U.S. credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/392/)
A study of the history of the 1960s, a tumultuous decade in the social and political history of the United States. The class has two main goals: 1)Provide a solid knowledge of the history of this period and its social and economic developments. 2)Develop skills as an analytic reader and writer in U.S. history.

HIST 393 The World of Jewish Sepharad credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/393/)
Same as ANTH 393 and REL 393. See ANTH 393.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

HIST 394 Hidden Political Figures credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/394/)
Examination of recent United States history with an emphasis on the presidential elections, public policy, popular culture, activism, and economic and social trends that helped define American life after 1964. The political contributions of lesser known figures will be highlighted to explore the development of American politics elicited by the civil rights movement and subsequent struggles to influence a newly transformed body politic. The course is designed as a topics course that may revolve around other "hidden figures" in political history. May be repeated once if topics vary.

HIST 395 Topics in Law and Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/395/)
Topics and problems in the history of laws, legal institutions, jurisprudence, concepts of justice, and their role(s) in shaping societies over time. Specific readings and foci will vary. May be repeated in the same or separate terms for a maximum of 6 hours if topics vary.

HIST 396 Special Topics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/396/)
Topics are given on an experimental one-time-only basis. May be repeated if topics vary.

HIST 397 Sexuality in Modern Europe credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/397/)
What is sexuality? How is it practiced, policed, represented, liberated and controlled? How do religion, the state, the law and the media influence sexual identities and practices? Focusing on modern Europe, we will examine the history of sexuality from the late eighteenth century to the present in order to explore how historians have answered these questions. We will investigate topics from pornography, prostitution, sex and totalitarianism, queer sexualities, sex and colonialism, and masturbation, to sex education, sexual revolutions, hermaphroditism, sex surveys and AIDS. Same as GWS 397.

HIST 398 Internship in Public History credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/398/)
With a faculty sponsor, a qualified students will develop a program of study or research related to an internship or other relevant employment opportunity. Consult departmental undergraduate advisor or Director of Undergraduate Studies. Approved for letter and S/U grading. May be repeated in separate terms to a maximum of 6 hours. Prerequisite: Consent of faculty sponsor and Director of Undergraduate Studies required.

HIST 399 Independent Study credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/399/)
Readings in selected fields in consultation with the instructor resulting in a 20-30 page paper. May be repeated with permission of the Director of Undergraduate Studies. Prerequisite: Junior or senior standing pursuing a History major; written consent of instructor and History undergraduate advisor required.

HIST 400 War, Soc, Politics, & Culture credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/400/)
Topics will be listed in the department's course guide at http://www.history.illinois.edu. 3 undergraduate hours. 2 to 4 graduate hours. May be repeated to a maximum of 6 undergraduate hours or 8 graduate hours in the same or subsequent terms if topics vary.

HIST 401 History of Terrorism credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/401/)
Historical examination of strategies of terror, their relationship to conventional warfare, and their political, social, cultural, and religious contexts. 3 undergraduate hours. 4 graduate hours.

HIST 405 History of Brazil from 1808 credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/405/)
Problems of a neocolonial society; themes include family structure, slavery, imperialism, modernization, and the crisis of traditional institutions. 3 undergraduate hours. 2 or 4 graduate hours.

HIST 407 Slavery & Race in Latin Am credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/407/)
Selected topics on Indians and Spaniards, whites and blacks, emphasizing Mexico, the Caribbean, and Brazil. Same as AFRO 407. 3 undergraduate hours. 2 or 4 graduate hours.

HIST 410 Decolonization in Africa credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/410/)
Almost all African countries fell under European colonial rule by the beginning of the 20th century, but formal colonialism did not last the century. Surveys the crucial ideological, political, social, and military strategies enlisted by African people and movements to shed colonial rule. Also examines the paradox of the coupling of "flag independence" with continuing economic dependence on Europe. 3 undergraduate hours. 4 graduate hours.

HIST 411 20thC Africa Intellectual Hist credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/411/)
The development of influential political and cultural ideas on the African continent over the course of the long 20th century, highlighting the interactions of individuals (as members of educated elites and of rural societies) and institutions (such as universities) in developing trademark African intellectualism. These concepts include: Pan-Africanism, the need for political independence, Negritude, feminism/womanism, calls for the promotion of indigenous languages and ubuntu; as well as the contested justifications for one-party rule. Students will gain an appreciation of the breadth, depth and creativity of African thought and activism. 3 undergraduate hours. 2 or 4 graduate hours.

HIST 412 Southern Africa Race & Power credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/412/)
Interdisciplinary survey of both the internal and international dimensions of the changing situation in Africa south of the Zambezi; focuses on the historical background - and a political, economic, and social analysis of - current events in the Republic of South Africa, Mozambique, Namibia, and Zimbabwe, emphasizing the central significance of race and power in this region. Same as AFST 425. 3 undergraduate hours. 4 graduate hours.

HIST 420 China Under the Qing Dynasty credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/420/)
The period of Manchu domination in China (1644-1912); emphasis on Chinese reactions to Western influences during the nineteenth century. Same as EALC 420. 3 undergraduate hours. 2 or 4 graduate hours.

HIST 422 Soc-Econ Hist Modern China credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/422/)
Disintegration of traditional social and economic systems during the nineteenth and twentieth centuries, and the political effects of that disintegration; examines changes in the agricultural economy, changing rural elites, urbanization, and emergence of new social classes. It is recommended that students take HIST 420 before registration in HIST 422. Same as EALC 421. 3 undergraduate hours. 2 or 4 graduate hours.

HIST 425 Classical Chinese Thought credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/425/)
Same as CWL 478 and EALC 476. See EALC 476.

HIST 426 Early Modern Japan credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/426/)
Study of the people, culture, and society from 1600 to 1868. Traces the rise of Japan's first truly national culture. Same as EALC 426. 3 undergraduate hours. 4 graduate hours.

HIST 427 Twentieth-Century Japan credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/427/)
Study of the people, culture, and society of Japan from 1868 to the present. Traces Japan's transformation from an insular bastion of "centralized feudalism" into a cross-cultural crucible of post-industrial democracy. Same as EALC 427. 3 undergraduate hours. 4 graduate hours.

HIST 430 India from Colony to Nation credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/430/)
Mughal Empire and British Raj, Indian national awakening, and struggle for independence under Gandhi and Nehru. 3 undergraduate hours. 2 or 4 graduate hours.

HIST 432 History of Early Judaism credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/432/)
Same as JS 442 and REL 442. See REL 442.

HIST 433 History of Jews in Diaspora credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/433/)
Deals with the history of the Jewish people from the destruction of the Jewish state by Rome to the reestablishment of a Jewish state in 1948. The emphasis is on the interaction between the Jewish and non-Jewish worlds as well as changes internal to the Jewish communities. Same as REL 434. 3 undergraduate hours. 4 graduate hours.

HIST 434 Women in Muslim Societies credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/434/)
Same as ANTH 403, GLBL 403, GWS 403, REL 403, and SAME 403. See REL 403.

HIST 436 Jewish Life-Writing credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/436/)
Same as CWL 421, REL 420, SLAV 420, and YDSH 420. See YDSH 420.

HIST 439 The Ottoman Empire credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/439/)
Economy, society, law, and government; the Ottomans and Mediterranean society; Ottoman culture and Islamic tradition; minorities; trade, diplomacy, and capitulations; "decline" and dismemberment; and traditional and westernizing attempts at revival. 3 undergraduate hours. 2 or 4 graduate hours.

HIST 440 Roman Republic to 44 B C credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/440/)
Examination of the political, social, economic, military, institutional, religious and cultural development of Rome from 753 BCE until 14 CE. Same as CLCV 440. 3 undergraduate hours. 4 graduate hours.

HIST 441 The Roman Empire credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/441/)
Examination of the political, social, economic, military, institutional, religious and cultural development of the Roman Empire from the reign of Augustus (27 BCE - 14 CE) through the fall of the Western Roman Empire ca. 480 CE. 3 undergraduate hours. 4 graduate hours.

HIST 442 Roman Law and Legal Trad credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/442/)
Examines Roman law and legal tradition in the context of historical, political, and social developments; origins of law in primitive and ancient classical societies; surveys development of precedent, codification, and preservation of Roman law, and the impact of Roman law on western legal traditions. 3 undergraduate hours. 4 graduate hours.

HIST 443 Byzantine Empire AD 284-717 credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/443/)
Examination of the political, social, economic, military, institutional, religious and cultural development of the early Byzantine Empire from the reign of Diocletian (AD 284-305) through the Heraclian Dynasty (AD 610-717). Same as MDVL 443. 3 undergraduate hours. 4 graduate hours.

HIST 444 European Education to 1600 credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/444/)
Same as EPS 403 and MDVL 403. See EPS 403.
This course satisfies the General Education Criteria for:
Advanced Composition
Humanities - Hist Phil
Cultural Studies - Western

HIST 445 Medieval England credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/445/)
Key sources and topics of English history, from the end of Roman rule in Britain (c. 410) to the fifteenth century. Recurrent themes include the development of law, the role of women, the status of commoners, intellectual trends, and the importance of public media for the dissemination of ideas (writing, performance). Same as MDVL 444. 3 undergraduate hours. 2 or 4 graduate hours.

HIST 448 Modern Britain credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/448/)
History of modern Britain's social, economic, cultural and political life with a special emphasis on the role of empire in shaping its career as a global power and its "domestic" national culture at home. 3 undergraduate hours. 2 or 4 graduate hours.

HIST 449 British Imperialism credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/449/)
Thematic approach to Britain's role as an imperial power, its impact on global issues and affairs, and the effect of colonies and colonial peoples on the history of its development as a Western "nation". 3 undergraduate hours. 2 or 4 graduate hours.

HIST 450 European Working Class History credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/450/)
Comparative study of the rise of the working class in European countries; formation, culture, and daily life; stratification within the working class; workers in organized labor and revolutionary movements. Same as LER 450 and SOC 422. 3 undergraduate hours. 2 or 4 graduate hours.

HIST 453 Sex and Science credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/453/)
Examines how modern scientific knowledge has shaped understandings and experiences of bodily sex difference, gender, and sexuality over time. It also focuses on understanding the ways in which social, cultural, and political expressions and issues of gender and sexuality have influenced biomedical and public health knowledge and practices. Thematic areas for discussion will include homosexuality, hysteria, eugenics, sex education, gender reassignment, and the AIDS crisis. Same as GWS 453. 3 undergraduate hours. 4 graduate hours.

HIST 456 Twentieth-Century Germany credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/456/)
Political upheavals of twentieth-century Germany; topics include the First World War's impact on German society, the war's revolutionary aftermath, the political struggles and cultural achievements of the Weimar Republic, the rise of Hitler, the Third Reich, the Holocaust, the Second World War, and the divided postwar Germanies; novels and films complement readings. 3 undergraduate hours. 4 graduate hours.

HIST 459 Postcolonial/Queer credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/459/)
Same as GWS 459. See GWS 459.

HIST 461 Russia- Peter the Great to Rev credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/461/)
Culture, society, and politics in Imperial Russia, focusing on power and resistance, the lives and culture of ordinary Russians, and competing ideas about the state, the individual, community, nation, religion, and morality. 3 undergraduate hours. 2 or 4 graduate hours. For higher credit, graduate students will be required to do more reading and to write an additional paper.

HIST 462 Soviet Union Since 1917 credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/462/)
Political, social, and economic development of the USSR since the 1917 revolutions that brought the Bolsheviks to power; social change and social engineering; political struggles among Stalin and his rivals; the "Stalin revolution" from above and economic modernization; the USSR's emergence through World War II and the Cold War as a world power; "developed socialist" society. 3 undergraduate hours. 2 or 4 graduate hours. Graduate students will write an additional substantial paper and engage in special discussion sections.

HIST 466 The Balkans credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/466/)
The political, economic, and cultural history of this region's peoples, including the Rumanians, South Slavs, Greeks, and Albanians; the impact of Ottoman rule; the rise of nationalism and the formation of national states; and the Orthodox Church. 3 undergraduate hours. 4 graduate hours.

HIST 467 Eastern Europe credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/467/)
The political, economic, and cultural history of Poland, Czechoslovakia, Hungary, Rumania, Yugoslavia, Bulgaria, Greece, and Albania; particular emphasis upon the post-World War II era. 3 undergraduate hours. 4 graduate hours.

HIST 468 Locating Queer Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/468/)
Same as GWS 467. See GWS 467.

HIST 470 Plantation Soc in Americas credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/470/)
Same as AFRO 453. See AFRO 453.

HIST 473 Crises of Political Tolerance credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/473/)
Investigates the character of American political tolerance and freedom in times of crisis, through a series of case studies: images of the American "enemy"; the Red Scare after World War I; the internment of Japanese-Americans in World War II; McCarthyism; and the resentments generated by protest movements in the late 1960's. 3 undergraduate hours. 2 or 4 graduate hours.

HIST 475 Formation of US Public Health credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/475/)
Introduction to the history of American public health and health policy. Emergence of modern public-health institutions in America; relation of public health to conceptions of disease, social order, and the role of government; emergence and development of public policy issues in public health and medical care, of the environment for the formulation of policy, and the relation of policy to broader issues of social development, incidence of disease, and assumptions about the proper distribution of public and private responsibility. 3 undergraduate hours. 4 graduate hours.

HIST 476 History of the American West credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/476/)
Examines the changing image of the American West by focusing on the process of conquest and resistance present within the region's history. Same as LLS 475. 3 undergraduate hours. 4 graduate hours.

HIST 478 Black Freed Move, 1955-Present credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/478/)
Same as AFRO 474. See AFRO 474.
This course satisfies the General Education Criteria for:
Advanced Composition

HIST 479 19thC US Intel & Cultr Hist credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/479/)
Examines diverse strains of cultural and intellectual life in the US from the early Republic through the 1890s. Emphasizes popular culture, religious revivalism, educational institutions, reform movements, art, science, and literature and the roles of cultural elites, women, working-classes, African Americans, Native Americans and immigrants in shaping national, regional and local cultures. Same as REL 478. 3 undergraduate hours. 2 or 4 graduate hours.

HIST 480 US Work Class Hist Since 1780 credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/480/)
Focuses on working class formation, culture, ideas, and organization; examines daily experience of work and community life; special emphasis on race, ethnicity, and gender in the process of class formation; labor relations and the changing patterns of working class protest and accommodation. Same as LER 480. 3 undergraduate hours. 2 or 4 graduate hours.

HIST 481 20th Century US Culture Wars credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/481/)
What ideas does "American Culture" include? How does it incorporate diverse religious traditions as well as new scientific perspectives? How are ethnicity, gender and race important? Topics of current "cultural wars", these and other questions about cultural conflict in the US have been hotly debated for over a century. This course explores such culture wars in the 20th century US and helps students evaluate contested cultural concepts they have produced, including pragmatism, pluralism, religious diversity, scientific objectivity, economic equality, as well as "popular," "high" and "democratic" culture. Same as REL 479. 3 undergraduate hours. 2 or 4 graduate hours.

HIST 482 Slavery in the United States credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/482/)
Same as AFRO 460. See AFRO 460.
This course satisfies the General Education Criteria for:
Advanced Composition

HIST 483 Race, Science, and Medicine credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/483/)
Same as AFRO 466. See AFRO 466.

HIST 486 Revivalism and Evangelicalism credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/486/)
Same as REL 435. See REL 435.

HIST 487 Great Books in History credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/487/)
An approach to History through a selection of prize-winning, influential, and lasting books, the point being to consider the role of the book in History and its relation to other forms of historical interpretation, including essays, web sites, films, lectures, and exhibits. It will hone students' composition abilities through careful attention to writing, craft, and genre. Each iteration of this course will focus on a particular theme. 3 undergraduate hours. 4 graduate hours. May be repeated as topics vary to a maximum of 6 undergraduate hours or 8 graduate hours.

HIST 488 The American Political Divide credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/488/)
Examines the diversity of political thought in the twentieth century by exploring the ways that Americans from diverse backgrounds have talked about, made sense of, and sought to influence change in modern American government. Throughout the course, students will examine the enduring debate about the proper role of the federal government, which has been central to some of the fiercest ideological divides in American history. 3 undergraduate hours. 4 graduate hours.

HIST 490 Honors Independent Study credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/490/)
Independent reading, research, and writing under the supervision of an individual instructor. Seniors in the History Honors Program taking this course in place of the Honors Senior Thesis must complete a substantive research paper (25-30 pages). No graduate credit. May be repeated to a maximum of 6 hours. Each 3-hour class must be taken with a different instructor. Prerequisite: Admission to the History Honors Program; or junior or senior of high standing with the consent of the Director of Undergraduate Studies.

HIST 491 Directed Research in Digital History credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/491/)
Advanced projects in Digital History undertaken with a faculty supervisor. 1 to 3 undergraduate hours. 1 to 4 graduate hours. Approved for Letter and S/U grading. May be repeated in separate terms to a maximum of 6 undergraduate hours or 4 graduate hours. Prerequisite: Consent of sponsoring faculty supervisor and Director of Undergraduate Studies or Director of Graduate Studies required for all students.

HIST 492 Historiography and Methodology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/492/)
This is a seminar for all students in the History Honors Program and other advanced students interested in honors level study of historiography and methodology. Students intending to write a senior honors thesis should take it no later than the spring of the Junior year. Students will study the development of the historian's craft and will be exposed to new research methods and techniques. The course will culminate in the preparation of a research proposal, developed in consultation with an individual faculty advisor. The instructor of HIST 492 and the Director of Undergraduate Studies will assist students intending to write a thesis in the selection of an appropriate mentor. 3 undergraduate hours. No graduate credit. Prerequisite: Admission to the History Honors Program or consent of the Director of Undergraduate Studies.

HIST 493 Honors Senior Thesis credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/493/)
Two-term independent research and writing project under the supervision of a faculty advisor. Students enrolled in this course must submit a completed Honors Senior Thesis at the end of the second term, for evaluation by the faculty advisor and a second reader. 3 undergraduate hours. No graduate credit. Must be repeated for a total of 6 hours. Students will receive separate grades for each semester's work. Prerequisite: Admission to the History Honors Program and consent of supervising professor; HIST 492 and HIST 495; concurrent enrollment in HIST 499 is required.

HIST 497 History of Historiography credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/497/)
An exploration of the different approaches to the conceptualization and narration of history in various times and places, with special emphasis on the social, cultural, and political role(s) of the historian. 3 undergraduate hours. 2 or 4 graduate hours.

HIST 498 Research and Writing Seminar credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HIST/498/)
Capstone course required of all majors. Students will make history by researching and writing a work of original scholarship. Several of these seminars are offered each term and each focuses on a special topic, thus allowing students with similar interests to work through the process of gathering, interpreting, and organizing historical evidence under the direction of an expert in the field. The topics on offer each semester will be listed in the Class Schedule and described in the department's course guide at http://www.history.illinois.edu. 3 undergraduate hours. No graduate credit. May be repeated to a maximum of 6 hours.
This course satisfies the General Education Criteria for:
Advanced Composition

HIST 499 Thesis Seminar credit: 1 to 2 Hours. (https://courses.illinois.edu/schedule/terms/HIST/499/)
A required seminar for all seniors writing Honor Theses in history, this course will meet throughout the year and will supplement individual students' meetings with their primary advisors. Provides an intellectually supportive environment in which students work together on common methodological problems, share the results of their research, and critique developing projects. 1 to 2 undergraduate hours. 1 to 2 graduate hours. Approved for S/U grading only. May be repeated in separate terms to a maximum of 3 hours. Prerequisite: Admission to the History Honors Program; HIST 492; and HIST 495. Concurrent enrollment in HIST 493 is required.

HIST 502 Prob in Comparative History credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/502/)
Intensive comparative examinations of particular issues in the histories of multiple countries, cultures or periods; emphasizes methodology, the discipline of comparative history, and the nature of historiography in a cross-cultural and interdisciplinary context. May be repeated to a maximum of 12 hours.

HIST 503 Prob in Comp Women's Hist credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/503/)
Examines major works in global women's history from about 1700 to 1950. Introduces students to major themes in women's history as well as major historiographical debates. Topics will be listed in the department's course guide at http://www.history.illinois.edu. Same as GWS 501. May be repeated to a maximum of 12 hours if topics vary.

HIST 504 Problems in the History of Science and Medicine credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/504/)
Topics will be listed in the department's course guide at https://www.history.illinois.edu. 4 graduate hours. No professional credit. May be repeated to a maximum of 12 hours if topics vary. Prerequisite: Consent of instructor.

HIST 505 Research Seminar: Science and Medicine credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/505/)
Topics will be listed in the department's course guide at https://www.history.illinois.edu. 4 graduate hours. No professional credit. May be repeated to a maximum of 12 hours if topics vary. Prerequisite: Consent of instructor.

HIST 507 Prob in Latin American Hist credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/507/)
Topics will be listed in the department's course guide at http://www.history.illinois.edu. May be repeated to a maximum of 12 hours if topics vary.

HIST 508 Research Seminar: Latin America credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/508/)
Topics will be listed in the department's course guide at https://www.history.illinois.edu. 4 graduate hours. No professional credit. May be repeated to a maximum of 12 hours if topics vary. Prerequisite: Consent of instructor.

HIST 510 Problems in African History credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/510/)
Topics will be listed in the department's course guide at http://www.history.illinois.edu. Same as AFST 510. May be repeated to a maximum of 12 hours if topics vary.

HIST 511 Research Seminar: Africa credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/511/)
Topics will be listed in the department's course guide at https://www.history.illinois.edu. Same as AFST 511. 4 graduate hours. No professional credit. May be repeated to a maximum of 12 hours if topics vary. Prerequisite: One upper-level African history course or consent of instructor.

HIST 519 Colonialism & Postcolonialism credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/519/)
Same as ANTH 504. See ANTH 504.

HIST 520 Problems in Chinese History credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/520/)
Topics will be listed in the department's course guide at http://www.history.illinois.edu. Same as EALC 520. May be repeated to a maximum of 12 hours if topics vary.

HIST 521 Research Seminar: China credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/521/)
Research Seminar in Chinese history designed to provide training to graduate students in research skills with an emphasis on the use of source materials in Chinese language. Same as EALC 522. 4 graduate hours. No professional credit. May be repeated to a maximum of 8 graduate hours in separate terms. Prerequisite: Proficiency in written Classical or Modern Chinese, EALC 500 for EALC graduate students, and HIST 520 for History graduate students, or the consent of instructor.

HIST 526 Problems in Japanese History credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/526/)
Period covered will alternate between the Early Modern (1550 - 1850) and Modern (1850 - present) eras. Same as EALC 526. May be repeated to a maximum of 8 hours.

HIST 527 Research Seminar: Japan credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/527/)
Period covered will alternate between the Early Modern (1550 - 1850) and Modern (1850 - present) eras. Same as EALC 527. May be repeated to a maximum of 8 hours if topics vary. Prerequisite: Graduate standing in HIST, EALC, or other related discipline and reading knowledge of Japanese, or consent of instructor. By permission of instructor. Same as EALC 527. 4 graduate hours. No professional credit. May be repeated to a maximum of 8 hours if topics vary. Prerequisite: Graduate standing in HIST, EALC, or other related discipline and reading knowledge of Japanese, or consent of instructor.

HIST 535 Prob Middle Eastern History credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/535/)
Covers, in depth, major problems of specific periods and areas and the relevant literature of Near and Middle Eastern History, which will vary from term to term. May be repeated to a maximum of 8 hours if topics vary.

HIST 536 Research Seminar: Middle East credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/536/)
Investigates research topics in Near and Middle Eastern history in accordance with students' needs. Topics may vary from term to term. Students will prepare oral and written reports. 4 graduate hours. No professional credit. May be repeated to a maximum of 8 hours. Prerequisite: Consent of instructor.

HIST 542 Problems in Medieval History credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/542/)
Topics will be listed in the department's course guide at http://www.history.illinois.edu. Same as MDVL 542. May be repeated to a maximum of 12 hours if topics vary.

HIST 543 Research Seminar: Medieval credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/543/)
Topics will be listed in the department's course guide at https://www.history.illinois.edu. Same as MDVL 543. 4 graduate hours. No professional credit. May be repeated to a maximum of 12 hours if topics vary. Prerequisite: Consent of instructor.

HIST 545 Research Seminar: Early Modern Europe credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/545/)
Topics will be listed in the department's course guide at https://www.history.illinois.edu. 4 graduate hours. No professional credit. May be repeated to a maximum of 12 hours if topics vary. Prerequisite: Consent of instructor.

HIST 546 Prob English Hist Since 1688 credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/546/)
Topics will be listed in the department's course guide at http://www.history.illinois.edu. May be repeated to a maximum of 12 hours if topics vary.

HIST 549 Research Seminar: England & the British Empire credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/549/)
Topics will be listed in the department's course guide at https://www.history.illinois.edu. 4 graduate hours. No professional credit. May be repeated to a maximum of 12 hours if topics vary. Prerequisite: Consent of instructor.

HIST 550 Prob Early Mod European Hist credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/550/)
Topics will be listed in the department's course guide at http://www.history.illinois.edu. May be repeated to a maximum of 12 hours if topics vary.

HIST 551 Prob European Hist Since 1789 credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/551/)
Topics will be listed in the department's course guide at http://history.illinois.edu. May be repeated in the same or subsequent terms as topics vary.

HIST 552 Research Seminar: Europe Since 1789 credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/552/)
Topics will be listed in the department's course guide at https://www.history.illinois.edu. 4 graduate hours. No professional credit. May be repeated to a maximum of 12 hours if topics vary. Prerequisite: Consent of instructor.

HIST 560 Problems in Russian History credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/560/)
Topics will be listed in the department's course guide at http://www.history.illinois.edu. May be repeated to a maximum of 12 hours if topics vary.

HIST 561 Research Seminar: Russia credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/561/)
Topics will be listed in the department's course guide at https://www.history.illinois.edu. 4 graduate hours. No professional credit. May be repeated to a maximum of 12 hours if topics vary. Prerequisite: Consent of instructor.

HIST 570 Prob in American Hist to 1830 credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/570/)
Topics will be listed in the department's course guide at http://www.history.illinois.edu. May be repeated to a maximum of 12 hours if topics vary.

HIST 571 Research Seminar: America to 1789 credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/571/)
Topics will be listed in the department's course guide at https://www.history.illinois.edu. 4 graduate hours. No professional credit. May be repeated to a maximum of 12 hours if topics vary. Prerequisite: Consent of instructor.

HIST 572 Prob in US Hist Since 1815 credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/572/)
Topics will be listed in the department's course guide at http://www.history.illinois.edu. May be repeated in the same or subsequent terms as topics vary.

HIST 573 Research Seminar: America Since 1789 credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/573/)
Topics will be listed in the department's course guide at https://www.history.illinois.edu. 4 graduate hours. No professional credit. May be repeated to a maximum of 12 hours if topics vary. Prerequisite: Consent of instructor.

HIST 574 Historiography of Religion in America credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/574/)
Same as REL 535. See REL 535.

HIST 575 Problems African American Hist credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/575/)
Covers in depth, major problems in the African American experience and in the historiography of that experience, including historical periods, themes and paradigms. Same as AFRO 501. Approved for letter and S/U grading. May be repeated to a maximum of 8 hours.

HIST 591 History and Social Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/591/)
Introduces recent historical work drawing upon theories and concepts from the social sciences; considers fields of inquiry which include family history, demographic history, labor history, prosopographical and entrepreneurial studies, local and regional studies, and others.

HIST 593 Approaches to History credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/593/)
Required course for entering history graduate students offering in initial foray into historiography, methods, and conceptual approaches for students in all fields. Provides experience dealing with three challenges that face all practitioners of the discipline: identifying the historical problem to be tackled, deciding what methodologies are best suited to that problem, and locating and then making use of the primary sources necessary for analyzing the subject at hand. Assigned materials, class discussions, and assignments will prepare students for the second semester required research seminar. Restricted to first-year graduate students in history.

HIST 594 Intro Historical Writing credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/594/)
Seminar for first-year graduate students and is the second half of the introductory graduate sequence. Focuses on the process of writing an original piece of historical scholarship. Topics to be discussed include: developing an argument, exploring sources, arriving at a research strategy, planning and structuring an article, presenting complex data, and producing scholarship that is a coherent representation of an author's perspective on the past. Over the course of the semester, each seminar participant will develop and write an original, article length research paper. Students will work with the assistance of the instructors and an advisor from her or his own research field. Prerequisite: HIST 593.

HIST 596 Individual Research Project credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/596/)
Directed research in special fields; may be taken in lieu of seminars in fields in which seminars are seldom offered. Topics will be listed in the department's course guide at http://www.history.illinois.edu. May be repeated to a maximum of 12 hours if topics vary.

HIST 597 Reading Course credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/HIST/597/)
Directed readings in special fields. Primarily, but not exclusively, for students with a master's degree or equivalent, who are preparing for the preliminary examination in history and who need instruction in areas not provided by current course offerings. Approved for letter and S/U grading. May be repeated in the same or subsequent terms as topics vary. Prerequisite: Consent of instructor.

HIST 598 Teaching of College History credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/HIST/598/)
Approved for S/U grading only. May be repeated. Prerequisite: Candidate for Ph.D. degree in history.

HIST 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/HIST/599/)
Individual direction in research and guidance in writing theses for advanced degrees. Approved for S/U grading only. May be repeated.

HORT - HORTICULTURE

HORT Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/HORT/)

Courses

HORT 100 Introduction to Horticulture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HORT/100/)
Basic principles of plant growth and development as they apply to the production, marketing, and utilization of fruits, vegetables, and ornamental plants. Additional fees may apply. See Class Schedule. Credit is not given for both HORT 100 and HORT 106.

HORT 105 Vegetable Gardening credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HORT/105/)
The science and art of growing vegetables and the connection between gardening and food. Topics include nutrient and pest management, history, folklore, growing requirements, and quality characteristics of vegetables. Lecture and laboratory. Additional fees may apply. See Class Schedule.

HORT 106 The Sustainable Home Garden credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HORT/106/)
Create inviting and sustainable indoor and outdoor living spaces with plants, whether your landscape is several acres or a few containers on an urban balcony. This blended-format class meets 1 hour per week for lecture and discussion with additional instruction presented through independent learning activities including virtual field trips, on-line lectures, and instructional videos. Learn the fundamentals of environmentally sound resource use when designing with and maintaining flowering, fruit and vegetable plants, lawns, trees and shrubs around your home. Become a savvy horticultural consumer and develop a healthy lifestyle that supports positive physical and mental well-being by including greenspace activities in your daily life. Additional fees may apply. See Class Schedule. Credit is not given for both HORT 106 and HORT 100.

HORT 199 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/HORT/199/)
Experimental course on a special topic in horticulture. Approved for Letter and S/U grading. May be repeated as topics vary.

HORT 205 Local Food Systems credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HORT/205/)
Prepares students to be leaders and facilitators in local food systems. The focus is on providing the knowledge and skills to initiate and manage community food gardens, school gardens and curricula, institutional buying programs, farmers markets, community supported agriculture, and urban farm networks. Requires participation in on-farm labs at the Sustainable Student Farm, as well as a group food system project and an experience with a local food organization. Prerequisite: An introductory course in HORT or CPSC or consent of instructor.

HORT 223 The Intelligent Behavior of Plants credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HORT/223/)
This course provides students with an introduction into the study of plant behavior, which focuses on how plants interact with and respond to the world around them. Topics include a basic overview of plant anatomy and physiology, a comparative examination of behavioral and communication mechanisms used by plants and animals, and an analysis of the controversial arguments regarding plant intelligence.
This course satisfies the General Education Criteria for:
Advanced Composition
Nat Sci Tech - Life Sciences

HORT 240 Plant Propagation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HORT/240/)
Examines theories and methods employed in propagation of plants, emphasizing anatomical, physiological, and ecological principles involved in sexual propagation (seeds) and asexual propagation (division, cuttings, budding, grafting, tissue culture, etc.) Additional fees may apply. See Class Schedule. Prerequisite: IB 103.

HORT 341 Greenhouse Mgmt and Production credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HORT/341/)
Focuses on how controlled environments can be managed to obtain optimal plant growth. Lectures cover greenhouse operations, management, and production, including: greenhouse design, location, glazing, heating, cooling, environmental control, irrigation systems, light control, root media, fertilization, watering, integrated pest management, and automation. The course also has a large laboratory component, in which students conduct experiments in the greenhouse. A required all-day field trip to nearby greenhouse operations rounds out the course experience. Additional fees may apply. See Class Schedule. Prerequisite: NRES 201 and HORT 100.

HORT 344 Planting for Biodiversity and Aesthetics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HORT/344/)
As the demand for food increases, plants in ornamental landscapes will need to provide not only beauty but also species biodiversity critical for supporting sustainable food production. Course emphasizes species identification (predominantly herbaceous perennials), management, and planting design principles. Designing for multiple contexts, such as residential and community gardens, and large scale production sites, to provide multiple ecosystem services, especially supporting human aesthetic preferences, and habitat for pollinators. Additional fees may apply. See Class Schedule. Prerequisite: IB 103.

HORT 360 Vegetable Crop Production credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HORT/360/)
Instruction on the commercial production of vegetable crops. The first part of the class focuses on broad issues important to all crops including methods of vegetable production, basic soil and nutritional management, irrigation, and weed, insect, and disease management. Both organic and conventional production are discussed with a focus on sustainability. Basic farm and business management topics, including postharvest handling, food safety, crop and farm budgets, business structures, marketing, insurance, and regulations are also discussed. The second part of the class focuses on specific crops, emphasizing their origin, production, growth and development, insects, and diseases as well as harvesting and postharvest handling. Prerequisite: HORT 100 or equivalent.

HORT 361 Small Fruit Production credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/HORT/361/)
Technological application of biological principles to the culture of strawberry, grape, blueberry, raspberry, blackberry, currant, gooseberry, and miscellaneous small fruits. Prerequisite: HORT 100 or IB 103.

HORT 362 Tree Fruit Production credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/HORT/362/)
Examines biological principles and cultural practices involved in the growth and production of apple, pear, peach, cherry, plum, apricot, almond, and miscellaneous citrus and nut crops. Offered every fall semester. Prerequisite: HORT 100 or IB 103.

HORT 363 Postharvest Handling Hort Crop credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/HORT/363/)
Provides theoretical and practical experience in the principles and practices of postharvest handling of cut flowers, ornamentals, fruits, and vegetables, emphasizing factors that impact quality, shelf-life, and safety. Requires two field trips, one to a local produce warehouse and the other to local supermarkets. Offered every fall semester. Prerequisite: HORT 100, CHEM 102, CHEM 103, IB 103.

HORT 393 Horticulture Internship credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/HORT/393/)
Supervised experience in a field directly pertaining to a subject matter in horticulture. Approved for S/U grading only. May be repeated in separate terms. Independent Study courses are limited to 12 hours total applying to a degree in ACES. For registration in this course students should contact the Department Undergraduate Program Coordinator. Prerequisite: Sophomore standing, cumulative GPA of 2.0 or above at the time the internship is arranged, and consent of instructor.

HORT 395 Undergrad Research or Thesis credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/HORT/395/)
Independent research, special problems, thesis, development and/or design work under the supervision of an appropriate member of the faculty. May be repeated. Independent Study courses are limited to 12 hours total applying to a degree in ACES. Prerequisite: Cumulative GPA of 2.5 or above at the time the activity is arranged and consent of instructor.

HORT 396 Ug Honors Research or Thesis credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/HORT/396/)
Individual research, special problems, thesis, development and/or design work under the direction of the Honors advisor. May be repeated. Independent Study courses are limited to 12 hours total applying to a degree in ACES. Prerequisite: Junior standing, admission to the ACES Honors Program, and consent of instructor.

HORT 421 Horticultural Physiology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HORT/421/)
Horticultural crop growth is examined in relation to plant structure, environment, and cultural practices. Emphasizes environmental control of whole plant growth as influenced by the supply of the raw materials required for growth: water, carbon dioxide, radiant energy, including the influence of temperature and photoperiod on plant growth and development. The shoot and root interactions with the environment are characterized relative to cultural practices. 4 undergraduate hours. 4 graduate hours. Prerequisite: HORT 100 or IB 103 and junior standing.

HORT 430 Children and Nature credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/HORT/430/)
Study of research theory and evidence suggesting the importance of children's contact with natural environments including, designed urban greenspaces, managed sustainable landscapes, and wilderness, for healthy child development, ecological literacy, and pro-environmental behavior as adults. Discussion of research implications and applications for redesigning our communities' outdoor spaces, societal values, public policies and education systems to foster children's access to, and bonding with, nature. Same as LA 430. 2 undergraduate hours. 2 graduate hours.

HORT 435 Urban Food Production credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HORT/435/)
Explore opportunities and challenges for maximizing the productivity and sustainability of urban food production systems, considering agricultural, environmental, energy, social, and economic issues. Students will examine the science and practice of urban agriculture through scientific and popular literature, case studies, online discussion, and service-learning opportunities. Production systems covered will include both outdoor (e.g., vacant lot urban farms) and controlled environment (e.g., hydroponics and aquaponics) agriculture. 3 undergraduate hours. 3 graduate hours. Prerequisite: HORT 100 or CPSC 112 or equivalent introductory course in plant science.

HORT 442 Plant Nutrition credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HORT/442/)
Mechanisms and factors affecting the absorption, transport, distribution, and functions of the essential elements required by higher plants. 4 undergraduate hours. 4 graduate hours. Offered in alternate years. Prerequisite: NRES 201 and IB 420.

HORT 447 Horticultural Plant Breeding credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HORT/447/)
Methodology, objectives, and constraints of breeding for improved cultivars of flowers, woody ornamentals, turfgrasses, fruits, and vegetables. Emphasis on breeding objectives unique to horticultural commodities such as color, appearance, flavor, shelf-life, nutritional value, and other characteristics that determine product quality. 3 undergraduate hours. 3 graduate hours. Offered in alternate years. Prerequisite: CPSC 352.

HORT 499 Advanced Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/HORT/499/)
Advanced experimental course on a special topic in horticulture. 1 to 4 undergraduate hours. 1 to 4 graduate hours. Approved for Letter and S/U grading. May be repeated if topics vary.

HDFS - HUMAN DEV AND FAMILY STUDIES

HDFS Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/HDFS/)

Courses

HDFS 101 Opportunities, Careers in HDFS credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/HDFS/101/)
Opportunities and Careers in HDFS explores the opportunities in the department of Human Development and Family Studies. The course also teaches students about careers related to the major.

HDFS 105 Intro to Human Development credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/105/)
Systematic overview of the psychological, biological, familial, and cultural factors related to human growth and development across the life span.
This course satisfies the General Education Criteria for:
Social Beh Sci - Beh Sci

HDFS 108 Grief and Loss Across the Lifespan credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/108/)
Educates students on the impact of grief and loss from the perspective of human development. Begins by exploring different types of grief and loss and the importance of studying this topic, especially for those students seeking professions in healthcare and social service settings. Utilizes developmental theories as we look across the lifespan at how individuals' approach and understand death, the coping strategies utilized to confront grief/loss and ways to support individuals experiencing the plethora of feelings that accompany grief/loss.

HDFS 120 Intro to Family Studies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/120/)
Overview of current concepts, theories, and substantive issues in family studies from an interdisciplinary perspective. Gives attention to variation in family form and function across different social/cultural contexts and how family experience is structured by gender. Examines issues of family development (marriage, parenting, divorce, remarriage, aging family) and explores the links between families and other social institutions.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

HDFS 140 Intro Gender & Women's Studies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/140/)
Same as GWS 100 and SOC 130. See GWS 100.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

HDFS 143 Biology of Human Behavior credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/143/)
Same as ANTH 143. See ANTH 143.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Life Sciences

HDFS 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/199/)
Experimental course on a special topic in human development and family studies. Approved for Letter and S/U grading. May be repeated to a maximum of 12 hours in the same or subsequent terms, if topics vary. Credit is not given for more than a total of 12 hours of Independent Study (IND) courses applying to a degree in ACES.

HDFS 206 Early Childhood Curriculum Dev credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/206/)
Introduces development of curriculum for children from birth to age five; integrates child development theory and principles with programming for young children in preschool and childcare setting. Prerequisite: HDFS 105.

HDFS 208 Child Fam with Special Needs credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/208/)
Multi-disciplinary approach to the study of issues related to exceptional children and their families. Explores social, emotional, and economic aspects of exceptionality for both children and families; examines processes of identification, intervention, and integration of children who deviate significantly from developmental norms. Designed for students studying child development, early childhood education, special education, social work, nursing and other disciplines involved with children who have special needs and their families. Recommended for students preparing for internships and careers as Child Life Specialists. Prerequisite: HDFS 105.

HDFS 220 Families in Global Perspective credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/220/)
Explores economic, political, cultural and social factors affecting families in different countries; examines variations among families in developed and developing nations and their historical, political and cultural contexts. Same as ANTH 210.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West
Social Beh Sci - Soc Sci

HDFS 221 Asian Families in America credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/221/)
Same as AAS 297 and SOCW 297. See SOCW 297.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - US Minority

HDFS 225 Close Relationships credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/225/)
Initiation, development, and dissolution of committed relationships with same- or opposite-sex partners within familial, cultural, and societal contexts. Prerequisite: Sophomore standing.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

HDFS 259 Motor Development and Control credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/259/)
Same as KIN 259. See KIN 259.
This course satisfies the General Education Criteria for:
Social Beh Sci - Beh Sci

HDFS 261 Self-Help Group Dev & Process credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/261/)
Defines nature and use of self-help groups in different contexts. Includes role of professionals in group formation and maintenance and develops group planning and management skills. Includes practice in group formation and visits to working groups in the community.

HDFS 262 Motor Develop, Growth & Form credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/262/)
Same as KIN 262. See KIN 262.
This course satisfies the General Education Criteria for:
Social Beh Sci - Beh Sci

HDFS 263 Diversity in Recreation, Sport, and Tourism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/263/)
Same as KIN 230 and RST 230. See RST 230.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

HDFS 290 Intro to Research Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/290/)
Introduction to quantitative and qualitative research methods used to study human development and families. Provides experience conducting observations and survey interviews, evaluating research results, and writing research reports. Prerequisite: HDFS 105.
This course satisfies the General Education Criteria for:
Advanced Composition

HDFS 291 HDFS Career Planning & Preparation credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/HDFS/291/)
Overview of job opportunities, graduate, and professional school programs that prepare students for careers in health care, counseling, social work, higher education, policymaking and other fields related to Human Development and Family Studies. Examines types of jobs, graduate and professional opportunities and the preparation they require. Students develop personal job, graduate/professional school preparation plans. Approved for S/U grading only.

HDFS 294 Research Internship credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/294/)
Students work one-on-one or in a small group with a faculty member engaged in research. Students must arrange this research experience with a professor prior to registering for the course. A list of possible research projects can be found at: http://hdfs.illinois.edu/undergraduate/research-opportunities. Once you have found a project that interests you, email the professor and ask to participate in his or her research opportunity. Approved for Letter and S/U grading. May be repeated in the same or separate terms to a maximum of 12 hours. Prerequisite: Consent of instructor; not open to students on probation.

HDFS 295 Independent Study or Research credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/295/)
Individual research, special problems, thesis, development and/or design work under the supervision of an appropriate member of the faculty. May be repeated in the same or separate terms to a maximum of 12 hours. Credit is not given for more than a total of 12 hours of Independent Study (IND) courses applying to a degree in ACES.

HDFS 301 Infancy & Early Childhood credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/301/)
Reviews development during the first five years of life, including cognitive, social, and biological aspects of early development; includes first-hand observation of young children to supplement and extend lecture material. Prerequisite: HDFS 105 or PSYC 216.

HDFS 305 Middle Childhood credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/305/)
Systematic overview of the normative changes that occur in the physical, cognitive, social, emotional, and moral domains during the middle childhood period as well as current social issues that confront many of today's children (such as school violence or poverty). Prerequisite: HDFS 105.

HDFS 310 Adult Development credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/310/)
Focuses on adult development as a means for understanding the quality of family relationships and community functioning. Uses current theoretical approaches to understand adult development and evaluate each approach's usefulness for adults in the contexts of family, health, work, leisure and challenges over the life course. Prerequisite: HDFS 105 or equivalent.

HDFS 314 Introduction to Aging credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/314/)
Same as CHLH 314, RST 314, PSYC 314, and REHB 314. See CHLH 314.

HDFS 322 US Latina and Latino Families credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/322/)
Explores a variety of topics and provides a basic overview of issues relevant to the understanding of Latina/Latino families and children in the United States. Examines recent demographic changes in the U.S. population and their implications for the socialization and education of Latina/Latino children and their families. Course content looks at such areas as who are Latina/Latino families; how are those families different from others; what are the similarities and differences within Latinas/Latinos; how does acculturation and language fit into our understanding of these families; and what are the implications for the education success of current and future Latina/Latino children. Same as LLS 322.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

HDFS 324 African Amer Families in Film credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/324/)
Same as AFRO 382. See AFRO 382.

HDFS 340 Gender, Relationshps & Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/340/)
Explores the production of gender through social interaction within families and other specific interpersonal and institutional relationships that change over time. Gender is also linked to race, class, ability, and sexuality. Same as GWS 340 and SOC 322. Prerequisite: HDFS 105 or SOC 100.

HDFS 341 Asian American Youth credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/341/)
Same as AAS 346. See AAS 346.

HDFS 361 Creative Dance for Children credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/361/)
Same as ARTE 350 and DANC 350. See DANC 350.

HDFS 379 HDFS Study Abroad Experience credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/379/)
International experience in areas related to human development and family studies involving foreign travel and study without enrollment in another institution. Experience must be planned and approved in advance via consultation with an HDFS faculty member. May be repeated in separate terms to a maximum of 8 hours if topics vary.

HDFS 396 Honors Research or Thesis credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/396/)
Individual research, special problems, thesis, development and/or design work under the direction of the Honors advisor. May be repeated in separate terms. Independent Study courses are limited to 12 hours total applying to a degree in ACES. Prerequisite: Junior standing, admission to the ACES Honors Program.

HDFS 398 Undergraduate Seminar credit: 1 to 3 Hours. **(**https://courses.illinois.edu/schedule/terms/HDFS/398/**)**
Special topics in a field of study directly pertaining to subject matter in human development and family studies. May be repeated in separate terms to a maximum of 12 hours. Prerequisite: Junior standing.

HDFS 401 Socialization and Development credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/HDFS/401/**)**
Presents and uses theories of socialization to evaluate and analyze current issues and socialization practices; delineates historical and philosophical trends in socialization, and discusses the implications of these trends for generating social policy affecting the developing individual. 4 undergraduate hours. 4 graduate hours. Prerequisite: HDFS 301 and HDFS 290.

HDFS 404 Gerontology credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/HDFS/404/**)**
Same as CHLH 404. See CHLH 404.

HDFS 405 Adolescent Development credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/HDFS/405/**)**
Examines paths of experience and individual development within the family, the peer group, and other domains through this socially-defined stage of life. 3 undergraduate hours. 3 graduate hours. Prerequisite: HDFS 105 or PSYC 100.

HDFS 406 Child Dev Class Supervision credit: 5 Hours. **(**https://courses.illinois.edu/schedule/terms/HDFS/406/**)**
Examines the relationships between child development theories and developmentally appropriate and individualized instruction techniques, discipline and guidance strategies, and the role of the family in child development programs. Emphasizes program supervision. Includes direct experience with children and families in a laboratory setting. 5 undergraduate hours. 5 graduate hours. Prerequisite: HDFS 206, HDFS 220, and junior standing.

HDFS 408 Hospitalized Children credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/HDFS/408/**)**
Examines the developmental needs and stress reactions of children and families in a hospital/medical setting; examines responses of family and staff facing terminal illness and the death of a family member; familiarizes students with general hospital procedures, medical terms, and illnesses; introduces the role of Child Life programs and the Child Life Specialist. 3 undergraduate hours. 4 graduate hours. Prerequisite: HDFS 105 or consent of instructor.

HDFS 420 Inequality, Public Policy, and U.S. Families credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/HDFS/420/**)**
Examines influence of economic, demographic and social changes on families in the U.S. and on the opportunities of individual family members. Explores interactions of social class, poverty, race and gender and their effects on family life and on child and adolescent development. Includes critical analysis of health care, employment, immigration, family leave, welfare and other social policy options that affect family life and well-being. 3 undergraduate hours. 4 graduate hours. Prerequisite: HDFS 120.

HDFS 424 Racial and Ethnic Families credit: 2 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/HDFS/424/**)**
Same as AFRO 421, EPOL 410, and EPS 421. See EPOL 410.

HDFS 425 Family Stress and Change credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/HDFS/425/**)**
Applies family theories (e.g. family systems, family stress, multigenerational developmental perspectives) to understand how families change and adapt to stress across time and diverse contexts. Attention is given to assessing intergenerational family dynamics and working with individuals and families to reduce negative patterns. 4 undergraduate hours. 4 graduate hours. Prerequisite: HDFS 120 and HDFS 290.

HDFS 426 Family Conflict Management credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/HDFS/426/**)**
Examines processes of conflict management in family and community disputes; emphasizes negotiation and mediation as modes of dispute settlement. 3 undergraduate hours. 4 graduate hours. Prerequisite: HDFS 120.

HDFS 444 LGBT Indiv, Fam & Community credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/HDFS/444/**)**
Examines contemporary sexual and gender minority experiences in the context of societal inequality. Of particular interest to students pursuing educational, human service, legal, and/or health profession careers. Same as CHLH 444. 3 undergraduate hours. 4 graduate hours. Prerequisite: SOC 100 or an introductory course on gender issues.

HDFS 450 Practicum in HDFS credit: 1 to 12 Hours. **(**https://courses.illinois.edu/schedule/terms/HDFS/450/**)**
Supervised on- or off-campus learning experience related to human development or family studies, supervised in cooperation with an appropriate agency or institution. Not available to students on probation. 1 to 12 undergraduate hours. 1 to 12 graduate hours. May be repeated for up to 12 hours in separate semesters. Only 6 hours of the course may be applied to the total required for a graduate or undergraduate degree in Human Development and Family Studies. Prerequisite: Human Development and Family Studies major; junior standing.

HDFS 459 Physical Activity & Aging credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/HDFS/459/**)**
Same as KIN 459. See KIN 459.

HDFS 461 Family Life Education credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/HDFS/461/**)**
Examines the theory and practice of designing family life education programs for children, youth, and/or families. Introduces strategies for translating science-based information into learning experiences. Family life education topics such as parenting (including managing difficult children and children with special needs), relationships (dating, marriage), family transitions (becoming new parents, divorce, & stepfamilies), and health and well-being (obesity, stress) will be reviewed. Principles of effective program design will be explored along with online program delivery skills. 3 undergraduate hours. No graduate credit. Credit is not given for both HDFS 461 and HDFS 561. Prerequisite: HDFS 120 or consent of instructor.

HDFS 494 Applied Research Methods credit: 1 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/HDFS/494/**)**
Participation in faculty-supervised research as a member of a transdisiplinary team investigating questions related to the health and well-being of children and families. Students propose their own research questions and present findings developed from data gathered by the team. 1 to 4 undergraduate hours. No graduate credit. May be repeated to a maximum of 6 hours in the same term or to a maximum of 12 hours in separate terms. Prerequisite: Consent of instructor.

HDFS 499 Seminar credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/499/)
Special topics in human development, family studies, or community development. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated in separate terms to a maximum of 12 hours.

HDFS 500 Professional Development credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/HDFS/500/)
Overview of issues in professional development in the field of human development and family studies; focuses on both academic and applied career paths. Approved for S/U grading only. May be repeated to a maximum of 4 hours.

HDFS 501 Human Development Theories credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/501/)
Overview of basic theories and theoretical perspectives on human development; focuses on major concepts, issues, and questions in the field.

HDFS 503 Social-Emotional Development credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/503/)
Theory and research related to social and emotional development from infancy through middle childhood. Key topics include emotional regulation and social-emotional understanding, with special attention to the interpersonal contexts of social-emotional development, including parent-child, sibling and peer relationships. Prerequisite: HDFS 501.

HDFS 505 Advanced Adolescence credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/505/)
Advanced interdisciplinary examination of current research on adolescence as a life course stage and developmental period; focuses on principal contexts of adolescents¿ lives, such as family, peers and school, and examines how experience in these contexts relates to preparation for adulthood. Designed for students with prior course work on adolescence or related topics who plan to do research, teaching, or policy work pertinent to this age period. Prerequisite: Prior course work in human development, developmental psychology or life course sociology.

HDFS 521 Family Theories credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/521/)
Contemporary family theories and their application in family research.

HDFS 523 Ethnic Families credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/523/)
Historical, social, economic, contextual (neighborhood), and subcultural factors that influence the organization and dynamics of ethnic-racial family life in the United States: family and group immigration and migration histories, acculturation, identity development, family organization, gender roles, parent-child relations, family rituals, neighborhood influences on family life and child-adolescent development, and the relationship between social class and ethnicity-race. Particular emphasis is given to qualitative studies that detail the first-hand experiences of families.

HDFS 525 Family Interaction credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/525/)
Observation and qualitative analysis of the family as a system; how family organization emerges, is maintained, and changes through social interaction.

HDFS 526 Intimate Partner Violence credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/526/)
Extent, nature, causes, and consequences of intimate partner violence in the United States. Examines the complexities of intimate partner violence, including individual, societal, and historical factors that contribute to violence, the implications of making distinctions in types of violence and perpetrators, and the relationship between institutional responses and individual decision-making. Also examines theoretical methodological and ethical issues related to violence research.

HDFS 527 Family Resiliency credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/527/)
Examines complex factors, including culture, economy, and values conflicts, that challenge families and the range of adaptive strategies that families deploy amid various challenges and stressors. Activities include developing a research or action proposal related to developing family resiliency. Credit is not given for both HDFS 527 and HDFS 427. Prerequisite: HDFS 521 or HDFS 525 or equivalent.

HDFS 528 Parenting credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/528/)
Explores how parenthood has been conceptualized and investigated in human development, family studies, and related disciplines. Major theoretical perspectives and emerging line of research will be reviewed including parental style, beliefs and cognition, identity, fathering and diverse parenting contexts. Prerequisite: HDFS 501 or HDFS 521.

HDFS 529 Youth and Family Acculturation credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/529/)
Examines acculturation in youth and families related to immigration and globalization (e.g., via media, trade). Covers theory regarding individual acculturation styles such as assimilation or integration/biculturalism, and explores societal influences. Also examines how youth and families adapt, including psychological and social adjustment, parent-child acculturation gaps, and risk/protective factors for family resilience. Films and discussions cover different types of acculturating individuals (e.g., immigrants, refugees, non-migrants) and span several world regions. Prerequisite: Prior coursework in family studies, child/adolescent development or related topics, or consent of instructor.

HDFS 533 Community In American Society credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/533/)
Classic U. S. community studies are paired with current journal articles to examine how people in rural, suburban, and urban places go about making, maintaining or losing "community" in the context of societal change. The community studies provide a window on change at the local level including: urbanization, suburbanization, ethnic group interactions, inner-city poverty concentration, household structure variation, economic restructuring, and environmental impacts. Community studies are also critically evaluated both theoretically and as a research strategy. Same as SOC 572 and UP 533. 4 graduate hours. No professional credit.

HDFS 534 Neighborhoods and Human Dev credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/534/)
Theories, methodological issues, and current empirical research on the impact of neighborhoods on human development and family welfare across the life course including how neighborhoods characteristics, e.g., poverty, racial and ethnic composition, and geographic space, influence child and adolescent development, health, and employment opportunities and success in adulthood. Key mechanisms include: family conditions, local environment, social networks, and spatial mismatch. 4 graduate hours. No professional credit.

HDFS 539 Youth, Culture and Society credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/539/)
Examines youth as a historically and culturally specific social formation; examines discursive and material positioning of youth within broader intersecting racial, cultural, socio-economic, gender and political contexts to situate youth and youth cultural practices within global and local processes. Specific topics include youth cultures, juvenile justice, education, labor, consumerism, politics, sexuality and activism, as well as methodological considerations of conducting research on youth. Same as AAS 539, EPOL 518, and EPS 539. 4 graduate hours. No professional credit.

HDFS 540 Gender & Sexuality credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/540/)
Highlights key approaches to gender and sexuality within the multidisciplinary field of family studies; examines how gender and sexuality organize the accomplishment of family life through both social structure and social performance, and their attendant historical, economic and political contexts.

HDFS 541 Inequalities In A Diverse Society credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/541/)
Same as LLS 554 and SOCW 554. See SOCW 554.

HDFS 543 Ethnography Urban Communities credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/543/)
Same as AFRO 552, SOC 578, and UP 578. See AFRO 552.

HDFS 550 Advanced Practicum in HDFS credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/550/)
Practicum providing graduate students with supervised experience in the design, implementation, and/or evaluation of outreach programs, policy development, or consultation models designed to meet the needs of children, families and/or communities. Prerequisite: HDFS 450.

HDFS 551 Childhood Obesity I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/551/)
Same as CHLH 530, FSHN 530, KIN 530, NUTR 530, SOCW 570. See NUTR 530.

HDFS 552 Childhood Obesity II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/552/)
Same as CHLH 531, FSHN 531, KIN 531, NUTR 531, SOCW 571. See NUTR 531.

HDFS 561 Child and Family Program Dev credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/561/)
Theoretical and practical aspects of planned efforts to influence the development of children, youth, and families in the context of communities, particularly efforts to promote competence and well-being of children and youth, positive parenting, and well-being and adjustment of adults. Examines literature from four approaches: family life education, youth development, prevention/applied developmental science, as well as health promotion and community health.

HDFS 562 Child & Family Program Eval credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/562/)
Introduces practical skills for evaluating service, intervention, and educational programs, including needs assessment, program monitoring and impact assessment, with emphasis on outcome measure selection, randomized and quasi-experimental designs, statistical power analysis, and ethical issues.

HDFS 586 Health and Leisure in Recreation, Sport and Tourism credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/586/)
Same as RST 586. See RST 586.

HDFS 590 Advanced Research Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/590/)
Overview of positivist, interpretive, and critical research paradigms and their quantitative and qualitative methodologies; critical evaluation of current social science literature; students develop their own research proposals. 4 graduate hours. No professional credit.

HDFS 591 Qualitative Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/591/)
Qualitative methods in the social sciences: epistemological context; data collection and relationships with participants; data management, analysis and evaluation; writing strategies. Specific content emphasis alternates annually between field research and grounded theory. 4 graduate hours. No professional credit. May be repeated to a maximum of 8 hours.

HDFS 594 Intermed Statistical Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/594/)
Overview of common quantitative research methods and statistical analyses used in human development, family, and community research; covers sampling, data management, bivariate analyses, multivariate regression. Students frame a research question and use a common data set and statistical analysis software to prepare methods and results sections of a manuscript suitable for publication. 4 graduate hours. No professional credit. Prerequisite: HDFS 590 or equivalent.

HDFS 595 Seminar credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/595/)
Discussion and evaluation of current literature on selected topics in human and community development. 1 to 4 graduate hours. No professional credit. May be repeated in the same or subsequent terms.

HDFS 596 Advanced Studies in HDFS credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/596/)
Library or experimental research on specific problems of limited scope. May be taken in addition to 32 hours required for a master's degree by students who do not write a thesis. For non-thesis students only. May be repeated to a maximum of 4 hours.

HDFS 597 Advanced Statistical Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/597/)
Introduction to the conceptual bases and uses of advanced statistical techniques in human development and family research, including factor analysis, cluster analysis, multilevel modeling, and logistic regression. Special attention given to the longitudinal and dyadic analyses and to techniques for handling missing data. Students use common statistical packages and their own data set to produce a journal-style manuscript. 4 graduate hours. No professional credit. Credit is not given for both HDFS 592 and HDFS 597. Prerequisite: HDFS 594 or a graduate-level course in multivariate statistical analysis.

HDFS 598 Special Problems in HDFS credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/598/)
Research or independent study on a special problem that is not part of thesis work. 1 to 4 graduate hours. No professional credit. May be repeated in the same or separate terms to a maximum of 8 hours.

HDFS 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/HDFS/599/)
Individual thesis research under supervision of faculty in specialized fields of human and community development. 0 to 16 graduate hours. No professional credit. Approved for S/U grading only. May be repeated.

HDES - HUMAN DIMENSIONS OF ENV SYS

HDES Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/HDES/)

Courses

HDES 595 Res Sem Human Enviro credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/HDES/595/**)**
Trains students to propose, conduct, communicate, and evaluate research in the human dimensions of environmental systems. Participants present and receive feedback on work in progress in formal seminars and in small multidisciplinary groups. May be repeated to a maximum of 20 hours. Prerequisite: HDES Scholar status or consent of instructor.

HDES 598 Special Topics in HDES credit: 1 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/HDES/598/**)**
Special topics in the human dimensions of environmental systems (HDES), with a focus on contemporary environmental and sustainability issues. An introduction course for graduate students who wish to explore the interdisciplinary studies offered through the Program in HDES. Approved for both letter and S/U grading. May be repeated in the same term to a maximum of 8 hours as topics vary. May be repeated in separate terms to a maximum of 12 hours as topics vary.

HRD - HUMAN RESOURCE DEVELOPMENT

HRD Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/HRD/)

Courses

HRD 400 Principles of Human Resource Education credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HRD/400/)
Same as EPOL 470. See EPOL 470.

HRD 402 Business Principles for Human Resource Development credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HRD/402/)
Same as EPOL 471. See EPOL 471.

HRD 411 Instructional and Training System Design credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HRD/411/)
Same as EPOL 472. See EPOL 472.

HRD 414 Facilitation Skills credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HRD/414/)
Same as EPOL 473. See EPOL 473.

HRD 415 Diversity in the Workplace credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HRD/415/)
Same as EPOL 474. See EPOL 474.

HRD 440 Work Analysis credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HRD/440/)
Same as EPOL 475. See EPOL 475.

HRD 470 Designing and Evaluating eLearning Systems credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HRD/470/)
Same as EPOL 482. See EPOL 482.

HRD 472 Learning Technologies credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HRD/472/)
Same as CI 484 and EPOL 483. See EPOL 483.

HRD 474 Evaluating Learning Technology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HRD/474/)
Same as EPOL 484 and EPSY 474. See EPSY 474.

HRD 475 Project Management Principles and Applications credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HRD/475/)
Same as EPOL 476. See EPOL 476.

HRD 480 Introduction to eLearning credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HRD/480/)
Same as EPOL 485. EPOL 485.

HRD 490 Issues and Developments in Human Resource Development credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HRD/490/)
Same as EPOL 477. See EPOL 477.

HRD 492 Supervised Internship credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HRD/492/)
Same as EPOL 491. See EPOL 491.

HRD 495 Special Study and Investigation credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HRD/495/)
Same as EPOL 490. See EPOL 490.

HRD 501 The Community College credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HRD/501/)
Same as EOL 573 and EPOL 558. See EPOL 558.

HRD 509 Advanced Theories in Human Resource Development credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HRD/509/)
Same as EPOL 571. See EPOL 571.

HRD 530 Organization Development credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HRD/530/)
Same as EPOL 570. See EPOL 570.

HRD 531 Quality Process Improvement credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HRD/531/)
Same as EOL 587 and EPOL 572. See EPOL 572.

HRD 532 Strategic Human Resource Development credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HRD/532/)
Same as EPOL 573. See EPOL 573.

HRD 533 Management of Human Resource Development credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HRD/533/)
Same as EPOL 574. See EPOL 574.

HRD 534 Economics of Human Resources credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HRD/534/)
Same as EPOL 575 and LER 545. See LER 545.

HRD 535 Consulting in Human Resource Development credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HRD/535/)
Same as EPOL 576. See EPOL 576.

HRD 536 International Human Resource Development credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HRD/536/)
Same as EPOL 577. See EPOL 577.

HRD 540 Learning on the Job credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HRD/540/)
Same as EPOL 578. See EPOL 578.

HRD 550 Adult and Professional Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HRD/550/)
This course takes a broad look at the philosophy, theory, research, and practice of adult education, along with additional considerations for the development of professionals. The broad perspective includes the social, cultural, and political factors that affect the research, planning, development, and implementation of adult education. You may explore the major adult learning theories, the practice of adult education, and the aims and challenges of professional education that match you scholarly and practical interests. Same as EPOL 579. 4 graduate hours. No professional credit.

HRD 572 eLearning Ecologies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HRD/572/)
Same as EPOL 583. EPOL 583.

HRD 575 Innovation in eLearning credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HRD/575/)
Same as EPOL 584. See EPOL 584.

HRD 585 Program Evaluation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HRD/585/)
Same as ERAM 556. See ERAM 556.

HRD 592 Special Topics in EPOL credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HRD/592/)
Same as EPOL 592. See EPOL 592.

HUM - HUMANITIES COURSES

HUM Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/HUM/)

Courses

HUM 110 Introduction to the Humanities I: Philosophy & Art History credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HUM/110/)
A foundation course in the humanities for adult learners in the Odyssey program. Team-taught by faculty in Philosophy and Art History, it focuses on close, attentive, and critical readings of key texts and images drawn from the history of the Western tradition, presented in chronological order. The course engages beginning students in the distinctive disciplinary forms of philosophical and art historical inquiry, and provides academic skill building, critical thinking, and writing. Approved for Letter and S/U grading. Prerequisite: Restricted to adult students in the Odyssey program.

HUM 111 Introduction to the Humanities II: Literature & US History credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/HUM/111/)
A foundation course in the humanities for adult learners in the Odyssey program. Team-taught by faculty in Literature and History, the course focuses on fiction, poetry, drama, and autobiography, as well as primary sources that make up the building blocks of historical interpretation. The course engages beginning students in the distinctive disciplinary forms of literary and historical inquiry, and provides academic skill building, critical thinking, and writing. Approved for Letter and S/U grading. Prerequisite: Restricted to adult students in the Odyssey program.

HUM 191 Freshman Honors Tutorial credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/HUM/191/)
Study of selected topics on an individually arranged basis. Open only to honors majors or to Cohn Scholars. May be repeated one time. Prerequisite: Consent of departmental honors adviser.

HUM 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/HUM/199/)
May be repeated.

HUM 275 Careers for Humanities Majors credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/HUM/275/)
Humanities majors will prepare for their professional lives while they explore the many forms those might take. Field trips to local organizations and businesses, networking opportunities, and invited speakers will expose students to the pathways between humanities fields and the postgraduate world. This course will prepare students to translate the skills they gain in their major to a wide range of careers. Students may not receive credit for both SLAV 300 and HUM 275. Prerequisite: Restricted to students with junior or senior standing in the following majors: African-American Studies, Art History, Asian American Studies, Classics, Comparative and World Lit, Creative Writing, East Asian Languages and Cultures, English, Gender and Women's Studies, German, History, French, Italian, Jewish Studies, Latino/Latina Studies, Linguistics, Philosophy, Portuguese, Religion, Russian Language and Literature, Slavic Studies, Spanish.

HUM 390 Individual Study credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/HUM/390/)
Supervised reading and research on interdisciplinary humanities topics chosen by the student in consultation with a faculty member. May be repeated to a maximum of 8 hours. Prerequisite: Consent of humanities adviser (An approved Learning Agreement must be submitted to 2002 Lincoln Hall, 702 S. Wright Street, Urbana, not later than the second week of the semester or the first week of the summer session).

HUM 395 Special Topics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HUM/395/)
Interdisciplinary topics in the humanities; topics vary, but are normally related to one of the options in the humanities major. May be repeated if topics vary. Students may register in more than one section per term.

HUM 397 Special Topics Junior credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HUM/397/)
Interdisciplinary seminar and tutorial in selected topics related to one of the options in the humanities major. May be repeated to a maximum of 6 hours. Prerequisite: Junior standing and consent of humanities adviser (Tutorial students must submit an Approved Learning Agreement to 2002 Lincoln Hall, 702 S. Wright Street, Urbana, not later than the second week of the semester or the first week of the summer session).

HUM 492 Senior Thesis credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/HUM/492/)
Individual research for majors in humanities leading to the completion of a thesis. 0 to 4 undergraduate hours. No graduate credit. May be repeated to a maximum of 8 hours. Prerequisite: Senior standing, a declared option in humanities major, and consent of advisor.

HUM 495 Special Advanced Topics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/HUM/495/)
Offers interdisciplinary topics in the humanities; topics vary, but normally relate to the interdisciplinary areas of study within the humanities major or to the special humanities facilities (e.g., the Language Learning Laboratory). 3 undergraduate hours. 4 graduate hours. May be repeated as topics vary to a maximum of 6 undergraduate hours or 8 graduate hours. Prerequisite: Will vary according to topic. See Class Schedule.

HUM 498 Special Topics Senior credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/HUM/498/)
Interdisciplinary seminar and tutorial in selected topics related to one of the options in the humanities major. 3 undergraduate hours. No graduate credit. May be repeated to a maximum of 6 hours. Prerequisite: Senior standing and consent of humanities adviser (Tutorial students must submit an approved Learning Agreement to 2002 Lincoln Hall, 702 S. Wright Street, Urbana, not later than the second week of the semester or the first week of the summer session).

IHLT - I-HEALTH

IHLT Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/IHLT/)

Courses

IHLT 101 Introduction to i-Health credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/IHLT/101/**)**
Introduction to the interdisciplinary major in Health. The course is designed to familiarize students with the concepts of interdisciplinary health, campus resources, academic policies, and program requirements.

IHLT 102 Survey of Interdisc Health credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/IHLT/102/**)**
Introduction to topics in interdisciplinary health with particular emphasis on the five dimensions of health: physical, emotional, social, intellectual and spiritual. Students will explore their personal health beliefs and patterns and discuss the benefits of studying health within an interdisciplinary curriculum.

IHLT 230 Leadership in Health credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/IHLT/230/**)**
Develops a framework to understand practices of exemplary leadership. Topics include: 1) Modeling behavior, 2) Inspiring a shared vision, 3) Challenging processes, 4) Enabling others to act, and 5) Encouraging passionate leadership. Case studies of individuals who are recognized leaders in health and well —being at local, regional, national and global levels will be explored. Through various assignments, students identify their own leadership style and understand the important role they can play as leaders to address local and global health challenges.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

IHLT 232 Health Disparities in the U.S. credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/IHLT/232/**)**
Provides an overview of health disparities in the United States, including existence and magnitude of health disparities, theories that explain health disparities, strategies to address their complexity, and solution required to eliminate them. Disparities are examined related to groups of diverse racial/ethnic backgrounds, socio-economic status, gender, age, and ability level.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

IHLT 240 Aging and Health Policy credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/IHLT/240/**)**
Provides an understanding of the policies that affect service delivery to older adults including key historical and current policies such as the Older Americans Act, Medicare, Medicaid, and Social Security. Theories of public policy and involvement of older adults in the political process will be introduced. Challenges of issues such as chronic disease prevention, housing, transportation, nutrition, and elder abuse will also be explored.
This course satisfies the General Education Criteria for:
Social Beh Sci - Beh Sci

IHLT 375 Interdis Collab in Health Serv credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IHLT/375/**)**
Provides scholarly knowledge and field experiences for interdisciplinary collaboration in the health services. Topic include health service delivery systems, vulnerable populations, models of health and health promotion, communication, policy and ethics in health care. Emphasis on introducing students to the importance of working with individuals from a variety of health disciplines to best address issues of health in society.

IHLT 385 Experience in Interdisciplinary Health Research credit: 1 to 3 Hours. **(**https://courses.illinois.edu/schedule/terms/IHLT/385/**)**
Supervised laboratory experiences in health research; individual work under the supervision of members of the faculty in their respective fields. The student assists with data collection, processing, and analysis for research in progress. Approved for Letter and S/U grading. May be repeated up to a maximum of 12 hours in separate semesters. Prerequisite: Consent of the instructor.

IHLT 391 Special Project-Problems credit: 1 to 3 Hours. **(**https://courses.illinois.edu/schedule/terms/IHLT/391/**)**
Special projects in research and independent investigation in any phase of health, kinesiology, physical education, and related areas selected by the students. Approved for Letter and S/U grading. May be repeated to a maximum of 6 hours in separate semesters. Prerequisite: Grade-point average of 2.5; consent of instructor.

IHLT 474 Pre-Field Experience in Health credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/IHLT/474/**)**
This is an independent study course that expands student's knowledge of health professions and prepares them for field work in an applied setting with a variety of health professionals. 1 undergraduate hour. 1 graduate hour.

IHLT 475 Field Experience in i-Health credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IHLT/475/**)**
Designed to emphasize field/research experiences that facilitate working with individuals from a variety of health disciplines. Field experience/research placements will be selected to best prepare students address issues of health within their concentrations areas. In class sessions will focus on interdisciplinary collaboration, professionalism and important global health issues. Serves as the capstone course for i-Health majors. 4 undergraduate hours. 4 graduate hours. Prerequisite: Restricted to senior i-Health majors.

IHLT 498 Interdisciplinary Health Study Abroad credit: 1 to 6 Hours. **(**https://courses.illinois.edu/schedule/terms/IHLT/498/**)**
An advanced-level study abroad experience where students complete assigned scholarly readings; participate in facilitated discussions prior to, during, and/or after the trip; and write a final paper. The on-campus and abroad activities are supervised and facilitated by campus faculty. 1 to 6 undergraduate hours. No graduate credit. May be repeated in separate terms for a total of 12 undergraduate hours, if the countries differ between terms. Prerequisite: Social & Behavioral Sciences General Education requirement fulfilled, and sophomore or higher standing.

IE - INDUSTRIAL ENGINEERING

IE Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/IE/)

Courses

IE 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/IE/199/)
May be repeated.

IE 297 Independent Study credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IE/297/)
Individual investigations of any phase of Industrial Engineering. May be repeated in separate terms. Prerequisite: Consent of instructor.

IE 300 Analysis of Data credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IE/300/)
Nature of probabilistic models for observed data; discrete and continuous distribution function models; inferences on universe parameters based on sample values; control charts, acceptance sampling, and measurement theory. Credit is not given for both IE 300 and CEE 202. Prerequisite: MATH 241.

IE 310 Deterministic Models in Optimization credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IE/310/)
Linear Optimization - Simplex method, duality, and sensitivity analysis, Transportation and Assignment Problems, Network Optimization Models, Dynamic Programming, Nonlinear optimization, and Discrete optimization. Credit is not given for both IE 310 and CEE 201. Prerequisite: Credit or concurrent registration in MATH 415.

IE 311 Operations Research Lab credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/IE/311/)
Applications of OR models with the use of software tools. Prerequisite: Concurrent registration in IE 310.

IE 330 Industrial Quality Control credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IE/330/)
Contemporary concepts and methods for quality and productivity design and improvement; philosophies of Deming, Taguchi, and others leading the quality management and engineering movement; Shewhart's methods for statistical process control; process capability analysis; statistical methods for tolerance assessment; process control methods employing attribute data; design of experiments, concepts, and methods. Prerequisite: IE 300.

IE 340 Human Factors credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IE/340/)
Introduction to human factors, ergonomics, engineering psychology, history of ergonomics, human-machine relations, displays and controls, human-computer interaction, industrial and aviation systems, physiology of work and anthropometrics, cognitive ergonomics, human reliability, human as manual controller, human-machine systems design, prototyping, professional practice and ethics, laboratory exercises. Same as PSYC 358. Prerequisite: PSYC 100, PSYC 103, or consent of instructor.

IE 360 Facilities Planning and Design credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IE/360/)
Facility planning, plant layout design, and materials handling analysis; determination of facilities requirements, site selection, materials flow, use of analytical and computerized techniques including simulation, and applications to areas such as manufacturing, warehousing, and office planning. Prerequisite: Credit or concurrent enrollment in IE 310.

IE 361 Production Planning & Control credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IE/361/)
Scope of production systems and activities involved in their design, establishment, management, operation, and maintenance; mathematical and computer models for planning and control of facilities, human resources, projects, products, material, and information in production systems. Prerequisite: IE 310.

IE 370 Stochastic Processes and Applications credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IE/370/)
Introduction to stochastic processes with applications in decision-making under uncertainty. Topics include newsvendor problem, discrete-time Markov chain (including classification of states, stationary distribution, absorbing states), Poisson processes (including time-homogenous, time-nonhomogeneous, thinning Poisson), continuous-time Markov chain (including Markov property, generator matrix, stationary distribution), queuing theory (including M/M/k queue, open Jackson network), and Markov decision processes (including finite-horizon models, infinite-horizon models). Prerequisite: IE 300 and IE 310.

IE 397 Independent Study credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IE/397/)
Individual investigations or studies of any phase of Industrial Engineering. May be repeated in separate terms. Prerequisite: Consent of instructor.

IE 398 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IE/398/)
Subject offerings of new and developing areas of knowledge in industrial engineering intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. May be repeated in the same or separate terms if topics vary.

IE 400 Design & Anlys of Experiments credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IE/400/)
Concepts and methods of design of experiments for quality design, improvement and control. Simple comparative experiments, including concepts of randomization and blocking, and analysis of variance techniques; factorial and fractional factorial designs; Taguchi's concepts and methods; second-order designs; response surface methodology. Engineering applications and case studies. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: IE 300.

IE 405 Computing for ISE credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IE/405/)
This course will introduce students to algorithm design, computer programming in C++, and database SQL queries. It will provide the fundamental methods, concepts and principles of these topics to give students enough breadth to use these techniques in their jobs and to prepare them to pursue advanced topics in these areas. There will be weekly programming assignments to implement algorithms and SQL covered in the class. 3 undergraduate hours. 4 graduate hours. Prerequisite: CS 101 or equivalent.

IE 410 Advanced Topics in Stochastic Processes & Applications credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IE/410/)
Modeling and analysis of stochastic processes. Transient and steady-state behavior of continuous-time Markov chains; renewal processes; models of queuing systems (birth-and-death models, embedded-Markov-chain models, queuing networks); reliability models; inventory models. Familiarity with discrete-time Markov chains, Poisson processes, and birth-and-death processes is assumed. Same as CS 481. 3 undergraduate hours. 4 graduate hours. Prerequisite: IE 310.

IE 411 Optimization of Large Systems credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IE/411/)
Practical methods of optimization of large-scale linear systems including extreme point algorithms, duality theory, parametric linear programming, generalized upper bounding technique, price-directive and resource-directive decomposition techniques, Lagrangian duality, Karmarkar's algorithm, applications in engineering systems, and use of state-of-the-art computer codes. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: IE 310 and MATH 415.

IE 412 OR Models for Mfg Systems credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IE/412/)
Operations research techniques applied to problems in manufacturing and distribution. Single and multi-stage lot sizing problems, scheduling and sequencing problems, and performance evaluation of manufacturing systems. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: IE 310.

IE 413 Simulation credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IE/413/)
Use of discrete-event simulation in modeling and analysis of complex systems. Data structures and event-list management; verification and validation of simulation models; input modeling, including selection of probability distributions and random variate generation; statistical analysis of output data. Same as CS 482. 3 undergraduate hours. 4 graduate hours. Prerequisite: CS 101 and IE 310.

IE 420 Financial Engineering credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IE/420/)
Introduction to the theory and practice of financial engineering: basics of derivative securities and risk management; Markowitz portfolio theory and capital asset pricing model; interest rate and bonds; forward and futures contracts, hedging using futures contracts; option contracts and arbitrage relationship; binomial model, no-arbitrage pricing, risk-neutral pricing, and American options pricing; Brownian motion, Black-Scholes-Merton model, delta hedging, Greek letters, implied volatility, and volatility smile. 3 undergraduate hours. 4 graduate hours. Prerequisite: IE 300.

IE 430 Economic Found of Quality Syst credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IE/430/)
Total quality systems for planning, developing, and manufacturing world-class products. Economic foundations of total quality. Product value, cost, pricing, environmental quality, activity-based costing, design for assembly, organization structure, lead time, innovation, Taguchi methods, simulation-based significance testing, Strategic Quality Deployment, statistical process control, and conjoint analysis. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: IE 300.

IE 431 Design for Six Sigma credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IE/431/)
Quality Engineering principles and the Six Sigma Define-Measure-Analyze-Improve-Control (DMAIC) process. Application of concepts and methods of statistical process control, designed experiments, and measurement systems analysis to cases of quality and productivity improvement; application of the fundamentals of quality engineering and the Six Sigma to areas of produce development, service enterprise, and manufacturing processes. 3 undergraduate hours. 3 graduate hours. Prerequisite: IE 300.

IE 445 Human Performance and Cognition in Context credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IE/445/)
Same as EPSY 456 and PSYC 456. See EPSY 456.

IE 497 Independent Study credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IE/497/)
Independent study of advanced problems related to industrial engineering. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated. Prerequisite: Consent of instructor.

IE 498 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IE/498/)
Subject offerings of new and developing areas of knowledge in industrial engineering intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated in the same or separate terms if topics vary to a maximum of 9 hours.

IE 510 Applied Nonlinear Programming credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IE/510/)
Optimization of nonlinear systems; survey of classical methods and concepts such as the Lagrangian method, the Jacobian method, and Kuhn-Tucker conditions; modern algorithms; numerical methods for digital computers; applications in engineering design; use of state-of-the-art computer codes. Prerequisite: IE 310.

IE 511 Integer Programming credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IE/511/)
Optimization of linear systems over discrete decision domains. Topics to be covered include Modeling, Polyhedral theory, Integral Polyhedra, Totally Unimodular Matrices, Total Dual Integrality, Computational Complexity, Cutting plane method, Branch and Bound method, and Lagrangian Dual. Structured integer programs involving Matchings, Knapsack, Cuts and Matroids will be studied as applications. 4 graduate hours. No professional credit. Prerequisite: IE 411 or MATH 482.

IE 512 Network Analysis of Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IE/512/)
Basic concepts, theories, and techniques of systems analysis, including modeling of large scale systems, forecasting, planning, control, and information handling; modeling of systems with network techniques, including distance, flow, and project networks; advanced network topics such as out-of-kilter algorithm and project resource analysis. Prerequisite: IE 361 or CEE 201.

IE 513 Optimal System Design credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IE/513/)
This course is designed to address the fundamental mathematical theories for complex engineering system (product) design optimization in multidisciplinary environment. The course starts with the basics of nonlinear programming (continuous optimization), then expands to the area of multidisciplinary design optimization (MDO) in depth. Analytical Target Cascading (ATC) - a well-established hierarchical optimization method - is covered in-depth with assignments in written and programming forms. After a successful completion of the course, the students will be able to model and solve basic MDO problems and apply MDO in a research-based semester project. Prior experience in coding (in Matlab or similar) will be helpful but not required. 4 graduate hours. No professional credit. Prerequisite: IE 310.

IE 514 Optimization Methods for Large-Scale, Network-Based Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IE/514/)
The course will cover topics related to optimization over large-scale networks. We will look at data-driven methodologies by which very large-scale optimization problems, primarily integer programs, can be solved. We will consider motivations from application areas such as airline scheduling, vehicle routing, and communications. Topics covered include shortest paths; multi-commodity flows; decomposition techniques; Lagrangean relaxation; set-covering and set-partitioning problems (with special characteristics); column generation and branch-and-price and cut; composite variables; large-scale neighborhood search techniques; modeling robustness and uncertainty; stochastic modeling in large-scale integer programs; data-driven optimization. The course will include real-world modeling examples from applications including vehicle routing, freight logistics, and airline schedule planning. 4 graduate hours. No professional credit. Prerequisite: IE 411 or the equivalent.

IE 515 Stochastic Simulation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IE/515/)
Random variable generation; sample path generation; variance reduction; simulation optimization; introduction to Sequential Monte Carlo and MCMC; applications in finance. Prerequisite: IE 410 and STAT 410.

IE 516 Pricing and Revenue Management credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IE/516/)
Focuses on the theory and practice of pricing optimization and revenue management. Topics that will be covered include: Quantity-based revenue management; Demand estimation, forecasting, and learning; Dynamic pricing; Assortment optimization. 4 graduate hours. No professional credit. Prerequisite: IE 410, IE 411.

IE 517 Machine Learning in Finance Lab credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/IE/517/)
Machine Learning includes the design and the study of algorithms that can learn from experience, improve their performance and make predictions. This course is designed specifically and exclusively for MSFE first semester students. It features rigorous coding exercises in Python and acts as preparation for later courses. Students will learn the concepts behind different supervised machine learning algorithms and implement them in Python using advanced packages; pandas, NumPy, and scikit-learn. All the data for this course features unique real-world financial datasets. 2 graduate hours. No professional credit. Prerequisite: Credit or concurrent enrollment in IE 523. Restricted to MS: Financial Engineering.

IE 518 Queueing Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IE/518/)
An introduction to queueing systems and their applications in engineering. Topics include both classical single-stage models and queueing networks. Students will learn how to apply key ideas and methods of queueing theory, such as: Markov processes, embedded Markov chains, PASTA property, reversibility, productform stationary distributions, stochastic stability, asymptotic analysis. 4 graduate hours. No professional credit. Prerequisite: IE 410 or an equivalent graduate stochastic processes course.

IE 519 Combinatorial Optimization credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IE/519/)
The course will cover a series of topics in combinatorial optimization. The emphasis will be on polyhedral theory, structural results and their applications to designing algorithms. Specific topics to be covered include: Matchings, b-matchings, T-joins, T-cuts, Arborescences, Branchings, Matroids, Matroid Intersection, Polymatroids, Submodular Functions, Directed Cuts, Multi-flows. Same as CS 586. 4 graduate hours. No professional credit. Prerequisite: Familiarity with linear programs (IE 411 or equivalent), Algorithms (CS 374 or equivalent), and Graph Theory (MATH 412 or equivalent).

IE 520 Variational Inequalities credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IE/520/)
Finite dimensional variational inequality and complementarity problems; characterization of solutions; nonsmooth Newton methods; interior-point methods; projected gradient schemes; applications of variational inequalities in game theory. Prerequisite: One of ECE 490, IE 510, IE 521, MATH 484.

IE 521 Convex Optimization credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IE/521/)
Finite dimensional convex optimization problems; characterization of optimal solutions; iterative algorithms for differentiable and nondifferentiable problems; distributed optimization algorithms; robust problems and solutions; applications of convex optimization models. Prerequisite: ECE 490 or IE 411; MATH 415; MATH 444.

IE 522 Statistical Methods in Finance credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IE/522/)
Methods of statistical modeling of signals and systems with an emphasis on finance applications. Review of linear algebra, probability theory, and spectral analysis; Linear Time Invariant (LTI) and ARX models; least-squares, maximum-likelihood, non-parametric, and frequency-domain methods; convergence, consistency and identifiability of linear models; asymptotic distribution of parameter estimates; techniques of model validation; Principle Component Analysis (PCA) for dimension reduction; ARCH and GARCH processes and their related models; implementation, application, and case-studies of recursive identification; Monte Carlo simulation. Credit is not given for both IE 522 and GE 524. Prerequisite: MATH 415.

IE 523 Financial Computing credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IE/523/)
Review of C++ programming: structures, classes, I/O, C++ standard libraries, Recursion. Linear Algebra tools and MILP solvers in C++. Computational aspects of probability, statistics and simulation in C++. Methods: Root-finding, Taylor's Expansion, FFTs, Dynamic Programming, Monte Carlo Methods. Financial computing case studies in C++. 4 graduate hours. No professional credit. Prerequisite: CS 225.

IE 524 Optimization in Finance credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/IE/524/)
Basic optimization models, theory and methods for financial engineering including linear, quadratic, nonlinear, dynamic integer, and stochastic programming; applications to portfolio selection, index fund tracking, asset management, arbitrage detection, option pricing and risk management; optimization software for classes of optimization problems. Projects requiring building optimization models based on financial market data and solutions using optimization solvers. 2 graduate hours. No professional credit. May be repeated in the same or separate semesters to a maximum of 4 hours. Prerequisite: FIN 500 and MATH 415. Restricted to MS: Financial Engineering.

IE 525 Stochastic Calculus & Numerical Models in Finance credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/IE/525/**)**
Basic theory of stochastic differential equations and numerical techniques for their analysis with applications to financial modeling. Brownian motion, martingales, stochastic integration, Ito's formula, stochastic differential equations, partial differential equations, simulation methods for derivatives pricing, finite-difference techniques for Black-Scholes equations and options pricing, Monte Carlo methods, variance reduction techniques, and sensitivity calculations. 2 graduate hours. No professional credit. May be repeated if topics vary to a maximum of 4 hours. Prerequisite: IE 523.

IE 527 MSFE Professional Development credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/IE/527/**)**
This course is required to encourage participation in professional development activities. Students will be required to be in attendance for at least 70% of the Practitioner Speaker Series in addition to other sanctioned MSFE Events. The Practitioner Speaker Series is an essential part of the MSFE curriculum. It allows firsthand interaction with Quantitative Practitioners. Exposure to insights on how the financial world is changing; regarding new products and needs, evolving data and information systems, and much more. Other events might include but are not limited to special seminars, workshops and conversation groups. 1 graduate hour. No professional credit. Approved for S/U grading only. May be repeated in separate terms up to 2 hours. Note that this course is for 1 credit hour during your first and second semester and will require a mandatory final paper. Prerequisite: Graduate MS: Financial Engineering Students only.

IE 528 Computing for Data Analytics credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IE/528/**)**
Hands-on programming course on select topics in data science and big data with major emphasis on a semester long project. Course will cover a variety of topics and tools in big data including Hadoop MapReduce Framwork, HBase, and Storm; Machine Learning; and Optimization. 4 graduate hours. No professional credit. Prerequisite: CS 242, CS 446. All ISE graduate students and students enrolled in the Master of Science in Advanced Analytics (MSAA) are eligible to take the course.

IE 529 Stats of Big Data & Clustering credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IE/529/**)**
This course will cover various foundational topics in data science. Parametric and non-parametric methods. Hypothesis testing; Regression; Classification; Dimension reduction; and Regularization. Unsupervised and semi-supervised learning, along with a few case studies. 4 graduate hours. No professional credit. Prerequisite: MATH 415 and IE 300 or equivalent. All ISE graduate students and students enrolled in the Master of Science in Advanced Analytics (MSAA) are eligible to take the course.

IE 530 Optimiztion for Data Analytics credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IE/530/**)**
Basic optimization methods for data analytics, optimization modeling languages such as AMPL and GAMS, and optimization software including the NEOS server. Linear and integer, and their applications to compressed sensing, data mining, and pattern classification. 4 graduate hours. No professional credit. Prerequisite: IE 411. All ISE graduate students and students enrolled in the Master of Science in Advanced Analytics (MSAA) are eligible to take the course.

IE 531 Algorithms for Data Analytics credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IE/531/**)**
This course will introduce the student to a set of algorithms for data analytics which include: hashing, indexes, caching; algorithms for structured datasets; streaming data modes; PageRank algorithms for market-basket models; clustering algorithms; and case studies. 4 graduate hours. No professional credit. Prerequisite: IE 411, CS 225. ISE graduate students and students enrolled in the Master of Science in Advanced Analytics (MCAA) are eligible to take the course.

IE 532 Analysis of Network Data credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IE/532/**)**
This course will focus on statistical aspects analyzing network data. It will review illustrative problems relating to aggregation of information, decision-making, and inference tasks over various graphical models and networks. 4 graduate hours. No professional credit. Prerequisite: MATH 412. ISE graduate students and students enrolled in the Master of Science in Advanced Analytics (MCAA) are eligible to take the course.

IE 533 Big Graphs and Social Networks credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IE/533/**)**
This course will cover the fundamentals of graph theory and network optimization. It will focus on algorithmic challenges associated with big graphs and intertwine the Hadoop Framework for solving example problems like shortest paths, link analysis, graph association and inexact graph matching. Applications in social network analysis will include study of network types, random graph models, exact and approximate computation of centrality measure, finding high value individuals, community detection, diffusion processes and cascading models, and influence maximization. 4 graduate hours. No professional credit. Prerequisite: MATH 213, IE 300, IE 411. ISE graduate students and students enrolled in the Master of Science in Advanced Analytics (MCAA) are eligible to take the course.

IE 534 Deep Learning credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IE/534/**)**
This course provides an introduction to neural networks and recent advances in deep learning. Topics include training and implementation of neural networks, convolution neural networks, recurrent neural networks (LSTM and gated recurrent), residual networks, reinforcement learning, and Q-learning with neural networks. A part of the course will especially focus on recent work in deep reinforcement learning. The course will also cover deep learning libraries (e.g., Chainer, Tensorflow) and how to train neural networks using GPUs and GPU clusters. Same as CS 547. 4 graduate hours. No professional credit. Prerequisite: CS 446 or equivalent. Graduate students only.

IE 542 Cooperative Problem Solving credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IE/542/**)**
Advanced graduate seminar on problem-solving models and taxonomies, models of coordination of activity and communication among multiple agents, design of human-machine cooperative problem-solving systems, adaptive automation, and intelligent decision support. Readings drawn from work in pragmatics, distributed artificial intelligence, cognitive engineering, and related areas. 4 graduate hours. No professional credit. Prerequisite: Credit or concurrent registration in either CS 440 or PSYC 527.

IE 546 Human Factors in Health Care Engineering Systems credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IE/546/**)**
Same as EPSY 546. See EPSY 546.

IE 547 Healthcare Operations and Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IE/547/)
Delivers an introduction of healthcare systems and strategic issues in their operations, and a background of healthcare, health systems, hospitals and elements of care centers. The course blends quantitative and qualitative material, modeling and practical perspectives, and includes demand management, forecasting methods, workforce planning, inventory and materials planning, supply chain management in healthcare, process improvement and patient flow, facility design and planning, and operations scheduling. Financial performance and metrics, as well as case studies and project work will be included. 4 graduate hours. No professional credit. Prerequisite: The student should have a Bachelors Degree in Industrial Engineering, Operations Management, or closely related disciplines. Specifically, they should have: (1) Basic Calculus sequence (Calc I, II and III at UIUC these are MATH 220, MATH 231, and MATH 241; MATH 234 can also be used); (2) Elementary Probability and Statistics (IE 300 or STAT 400, MATH 463 or equivalent); (3) Notions or Linear Algebra (MATH 415) and preference for Linear Programming (IE 310/IE 311). Priority will be given to students enrolled in the Healthcare Engineering Systems Concentration of M.Eng. degree program.

IE 590 Seminar credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/IE/590/)
Presentation and discussion of significant developments in industrial engineering. Approved for S/U grading only. May be repeated.

IE 597 Independent Study credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IE/597/)
Independent study of advanced problems related to industrial engineering. May be repeated in the same or separate terms if topics vary to a maximum of 12 hours. Prerequisite: Consent of instructor.

IE 598 Special Topics credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IE/598/)
Subject offerings of new and developing areas of knowledge in industrial engineering intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. Approved for letter and S/U grading. May be repeated in the same or separate terms if topics vary.

IE 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/IE/599/)
Approved for S/U grading only. May be repeated.

INFO - INFORMATICS

INFO Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/INFO/)

Courses

INFO 102 Little Bits to Big Ideas credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/INFO/102/)
Broad introduction to the nature, capabilities, and limitations of computing. Topics range from the way data is represented and stored, to the way today's computers work, to the general ideas of algorithms and computational efficiency, to the future of computing. Covers "Great Ideas" across various areas of the field, including, for example, cryptography and internet security, problem solving, modeling and simulation, and artificial intelligence. Same as CS 102.

INFO 199 Undergraduate Open Seminar credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/INFO/199/)
May be repeated in separate terms to a maximum of 6 hours. Prerequisite: Consent of instructor.

INFO 202 Social Aspects Info Tech credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/INFO/202/)
Same as IS 202 and MACS 202. See IS 202.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

INFO 303 Writing Across Media credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/INFO/303/)
The ability to communicate effectively in multiple types of media is a crucial part of literacy in our society. In this course, students will explore the intersections of various media: print, film, images, sound, etc. Students will consider the ways in which writing--as an object and as a practice--is shaped by multimodal interactions. Also integrates practical activities with broader theoretical issues in order to provide effective strategies for designing multimedia presentations, projects, and texts that integrate photography, video, and sound. Same as WRIT 303.
This course satisfies the General Education Criteria for:
Advanced Composition

INFO 310 Computing in the Humanities credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/INFO/310/)
Same as IS 310. See IS 310.

INFO 325 Social Media and Global Change credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/INFO/325/)
Same as AFST 325, ASST 325, EPOL 325, EPS 325, EURO 325, LAST 325, REES 325, and SAME 325. See EPOL 325.

INFO 326 New Media, Culture & Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/INFO/326/)
Same as MACS 326. See MACS 326.

INFO 345 Digital & Gender Cultures credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/INFO/345/)
Same as GWS 345, MACS 345, and SOC 345. See GWS 345.

INFO 390 Special Topics credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/INFO/390/)
Explores a variety of informatics topics. Topics and prerequisites vary by section; see current Class Schedule for details. May be repeated up to 6 hours if topics vary.

INFO 399 Individual Study credit: 0 to 3 Hours. (https://courses.illinois.edu/schedule/terms/INFO/399/)
Individual study in a subject related to informatics not covered in normal course offerings. Approved for Letter and S/U grading. May be repeated in separate terms to a maximum of 6 hours. Prerequisite: Consent of instructor.

INFO 403 An Introduction to Top Down Video Game Design credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/INFO/403/)
The emphasis of this course is on developing an understanding of top down video game design using the various design methodologies and tools introduced in class. Students will form small groups (4-6) and work on their own design within a selected genre (to be determined at the beginning of the semester). Areas of focus include high level design vision, audience evaluation, User Interface and its impact on the design, iteration of a series of design documents (high, medium and low level) and the team dynamics of communication, critique and integration. The goal of the class is to have the small teams use the concepts and the tools taught in class to create a complete design document that will be cataloged for later use. 3 undergraduate hours. 3 graduate hours.

INFO 405 Introduction to the Video Game Development Process credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/INFO/405/)
The emphasis of this course is understanding the video game development process as seen in current Game Studios. The course will focus on key elements of the process including the development timeline, scheduling, prototyping, iteration, QA, game builds and player research. The goal will be to take a design document from a catalog of designs that have already been created and implement one or more of them using the game development process. Same as GSD 405. 3 undergraduate hours. 3 graduate hours. Credit is not given for INFO 405 and INFO 490 DC "The Video Game Dev Process" sections.

INFO 407 Introduction to Programming Python for Data Science credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/INFO/407/)
For students who want to learn about solving problems common in data sciences but have little or no programming experience. The class is asynchronous (students can access material on-line but within specified timeframes) and taught online. Data Science lies at the intersection of statistics and computer science and focuses on extracting information from data. This class will immerse students on topics of software construction, design, programming paradigms and the semantic and syntax of the Python language and then focus on some of the necessary workflows to move raw data into information. The class will explore common Python modules (libraries) used in data science, natural language processing, statistics, mathematics, data management (acquiring, cleaning, reshaping, organizing, persisting) and visualizations. 3 undergraduate hours. 3 graduate hours. Credit is not given for INFO 407 and INFO 490 MH "Intro to Prog for the Data Science" sections.

INFO 409 Design & Programming of Narrative Games & Simulations credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/INFO/409/**)**
In this course, you will be introduced to the narrative design process for the authoring of text-based digital games and simulations. You will become proficient in Inform 7, a programming language and design system for parser-based interactive fiction (IF). By the end of the semester you will have developed a game or literary work of IF and made a substantive contribution to a collaborative project. No prior programming knowledge is required for students to be successful in the course. Students will be expected to bring a laptop to class. Please note that this course teaches design and programming techniques for "parser-based" interactive fiction, and does not cover Twine, or other hyper-text based interactive narrative systems. Same as GSD 409. 3 undergraduate hours. 4 graduate hours. Credit is not given for INFO 409 and INFO 490 JP, JPU or JPG "Design & Prog Text Based Games" sections.

INFO 416 Makerspace: Game Studies credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/INFO/416/**)**
A foray into game studies via makerspace production mediums. Students will study the role of play, tinkering and gaming in design, research and innovation and be challenged to learn a variety of makerspace production tools and techniques to create games. This course will include three major components (1) physical board game design, (2) introductory computer game design and (3) investigation into the narrative themes, artistic production, interaction mechanics and culture that make games engaging. During the course, students will prototype both playable board and video games, followed by iterating through to a final version of a game of their choice. Class will meet in the CU Community Fab Lab in Art Annex II. Students who have taken a different makerspace class before are encouraged to enroll. Additional fees may apply. See Class Schedule. 3 undergraduate hours. 4 graduate hours. Credit is not given for INFO 416 and INFO 490 A/AG "Makerspace: Game Studies" sections.

INFO 418 Makerspace: Escape Rooms credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/INFO/418/**)**
Explores the intersection of storytelling, interaction design, and user experience through the design of escape rooms. In the past few years escape rooms have been on the rise, changing from simple locked boxes in an open room to complex adventures spanning multiple rooms involving electronics, sound design, storytelling, and even live actors. This class will be primarily focusing on the manufacturing and electronics work that goes into making an immersive but self-contained escape room in a box experience. Over the span of the course, students will become familiar with the basics of several advanced small-scale manufacturing tools, such as laser engravers, electronic cutters, and 3D printers/scanners. The primary focus, however, will be a more in depth exploration of small board electronics – such as Arduino and IoT programming – and hardware – such as sensors, servos, LEDs, and other components. 3 undergraduate hours. 4 graduate hours. Credit is not given for INFO 418 and INFO 490 B, BG, ERU or ERG "Makerspace: Escape rooms" sections.

INFO 427 Data, Machines and the Python credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/INFO/427/**)**
A continuation to the introductory course on Data Science (INFO 407). This advanced course on Data Science is completely taught online and scheduled asynchronously (you decide where it best fits in your week). The course consists of several tracks including Machine learning and advanced Python skills. There will be lessons that guide you to learn advanced techniques in data science and you will also be introduced to machine learning algorithms. In addition, there will be a few lessons that help you advance your Python knowledge and software development skills. This course can mainly be considered as an applied course where you will learn by doing. In many cases, you will first write a reduced implementation before using an established library. The second half of the course will be focused on data driven individual projects along with weekly lessons. 3 undergraduate hours. 3 graduate hours. Credit is not given for INFO 427 and INFO 490 MH2 "Data, Machines and the Python" sections. Prerequisite: Students should have either taken INFO 407; OR Have at least 1 year of programming experience using Python; OR Be comfortable with NumPy, Pandas, Matplotlib, NLTK; OR Have a strong ability and passion for learning. Junior, Senior or Graduate standing.

INFO 490 Special Topics credit: 1 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/INFO/490/**)**
Topics of current interest. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated if topics vary. Prerequisite: Consent of instructor. Other prerequisites as specified for each topic offering. See Class Schedule.

INFO 491 Ugrad Bioinformatics Seminar credit: 0 to 2 Hours. **(**https://courses.illinois.edu/schedule/terms/INFO/491/**)**
Introduces the field of bioinformatics and computational biology. Same as CPSC 491. 0 to 2 undergraduate hours. No graduate credit. Approved for Letter and S/U grading. May be repeated in separate terms to maximum of 2 undergraduate hours. Prerequisite: Consent of instructor.

INFO 500 Orientation Seminar credit: 0 or 1 Hours. **(**https://courses.illinois.edu/schedule/terms/INFO/500/**)**
A broad introduction to faculty research in each Informatics Area. Consists of weekly presentations by Informatics faculty highlighting their recent research, practice, and related concepts. Approved for S/U grading only. May be repeated in separate terms to a maximum of 2 hours. Prerequisite: Graduate standing in any field.

INFO 510 Research Practicum credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/INFO/510/**)**
A one semester directed research project supervised by a member of the informatics faculty in the student's area of specialization or closely related area. These are intended to be practical research, not just literature surveys, and must have a definite output such as a paper or demonstration project. The research should be relevant to the thesis work or preparatory work to support the thesis. Informatics students must take two semesters, usually each semester should be under a different Informatics faculty member, but with the concurrence of their advising committee both may be taken under a single faculty member. Approved for S/U grading only. May be repeated in separate terms to a maximum of 8 hours. Prerequisite: Graduate standing in any Informatics.

INFO 555 Advanced Educational Technologies for Engagement and Interactive Learning credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/INFO/555/**)**
Same as CI 555 and EPSY 555. See EPSY 555.

INFO 590 Advanced Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/INFO/590/)
Subject offerings of new and developing areas of knowledge in Informatics, intended to augment existing curriculum. See Class Schedule for specific topics and prerequisites. 1 to 4 graduate hours. No professional credit. May be repeated if topics vary. Prerequisite: Graduate Student Standing.

INFO 591 Grad Bioinformatics Seminar credit: 0 to 2 Hours. (https://courses.illinois.edu/schedule/terms/INFO/591/)
This seminar series focuses on research in the field of bioinformatics and computational biology. Same as ANSC 591 and CPSC 591. 0 to 2 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated in separate terms to a maximum of 4 hours. Prerequisite: Consent of instructor.

INFO 597 Individual Study credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/INFO/597/)
Individual study in a subject related to informatics not covered in normal course offerings. May be repeated in same term for a maximum of 8 hours or separate terms for a maximum of 16 hours if topics vary. Prerequisite: Consent of instructor.

INFO 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/INFO/599/)
Research for Ph.D. thesis. May be repeated in separate terms. Prerequisite: Instructor approval required.

IS - INFORMATION SCIENCES

IS Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/IS/)

Courses

IS 100 Exploring the iSchool with a Human-Centered Lens credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/IS/100/**)**
This course introduces students to the School of Information Sciences (iSchool). Students will explore career and professional development within information sciences, building their leadership and collaborative skills, and building a network within and beyond the iSchool. Through a human centered design project focused on an information science problem, students will gain experience and a better understanding of the process to develop an innovative solution addressing a societal need. Prerequisite: Restricted to Majors Only; First Semester Freshman, Intercollegiate and Off-Campus Transfer Students Only.

IS 101 Introduction to Information Sciences credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/101/**)**
This course provides an introduction to the field of information science and the major. It offers both historical and contemporary context for understanding the role of information in society. Focus is placed upon critical analysis of information problems as well as understanding the creation, use, and distribution of information in business, policy, education, government, health, and other sectors.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

IS 107 Data Science Discovery credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/107/**)**
Same as CS 107 and STAT 107. See STAT 107.
This course satisfies the General Education Criteria for:
Quantitative Reasoning I

IS 145 Mapping Inequalities credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/145/**)**
Immerses students in the history of Inequality in the United States through mapping the geographic, historical, and/or social movement of minority cultures using quantitative and social science methods. Topics vary by section, but each section emphasizes experiential learning through community-engaged scholarship, field-trips, or computer programming projects. No previous computer programming experience is required. No previous computer programming experience is required. Prerequisite: This course is intended for first and second year students.
This course satisfies the General Education Criteria for:
Quantitative Reasoning II
Social Beh Sci - Soc Sci
Cultural Studies - US Minority

IS 189 Independent Study credit: 0 to 3 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/189/**)**
Individual study in a subject related to information sciences not covered in normal course offerings. Approved for Letter and S/U grading. May be repeated in separate terms to a maximum of 6 hours. Prerequisite: Consent of instructor. Submission of "Request to Enroll in IS Independent Study".

IS 199 Undergraduate Open Seminar credit: 1 to 5 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/199/**)**
Undergraduate Open Seminar. Additional fees may apply. See Class Schedule. May be repeated.

IS 202 Social Aspects Info Tech credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/202/**)**
Explores the way in which information technologies have and are transforming society and how these affect a range of social, political and economic issues from the individual to societal levels. Same as INFO 202 and MACS 202.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

IS 203 Analytical Foundations for Information Problems credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/203/**)**
A survey of mathematical topics for students in information sciences. Provides an introduction to sets, relations, graphs, grammars, probability, and propositional and predicate logic. These topics relate to applications in information modeling, representation and expression. Prerequisite: MATH 112 or Required ALEKS Score.
This course satisfies the General Education Criteria for:
Quantitative Reasoning II

IS 204 Research Design for Information Sciences credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/204/**)**
This course provides an introduction to different approaches to research in the information sciences, including social science methods, data and text mining, digital humanities, historical approaches, and others. Topics include methods for evaluating research, developing research questions, selecting research methods, conducting research ethically, and communicating findings clearly and effectively through words, graphics, and other visualizations.

IS 205 Programming for Information Problems credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/205/**)**
Covers common data processing methods and computing concepts used in the information sciences. Evaluates strengths and weaknesses of the techniques in the context of our discipline. No prior programming background is assumed. Course will use the Python programming language. Prerequisite: IS 203.

IS 206 Introduction to Database Concepts & Applications credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/206/**)**
Introduction to database technology concepts and architecture. Explore data types and reading/writing database layout descriptions. Discussion of database ethics and privacy concerns. Comparison of different database systems a user might encounter including RDBMS, XML/RDF/JSON, NOSQL, and Graph database systems. Labs involving common database tools and exercises in SQL. Prerequisite: IS 205, or CS 101, or CS 105, or CS 125, or ECE 120, or permission of instructor.

IS 226 Introduction to HCI credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/226/**)**
This course introduces students to fundamental theories and techniques in Human-Computer Interaction (HCI). This course presents basic tools and methods for creating, designing, prototyping, and evaluating user interfaces to computing applications and web sites. Students will explore course content by conducting individual and group hands-on projects. Assignments involving prototyping can be implemented by self-selected solutions, e.g. Axure, JavaScript. Students from all backgrounds are welcomed.

IS 229 Web Design Fundamentals credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/229/)
This course will teach students about building inclusive interactive systems. They will learn to gather and understand user requirements and needs for a wide range of user populations, especially those that are under-served (e.g., children, older adults, people with disabilities), apply inclusive design frameworks and principles, and design, develop, evaluate and improve interactive prototypes in an iterative manner. Prerequisite: IS 205, or IS 226, or equivalent course.
This course satisfies the General Education Criteria for:
Quantitative Reasoning I

IS 236 User Research & Evaluation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/236/)
This course will teach students about user research and evaluation. They will learn to apply various user research methods, gather and understand user requirements and needs for a wide range of user populations, especially those that are under-served (e.g., children, older adults, people with disabilities), conduct user evaluations of prototypes and interactive systems, and communicate effectively about the research insights and make actionable design suggestions. Prerequisite: IS 204, or IS 226, or equivalent course.

IS 249 BSIS Practicum credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/249/)
A professional field experience program designed to provide the student with the opportunity to work in a professional environment under the supervision of an experienced information professional with the guidance of a faculty advisor. This opportunity allows students to integrate the theory and knowledge of course content with the application of principles and practices in a work environment, including these specific objectives Approved for S/U grading only. Prerequisite: IS 101 or IS 202. Restricted to BSIS students only.

IS 265 Innovation Illinois: From Accessible Design to Supercomputing Cultures credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/265/)
Same as CS 265 and MACS 265. See MACS 265.

IS 266 Community Innovation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/266/)
How do communities contribute to transformative, world-changing innovations? Why is their participation indispensable for fostering change? And what makes change ultimately transformative across diverse spaces and time? Community Innovation explores how engagement with interdisciplinary communities and collaborations, as well as histories of globally-changing local innovations from the Illinois were critical to fostering and sustaining new social and technical practices across space and time. Same as MACS 266.

IS 269 BSIS Internship credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/IS/269/)
Designed to provide students an opportunity to apply the skills and concepts learned in Information Sciences classes to a work environment. Students will complete internships of their choosing under supervision and will be expected to complete activities online including a reflective paper and presentation. The goal of this course is to provide an experience that will form a connection between a student's academic career and career goals for the future. Approved for S/U grading only. May be repeated. Prerequisite: IS 101 or IS 202. Restricted to BSIS students only.

IS 304 Advanced Research Design credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/304/)
This course is a practical, hands-on class in social science research methods in the field of information sciences. Students will learn both qualitative and quantitative methods, including survey design, interview techniques, and observation strategies. Examples and practical exercises will be geared towards future work as information professionals and will enable students to design and apply research strategies that help them understand the intersections between people, information, and technologies. Prerequisite: IS 204, or IS 236, or similar research course.

IS 305 Programming for Information Problems II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/305/)
Continuing coverage of common data processing and computing methods in the information sciences. Building on programming skills from IS 205, additional programming patterns will be explored, and additional tools like the command line and version control will be explored in the context of information problems. Course will be in Python. Some Python review will be provided, but students without prior experience in Python should contact the school or instructor for review material. Prerequisite: IS 205, or CS 101, or CS 105, or CS 125, or ECE 120, or equivalent. Basic programming (Python) proficiency required.
This course satisfies the General Education Criteria for:
Quantitative Reasoning I

IS 308 Race, Gender, and Information Technology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/308/)
In this course we will critically examine the ways in which information and communication technologies (ICTs) are shaped by – and help to shape – social relations of race and gender; and we will extend our review to other categories of identity and exclusion as well, such as age, ability, geography and ethnicity. We will also explore the various benefits and burdens of the information society and how these are socially distributed, and conduct case-studies of policies, practices, and programs designed to enhance opportunities and/or mitigate disadvantages through the creative or disruptive use of ICTs. Directed and supervised investigation of selected topics in information studies that may include among others computers and culture; information policy; community information systems; production, retrieval and evaluation of scientific or social science knowledge; computer-mediated communication; and computer-supported cooperative work. Prerequisite: IS 202 Highly recommended. Sophomore standing.

IS 309 Computers and Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/309/)
This course explores cultural ideas about computers, including hopes and fears about the effects of computers on our lives. We will analyze images of computers in fiction and movies. The course will also discuss hackers, online subcultures, and other computer-related subcultures, and the integration of computers into various cultural practices. The course will also explore the different uses of digital media. Prerequisite: IS 202 Highly recommended.

IS 310 Computing in the Humanities credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/310/)
Explores use and application of technology to scholarly activity in the humanities, including projects that put classic texts on the web or create multimedia application on humanities topics. Same as INFO 310. Prerequisite: Sophomore standing.

IS 311 History and Foundations of the Information Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/311/)
Today's information society bespeaks a long history, exhibiting marked continuities with the past as well as some sharply defined new features. Yet the historical foundations of the information society remain poorly understood. This course develops such a framework, by examining emergent information institutions and practices from early modern Europe to the later 20th century. It examines the historical development of the information society through a number of important conceptual lenses, including: modernity and post-modernity; Fordist and post-Fordist capitalism; social class and information poverty; social and technological determinism; utopianism and dystopianism; and empire and globalization. Prerequisite: IS 202 Highly recommended.

IS 316 The Design of Usable Information Interfaces credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/316/)
Examines issues of Human Computer Interaction and the design of better computer interfaces. Prerequisite: Sophomore standing.

IS 324 Social Network Analysis credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/324/)
Introduces theories of social networks (how they form, and how they influence thoughts, feelings, and behaviors), while also providing hands-on experience with some powerful tools and methods for analyzing networks on various scales, ranging from small groups, to communities, to populations. It will also explore the use of network analysis to reveal patterns in large-scale data from the humanities such as periods of literary narrative, or character development across vast narratives with multiple interweaving plot lines. Same as SOC 324.

IS 334 Usable Privacy and Security credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/334/)
From passwords to email encryption to privacy settings on social media services, it is widely recognized that human factors, usability or user experience play a crucial role in effective privacy and security solutions. Designers of privacy and security solutions need to understand how people might use, interact or appropriate the mechanisms they develop. This course introduces various aspects of user experience (e.g., usability problems, user interface designs, conflicting needs) related to privacy and security systems. It is also designed to provide students with knowledge and opportunities to analyze and evaluate user experience of privacy and security systems. This course is suitable for students who are interested in privacy and security, or user experience, or both!.

IS 340 Project Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/340/)
Focuses on project management methodology that will allow you to initiate and manage projects efficiently and effectively. You will learn key project management skills and strategies, and you will have the opportunity to apply this knowledge through assignments.

IS 357 Introduction to Data Storytelling credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/357/)
Communicating with the right audience in the right way connotes creation of ways and approaches that can serve diverse populations within and beyond a particular or specific culture. In the context of our school, the iSchool at the University of Illinois, we propose to approach strategic communication from the perspective of storytelling thinking. The goal is to introduce students to the philosophical, social, and relational dynamics of "story" among people as all human storyteller as well as organizations of all sizes across a wide spectrum of fields including library as storytelling organizations. It also aims to draw students to explore how a story foregrounds bridge-building dialog, affects the power of information, and thus maximize human potential. Students will be exposed to a range of opportunities to apply storytelling thinking as a tool to identify the audience, design means to communicate with them, and develop dynamic triangle of people sharing stories, engaging in constructive dialogs and reinterpreting etc.

IS 368 Youth Community Engagement credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/368/)
This course examines youth services by surveying how youth serving organizations meet young people's developmental, informational, social, personal, and cultural needs through programs and services. The course will provide both practical experience and theoretical knowledge for understanding the value and impact of youth services programs; strategies, techniques, and resources for developing these programs; approaches for ensuring programs are relevant to service communities; and methods for assessment and evaluation of program success. Prerequisite: IS 358 Highly recommended.

IS 370 Concepts of Information Behavior Theory credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/370/)
This course will introduce students to the relationships between users and the information they encounter. Students will become familiar with the concepts of understanding the information needs and information behavior of users, as well as the methods of accessing and assimilating information employed by users. The course will also introduce a range of the major models and theories employed in exploring information needs and behavior. Prerequisite: IS 204, or equivalent course.

IS 378 Information Technology Services for Youth credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/378/)
This course examines the intersections between youth, information, and technology from a socio-technical perspective. This course will provide both practical experience and theoretical knowledge for understanding the ways youth engage with information via technology, as well as various developmental, social, personal, and cultural contexts that inform those interactions. Students will evaluate examples of youth information and communication technology use and analyze factors including identities, educational and social structures, opportunities and risks, learning and literacy, and potential futures in these areas. Prerequisite: IS 358 Highly recommended.

IS 381 Introduction to Literacies for Youth credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IS/381/)
An overview of youth literacies covering: popular literacy myths, censorship, cognitive processes behind reading, visual and digital literacies, contemporary youth practices, government policies, and literacy education in schools. Course readings include fictional works and scholarship from the fields of education, library science, history, media studies, critical race studies, and literary and cultural studies. Students learn the history of marginalized youth in America in order to understand how literacies are defined, promoted, or stigmatized today.

IS 389 Independent Study credit: 0 to 3 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/389/**)**
Advanced individual study in a subject related to Information Sciences not covered in normal course offerings. Approved for Letter and S/U grading. May be repeated in separate terms to a maximum of 6 hours. Prerequisite: Consent of instructor. "Request to Enroll in IS Independent Study". Restricted to students with Junior level standing or above.

IS 390 Special Topics in Information Studies credit: 1 to 3 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/390/**)**
Directed and supervised investigation of selected topics in information studies that may include among others computers and culture; information policy; community information systems; production, retrieval and evaluation of scientific or social science knowledge; computer-mediated communication; and computer-supported cooperative work. May be repeated. Prerequisite: Sophomore standing.

IS 400 Colloquium credit: 0 or 1 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/400/**)**
Venue for presentation and discussion of research and professional activities by faculty, students, staff, and guest speakers. 0 or 1 undergraduate hours. 0 or 1 graduate hours. Approved for Letter and S/U grading. May be repeated in separate semesters.

IS 401 Introduction to Network Information Systems credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/401/**)**
This course provides a deep hands-on sociotechnical dive into technology including electronics, software, and networks culminating in a holistic understanding of networked information systems. The course also explores the methodological landscape of networked information systems including theoretical assumptions, research methods, and research techniques. Throughout, students will be introduced to, and make active use of, skillsets, frameworks, and standards employed by a wide range of information professionals in selecting, co-designing, appropriating, and innovating-in-use networked information systems. Additional fees may apply. See Class Schedule. 4 undergraduate hours. 4 graduate hours.

IS 403 Children's Materials credit: 2 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/403/**)**
Evaluation, selection and use of books and other resources for children (ages 0-14) in public libraries and school media centers; explores standard selection criteria for print and nonprint materials in all formats and develops the ability to evaluate and promote materials according to their various uses (personal and curricular) and according to children's various needs (intellectual, emotional, social and physical). 3 undergraduate hours. 2 or 4 graduate hours. Prerequisite: For undergraduates, junior or senior standing and consent of instructor.

IS 406 Cognition in the Wild credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/406/**)**
Designed as a foundation for students who are interested in learning how to design human-centered information technologies. Students will learn basic principles in human cognition and behavior, and how these principles influence how we interact with information technologies. The course will prepare students to translate theories in human cognition and behavior to analyze, evaluate and rethink everyday design examples. 3 undergraduate hours. 4 graduate hours.

IS 407 Introduction to Data Science credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/407/**)**
This course introduces students to data science approaches that have emerged from recent advances in programming and computing technology. They will learn to collect and use data from a variety of sources, including the web, in a modern statistical inference and visualization paradigm. The course will be based in the programming language R, but will also use HTML, regular expressions, basic unix tools, XML, and SQL. Supervised and unsupervised statistical learning techniques made possible by recent advances in computing power will also be covered. 4 undergraduate hours. 4 graduate hours.

IS 409 Web Technologies & Techniques credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/409/**)**
This course provides an introduction to the technologies behind the Web. Topics covered include: hypertext, hypermedia, the history of the Web, the role of Web standards and their impact on the development of Web resources. The course introduces principles of Web design and usability. Students will gain an understanding how the Web works and how to design, construct, evaluate, and maintain Web-based materials. 3 undergraduate hours. 4 graduate hours. Priority is given to students pursuing a transfer into the BS/IS degree (http://go.ischool.illinois.edu/BSIS).

IS 410 Storytelling credit: 2 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/410/**)**
Fundamental principles of the art of storytelling including techniques of adaptation and presentation; content and sources of materials; methods of learning; practice in storytelling; planning the story hour for school and public libraries and other public information settings; and audio, video, and digital media. 3 undergraduate hours. 2 or 4 graduate hours. Prerequisite: For undergraduates, junior or senior standing and consent of instructor.

IS 411 Information Systems Analysis credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/411/**)**
This is an introductory course to Information Systems Analysis. Information Systems Analysts are typically involved in an entire information systems development life cycle from initial planning to final assessment. Several different approaches have been used. Students will gain experience in several aspects of Information Systems Analysis, including business process modeling, requirements gathering, data flow diagramming, and database design. This is a hands-on course with in-class exercises and group practical assignments. 3 undergraduate hours. 4 graduate hours.

IS 413 Teen Materials credit: 2 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/413/**)**
Evaluation, selection and use of books and other resources for young adults (ages 12-18) in public libraries and school media centers; explores standard selection criteria for print and nonprint materials in all formats and develops the ability to evaluate and promote materials according to their various uses (personal and curricular) and according to young adults' various needs (intellectual, emotional, social and physical). 3 undergraduate hours. 2 or 4 graduate hours. Prerequisite: For undergraduates, junior or senior standing and consent of instructor.

IS 416 Adaptive Minds and Computers credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/416/**)**
Given the rapid changes in information environments, emerging research has shown how human adapts to the complex information environments through different self-regulated processes. This course will discuss the evolving theories of human performance in the contemporary information environments, including how people select, search, make sense and make decisions among a huge amount of information; how information environments shape individual and collective human performance; and how people adapt to information environments for forming coupling cognitive systems. 3 undergraduate hours. 4 graduate hours. Prerequisite: IS 406.

IS 417 Data Science in the Humanities credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/417/**)**
Human culture provides an ideal testbed for students exploring data science, because the interpretive challenges that lurk beneath the surface in other domains become starkly visible here. For instance, cultural materials usually come to analysts as unstructured texts, images, or sound files, forcing explicit decisions about data modeling and feature extraction. Cultural questions also highlight the importance of interpreting statistical models in relation to a social context. Last but not least: songs, poems, and stories confront us with vivid problems that are inherently fun to explore. This course will start by reviewing descriptive and inferential statistics, and build up to applications of supervised and unsupervised machine learning. We will apply those methods to a range of cultural materials using them to model the pace of stylistic change in popular music, for instance, and the representation of gender in fiction. 3 undergraduate hours. 4 graduate hours. Prerequisite: One semester of experience programming, for example, STAT 107 or IS 430 - or any analogous course.

IS 418 Community Engagement credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/418/**)**
Community engagement refers to the multiple ways that information professionals in libraries and other settings learn about, collaborate with, and provide service and outreach to community members. Provides an introduction to, and overview of, community engagement theory and practice. A significant portion of coursework will take the form of service learning or community-based research via approved projects that match students' interests. 3 undergraduate hours. 4 graduate hours.

IS 419 Entrepreneurial Information Technology Design credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/419/**)**
Introduces students to a range of rapid prototyping techniques and methods to analyze needs, opportunities and design spaces. Students will work in teams to develop ideas for novel computational devices or applications to meet identified needs. Covers the interlinked entrepreneurial skills of identifying an unmet need, exploiting technological opportunities, exploring a design space to refine an idea, and communicating a design vision through demonstrations with prototypes and proofs of concept. This enables developers to show how their envisaged working interactive technology will be used productively in a particular real-life context. Communicating the vision of computational devices is a challenge because dynamic use in context is hard for people other than the device's developers to imagine. The ability to produce convincing, clear, powerful demonstrations even at the early stages of a project is a highly valuable entrepreneurial skill, and also highly applicable within an organization. Directed and supervised investigation of selected topics in information studies that may include among others the social, political, and historical contexts of information creation and dissemination; computers and culture; information policy; community information systems; production, retrieval and evaluation of knowledge; computer-mediated communication. 3 undergraduate hours. 4 graduate hours. Prerequisite: Undergraduate students: Priority is given to students pursuing a transfer into the BS/IS degree (http://go.ischool.illinois.edu/BSIS).

IS 420 Community Informatics credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/420/**)**
Surveys an emerging field that studies how local, historical communities are using information and communications technologies. Key principles and hands-on experience equip students for contributing to the non-profit/public sector as people harness new technologies and media—be they individuals, students, families, community organizations, or other. Prepares future professionals and researchers to understand and master this environment, whatever their technology background. Especially useful for those interested in public or community libraries, youth services, social work, education, and anyone interested in working with or studying underserved communities. 3 undergraduate hours. 4 graduate hours.

IS 423 Early Literacy credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/423/**)**
Librarians fill a key role in the literacy development of young children with opportunities for interaction both in the library and through outreach programs. Key skills center on developing literacy-rich library environments, classroom instructional support, intentional embedding of essentials skills and practices within daily activities and lessons, resources about early literacy strategies to share with families and caregivers. Practitioners will understand the importance of integration of technology to meet the diverse developmental, cultural, social and linguistic needs of children to ensure they are able to create meaning from text. No undergraduate credit. 2 graduate hours.

IS 424 Social Computing credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/424/)
This interdisciplinary course introduces students to fundamental theories, methods, technologies and applications of social computing. Students learn about this emerging discipline from two perspectives: First, basic principles of collective information production and processing, and methods for studying these principles. Topics include prediction markets, games with a purpose, open source software development, social media, social networks, information visualization, and online games. Second, socio-technical aspects of the design and usage of respective technologies. This includes participation, privacy and security. Students learn how to solve problems in social computing in a systematic and rigorous fashion. At the end of the course, students will be able to design, manage and execute social computing projects for scholarly and commercial use, and to critically assess work in this area. 3 undergraduate hours. 4 graduate hours.

IS 426 Museum Informatics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/426/)
The course examines various ways that information technologies are and might be used in museums and other cultural heritage settings. Museum websites, visitor apps, interactive exhibits, and uses of digitized and federated collections are explored. Students gain an introduction to Design Thinking by working on a final project that involves the development of a novel computational resource. Students are encouraged to approach class topics from their individual backgrounds in the humanities, sciences, or social sciences. 4 undergraduate hours. 4 graduate hours. Prerequisite: Junior or senior standing and consent of instructor for undergraduates; consent of instructor for non-iSchool graduate students for on-campus sections.

IS 427 Mathematical Foundations for Data Analytics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/427/)
An introduction to topics and techniques in transformational geometry, linear algebra, and calculus most relevant for the study of multivariate analysis, and demonstrates their roles as bases for solving data analytic problems in the information sciences. 3 undergraduate hours. 4 graduate hours. Prerequisite: Recommended IS 203; or IS 205; or IS 206; or equivalent course.

IS 429 Web Content Strategy and Management credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/429/)
Focuses on the basics of web site design, content development, constructing web pages with standard HTML and CSS. We will also cover usability and accessibility, content management system options, multi-media and interactivity in the context of standard HTML and CSS, procedures and policies for organizations, with a concentration on public, academic and special libraries. Students will investigate, design, and draft a representative site. Students may work with non-profit and library clients in constructing and redesigning their web sites or design and construct their own personal professional pages. In this course we will learn how to design and deploy flexible websites that serve dynamically changing content, focusing in particular on the needs of public-service organizations such as libraries, associations, and other not-for-profit entities. 4 undergraduate hours. 4 graduate hours. Prerequisite: Laptop Required.

IS 430 Foundations of Information Processing credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/430/)
Covers common data, document processing, and programming constructs and concepts. Focuses on problem solving and abstraction with a programming language. By the end of the course students will be able to design, develop and test a moderately complex computer program to manage full text, bibliographic records or multimedia. The course prepares students for working with applications in data analytics, data science, digital libraries, text mining and knowledge management. No prior programming background is assumed. 4 undergraduate hours. 2 or 4 graduate hours.

IS 436 Playful Design Methods credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/436/)
In this immersive and experiential course, students consider "playfulness" as a key aspect of design methodologies and practices. Looking closely at the philosophical, social, and relational dynamics of play, we will explore how playful approaches to design thinking, game design, and other gameful methodologies can encourage collaboration, engagement, and emergent, transformative solutions to a range of challenges that face us in our rapidly-changing, information-based culture. The course aims to build student competency in design methods through a sequence of game design experiences arising from a broad consideration of play. 3 undergraduate hours. 4 graduate hours.

IS 439 Web Development Using Application Framework credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/439/)
A course in the use and evaluation of Web application frameworks for system architects, designers, and developers. Experience in creating static Web sites using HTML and CSS. 3 undergraduate hours. 4 graduate hours. Prerequisite: Experience in Python programming (IS 430 or equivalent). Experience in creating static Web sites using HTML and CSS. Experience in creating dynamic Web sites using tools like PHP is helpful but not required. Experience in using relational databases is helpful but not required.

IS 440 Community Informatics Studio credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/440/)
Studio-based learning methods, which are common in art and architectural education, are used to help students address a real-world problem or 'case'. Working in teams and mentored by the instructor and experts, students will learn how to 'be a professional' in an environment in which process is as important as project. During the term, students will participate in a cyclical process of design creation, presentation and critique culminating in a final presentation during the final day(s) of class of the finished proposal/design of how to address the case. Assumes experience in community engagement within a social justice framework. 3 undergraduate hours. 4 graduate hours.

IS 441 Strategic Communication credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/441/)
This course introduces students to collaborative approaches to strategic communication designed to persuade, influence and cause action through free and informed choices. There are many methods and tools at the disposal of the strategic communicator. This course will focus on the ethics, forms, techniques and practices of data storytelling as the centerpiece of strategic communications that are appropriate and effective for the information professional. Students learn to coordinate multiple aspects of human-centered information solutions such as information visualizations. Serving diverse information needs and ensuring those needs are met, future information professionals are expected to understand, support, and innovate dynamism of the relationships between people, information and technology. 3 undergraduate hours. 4 graduate hours.

IS 444 Legal Aspects of Information Systems credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/444/**)**
This course is intended to introduce students to principles, fundamental ideas, and cases in the Legal Aspects of Information Systems, with an emphasis on Intellectual Property Law and using scholarship as an exemplar information system, which is considered broadly. This course will be conducted in a seminar format and survey the literature and case law including copyright and open licensing, patents, and trademark law. We will discuss recent policy changes and their impact on the Intellectual Property rights. Where appropriate we will compare American jurisprudence to international Intellectual Property Law. 3 undergraduate hours. 4 graduate hours.

IS 445 Data Visualization credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/445/**)**
Data visualization is crucial to conveying information drawn from models, observations or investigations. This course will provide an overview of historical and modern techniques for visualizing data, drawing on quantitative, statistical, and network-focused datasets. Topics will include construction of communicative visualizations, the modern software ecosystem of visualization, and techniques for aggregation and interpretation of data through visualization. Particular attention will be paid to the Python ecosystem and multi-dimensional quantitative datasets. 3 undergraduate hours. 4 graduate hours.

IS 446 Systems Analysis and Design credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/446/**)**
Covers how to evaluate, select and manage information systems that will be used in the daily operation of libraries and information centers. Includes the systems used by technical staff and the information consumers. Course will focus on information as a product. Attention is given to the operation of an organization as a whole and the impact of change on the integration of resources, work flow and usability. Formal methods for modeling systems, and industry practice techniques of analysis are used to address these problems and opportunities. 3 undergraduate hours. 4 graduate hours.

IS 449 Web Application Development credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/449/**)**
This course focuses on concepts and skills needed to build full stack web applications. Topics include Model-View-Controller architecture, database access, business logic implementation, advanced client-side scripting, authentication, and application security. Students will use popular client-side and server-side web application frameworks, such as React.js and Django, to study how these concepts are implemented in practice and to apply design/development principles to build realistic web applications. 3 undergraduate hours. 4 graduate hours. Prerequisite: IS 205, IS 206, and IS 229.

IS 451 Bibliography of Africa credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/451/**)**
We will focus on the identification and evaluation of African studies reference sources and library techniques as a foundation for in-depth research. Sources covered will be in all formats, including print, microform and electronic resources. 3 undergraduate hours. 4 graduate hours.

IS 453 Information Books and Resources for Youth credit: 2 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/453/**)**
Evaluation, selection and use of information books and other resources for young people (ages 0-18) in public libraries and school media centers; explores standard selection criteria for factual print and nonprint materials in all formats and develops the ability to evaluate and promote nonfiction books and resources according to their various uses (personal and curricular) and according to young people's various needs (intellectual, emotional, social and physical). 3 undergraduate hours. 2 or 4 graduate hours.

IS 455 Database Design and Prototyping credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/455/**)**
The course provides students with both theoretical and practical training in good database design. By the end of the course students will create a conceptual data model using entity-relationship diagrams, understand the importance of referential integrity and how to enforce data integrity constraints when creating a database. Students will be proficient in writing basic queries in the structured query language (SQL) and have a general understanding of relational database theory including normalization. 4 undergraduate hours. 4 graduate hours. Prerequisite: Junior Standing required.

IS 456 Information Storage and Retrieval credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/456/**)**
Introduces problems of document representation, information need specification, and query processing. Describes the theories, models, and current research aimed at solving those problems. Primary focus is on bibliographic, text, and multimedia records. 3 undergraduate hours. 4 graduate hours.

IS 457 Data Storytelling credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/457/**)**
An introduction to understanding data as a source for storytelling and to telling stories based on data. This process will include understanding and analyzing data sets to find informative aspects, changes, or contrasts that will provide the basic information for developing stories. Course participants will learn storytelling concepts, narrative theories, and performance techniques and develop stories in a collaborative workshop style. Students will work with data visualization toolkits, which will involve variable levels of coding and skill. By using storytelling techniques with data, students can develop, and tell well-evidenced stories, organizations can make better data-driven decisions. 3 undergraduate hours. 4 graduate hours.

IS 459 Mobile Applications credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/459/**)**
This course introduces students to the fundamental concepts, cutting edge technologies and state-of-the-art research in Human Computer Interaction areas of mobile computing and ubiquitous computing. The course presents major mobile application domains systems design challenges, and design opportunities. Students' understanding will be reinforced through practical work in mobile system design, e.g., applying a video prototyping tool to design and evaluate a mobile system. 3 undergraduate hours. 4 graduate hours.

IS 461 Russian, East European, and Eurasian Bibliography & Research Methods credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/461/**)**
With a focus on Russia, Eastern Europe, and Eurasia, students will investigate this fascinating part of the world, how it has been studied and represented by generations of scholars, scientists, writers, artists, government officials, and others, and how the many fruits of their labors are (or are not) accessible to us today. 3 undergraduate hours. 4 graduate hours.

IS 464 Information Assurance credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/464/)
The course provides an introduction to the concepts, technologies, practices and challenges of Information Assurance. It takes a broad view of Information Security and Privacy and covers the essential principles for the protection of information systems; the relevant technologies; organizational concerns; policies, human aspects; legal approaches; criminology; and ethical issues. Students will gain an appreciation for the difficulty of designing, developing, deploying and maintaining information systems, services and software products that are secure and comply with expectations of security and privacy. 3 undergraduate hours. 4 graduate hours.

IS 466 Accessible and Inclusive Technologies credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/466/)
This course introduces students to various technology challenges and needs of under-served populations (e.g., people with disabilities). We will examine various accessible and inclusive technologies to understand how they were built to serve specific under-served user groups but can also benefit a wider range of users. This course will also cover various design frameworks, guidelines and processes to create more inclusive designs and technologies. 3 undergraduate hours. 4 graduate hours.

IS 467 Ethics and Policy for Data Science credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/467/)
The course will address common ethical challenges related to data including privacy, bias, and data access. These challenges will be explored through real-world cases of corporate settings, non-profits, governments, academic research, and healthcare. The course emphasizes the complexity of ethical decision-making and that trade-offs between priorities are often necessary. The course also considers how the burdens of addressing ethical concerns should be distributed among stakeholders. Students will be introduced to a range of relevant policy responses at the organizational, institutional, governmental,and supranational levels. 3 undergraduate hours. 4 graduate hours.

IS 471 Instructional Strategies and Techniques for Information Professionals credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/471/)
Provides an introduction to learning theories and instructional methods used in a variety of information settings, including libraries, archives, museums, online, and educational environments. Includes an overview of theoretical and applied research and discusses relevant issues and concepts. Students will have an opportunity to design and present an instructional program. 3 undergraduate hours. 2 or 4 graduate hours.

IS 477 Data Management, Curation & Reproducibility credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/477/)
This course addresses issues in Data Management, Curation & Reproducibility from a Data Science perspective. We discuss definitions of data science, and then introduce and use the Data Science Life Cycle as an intellectual foundation. Topics include Research Artifact Identification and Management, Metadata, Repositories, Economics of Artifact Preservation and Sustainability, and Data Management Plans. We use the case study to ground our discussions in both data sets and in specific data science research. This course requires a final project that applies course knowledge to a data science experiment and creates a data management plan for that experiment. 3 undergraduate hours. 4 graduate hours. Prerequisite: STAT 107/CS 107/IS 107; STAT 207/CS 207/IS 207; CS 227/STAT 227.

IS 490 Topics in Info Foundations credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/490/)
Directed and supervised investigation of selected topics in information studies that may include among others the social, political, and historical contexts of information creation and dissemination; computers and culture; information policy; community information systems; production, retrieval and evaluation of knowledge; computer-mediated communication. Additional fees may apply. See Class Schedule. 2 to 4 undergraduate hours. 2 to 4 graduate hours. Approved for Letter and S/U grading. May be repeated. Prerequisite: For undergraduates, junior standing and IS 202, or consent of instructor.

IS 491 Topics in Information Services credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/491/)
Variety of newly developed and current topics courses within the field of information services, intended to augment the existing Information Sciences curricula. 3 undergraduate hours. 2 to 4 graduate hours. May be repeated if topics vary.

IS 492 Topics in Information Organizations & Social Contexts credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/492/)
Variety of newly developed and current topics courses within the field of information organizations and social contexts, intended to augment the existing Information Sciences curricula. 3 undergraduate hours. 2 to 4 graduate hours. May be repeated if topics vary.

IS 493 Topics in Cultural Heritage, Collection Management & Preservation credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/493/)
Variety of newly developed and current topics courses within the field of information cultural heritage, collection management and preservation, intended to augment the existing Information Sciences curricula. 3 undergraduate hours. 2 to 4 graduate hours. May be repeated if topics vary.

IS 494 Topics in Management, Ethics & Policy credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/494/)
Variety of newly developed and current topics courses within the field of management ethics and policy, intended to augment the existing Information Sciences curricula. 3 undergraduate hours. 2 to 4 graduate hours. May be repeated if topics vary.

IS 495 Topics in Organization & Representation credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/495/)
Variety of newly developed and current topics courses within the field of information organizations and representation, intended to augment the existing Information Sciences curricula. 3 undergraduate hours. 2 to 4 graduate hours. May be repeated if topics vary.

IS 496 Topics in Human-Centered Design & Systems credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/496/)
Variety of newly developed and current topics courses within the field of human-centered design and systems, intended to augment the existing Information Sciences curricula. 3 undergraduate hours. 2 to 4 graduate hours. May be repeated if topics vary.

IS 497 Topics in Data Analytics & Data Science credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/497/)
Variety of newly developed and topics courses within Data Analytics & Data Science, intended to augment the existing Information Sciences curricula. Additional fees may apply. See Class Schedule. 2 to 4 undergraduate hours. 2 to 4 graduate hours. May be repeated if topics vary.

IS 499 Topics in Web Design & Development credit: 2 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/499/**)**
Variety of newly developed and current topics courses within Web Design & Development, intended to augment the existing Information Sciences curricula. 3 undergraduate hours. 2 to 4 graduate hours. May be repeated if topics vary.

IS 500 Introduction to the iSchool credit: 0 to 2 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/500/**)**
Introduces graduate students to the School of Information Sciences (the iSchool). Students will learn best practices for success in their program. They will also learn about resources and support provided by the School and the University while building community among their peers, faculty, staff and alumni. Various sections address different graduate student audiences and needs. 0 to 2 graduate hours. No professional credit. Approved for Letter and S/U grading.

IS 501 Reference and Information Services credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/501/**)**
Explores reference and information services in a variety of settings, introduces widely used print and online sources, and develops question negotiation skills and search strategies. 4 graduate hours. No professional credit.

IS 503 History of Children's Lit credit: 2 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/503/**)**
Interpretation of children's literature from the earliest times, including the impact of changing social and cultural patterns on books for children; attention to early printers and publishers of children's books and to magazines for children. 2 or 4 graduate hours. No professional credit.

IS 504 Sociotechnical Information Systems credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/504/**)**
The character, success, and costs/benefits of information technologies are socio-technical matters. Because of this, best practice for IT design and integration relies on participants' ability to understand and create for the totality of those settings, including social and technical dimensions. This course provides students with analytic tools for examining socio-technical settings and experience in applying that knowledge in IT modeling, design and management. 4 graduate hours. No professional credit.

IS 505 Information Organization and Access credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/505/**)**
Emphasizes information organization and access in settings and systems of different kinds. Traces the information transfer process from the generation of knowledge through its storage and use in both print and non-print formats. Consideration will be given to the creation of information systems: the principles and practice of selection and preservation, methods of organizing information for retrieval and display, the operation of organizations that provide information services, and the information service needs of various user communities. 4 graduate hours. No professional credit.

IS 506 Human-Centered Information Systems credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/506/**)**
This course provides students the fundamental theory and skills necessary to design, develop, and evaluate human centered information systems. By the end of the course students will be able to gather user needs in light of existing sociotechnical systems, design effective human centered interfaces, implement interactive prototypes, and conduct unit testing and user studies of software. The course will employ lectures, mini projects and in-class hands-on activities to reinforce the ideas presented. 4 graduate hours. No professional credit.

IS 507 Data, Statistical Models and Information credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/507/**)**
An introduction to statistical and probabilistic models as they pertain to quantifying information, assessing information quality, and principled application of information to decision making, with focus on model selection and gauging model quality. The course reviews relevant results from probability theory, parametric and non-parametric predictive models, as well as extensions of these models for unsupervised learning. Applications of statistical and probabilistic models to tasks in information management (e.g. prediction, ranking, and data reduction) are emphasized. 4 graduate hours. No professional credit. Prerequisite: Graduate standing.

IS 508 Seminar in Information Foundations credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/508/**)**
This seminar course will offer an advanced graduate survey of research in areas related to information foundations, across a wide range of topics. This course is designed to incorporate multiple guest lectures. Weekly class meetings will be composed of both lectures and discussions. 4 graduate hours. No professional credit. May be repeated in the same or separate semesters to a maximum of 16 hours, if topics vary.

IS 509 History and Foundations of Information Science credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/509/**)**
Provides an introduction to the historical foundations of IS. Examinations of the interactions of socio-cultural, technological and professional factors underlying the emergence of IS provide a basis for exploring more recent developments in theory and practice. Required IS Ph.D. course. 4 graduate hours. No professional credit.

IS 510 Libraries, Information and Society credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/510/**)**
Explores major issues in the library and information science professions as they involve their communities of users and sponsors. Analyzes specific situations that reflect the professional agenda of these fields, including intellectual freedom, community service, professional ethics, social responsibilities, intellectual property, literacy, historical and international models, the socio-cultural role of libraries and information agencies and professionalism in general, focusing in particular on the interrelationships among these issues. 4 graduate hours. No professional credit. Prerequisite: Required M.S. in library and information science degree core course.

IS 511 Scholarly Communications credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/511/**)**
A basic level of scholarly communication literacy and sophistication is an increasing requirement of academic librarians, both to inform their work and to make those librarians effective partners in the scholarly enterprise. This course is designed to cultivate and develop that literacy. It will address topics such as: the established modes of scholarly communication and the emergence of alternatives influenced by the growth of social media and other forms of networked communication; the divide between formal and informal modes of scholarly communication and the current state of flux as that divide begins to collapse; the varying economies of scholarship (the reputation and prestige economy, the financial economy both in the market and in the mission-driven research academy, and the economic impact of scholarly communication decisions upon library budgets); modes of credentialing scholarship and their impact upon professional advancement, with special attention to peer review and its (current?) discontents; scholarship as intellectual property and the most effective ways to manage that property and achieve scholarly goals; and issues in access and preservation as they relate to ensuring the future of the scholarly conversation. 4 graduate hours. No professional credit.

IS 512 History of Libraries credit: 2 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/512/**)**
The origins, development, and evolution of libraries and related institutions, from antiquity to the twentieth century, as a reflection of literacy, recognition of archival responsibility, humanistic achievement, scientific information needs, and service to society. Same as MDIA 512. 2 or 4 graduate hours. No professional credit.

IS 514 Applied Business Research credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/514/**)**
As an experiential learning class, this course covers advanced techniques of business research with an emphasis on managing real-world client projects. Students will be assigned to teams and work with clients to identify research requirements and construct recommendations. Students will acquire critical skills in creating professional deliverables through client engagements. Students will build professional research portfolios at the conclusion of their projects. 4 graduate hours. No professional credit. May be repeated in separate terms up to 8 hours if topics vary. Prerequisite: Instructor approval required.

IS 515 Information Modeling credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/515/**)**
Information modeling is critical to all information systems and analysis. This course introduces students to foundational frameworks (set theory and logics) and basic underlying objects (entities, attributes, and relations) of information modeling. A variety of modeling approaches (use case modeling, relational database design, first-order predicate logic, and semantic web technologies) are considered, and recent developments (non-relational databases and knowledge graphs) are reviewed. Modeling strategies are assessed by their expressiveness and reasoning capabilities. 4 graduate hours. No professional credit.

IS 516 Scalable Information Systems credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/516/**)**
Focuses on large-scale information systems and analyzes the design and development principles and infrastructures that make them scalable and reliable. Topics include issues in scalability and availability, distributed system design, virtualization, scalability testing, and popular frameworks and platforms, such as Hadoop/MapReduce, Apache Spark, Amazon Web Services. Real-world, large-scale information systems, such as those developed by Google, Amazon, and Facebook, etc., are discussed and analyzed as use cases. 4 graduate hours. No professional credit.

IS 517 Methods of Data Science credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/517/**)**
A dramatic increase in computing power has enabled new areas of data science to develop in statistical modeling and analysis. These areas cover predictive and descriptive learning and bridge between ideas and theory in statistics, computer science, and artificial intelligence. We will cover methods including predictive learning: estimating models from data to predict future outcomes. Regression topics include linear regression with recent advances using large numbers of variables, smoothing techniques, additive models, and local regression. Classification topics include linear regression, regularization, logistic regression, discriminant analysis, splines, support vector machines, generalized additive models, naive Bayes, mixture models and nearest neighbor methods as time permits. Lastly we develop neural networks and deep learning techniques, bridging the theory introduced in the earlier parts of the class to purely empirical methods. We situate the course components in the "data science lifecycle" as part of the larger set of practices in the discovery and communication of scientific findings. 4 graduate hours. No professional credit. Prerequisite: IS 507 or equivalent (e.g. intro probability/stats STAT 100, CS 361, or ECON 202); and IS 490 IDS/CS 398 ID/STAT 490 or CS101 or equivalent; or consent of the instructor. Linear Algebra recommended at the level of MATH 125; Calculus recommended at the level of MATH 220.

IS 518 Seminar in Information Services credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/518/**)**
This seminar course will offer an advanced graduate survey of research in areas related to information services, across a wide range of topics. This course is designed to benefit from guest lectures. This seminar course will be composed of both lectures and discussions. 4 graduate hours. No professional credit.

IS 519 Research Design in Information Science credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/519/**)**
Provides an introduction to the design of IS research, beginning with an in-depth consideration of the philosophical and logical underpinnings of research. A brief survey of different methods used in IS research is followed by an exploration of research design issues through comparative hands-on exercises. Throughout the course, the emphasis will be on research design choices, especially the connections between research questions and research methods. Required IS Ph.D. course. 4 graduate hours. No professional credit.

IS 521 Digital Libraries credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/521/**)**
A comprehensive examination of the history and state-of-the-art in digital library research and practice. Focuses upon the theoretical, technological, human factors and evaluative components of digital library research and practice. Course includes an intensive reading of the literature, review of existing technologies and proof-of-concepts implementation projects. Students should have access to a personal computer on which they can experiment on their own with downloaded software tools. Students must be competent in basic computing including the installation and configuration of software packages. 4 graduate hours. No professional credit. Prerequisite: IS 505 (formerly IS 501, SP 20 and before) or consent of instructor; previous or concurrent enrollment in IS 430 (formerly IS 452, SU 20 and before) (either the 2 credit hours or the 4 credit hours of Foundations Info Processing are acceptable), or proof of competency in programming.

IS 522 Library Buildings credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/522/)
Studies the library's physical plant in the light of changing concepts and patterns of library service; analyzes present-day library buildings (both new and remodeled), and their comparison with each other as well as with buildings of the past; examines the interrelationship of staff, collections, users, and physical plant; discussion supplemented by visits to new libraries and conference with their staffs. A two-day field trip is required. Additional fees may apply. See Class Schedule. 2 or 4 graduate hours. No professional credit.

IS 523 Preserving Info Resources credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/523/)
Covers the broad range of library preservation and conservation for book and nonbook materials relating these efforts to the total library environment; emphasizes how the preservation of collections affects collection management and development, technical services, access to materials and service to users. 4 graduate hours. No professional credit.

IS 524 Data Governance credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/524/)
The course will address issues of data governance, including data ethics, and design and implementation of policy responses and best practices. Topics include privacy, discrimination, data sharing, data quality, and building a diverse workforce. These topics will be explored through real-world cases in corporate settings, libraries, non-profits, healthcare, governments, and academe. The course will also cover principles and frameworks for analyzing and responding to issues. The course is suitable for anyone planning to work in a professional setting that will involve handling data or building information systems, or seeking a grounding for future study of data and information ethics. 2 or 4 graduate hours. No professional credit.

IS 525 Data Warehousing and Business Intelligence credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/525/)
This course examines the construction of a data warehouse and business intelligence system. It will review the roles and requirements of building the system, including data modelling and business intelligence product design. This course will explore real-world case studies of data warehouse and business intelligence projects through hands-on experience with data modelling, Business Objects, Power BI and Tableau. The course culminates with a final project to design a solution for a business case. 4 graduate hours. No professional credit.

IS 526 Building Advanced Interactive Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/526/)
This course will teach students about building inclusive interactive systems. They will learn to gather and understand user requirements and needs for a wide range of user populations, especially those that are under-served (e.g., children, older adults, people with disabilities), apply inclusive design frameworks and principles, and design, develop, evaluate and improve interactive prototypes in an iterative manner. 4 graduate hours. No professional credit.

IS 527 Network Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/527/)
Network Analysis has become a widely adopted method for studying the interactions between social agents, information and infrastructures. The strong demand for expertise in network analysis has been fueled by the widespread acknowledgement that everything is connected and the popularity of social networking services. This interdisciplinary course introduces students to fundamental theories, concepts, methods and applications of network analysis in a practical manner. Students learn and practice hands-on skills in collecting, analyzing and visualizing network data. 4 graduate hours. No professional credit.

IS 528 Seminar in Information Organizations & Social Contexts credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/528/)
This seminar course will offer an advanced graduate survey of research in areas related to information in Information Organizations & Social Contexts, across a wide range of topics. This course is designed to incorporate multiple guest lectures. Weekly class meetings will be composed of both lectures and discussions. 4 graduate hours. No professional credit.

IS 529 Doctoral ProSeminar credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/IS/529/)
A core course for all first year Information Science PhD students. The seminar serves as a venue for the development of a variety of skills and capacities to succeed as a scholar. Throughout the term, students will engage in a series of tasks designed as an initiation to the academic profession. The seminar offers a mix of sessions on progression through the Ph.D. degree program, the research process, guidance on the academic profession, and written and oral presentation of scholarly research. While students will receive feedback from the instructor, this is a seminar, meaning that active student participation and peer feedback is crucial. 1 graduate hour. No professional credit. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 4 hours. Prerequisite: PhD Students in Information Sciences.

IS 530 Collection Development credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/530/)
Examines issues affecting the development and management of collections for academic, public, special, and school libraries: collection development policies, collection assessment, the marketplace, publishing, legal issues, and budget allocation; document delivery; collaboration and cooperation. 4 graduate hours. No professional credit. Prerequisite: IS 505 - Information, Organization and Access (formerly IS 501 prior to FA 20), or concurrent enrollment in IS 505 and IS 530.

IS 532 School Library Management credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/532/)
School Library Information Specialists serve children and young adults (ages 5-18) in K-12 school library media centers. Students will acquire specific knowledge, skills and competencies needed to design, develop, integrate and assess curriculum and instruction with an emphasis on the information needs of K-12 students. Readings and projects provide students with opportunities to apply the practical knowledge and skills they have learned about building reading literacy, teaching information literacy skills, collaborating with teachers and integrating resources into teaching and learning. 2 or 4 graduate hours. No professional credit.

IS 533 Oral History Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/533/)
This methods seminar engages with the theory and practice of oral history through reading, discussion, and practice. Students will: gain hands-on experience with interviewing and transcription, be prepared to work with Institutional Review Boards, understand how to design consent and legal release forms, and will engage with relevant ethical and theoretical issues. 4 graduate hours. No professional credit.

IS 534 Information Consulting credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/534/)
This course is designed to provide fundamental knowledge in providing research services and also introduce the latest trends and innovative approaches in research services. Information professionals are increasingly being challenged to provide not just data but insights and recommendations that are critical for strategic decision making. Using methodologies widely adopted by professional firms and researchers, this course will cover basics of research consulting including framing research problems, developing deliverables, and presenting professionally. 4 graduate hours. No professional credit.

IS 537 Theory & Practice of Data Cleaning credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/537/)
Data cleaning (also: cleansing) is the process of assessing and improving data quality for later analysis and use, and is a crucial part of data curation and analysis. This course identifies data quality issues throughout the data lifecycle, and reviews specific techniques and approaches for checking and improving data quality. Techniques are drawn primarily from the database community, using schema-level and instance-level information, and from different scientific communities, which are developing practical tools for data pre-processing and cleaning. Same as CS 513. 4 graduate hours. No professional credit.

IS 538 Seminar in Cultural Heritage, Collection Management, & Preservation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/538/)
This seminar course will offer an advanced graduate survey of research in areas related to research in Cultural Heritage, Collection Management, & Preservation, across a wide range of topics. This course is designed to incorporate multiple guest lectures. Weekly class meetings will be composed of both lectures and discussions. 4 graduate hours. No professional credit.

IS 540 Social Justice in the Information Professions credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/540/)
Intended to provide a historic and contemporary overview of social justice and advocacy work in librarianship. The course will be primarily focused on activities in the United States, though international movements and perspectives will be addressed. Topics include: desegregation of libraries and professional associations; recruitment and retention of library workers from traditionally underrepresented populations; library outreach; intellectual freedom; and emerging critical theories and issues in the field. 2 or 4 graduate hours. No professional credit. Prerequisite: Graduate student.

IS 541 Copyright for Information Professions credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/541/)
Copyright is a complicated legal concept that affects all information institutions, including corporations, libraries, archives, and museums whether they are online or off. This course will explore copyright from both a legal and information management perspective to demystify the concept and provide practical tools for working with copyrighted material. Topics discussed include the Constitutional underpinnings of copyright, copyright basics, copyright exceptions, fair use, the open access movement, licensing, data and copyright, and educational issues relating to copyright including issues related to K-12 teaching. This course is designed for students with a variety of backgrounds and interests. 2 or 4 graduate hours. No professional credit.

IS 542 Research and Inquiry for Youth credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/542/)
This course is designed to prepare school librarians to serve as instructional leaders in their learning communities, positioned to transform teaching and learning in order to ensure students are college, career, and community ready. Participants will develop strategies and practices to support the school's curriculum through the roles of instructional partner, information specialist, and teacher. The school librarian has a leadership role in designing authentic learning activities in research and guided inquiry to prepare students in both the process and attitudes necessary to identify and meet their own lifelong information needs. 4 graduate hours. No professional credit.

IS 543 Digital Preservation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/543/)
Examines current problems with and approaches to digital preservation that are fundamental to the long-term accessibility of digital materials. Examines the range of current research problems, along with emerging methods and tools, and assesses a variety of organizational scenarios to plan and implement a preservation plan. Topics include basic information theory, preservation of complex digital objects; standards and specifications; sustainability and risk assessment; authenticity, integrity, quality control, and certification; and management of preservation activities. 4 graduate hours. No professional credit.

IS 544 Administration & Management of Libraries and Information Centers credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/544/)
Designed to explore the principles that govern how organizations and institutions work, this course provides a foundation for and introduction to the theories, practices and procedures involved in the management and administration of libraries and information centers. 4 graduate hours. No professional credit.

IS 545 Advanced Data Visualization credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/545/)
This seminar-style course will cover advanced topics in visualization techniques. This will cover topics such as the history of visualization techniques, the perception and understanding of visual information, and new frontiers in displaying quantitative information. We will explore the modern technical stack for creating and sharing visualizations, including topics in javascript, python, and reactive frameworks. 4 graduate hours. No professional credit.

IS 547 Foundations of Data Curation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/547/)
Data curation is the active and on-going management of data through its lifecycle of interest and usefulness to scholarship, science, and education; curation activities and policies enable data discovery and retrieval, maintain data quality and add value, and provide for re-use over time. This course provides an overview of a broad range of theoretical and practical problems in the emerging field, examining issues related to appraisal and selection, long-lived data collections, research lifecycles, workflows, metadata, and legal and intellectual property issues. 4 graduate hours. No professional credit.

IS 548 Seminar in Management, Ethics, & Policy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/548/)
This seminar course will offer an advanced graduate survey of research in areas related to research in management, ethics, & policy, across a wide range of topics. This course is designed to incorporate multiple guest lectures. Weekly class meetings will be composed of both lectures and discussions. 4 graduate hours. No professional credit.

IS 549 Practicum credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/549/**)**
Supervised field experience of professional-level duties in an approved library or information center. 2 graduate hours. No professional credit. Approved for S/U grading only. A maximum of 2 hours may be applied toward a degree program. Prerequisite: Completion of 12 graduate hours of information sciences courses; submission of Practicum forms.

IS 550 Theories of Information credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/550/**)**
A theory of information attempts to articulate clearly and precisely what information is, and what it means to become informed. Theories of information can contribute to the scientific foundations for many important research and practice activities in IS, including data curation, information modeling, information access, digital preservation, and informatics support for science and scholarship. This course, Theories of Information -- A, takes a logic-based approach to investigating the nature of information. Methodologically we draw from a family of methods that might be called formal methods, in contrast to the empirical methods of social and nature science. Formal methods typically make use of concepts from logic, set theory, and discrete mathematics to construct and explore formal systems. Formal methods are widely used in linguistics, mathematics, philosophy, and computer science. Within the general area of formal methods our approach in this course might be more specifically referred to as conceptual analysis, as it takes the form of a systematic analysis of a concept, namely information. Most of the prior work that is relevant to our analysis is from analytic philosophy, linguistics (especially formal semantics), and computer science (especially knowledge representation and AI). 4 graduate hours. No professional credit. Prerequisite: Some familiarity with formal logic would be useful, but is not required. Some familiarity with conceptual modeling (ER or UML diagrams, or RDF/S for instance) would also be useful, but not required.

IS 551 Youth Services Librarianship credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/551/**)**
Theory and techniques in planning, implementing and evaluating library programs/services for youth (age 0-18) in public and school libraries/media centers; the knowledge base, skills, and competencies needed by the library media professional in the development of all aspects of young people's reading/viewing/listening and information literacy skills. 4 graduate hours. No professional credit.

IS 555 Naming and Power credit: 2 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/555/**)**
An advanced topics seminar in subject description and access that focuses upon representation in race, gender, sexuality and other contested categories. Critical intersections of bias, exclusion, and marginalization will be explored through a variety of case studies. Implications for how we construct search and discovery systems (e.g databases, archival and museum finding aids, taxonomies and catalogues), and other tools, are crucial considerations for those engaging in cultural heritage work. Open to masters and doctoral students. 2 or 4 graduate hours. No professional credit.

IS 556 Internet of Things credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/556/**)**
Relying primarily on case studies, this course will help develop the students' understanding of how the IoT enables Business Data Analytics. Lectures and readings will be focused on the impact to a company's business model created by IoT data and analytics. Because of the disruptive nature of IoT sensors or data, IT Innovation will also be discussed. While the course will reflect a practitioner's view, the material will be presented on a solid academic under-pinning. 4 graduate hours. No professional credit.

IS 557 Applied Machine Learning: Team Projects credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/557/**)**
A comprehensive exploration of the applied machine learning workflow from inspiration to delivery of a machine learning solution broadly defined (i.e., from analytic finding to embedded machine learning application). This course is firmly grounded in a "learning-by-doing" teaching philosophy with pedagogical priority clearly placed on the application of machine learning to real-world data and problems. Ongoing and intense practical experiences in team-based project management and work are another cornerstone of this course. This course includes student-led reviews of existing data sources and machine learning technologies along with several team-based fact-finding and proof-of-concept implementation projects. This course is designed for students wishing to engage seriously in the practical world of machine learning implementation. 4 graduate hours. No professional credit. Prerequisite: Students should have demonstrated ability, and must have taken one of the following courses, IS 577 (formerly IS 590 DT), IS 517 (formerly IS 590 MD), CS 412, CS 446 or a course demonstrably equivalent.

IS 558 Seminar in Organization & Representation credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/558/**)**
Offers an advanced graduate survey of research in areas related to research in Organization and Representation, across a wide range of topics. Designed to incorporate multiple guest lectures. Weekly class meetings will be composed of both lectures and discussions. 4 graduate hours. No professional credit. May be repeated in the same or separate terms, to a maximum of 16 hours, if topics vary.

IS 559 CAS Project credit: 0 to 8 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/559/**)**
Individual study of a problem in library and information science; forms the culmination of the Certificate of Advanced Study program. 0 to 8 graduate hours. No professional credit. Approved for S/U grading only. May be repeated. Only eight hours will apply to the Certificate of Advanced Study. Prerequisite: Admission to Certificate of Advanced Study program in library and information science; submission of "Request to Enroll in IS 559 - CAS Project" form.

IS 560 Social Science Research in Library and Information Science credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/560/**)**
Introduces students to the fundamentals of doing social science research in LIS. Students will learn how to frame a research problem, choose an appropriate research method, apply it, and write up the research for presentation and publication. 4 graduate hours. No professional credit.

IS 561 Use and Users of Information credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/561/)
Explores information needs and uses at a general level, addressing formal and informal information channels, barriers to information, issues of value, and impacts of technology. Examines information seeking practices of particular communities and within various environments, introducing recent approaches to user-centered system design and digital library development. Provides an overview of methods that can be used to study information needs, information seeking behavior, and related phenomena. 4 graduate hours. No professional credit. Prerequisite: IS 505.

IS 562 Administration and Use of Archival Materials credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/562/)
Administration of archives and manuscript collections in various types of institutions. Theoretical principles and archival practices of appraisal, acquisition, accessioning, arrangement, description, preservation, and reference services. Topics will include: records management programs, collecting archives programs/special collections, legal and ethical issues, public programming and advocacy, and the impact of new information technologies for preservation and access. Lectures, discussion, internet demonstration, and field trips to the Special Collections Department and University Archives. 4 graduate hours. No professional credit.

IS 563 Advanced Topics in Literature, Media and Materials credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/563/)
Variety of newly developed and advanced topics courses within Literature, Media and Materials, intended to augment the existing Information Sciences curricula. 2 to 4 graduate hours. No professional credit. May be repeated in the same or separate terms, to a maximum of 16 hours, if topics vary.

IS 565 Cataloging for School Libraries credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/IS/565/)
This course will introduce the student to the principles, practices and standards for information representation and organization in school media centers. Course content will include an introduction to original cataloging of non-standard materials (such as realia and audiovisual materials), evaluation of bibliographic records, exposure to authority control and subject access systems with a special focus on the Dewey Decimal System and Sears Subject Headings. The course will also provide an overview and exploration of different library systems/OPACS. 2 graduate hours. No professional credit.

IS 567 Text Mining credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/567/)
The goal of this project-based course is to provide students with first-hand experience with how to create a well-formed text mining problem and how to select, transform, and mine a collection of text. Prior programming knowledge (in any language) is required. As students work on their own project, they will draw from key concepts in text mining using perspectives from both the knowledge discovery and natural language processing research communities. 4 graduate hours. No professional credit.

IS 568 Seminar in Human-Centered Design & Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/568/)
This seminar course will offer an advanced graduate survey of research in areas related to research in human-centered design and systems, across a wide range of topics. This course is designed to incorporate multiple guest lectures. Weekly class meetings will be composed of both lectures and discussions. 4 graduate hours. No professional credit.

IS 569 Internship credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/IS/569/)
Supervised field experience designed for learning professional-level duties in an approved information-related organization or institution. 0 graduate hours. No professional credit. Approved for S/U grading only. May be repeated in separate terms.

IS 571 Advanced Topics in Use and Users of Information credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/571/)
Variety of newly developed and advanced topics courses within the field of Use and Users of Information, intended to augment the existing Information Sciences curricula. 2 to 4 graduate hours. No professional credit.

IS 573 Advanced Topics in Collections credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/573/)
Variety of newly developed and advanced topics courses within the field of Collections, intended to augment the existing Information Sciences curricula. Additional fees may apply. See Class Schedule. 2 or 4 graduate hours. No professional credit.

IS 575 Metadata in Theory & Practice credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/575/)
Combines theoretical examination of the design of metadata schema with their practical application in a variety of settings. Hands-on experience in the creation of descriptive, administrative, and structural metadata, along with their application in systems such as OAI harvesting, OpenURL resolution systems, metasearch systems and digital repositories, will help students develop a thorough understanding of current metadata standards as well as such issues as crosswalking, metadata schema, metadata's use in information retrieval and data management applications, and the role of standards bodies in metadata schema development. 4 graduate hours. No professional credit. Prerequisite: IS 505 - Information, Organization and Access (formerly IS 501 prior to FA 20) or consent of the instructor.

IS 577 Data Mining credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/577/)
Data mining refers to the process of exploring large datasets with the goal of uncovering interesting patterns. This process usually involves a number of tasks such as data collection, pre-processing, & characterization; model fitting, selection, & evaluation; classification, clustering, & prediction. Although data mining has its roots in database management, it has grown into a discipline that focuses on algorithm design (to ensure computational feasibility) & statistical modeling (to separate the signal from the noise). It draws heavily upon a variety of other disciplines including statistics, machine learning, operations research, & information retrieval. Will cover the major data mining concepts, principles, & techniques that every information scientist should know about. Lectures will introduce & discuss the major approaches to data mining; computer lab sessions coupled w/assignments will provide hands-on experience with these approaches; term projects offer the opportunity to use data mining in a novel way. Mathematical detail will be left to the students who are so inclined. 2 or 4 graduate hours. No professional credit.

IS 578 Seminar in Research Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/578/)
This seminar course will offer an advanced graduate survey of research in areas related to research in research methods, across a wide range of topics. This course is designed to incorporate multiple guest lectures. 4 graduate hours. No professional credit.

IS 580 Information History credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/580/)
Drawing on research in varied historical specializations, information history has become a vibrant area of study, one that improves our understanding, moreover, of today's information universe. Information history covers diverse institutions and practices -- from libraries and the book to the telegraph and postal systems, from surveillance to cartography, from documentary culture to statistical surveys -- seeking to connect them with the major developmental processes of human history. Framed in a succession of major historical epochs, topics and trends, from Antiquity to the twentieth century, this course revises our sense of the historical record by situating information explicitly within it. 4 graduate hours. No professional credit.

IS 581 Advanced Topics in Youth Services credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/581/)
Variety of newly developed and advanced topics courses within the field of Youth Services, intended to augment the existing Information Sciences curricula. 2 to 4 graduate hours. No professional credit. May be repeated in the same or separate semesters to a maximum of 16 hours, if topics vary.

IS 582 Advanced Topics in Librarianship credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/582/)
Variety of newly developed and advanced topics courses within the field of Librarianship, intended to augment the existing Information Sciences curricula. Additional fees may apply. See Class Schedule. 2 to 4 graduate hours. No professional credit. May be repeated in the same or separate semesters to a maximum of 16 hours, if topics vary.

IS 583 Advanced Topics in Book History credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/583/)
Variety of newly developed and advanced topics courses within the field of Book History, intended to augment the existing Information Sciences curricula. Additional fees may apply. See Class Schedule. 2 to 4 graduate hours. No professional credit. May be repeated in the same or separate semesters to a maximum of 16 hours, if topics vary.

IS 584 Advanced Topics in Ethics and Privacy credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/584/)
Variety of newly developed and advanced topics courses within the field of ethics and privacy, intended to augment the existing Information Sciences curricula. 2 to 4 graduate hours. No professional credit. May be repeated in the same or separate semesters to a maximum of 16 hours, if topics vary.

IS 585 Bibliographic Metadata credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/585/)
Introduction to basic principles and concepts of descriptive and subject cataloging in the context of information service needs for various user communities. Explores principles, structures, standards, technologies and practices relating to organizing and creating access to print and non-print media. Includes coverage of subject analysis and descriptive practices. Introduces controlled vocabularies. 4 graduate hours. No professional credit. Prerequisite: Information Organization and Access; IS 505 for Fall 2020 (previously IS 501).

IS 586 Usability Engineering credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/586/)
The course provides an introduction to: issues in Human Computer Interaction; analysis of interfaces and their use; the interface design process as an engineering activity; designing usable interfaces under constraints; and the rapid prototyping and evaluation cycle. The course covers interface design in multiple contexts including websites, web-based applications, smartphone apps, regular computer apps and new contexts of interacting with computers. Elective course for the CAS in Digital Libraries concentration. 4 graduate hours. No professional credit.

IS 587 Seminar in Data Analytics and Data Science credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/587/)
This seminar course will offer an advanced graduate survey of data analytics and data science in the information fields, across a wide range of topics. This course is designed to incorporate multiple guest lectures. 4 graduate hours. No professional credit.

IS 588 Data Consulting Capstone credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/588/)
This course will help to prepare students for a competitive job market in data consulting. They will build a portfolio including evidence of effective consulting abilities, database design, and knowledge of applying data to solve real world problems. Portfolios will demonstrate theoretical and practical understandings of areas such as entity-relationship modeling, creating tables, writing queries in SQL, and data analysis for decision making. 4 graduate hours. No professional credit.

IS 589 Independent Study credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/589/)
Permits the intermediate or advanced student opportunity to undertake the study of a topic not otherwise offered in the curriculum or to pursue a topic beyond or in greater depth than is possible within the context of a regular course. 2 to 4 graduate hours. No professional credit. May be repeated by MS students to a maximum of 4 graduate hours. May be repeated by CAS students to a maximum of 8 graduate hours. May be repeated by PhD students to a maximum of 16 graduate hours. Prerequisite: Submission of "Request to Enroll in IS 592" form.

IS 590 Advanced Topics in Information Foundations credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/590/)
Variety of newly developed and advanced topics courses within the field of information foundations, intended to augment the existing Information Sciences curricula. Additional fees may apply. See Class Schedule. 1 to 4 graduate hours. No professional credit. May be repeated.

IS 591 Advanced Topics in Information Services credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/591/)
Variety of newly developed and advanced topics courses within the fields of Information Services, intended to augment the existing Information Sciences curricula. 0 to 4 graduate hours. No professional credit. May be repeated in the same or separate semesters to a maximum of 16 hours, if topics vary.

IS 592 Advanced Topics In Information Organizations credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/IS/592/)
Variety of newly developed and advanced topics courses within the fields of Information Organization, intended to augment the existing Information Sciences curricula. 2 to 4 graduate hours. No professional credit. May be repeated in the same or separate semesters to a maximum of 16 hours, if topics vary.

IS 593 Advanced Topics in Preservation & Tech Services credit: 2 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/593/**)**
Variety of newly developed and advanced topics courses within the fields of Preservation & Tech Services, intended to augment the existing Information Sciences curricula. 2 to 4 graduate hours. No professional credit. May be repeated in the same or separate semesters to a maximum of 16 hours, if topics vary.

IS 594 Advanced Topics in Management and Policy credit: 2 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/594/**)**
Variety of newly developed and advanced topics courses within the fields of Management and Policy, intended to augment the existing Information Sciences curricula. 2 to 4 graduate hours. No professional credit. May be repeated in the same or separate semesters to a maximum of 16 hours, if topics vary.

IS 595 Advanced Topics in Organization & Representation credit: 2 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/595/**)**
Variety of newly developed and advanced topics courses within the fields of Organization & Representation, intended to augment the existing Information Sciences curricula. 2 to 4 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated in the same or separate semesters to a maximum of 16 hours, if topics vary.

IS 596 Advanced Topics in Human-Centered Design & Systems credit: 2 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/596/**)**
Variety of newly developed and advanced topics courses within the field of Human-Centered Design & Systems, intended to augment the existing Information Sciences curricula. 2 to 4 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated in the same or separate semesters to a maximum of 16 hours, if topics vary.

IS 597 Advanced Topics in Data Analytics & Data Science credit: 2 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/597/**)**
Variety of newly developed and advanced topics courses within the fields of Data Analytics & Data Science, intended to augment the existing Information Sciences curricula. 2 to 4 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated in the same or separate semesters to a maximum of 16 hours, if topics vary.

IS 599 Thesis Research credit: 0 to 16 Hours. **(**https://courses.illinois.edu/schedule/terms/IS/599/**)**
Individual study and research. 0 to 16 graduate hours. No professional credit. Approved for S/U grading only. May be repeated. M.S. candidates, 0 to 8 hours. Doctoral candidates, 0 to 16 hours. Prerequisite: MS students must submit a "Request to Enroll in IS 599 - Master's Thesis" form.

IB - INTEGRATIVE BIOLOGY

IB Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/IB/)

Courses

IB 100 Biology in Today's World credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IB/100/)
Introduction to biology for the non-major. In-depth focus on three contemporary problems-maintaining a livable environment, issues of human health, and evolution.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Life Sciences

IB 103 Introduction to Plant Biology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/103/)
Basic principles of growth and form, physiology, genetics, evolution, and ecology in plant biology. Lecture and laboratory.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Life Sciences

IB 104 Animal Biology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/104/)
Introductory zoological concepts with emphasis on the diversity and comparative anatomy of animals and the fundamentals of physiology, genetics, evolution, and behavior. Lecture and laboratory. The laboratory includes vertebrate dissection.

IB 105 Environmental Biology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IB/105/)
Introduction to ecological principles in relation to understanding environmental problems; course emphasizes impacts upon ecosystems by human activities such as air and water pollution, usage of pesticides and pest control measures, expansion of agriculture in tropics and arid regions, harvesting the oceans, and development of energy sources.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Life Sciences

IB 108 The Biology of Dinosaurs credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IB/108/)
The origin, diversity, and extinction of dinosaurs will serve as a conceptual framework to explore fundamental principles of biology. We will consider dinosaurs as animals, examining evidence for their physiology and behavior, and how evolution and speciation produced the diversity of dinosaurs. We will relate the influence of Earth's changing environments on dinosaurs to environmental change on human timescales. We will emphasize how scientists collect and evaluate fossil data through an understanding of living organisms.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Life Sciences

IB 110 Race and Environmental Biology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IB/110/)
The environment each person experiences is created by cultural, biological, and political factors. We will explore how race and culture shape environment and the underlying biological processes that influence the people and organisms that occur in these environments. We will also explore how politics can further shape environments for various racial and ethnic groups.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Life Sciences
Cultural Studies - US Minority

IB 150 Organismal & Evolutionary Biol credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/150/)
Introduction to physiology, genetics, and evolution of organisms, and their ecology and diversity.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Life Sciences

IB 151 Organismal & Evol Biol Lab credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/IB/151/)
Topics follow lecture topics in IB 150 and include labs in ecology, plant and animal function, and genetics and evolution. Designed for non-majors needing a year of biology with lab. Credit is not given for IB 151 for Integrative Biology or Molecular and Cellular Biology majors. Prerequisite: Credit or concurrent registration in IB 150.

IB 199 Undergraduate Open Seminar credit: 0 to 5 Hours. (https://courses.illinois.edu/schedule/terms/IB/199/)
Approved for both letter and S/U grading. May be repeated to a maximum of 5 hours.

IB 202 Physiology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/202/)
How animals function in acquiring, processing, and allocating resources in the face of environmental constraints. The inquiry-based laboratory emphasizes testing of hypotheses related to functioning of physiological components of the basic systems of animals. Lecture only, 3 hours; with laboratory, 4 hours. Students must complete the laboratory portion of the course to receive 4 hours of credit. The laboratory includes vertebrate dissection. Prerequisite: IB 150 and MCB 150.

IB 203 Ecology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/203/)
The links between evolution and ecology, population dynamics, community structure and function, and ecosystem function on local and global scales. Basic ecology needed to understand environmental problems and to conserve biodiversity. Investigations in both field and laboratory included. Prerequisite: IB 150 and MCB 150.
This course satisfies the General Education Criteria for:
Advanced Composition

IB 204 Genetics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/204/)
The fundamentals of inheritance, with an emphasis on eukaryotes. Major topics include transmission genetics, quantitative genetics, cytogenetics, genomics, genetics of development and behavior, and population genetics. Laboratory emphasizes an experimental, inquiry-based approach to modern and classical genetics. Lecture only, 3 hours; with laboratory, 4 hours. Students must complete the laboratory portion of the course to receive 4 hours of credit. Prerequisite: IB 150 and MCB 150.

IB 210 The Biology of Sex: From Molecules to Societies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IB/210/)
The biological study of sexual reproduction, through the survey of molecular and physiological processes and with reference to the function, ecology, behavior, and evolution of sexual and asexual reproduction in human societies and other organisms. Using student-driven library-research, and written and verbal team presentations on primary data papers, the course also explores the methods of originating, analyzing, and interpreting sex-focused scientific data.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Life Sciences

IB 220 Applied Entomology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IB/220/)
Same as CPSC 270 and NRES 270. See CPSC 270.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Life Sciences

IB 230 Pandemics credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/IB/230/)
Pandemics (global outbreaks of infectious disease) are among the most impactful events in human history. Through this course, we will study the major historical and modern pandemics from a biological, social, and political perspective. We will compare these past events to the public health crisis caused by COVID-19 and use this knowledge to interpret events and scientific discoveries related to pandemics.

IB 270 Evolution of Molecules & Cells credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/IB/270/)
The major evolutionary transitions of biomolecules and cells including: energy acquisition and metabolism; information inheritance, system regulation, and genomes; the origin of life and of the prokaryotic cell, eukaryotic cell, and multicellularity. Lecture and laboratory. Credit is not given for both IB 270 and IB 204. Prerequisite: Admission to the IB honors biology option; credit or concurrent registration in organic chemistry.

IB 271 Organismal Biology credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/IB/271/)
Integrated study of the diversity and structure and function of plants and animals in evolutionary and environmental contexts. Conceptual themes and techniques of molecular and cellular levels of biological organization will be integrated as well. Lecture and laboratory. The laboratory includes vertebrate dissection. Credit is not given for both IB 271 and IB 202. Prerequisite: IB 270; good standing in the honors biology option.
This course satisfies the General Education Criteria for:
Advanced Composition

IB 290 Introduction to Undergraduate Research in Integrative Biology credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/IB/290/)
An introduction to the practice of scientific research through hands-on experience and direct faculty interaction. Through weekly discussions, students are exposed to a variety of research topics, methods and careers in Integrative Biology and practice the steps involved in devising, planning, executing and presenting a scientific research project. Students are also assigned to a faculty advisor and work three hours a week on a laboratory and/or field research project. Prerequisite: Restricted to IB majors only.

IB 292 Translating Your IB Degree Into Career Success credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/IB/292/)
An exploration into what career options are available to students interested in biology. Students will develop the skills to stand out as an applicant and how to break into competitive fields, even in a tough or uncertain job market. The resources and connections necessary to be successful in biology will be presented, and over 20 alumni who are professionals in many biology- and health-related fields will provide insight and commentary. All assignments are real-life applications of course material, with every component meant to further career goals. Approved for S/U grading only. Prerequisite: For students pursuing biology- or health-related careers.

IB 299 Undergraduate Special Course credit: 0 to 5 Hours. (https://courses.illinois.edu/schedule/terms/IB/299/)
Approved for Letter and S/U grading. May be repeated in the same term; may be repeated in separate terms to a maximum of 6 hours.

IB 302 Evolution credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/302/)
Broad introduction to evolutionary biology, including natural selection and microevolution, phylogeny, speciation, molecular evolution, macroevolution and the fossil records. The laboratory emphasizes a survey of biodiversity and processes and patterns of evolution. Prerequisite: IB 204 or consent of instructor.

IB 303 Anatomy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/303/)
An overview of the body structure of vertebrate animals, with a special focus on mammals including humans. Body structure will be investigated from evolutionary, developmental, and human health perspectives through lectures, in-class activities, and required laboratory dissections. Through this course, students will develop a better understanding of anatomy vocabulary, the anatomical design of vertebrates, vertebrate development, and how vertebrate anatomy and development are related to each other, to organismal function, and to human health. Prerequisite: IB 150.

IB 329 Animal Behavior credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IB/329/)
Introductory course emphasizing how patterns of behavior promote survival, change through evolution, and are modified by the environment. Same as ANSC 366, ANTH 342, and PSYC 329.

IB 335 Plant Systematics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/335/)
Introduces the principles and methods of identifying, naming, and classifying flowering plants; provides an introduction to the natural history of flowering plants (pollination biology, dispersal mechanisms, breeding systems) and the use of phylogeny estimation in producing modern classifications; develops skills in using plant identification keys; and includes a survey of 40 of the most important plant families distributed worldwide.

IB 348 Fish and Wildlife Ecology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IB/348/)
Same as NRES 348. See NRES 348.

IB 360 Evolution and Human Health credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IB/360/)
Our health is inseparably tied to our evolutionary history. As a result, evolution is an important underpinning discipline for health professionals. This course first provides an overview of evolutionary processes, molecular evolution, human evolution, life history theory, and evolutionary-developmental biology. Second, it illustrates the application of these principles to our understanding of nutrition and metabolism, reproduction, disease and stress, and behavior. Third, it shows in practical terms how the principles of evolutionary medicine can be applied in medical practice and public health. Same as ANTH 360. Prerequisite: IB 302 or MCB 250 or MCB 244, or consent of instructor.

IB 361 Ecology and Human Health credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IB/361/)
Exploration of the emergence of infectious diseases and other human health issues from an ecological perspective, including vector-borne diseases, diseases spread from wildlife in terrestrial and aquatic ecosystems, and the role of pathogens and parasites in community and population ecology, food webs, and ecosystem functioning. Attention will be placed on how current and future global change and biodiversity loss will contribute to the increasing prevalence of human emerging diseases. Same as ANTH 361.

IB 362 Marine Biology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IB/362/)
Study of the major marine environments on earth, the huge diversity of organisms that live in them, and the ecological and functional reasons why these organisms live where they do. Also examines the impacts of human and their activities upon the sustainability of marine resources. Designed for students with some background in biology and evolution and interest in marine biodiversity, ecology, and conservation.

IB 364 Genomics and Human Health credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IB/364/)
Highlights advances in understanding the human genome, by utilizing the latest techniques in bioinformatics, i.e. acquiring, analyzing, storing, and displaying the information from the entire genome and protein sequences. The course describes the theory and practices behind modern sequencing techniques and explores the genome with a particular emphasis on the use of extensive online databases and software. Students will analyze one human disorder using bioinformatics software and databases in order to update older published literature about the genomics underpinning the disorder. Prerequisite: IB 204 or consent of instructor.

IB 368 Vertebrate Natural History credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/368/)
Introduction to the classification, life histories, adaptations, and ecology of fishes, amphibians, reptiles, birds, and mammals. Focus is on species of the Midwest region. Laboratory emphasizes identification and distribution of Illinois' vertebrate fauna. Some Saturday field trips are required. Same as NRES 368. Prerequisite: IB 203 or NRES 219 or consent of instructor.

IB 372 Ecology and Evolution credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/IB/372/)
Integrated study of ecology, population genetics, and evolution. Conceptual themes and techniques from the molecular, cellular, and organismal levels of biology will be integrated as well. Lecture, laboratory, and field work. Credit is not given for both IB 372 and either IB 203 or IB 302. Prerequisite: IB 271; good standing in the IB honors biology option.

IB 390 Undergraduate Research Experience credit: 0 to 5 Hours. (https://courses.illinois.edu/schedule/terms/IB/390/)
Laboratory and/or field research and/or reading supervised by faculty members in the School of Integrative Biology. Approved for S/U grading only. May be repeated to a maximum of 10 hours. Credit is not given for more than a combined maximum of 10 hours of IB 390 or IB 490 towards graduation for IB majors. Prerequisite: Consent of instructor.

IB 401 Introduction to Entomology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/401/)
Integrated studies of the principal morphological, physiological, ecological and behavioral relationships among insects. Lecture and laboratory. 3 or 4 undergraduate hours. 3 or 4 graduate hours. An insect collection will be required for 4 hours credit. Prerequisite: IB 150; or consent of instructor.

IB 405 Evolution of Traits and Genomes credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IB/405/)
Study of the evolution of phenotypic traits and genetics of natural populations, stressing empirical observations and experiments. Emphasis on recent theories of genotype/environmental interactions and their relationship to evolutionary processes. Offered in alternate years. 3 undergraduate hours. 3 graduate hours. Prerequisite: IB 204; or consent of instructor.

IB 411 Bioinspiration credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IB/411/)
Focuses on how experts in biology and technological fields find inspiration in nature and use it as a model to make technological innovations and solve societal problems. In the future, our day-to-day living, health, and the environment will benefit from interdisciplinary teams using findings in basic biological research for technological innovation. Topics to be explored include human health, efficient architecture, cooperative control, robotics, swarm logic, and advanced biological materials. 3 undergraduate hours. 3 graduate hours.

IB 416 Population Genetics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/416/)
Same as ANSC 446. See ANSC 446.

IB 420 Plant Physiology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IB/420/)
General course concerned with plant functions, including water relations, mineral nutrition, metabolism, growth, and reproduction. Same as CPSC 484. 3 undergraduate hours. 3 graduate hours. Prerequisite: IB 103 or IB 150 and MCB 150; CHEM 232; or consent of instructor.

IB 421 Photosynthesis credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IB/421/)
Comprehensive description of photosynthesis. Topics include: the photosynthetic membranes, light absorption, electron and proton transfer, photophosphorylation, water oxidation, RUBP carboxylase/oxygenase, photorespiration, whole plant photosynthesis, gas exchange and atmospheric interactions, and impacts of global environmental change. Same as BIOP 432 and CPSC 489. 3 undergraduate hours. 3 graduate hours. Prerequisite: IB 420, MCB 354, MCB 450, BIOP 401, or equivalent; or consent of instructor.

IB 426 Env and Evol Physl of Animals credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IB/426/)
Physiological adaptations of invertebrate and vertebrate animals to diverse aquatic and terrestrial environments and the extreme habitats embodied therein. 3 undergraduate hours. 3 graduate hours. Prerequisite: MCB 150; IB 202; CHEM 232; or consent of instructor.

IB 427 Insect Physiology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/427/)
The principal physiological and biochemical functions of insects. Lecture and laboratory. Offered in alternate years. 4 undergraduate hours. 4 graduate hours. Prerequisite: IB 202 and IB 401; or consent of instructor.

IB 430 Animal Behavior Lab credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IB/430/)
Inquiry-driven laboratory course in animal behavior. Students work in groups to generate hypotheses, design experiments, collect and analyze data, and write up their results. Experiments will be carried out in both the field and lab. Discussions emphasize the scientific process, including hypothesis testing, and experimental design and statistics. 3 undergraduate hours. No graduate credit. Prerequisite: IB 329. For majors only.

IB 431 Behavioral Ecology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IB/431/)
In-depth examination of areas of current interest at the interface of behavior, ecology, and evolution; focuses on communication, foraging, and social behavior. 3 undergraduate hours. 3 graduate hours. Offered in alternate years. Prerequisite: IB 329; or consent of instructor.

IB 432 Genes and Behavior credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IB/432/)
Concepts, methods, and problems in the analysis of the relationship between genes and behavior, the complex neurobiological processes that mediate action on behavior, in appropriate ecological and evolutionary contexts. Same as ANTH 432, NEUR 432, and PSYC 432. 3 undergraduate hours. 3 graduate hours. Prerequisite: IB 150 and IB 204; or consent of instructor.

IB 434 Physical Principles in Biology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IB/434/)
Examines the interaction between biological processes and the fundamental laws of mechanics. Covers general topics, such as structural analyses of anatomy, kinematics of movement, the behavior of organisms in fluids, and the importance of scaling, as well as specific topics, such as bird flight, fluid flow in cardio-vascular systems, and high speed predation. Lab culminates in student-designed, group projects to collect novel biomechanical data to answer questions about the organism of the students' choice. 3 undergraduate hours. No graduate credit. Prerequisite: IB 202 or consent of instructor; Physics 101 is recommended.

IB 435 Critical Evaluation of Herbal Remedies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IB/435/)
One-third of Americans use health care products derived from natural sources, particularly plants, but also animals, and fungi. This course examines the biological activity of natural products with respect to their ecological functions and their therapeutic uses. Principles of evidence-based medicine will be reviewed and students will evaluate natural remedies through lectures, in-class activities, discussions, and analyses of scientific papers. Overall, students develop skills useful for evaluating alternative remedies and for communicating their conclusions to the general public. 3 undergraduate hours. No graduate credit. Prerequisite: IB 202 or IB 203 or consent of instructor.

IB 436 Evolutionary Neuroscience credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/436/)
Same as NEUR 433, PHIL 433 and PSYC 433. See PSYC 433.

IB 439 Biogeography credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IB/439/)
Spatial and temporal patterns of biological diversity and the factors that govern the distribution and abundance of taxa. This course addresses two of its subfields: historical biogeography - the origin, dispersal, and extinction of taxa and biotas; and ecological biogeography - the role physical and biotic environments have played in determining taxonomic distributions. Also explores the ecological, evolutionary, climatological, and paleontological foundations for the distribution of species and biological communities. Includes a review of many of the field's classical papers, the current synthesis of biogeographic theory, and the relevance of biogeography to modern conservation goals. Offered in alternate years. Same as ANTH 436, ESE 439, GEOG 436, and NRES 441. 3 undergraduate hours. 3 graduate hours. Prerequisite: IB 150 or other introductory biology course, or consent of instructor.

IB 440 Plants and Global Change credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IB/440/)
Same as CPSC 431 and NRES 431. See CPSC 431.

IB 442 Evolution of Infectious Disease credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IB/442/)
Same as MCB 435. See MCB 435.

IB 443 Evolutionary Ecology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IB/443/)
Emphasizes the evolution of life-history strategies in plants and animals (reproductive rates, life cycles, sex ratios, breeding and mating systems) and the coevolution of animals and plants (pollination, dispersal, and herbivory). 3 undergraduate hours. 3 graduate hours. Offered in alternate years. Prerequisite: IB 203 or equivalent; IB 302; or consent of instructor.

IB 444 Insect Ecology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/444/)
Discussion of the practical and theoretical aspects of ecology in relation to insects as individuals, populations, and communities; emphasis on the role of insects in the environment. 3 or 4 undergraduate hours. 3 or 4 graduate hours. Offered in alternate years. Lecture only, 3 hours; with laboratory, 4 hours. Prerequisite: IB 150 and MCB 150 or consent of instructor.

IB 447 Field Ecology credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/IB/447/)
Study of habitats in various sections of North America during spring vacation or intersession. Outdoor cooking and camping; transportation in University cars. Additional fees may apply. See Class Schedule. 1 undergraduate hour. 1 graduate hour. May be repeated to a maximum of 3 hours. Prerequisite: IB 203; or consent of instructor.

IB 450 Stream Ecology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/450/)
Same as CEE 432. See CEE 432.

IB 451 Conservation Biology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/451/)
Synthesis of conservation biology with an emphasis on the preservation of biological diversity and its evolutionary potential. Laboratory includes an introduction to the use of modern molecular techniques in conservation biology, computer simulation modeling, and field conservation problem solving. Same as CPSC 436 and ENVS 420. 4 undergraduate hours. 4 graduate hours. Offered in alternate years. Prerequisite: IB 203 or consent of instructor.

IB 452 Ecosystem Ecology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IB/452/)
Distribution and structure of ecosystems on earth; integration of multiple disciplines to gain a holistic view of ecosystem function; ecosystem concepts as they apply to understand natural and anthropogenic environmental change. Offered in alternate years. Same as ESE 452 and NRES 462. 3 undergraduate hours. 3 graduate hours. Prerequisite: CHEM 102 and CHEM 104; or consent of instructor.

IB 453 Community Ecology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IB/453/)
The direct and indirect interactions among species that determine the structure and composition of plant and animal communities. Emphasis will be on the maintenance of species diversity and its consequences at both local and regional scales. Offered in alternate years. Same as NRES 452. 3 undergraduate hours. 3 graduate hours. Prerequisite: IB 203 or consent of instructor.

IB 461 Ornithology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/461/)
Structure, function, ecology, behavior, and evolution of the birds of the world; laboratory devoted to anatomy and identification; and field studies devoted to identification and behavior of birds. Independent research project and two optional weekend field trips. Same as NRES 461. 4 undergraduate hours. 4 graduate hours. Prerequisite: IB 203; or consent of instructor.

IB 462 Mammalogy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/462/)
Classification, distribution, structure, function, life history, evolution and identification of mammals. Lecture/discussions, laboratory and field work. The laboratory includes vertebrate dissection. Same as NRES 442. 4 undergraduate hours. 4 graduate hours. Offered in alternate years. Prerequisite: IB 202 and IB 203; or consent of instructor.

IB 463 Ichthyology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/463/)
Classification, anatomy, ecology, behavior, distribution, and evolution of fishes of the world. Emphasis is on morphological, ecological, and behavioral diversification of fishes in a phylogenetic context. Laboratory devoted to anatomy and identification. Same as NRES 463. 4 undergraduate hours. 4 graduate hours. Offered in alternate years. Prerequisite: IB 302; or consent of instructor.

IB 464 Herpetology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/464/)
Classification, diversity, structure, function, ecology, behavior and evolution of amphibians and reptiles. Laboratory devoted to anatomy and identification. Offered in alternate years. Same as NRES 464. 4 undergraduate hours. 4 graduate hours. Prerequisite: IB 302; or consent of instructor.

IB 467 Principles of Systematics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/467/)
Comprehensive survey of the theory and methodology of systematics as they are applied today to all groups of organisms, with a practical experience in the acquisition and analysis of systematic data. 4 undergraduate hours. 4 graduate hours. Offered in alternate years. Prerequisite: IB 302 and IB 335 or IB 468; or consent of instructor.

IB 468 Insect Classification and Evol credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/468/)
Analytical survey of the classification and evolution of the orders and principal families of insects, with practical experience in the identification of insects at these taxonomic levels; field trips required. Lecture and laboratory. 4 undergraduate hours. 4 graduate hours. Offered in alternate years. Prerequisite: IB 401 or consent of instructor.

IB 471 General Mycology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/471/)
Structure, classification, and identification of fungi, including those of economic importance. Offered in alternate years. 4 undergraduate hours. 4 graduate hours. Prerequisite: IB 150 and MCB 150; IB 302 recommended; or consent of instructor.

IB 472 Plant Molecular Biology credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/IB/472/)
The basic concepts and methodologies of measuring plant gene expression and gene product activity and constructing transgenic plants are presented and discussed. Same as CPSC 462. 1 undergraduate hour. 1 graduate hour. Prerequisite: MCB 150 and IB 204; or consent of instructor.

IB 473 Plant Genomics credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/IB/473/)
Provides broad overview of structural and functional genomics, including genetic and physical mapping, whole genome sequencing, comparative genomic analysis, evolution of gene families and repetitive sequences, genome-wide expression analysis. Emphasis on structural and comparative genomics with brief introduction to functional genomics and bioinformatics. Same as CPSC 467. 1 undergraduate hour. 1 graduate hour. Prerequisite: IB 204 or IB 270 or MCB 250 or consent of instructor.

IB 476 Applied GIS to Environ Studies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IB/476/)
Same as GEOG 476. See GEOG 476.

IB 478 Advanced Plant Genetics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IB/478/)
Same as CPSC 452. See CPSC 452.

IB 479 Plant Growth and Development credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IB/479/)
Same as CPSC 486. See CPSC 486.

IB 480 Bioinspired Design credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/480/)
Same as ME 475. See ME 475.

IB 481 Vector-borne Diseases credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/481/)
Study of the major groups of arthropods and associated pathogens that affect the health and well-being of humans and other animals. Training will include ecology, evolutionary biology, and epidemiology of vector-borne diseases; taxonomy and identification of vector arthropods; practical skills in molecular and mathematical biology, spatial analysis and field research. Lecture will make use of technology-enhanced classroom for group-based active learning exercises to address critical challenges in vector-borne disease control. 4 undergraduate hours. 4 graduate hours. Offered in alternate years. Prerequisite: IB 361 or IB 401 or consent of instructor.

IB 482 Insect Pest Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IB/482/)
The principles underlying the control of important insect pests of agriculture and of human and animal health; emphasis on integrated pest management involving a systems approach which combines biological, cultural, and chemical suppressive factors into ecologically sound and socially and economically acceptable technology. Lecture and laboratory. Same as CPSC 479. 3 undergraduate hours. 3 graduate hours. Offered in alternate years. Prerequisite: IB 150 or equivalent; or consent of department.

IB 483 Insect Pathology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IB/483/)
The general principles of pathology as they apply to insects; includes non-infectious and infectious diseases caused by viruses, bacteria, fungi, protozoa, and nematodes. Studies the epizootiology of naturally occurring insect disease and the use of insect pathogens as microbial control agents. Same as CPSC 475. 3 undergraduate hours. 3 graduate hours. Lecture in alternate years. Prerequisite: IB 150 and MCB 150 or consent of instructor.

IB 484 Paleoclimatology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/484/)
Same as GEOL 484. See GEOL 484.

IB 485 Environ Toxicology & Health credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IB/485/)
Explores toxicological, environmental, public health, occupational and ecological aspects of the use and release of toxic substances in the environment; features case histories of environmental contamination that illustrate ecological, health, and social aspects of pollution; emphasizes biochemical mechanisms and ecosystem consequences. Same as CHLH 461 and ENVS 431. 3 undergraduate hours. 3 graduate hours. Prerequisite: A college chemistry course and a college biology course; or consent of instructor.

IB 486 Pesticide Toxicology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/486/)
Examines the biological effects of major classes of insecticides and herbicides, and of selected individual fungicides, including: toxicity to nontarget organisms, persistence and fate in the environment, biotransformation, and ecological consequences. Current regulations on pesticide testing will also be presented. The mechanism of action on target species will be discussed only in relation to effects on nontarget organisms. Same as CB 434 and ENVS 433. 3 undergraduate hours. 4 graduate hours. Offered in alternate years. Prerequisite: One year of college chemistry and one year of college biology; or consent of instructor.

IB 487 Math Modeling in Life Sciences credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/487/)
Same as ANSC 448 and STAT 458. See ANSC 448.

IB 490 Independent Study credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/IB/490/)
Laboratory and/or field research supervised by faculty members in the School of Integrative Biology. A written report is required. 1 to 5 undergraduate hours. No graduate credit. May be repeated. Credit is not given for more than a combined maximum of 10 hours of IB 390 or IB 490 towards graduation for IB majors. Prerequisite: Consent of instructor.

IB 491 Biological Modeling credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/491/)
Same as ANSC 449, CPSC 448, and GEOG 468. See GEOG 468.

IB 492 Career and Skill Development in Integrative Biology credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/IB/492/)
A successful career in the sciences requires tools and skills for communicating research, such as how to master the scientific literature and how to write scientifically as informed scientists to broad audiences. This course helps to build these skills while also developing professional skills to better compete for positions in professional school, jobs in industry, non-profit, or government. Students will also explore career options available with an IB degree. This course is designed to teach students these skills with targeted in and out of class exercises. This course can count toward graduate credit with a required online project component. 2 undergraduate hours. 2 graduate hours. Prerequisite: IB 203 or IB 271; or consent of instructor. Restricted to Junior and Senior IB majors only; or graduate students within IB.

IB 494 Theoretical Biology + Models credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/494/)
Biologists are increasingly using mathematical and computer-based models to complement fieldwork and experimental data. These models provide a context in which to understand and answer existing questions, and also lead us to new questions and new insights. Students will encode biological mechanisms into mathematical models, develop the skills to find solutions to these models and relate them to biological data, and analyze and discuss relevant primary literature. Examples will be drawn largely from ecology and evolutionary biology. 4 undergraduate hours. 4 graduate hours. Prerequisite: MATH 220 or MATH 221; Introductory courses in Ecology and Evolution.

IB 496 Special Courses credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/IB/496/)
Experimental and temporary courses. Additional fees may apply. See Class Schedule. 1 to 5 undergraduate hours. 1 to 4 graduate hours. Approved for letter and S/U grading. May be repeated as topics vary. Prerequisite: Consent of instructor.

IB 499 Discussions in Integrative Biology credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/IB/499/)
Seminars, discussions, research project presentations, readings, and reviews of special topics in integrative biology. 1 undergraduate hour. 1 graduate hour. Approved for S/U grading only. May be repeated if topics vary. Prerequisite: Consent of instructor.

IB 501 Programming for Genomics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/501/)
Students will learn to think algorithmically by constructing a biological hypothesis, and implementing code or deploying an existing code implementation, to test that hypothesis. Students will learn to use UNIX and to program in Python, using biological data sets from high-throughput sequencing projects. We will cover major genomics approaches and the algorithms that underlie them, including K-mer analysis, genome and transcriptome assembly, databases and SQL, and visualization techniques. Same as CPSC 501. 4 graduate hours. No professional credit. Prerequisite: Courses in Ecology, Evolution, and Molecular Biology, or consent of instructor.

IB 502 Biological Networks credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/IB/502/)
This taxon-neutral course prepares students to organize, integrate and analyze complex, multi-scale data that describe biological systems. It provides training, collecting, and processing "omic"-scale data (genomics, transcriptomics and proteomics) into network models, and analyzing these models using current in silico tools to determine biological significance and function of the resulting network interactions. Students will be introduced to Gene Ontology and open source tools for data integration and visualization, including Cytoscape, Multiple Experiment Viewer and STRING. 2 graduate hours. No professional credit. Prerequisite: Graduate student status or consent of instructor. At least one upper level undergraduate course in molecular biology or its equivalent.

IB 504 Genomic Analysis of Insects credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/IB/504/)
Comprehensive and integrated presentation of insect genomic analysis from the molecular level to that of the population; concepts are applied to certain aspects of insect population regulation. Offered in alternate years. Prerequisite: IB 204 or consent of instructor.

IB 505 Bioinformatics & Systems Biol credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/505/)
Same as CPSC 567. See CPSC 567.

IB 506 Applied Bioinformatics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/506/)
Same as ANSC 542 and CPSC 569. See ANSC 542.

IB 507 Statistical Genomics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/507/)
Same as ANSC 545 and CPSC 545. See ANSC 545.

IB 508 Multivariate Biostatistics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/508/)
Same as PATH 528. See PATH 528.

IB 512 Plant Metabolomics credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/IB/512/)
Plants are sessile organisms that must respond dynamically to environmental signals. Key to their response and survival is the intricate network of metabolic pathways that result in the differential accumulation of metabolites. This course will familiarize students with the fundamentals of plant metabolomics research. Metabolomics is presented in relation to plant development, nutrition, and response to stress, among other topics. Students will use online tools to analyze, organize, and visualize metabolomics data. Course goals include a critical evaluation of a current topic in plant metabolomics and how metabolomics technology can enhance their own research objectives. 2 graduate hours. No professional credit. Prerequisite: Graduate student status or consent of instructor; at least one upper level undergraduate course in biochemistry or its equivalent.

IB 513 Disc in Plant Physiology credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/IB/513/)
Approved for letter and S/U grading. May be repeated.

IB 516 Ecosystem Biogeochemistry credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/516/)
Same as NRES 516. See NRES 516.

IB 524 Plant Biochemistry credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/524/)
Same as CPSC 588. See CPSC 588.

IB 526 Seminar in Entomology credit: 0 to 1 Hours. (https://courses.illinois.edu/schedule/terms/IB/526/)
Discussions, reviews, and appraisals of special topics in the field of entomology. 0 to 1 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated if topics vary.

IB 531 Emerging Infectious Diseases credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/531/)
Examines new human infectious diseases, such as Asian flu, West Nile virus, AIDS, and Lyme disease, that are a major threat to human health. Explores the historic links among human health, disease pathogens, and ecology, as well as the origin of each new disease and how it is regulated by specific environmental conditions. Also explores how global change and biodiversity loss will increase the possibility of future ecological epidemic and the steps needed to reduce their effects on human health. In this course, students also produce teaching materials for their classrooms.

IB 532 Sustainability & Global Change credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/532/)
Examines how on-going global change affects sustainability. Explores climate change, global warming, alternative biofuels, future food security, and conservation of biodiversity, and their effects on society. Examines how to make better use of the Earth's natural resources with little to no damage to the ecosystem, while taking into account ever mounting demands for energy resources and climate change. In this course, students also produce teaching materials for their classrooms.

IB 533 Human Genome & Bioinformatics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/533/)
Highlights advances in understanding the human genome, utilizing the latest techniques in bioinformatics, i.e. acquiring, analyzing, storing, and displaying the information from the entire genome and protein sequences. Explores the latest laboratory techniques, as well as the use of extensive online databases and software. Students explore the significance of sequencing the human genome, applying bioinformatics to the genome, and realizing its potential to understand human health, disease, and the place of humans in the large ecosystem. In this course, students also produce teaching materials for their classrooms.

IB 534 Evolution and Medicine credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/534/)
Explores how human health is inseparably tied to our evolutionary history. Principles that apply to human health include evolutionary processes, e.g. natural selections, as well as molecular evolution, human evolution, and evolutionary-developmental biology. Explores how these principles can be applied to understand human nutrition and metabolism, reproduction, disease and stress, and behavior. These principles assist physicians, researchers, and the general public in understanding how natural selection has acted on humans over time and left us vulnerable to disease and injury. In this course, students also produce teaching materials for their classrooms.

IB 535 Biology and Tech Innovation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/535/)
Focuses on how experts in biology and technological fields use bio-inspiration to create technology innovations to solve human problems. Classic examples, such as how the observation that seeds with barbs stick to animal fur led to Velcro, are explored. Students use and expand upon their current biological knowledge to explore new ways to create biologically-based sustainable innovations. Topics to be explored include nest building as inspiration for energy-efficient architecture, plant chemistry as inspiration for green manufacturing, animal locomotion and sensing as inspiration for robots, and the advances in understanding of biological nanostructures and nanoprocesses as inspiration for nanotechnology. In this course, students also produce teaching materials for their classrooms.

IB 536 Evolutionary Biology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/536/)
Examines fundamental topics for understanding evolution, the unifying principle for all of biology. Evidence for evolution is all around us, and learning how to view life through 'evolutionary tinted' lenses greatly changes our perspective. Emphasizes the creative ways that scientists are gaining insights into how and why life evolved as it is. Provides avenues to use in the classroom to provide scholarly evidence for the basis of evolution to refute non-academic arguments. Students will produce teaching materials for their classrooms. 4 graduate hours. No professional credit. Prerequisite: For graduate students in the Online Masters of Science Teaching Biology program (OMST).

IB 542 Environmental Plant Physiology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/IB/542/)
The interaction of plants and environment at the level of the whole organism, extending to the cell and the community; emphasis on heat and mass transfer, plant and soil potentials, and effects of light on growth. Same as CPSC 538. Offered in alternate years. Prerequisite: IB 420; consent of instructor.

IB 546 Topics in Ecology & Evolution credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/IB/546/**)**
Speaker seminar series featuring discussion, review and critical analysis of general concepts and specific problems in ecology and evolution. Approved for both letter and S/U grading. May be repeated.

IB 590 Individual Topics credit: 2 to 12 Hours. **(**https://courses.illinois.edu/schedule/terms/IB/590/**)**
Individual topics in research conducted under the supervision of faculty members in the School of Integrative Biology. Designed for graduate students who would like to become more familiar with specialized fields of study prior to committing themselves to a specific area for their doctorate degree. Approved for S/U grading only. May be repeated to a maximum of 16 hours. Prerequisite: Consent of instructor.

ITAL - ITALIAN

ITAL Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/ITAL/)

Courses

ITAL 101 Elementary Italian I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ITAL/101/)
For students who have no credit in Italian.

ITAL 102 Elementary Italian II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ITAL/102/)
Continuation of ITAL 101. Prerequisite: ITAL 101 or one year of high school Italian.

ITAL 103 Intermediate Italian I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ITAL/103/)
Rapid reading, review of grammar, composition, and conversation. Prerequisite: ITAL 102 or two years of high school Italian.

ITAL 104 Intermediate Italian II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ITAL/104/)
Continuation of ITAL 103. Prerequisite: ITAL 103 or three years of high school Italian.

ITAL 156 Exploring Rome: History and Culture of the Eternal City credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ITAL/156/)
Examines Rome and its roles (religious, political, cultural) in Italian culture from ancient times to the present day. Through history, film, literature, painting and architecture, we will explore the Rome through its various historical and political developments and the effects the city has had on wider Italian and global perception of the "Eternal City". All readings and class meetings are in English.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

ITAL 191 Freshman Honors Tutorial credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/ITAL/191/)
Study of selected topics on an individually arranged basis. Open only to honors majors or to Cohn Scholars and Associates. May be repeated one time to a maximum of 6 hours. Prerequisite: Consent of departmental honors adviser in Italian.

ITAL 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/ITAL/199/)
Approved for letter and S/U grading. May be repeated to a maximum of 5 hours.

ITAL 200 Italian Studies in a Mediterranean Context credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ITAL/200/)
Introduces students to the study of Italy and Italian culture, emphasizing Italy's central position in Mediterranean networks of cultural, economic and linguistic exchange. Prerequisite: ITAL 104 or consent of instructor.

ITAL 210 Practical Review Italian credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ITAL/210/)
Reviews major challenges in Italian grammar, with particular emphasis on the verb system (major tenses and moods, morphology, and aspect) and areas of contrast with English. Prerequisite: Credit or concurrent enrollment in ITAL 104 or equivalent.

ITAL 220 Contemporary Italian, Oral and Written credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ITAL/220/)
Training in oral-aural skill and in writing.

ITAL 240 Italy Middle Ages & Renaiss credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ITAL/240/)
The development of Medieval Italian civilization in a literary context from the Sicilian School of love poetry to the early Renaissance in Florence; lectures and readings are in English. Same as CWL 240 and MDVL 240.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

ITAL 250 Minority Identities in Film and Culture: The Italian American and African American Experience credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ITAL/250/)
Explores the complex relation between Italian Americans and African Americans in the 19th and 20th century. Were Italian Americans white? What is whiteness? How does identity politics define the relation between minority groups? By looking at the problem of the construction of whiteness among Italian American and at the representation of their relation with African Americans in literature, movies and social studies we will discuss the problem of the relation between two minorities with often conflictual relations in the American context.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

ITAL 270 Introduction to Italian Cinema credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ITAL/270/)
Introduction to major films, movements and directors in the Italian tradition, paying particular attention to questions of national identity, gender and political and social history. Knowledge of Italian not required.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

ITAL 310 Advanced Grammar credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ITAL/310/)
Study of the structure of modern Italian in both its phonological and syntactic aspects for the student who already has a functional command of the language, with an emphasis on developing ability to analyze and interpret grammatical structures. Prerequisite: ITAL 210 or consent of instructor.

ITAL 380 Ital Business & Profess credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ITAL/380/)
Builds preexisting language skills through the study of Italian business practices: financial systems, transactions, banking, import/export and commercial correspondence. Prerequisite: ITAL 210 or equivalent.

ITAL 390 Spec Topics Italian Studies credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ITAL/390/)
Selected substantive readings for independent study on a given special topic of Italian literature, culture, language, or linguistics. May be repeated. Prerequisite: ITAL 104 and consent of instructor.

ITAL 406 Italian Culture and Globalization credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ITAL/406/)
Introduction to factors that have shaped present-day Italy, with particular attention to globalization; basic concepts contributing to understanding its present social and cultural development in a European and global context; taught in Italian. 3 undergraduate hours. 4 graduate hours. Prerequisite: ITAL 200 or ITAL 220, or consent of instructor.

ITAL 413 Dante credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ITAL/413/)
Interpretation of Dante's Divine Comedy with special attention to its position in the medieval world; a knowledge of Italian not required. Same as CWL 413 and MDVL 413. 3 undergraduate hours. 4 graduate hours.

ITAL 414 Petrarch & Boccaccio credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ITAL/414/)
Studies in Petrarch and Boccaccio; nonmajors in Italian may read the works in translation; lectures are in English. Same as CWL 414 and MDVL 414. 3 undergraduate hours. 4 graduate hours. Prerequisite: Fulfillment of campus rhetoric requirement.

ITAL 415 Europe and the Mediterranean credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ITAL/415/)
Same as EURO 415 and PS 415. See EURO 415.

ITAL 418 Language & Minorities in Europe credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ITAL/418/)
Same as EURO 418, FR 418, GER 418, LING 418, PS 418, SLAV 418, and SPAN 418. See FR 418.

ITAL 420 Masterpieces Renaiss Lit credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ITAL/420/)
Reading of masterpieces of the 1400 and 1500s and a study of their predecessors and influence; nonconcentrators in Italian may read the works in translation; lectures are in English. Content rotates. Same as CWL 420 and MDVL 420. 3 undergraduate hours. 4 graduate hours. May be repeated to a maximum of 8 hours with consent of instructor. Prerequisite: Fulfillment of campus rhetoric requirement.

ITAL 435 Introduction to Romance Linguistics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ITAL/435/)
Same as FR 462, LING 462, PORT 435, RMLG 435 and SPAN 435. See SPAN 435.

ITAL 440 Modern Italian Novel credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ITAL/440/)
An in-depth examination of a particular writer, genre, form or period in modern Italian literature (such as Italo Calvino, Italian detective fiction, or the contemporary Italian novel). See online schedule for specific topic. 3 undergraduate hours. 4 graduate hours. Prerequisite: ITAL 200 or consent of instructor.

ITAL 450 Italian Syntax & Phonology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ITAL/450/)
Introduction to the essential syntactic and phonological structures of Modern Standard Italian in combination with appropriate discussion of corresponding linguistic concepts. 3 undergraduate hours. 3 graduate hours. Prerequisite: ITAL 310 or consent of instructor.

ITAL 460 Principles of Language Testing credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ITAL/460/)
Same as EIL 460, EPSY 487, FR 460, GER 460, PORT 460, and SPAN 460. See EIL 460.

ITAL 470 Topics in Italian Cinema credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ITAL/470/)
An in-depth examination of a particular director, genre or school from the Italian cinematic tradition (e.g., Fellini, Italian horror, or noerealism); topic will very each semester. No knowledge of Italian is required. Same as MACS 470. 3 undergraduate hours. 4 graduate hours. May be repeated to a maximum of 6 undergraduate hours or 8 graduate hours.

ITAL 489 Theoretical Foundations of SLA credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ITAL/489/)
Same as FR 481, GER 489, LING 489, PORT 489, and SPAN 489. See LING 489.

ITAL 490 Italian Critical Theory credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ITAL/490/)
An advanced introduction to the critical theory of major Italian thinkers and philosophers (e.g., Gramsci, Negri, Agamben, Esposito). 3 undergraduate hours. 4 graduate hours. May be repeated to a maximum of 6 undergraduate hours or 8 graduate hours if topic varies. Prerequisite: At least two 200-level courses in Italian, or consent of instructor.

ITAL 491 Honors Senior Thesis credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/ITAL/491/)
For candidates for honors in Italian. No graduate credit. May be repeated.

ITAL 505 Teaching College and Secondary Foreign Language credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ITAL/505/)
Same as FR 505. See FR 505.

ITAL 510 Seminar in Italian Studies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ITAL/510/)
Graduate seminar in Italian culture, literature, linguistics, or critical theory. Topics vary. May be repeated in the same semester to a maximum of 8 hours as topics vary. May be repeated in separate semesters to a maximum of 16 hours as topics vary.

ITAL 530 Introduction to Research and Text Criticism credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ITAL/530/)
Same as FR 530. See FR 530.

ITAL 559 Sem Romance Ling credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ITAL/559/)
Same as FR 559, LING 559, PORT 559, RMLG 559, and SPAN 557. See SPAN 557.

ITAL 580 Classroom Language Acquisition credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ITAL/580/)
Same as EIL 580, FR 580, GER 580, PORT 580, and SPAN 580. See SPAN 580.

ITAL 584 Theories in Second Language Acquisition credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ITAL/584/)
Same as CI 584, EALC 584, EPSY 563, FR 584, GER 584, LING 584, PORT 584, and SPAN 584. See SPAN 584.

ITAL 588 Sem Second Lang Learn credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ITAL/588/)
Same as EALC 588, FR 588, GER 588, LING 588, PORT 588, and SPAN 588. See SPAN 588.

ITAL 595 Spec Topics in Italian credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ITAL/595/)
Independent study/research under the direction of a faculty member. May or may not fulfill requirements for a particular degree program in Spanish, Italian, and Portuguese. Consult graduate advisor. May be repeated in same or subsequent terms to a maximum of 8 hours.

ITAL 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/ITAL/599/)
Approved for S/U grading only. May be repeated.

JAPN - JAPANESE

JAPN Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/JAPN/)

Courses

JAPN 199 Undergraduate Open Seminar credit: 1 to 5 Hours. **(**https://courses.illinois.edu/schedule/terms/JAPN/199/**)**
May be repeated.

JAPN 201 Elementary Japanese I credit: 5 Hours. **(**https://courses.illinois.edu/schedule/terms/JAPN/201/**)**
Introduction to Japanese, spoken language skills and the reading and writing of hirigana, katakana, and kanji.

JAPN 202 Elementary Japanese II credit: 5 Hours. **(**https://courses.illinois.edu/schedule/terms/JAPN/202/**)**
Continuation of JAPN 201. Prerequisite: JAPN 201.

JAPN 203 Intermediate Japanese I credit: 5 Hours. **(**https://courses.illinois.edu/schedule/terms/JAPN/203/**)**
Prerequisite: JAPN 202 or equivalent.

JAPN 204 Intermediate Japanese II credit: 5 Hours. **(**https://courses.illinois.edu/schedule/terms/JAPN/204/**)**
Continuation of JAPN 203. Prerequisite: JAPN 203 or equivalent.

JAPN 305 Advanced Japanese I credit: 5 Hours. **(**https://courses.illinois.edu/schedule/terms/JAPN/305/**)**
Readings in graded Japanese texts with oral practice designed to help students acquire the sophisticated vocabulary and grammatical structures of written Japanese. Prerequisite: JAPN 204 or placement test for students who have Japanese background or who have previously taken a course(s) in Japanese.

JAPN 306 Advanced Japanese II credit: 5 Hours. **(**https://courses.illinois.edu/schedule/terms/JAPN/306/**)**
Continuation of JAPN 305. Prerequisite: JAPN 305 or be placement test.

JAPN 407 Introduction to Classical Japanese credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/JAPN/407/**)**
Introduction to the grammar, morphology, vocabulary, and style of classical Japanese language as found in premodern Japanese literary and historical writings. 3 undergraduate hours. 4 graduate hours. Prerequisite: Three years of modern Japanese language or equivalent.

JAPN 408 Readings in Classical Japanese credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/JAPN/408/**)**
Readings in texts in classical Japanese selected from historical and literary sources of the premodern period. Attention is given to grammatical, morphological, and stylistic features and to problems in translation. Introduction to reading of classical syllabaries and manuscript texts. 3 undergraduate hours. 3 graduate hours. Prerequisite: JAPN 407 or equivalent.

JAPN 410 Advanced Readings in Japanese credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/JAPN/410/**)**
Advanced reading course in Japanese for undergraduate and graduate students who have completed the 4th year level of Japanese in EALC and who have the requisite language competence. Prepares students to read authentic materials in Japanese and to do independent research using primary and secondary materials in different genres and disciplines, either literary materials or social science/history. Students will build vocabulary, strengthen grammar comprehension and increase reading speed in Japanese prose. Translation skills will also be a focus of this class. Depending upon the professor offering the class, the nature of the readings will vary. 3 undergraduate hours. 4 graduate hours. May be repeated, if topics vary, in separate terms to a maximum of 6 undergraduate hours or 8 graduate hours. Prerequisite: Fourth year Japanese or the equivalent or permission of instructor.

JAPN 440 Fourth Year Japanese I credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/JAPN/440/**)**
Further developments of skills in sophisticated Japanese language use, including readings in authentic materials in a wide variety of writing styles, writing for formal occasions, and speaking appropriately according to the situation while using precise vocabulary in correct level of speech. 3 undergraduate hours. 4 graduate hours. Prerequisite: JAPN 306 or equivalent.

JAPN 441 Fourth Year Japanese II credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/JAPN/441/**)**
Continuation of JAPN 440. 3 undergraduate hours. 4 graduate hours. Prerequisite: JAPN 440 or equivalent.

JAPN 499 Study Abroad credit: 0 to 18 Hours. **(**https://courses.illinois.edu/schedule/terms/JAPN/499/**)**
Lectures, seminars, and practical work in the Japanese language, literature, and civilization, and in other academic areas appropriate to the student's course of study. 0 to 18 undergraduate hours. 0 graduate hours. Approved for S/U grading only. May be repeated. Prerequisite: Junior standing and a GPA of 3.00.

JS - JEWISH STUDIES

JS Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/JS/)

Courses

JS 108 Religion & Society in West I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JS/108/)
Same as ANTH 108, PHIL 108, and REL 108. See REL 108.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

JS 120 A History of Judaism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JS/120/)
Same as HIST 168 and REL 120. See REL 120.
This course satisfies the General Education Criteria for:
Advanced Composition
Humanities - Hist Phil

JS 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/JS/199/)
Faculty offer seminars in a range of areas that provide an opportunity for undergraduates to be exposed to key dimensions of Jewish Studies. May be repeated in the same or separate terms to a maximum of 10 hours.

JS 201 History of Antisemitism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JS/201/)
Studies the negative representations of Judaism and Jews from antiquity to the modern world. Topics include: Greco-Roman concepts of the Jewish religion; medieval Christian symbolization of the demonic Jew; Jews and negative attitudes to capitalism; blood purity and blood libel; the rise of racial prejudice in the modern nation state; totalitarianism and genocide; antisemitism and anti-Zionism. Same as REL 212.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

JS 209 Jewish American and US Minority Literatures in Dialogue credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JS/209/)
How does Jewish American Literature compare with/influence/be influenced by other U.S. Minority Literatures? What can we say about the similarities and differences between the Jewish American experience and that of many other US minority literatures? What does the dialogue between them sound like? By looking at some examples of Jewish American Literature and comparing and analyzing the dialogue between Jewish American Literature and myriad U.S. Minority literatures this course aims to grapple with these and other questions. We will explore the experiences, conditions, and perspectives of the U.S. Minority literatures we are able to peruse. We will encourage comparison across these different contexts while also preserving the distinctions inherent in each minority group. Same as CWL 209 and ENGL 222.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - US Minority

JS 211 The Arab-Israeli Conflict credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JS/211/)
Same as CWL 211 and SAME 211. See CWL 211.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

JS 212 Israeli Cinema and Television credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JS/212/)
Examination of Israeli cinema from its documentary beginnings to its internationally award winning feature films. First established as a way to record the developments of the Jewish community in Palestine, after Independence in 1948, it became a way to explore the ideals and values of the new state. Trapped between Eastern and Western cinematic tradition, we will view heroic cinema, new wave, and bourekas films. Through lectures, readings and film screenings this seminar examines the diversity of Israeli society, including religious/secular divisions, the Arab-Israeli Conflict, the Holocaust, gay cinema and the country's ethnic diversity including Palestinian, Russian, and Mizrachi identity. All films are subtitled and no previous knowledge of cinema or Israel is required. Same as CWL 212 and SAME 212.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

JS 220 Jewish Storytelling credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JS/220/)
Same as CWL 221, ENGL 223, REL 220, and YDSH 220. See YDSH 220.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

JS 231 Development of Ancient Cities credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JS/231/)
Same as ARTH 217 and CLCV 231. See CLCV 231.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

JS 252 The Holocaust credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JS/252/)
Same as HIST 252. See HIST 252.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

JS 261 The Holocaust in Context credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JS/261/)
Same as CWL 273, ENGL 269, and GER 261. See GER 261.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

JS 262 Zionism: A Global History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JS/262/)
Same as HIST 262. See HIST 262.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

JS 269 Jewish History Since 1700 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JS/269/)
Same as HIST 269 and REL 269. See HIST 269.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

JS 284 Modern Jewish Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JS/284/)
Surveys imaginative literature by Jewish authors from the Enlightenment to the present, including fiction, poetry, drama, and autobiography written in English or translated from other languages. Same as CWL 284, ENGL 284, and REL 284. Prerequisite: Completion of the Composition I requirement.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

JS 290 Jewish Cultures of the World credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JS/290/)
Same as ANTH 290. See ANTH 290.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West

JS 300 Jewish Chicago credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JS/300/)
The history of Jewish Chicago from 1820 to the present will be taught in Chicago during Summer I. The class includes excursions all over the city as well as class time at the Newberry Library. Topics of study include immigration, Jews in the labor movement, Jewish political activism, Jewish religious practice, Jewish art, literature, and Yiddish theater. The course will contextualize our study of Jewish Chicago in terms of American history, urban history, gender history, and labor history.

JS 320 Responses to the Holocaust credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JS/320/)
Same as CWL 320, ENGL 359, REL 320, and YDSH 320. See CWL 320.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

JS 335 Middle East 1566-1914 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JS/335/)
Same as HIST 335. See HIST 335.

JS 341 Love & Sex in Hebrew Lit credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JS/341/)
Same as CWL 341, REL 340 and SAME 341. See CWL 341.

JS 344 Medieval Jewish Thought credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JS/344/)
Same as MDVL 344 and REL 344. See REL 344.

JS 355 Soviet Jewish History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JS/355/)
Same as HIST 355. See HIST 355.

JS 399 Special Topics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JS/399/)
Faculty offer special topics in their areas of expertise that provide an opportunity for undergraduates to be exposed to some of the most current developments in faculty research. May be repeated in the same or separate term to a maximum of 9 hours.

JS 442 History of Early Judaism credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/JS/442/)
Same as HIST 432 and REL 442. See REL 442.

JS 454 Topics in Israeli Lit &Culture credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/JS/454/)
Same as CWL 454 and SAME 454. See CWL 454.

JS 495 Independent Study credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/JS/495/)
Readings in selected fields in consultation with the instructor along with the completion of a specified writing assignment. 2 to 4 undergraduate hours. 2 to 4 graduate hours. May be repeated in the same term to a maximum of 4 undergraduate hours or 8 graduate hours. May be repeated in separate terms to a maximum of 8 undergraduate hours and 16 graduate hours. Prerequisite: Consent of instructor.

JS 496 Topics in History of Judaism credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/JS/496/)
Same as REL 496. See REL 496.

JS 501 Grad Intro to Jewish Culture credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/JS/501/)
Interdisciplinary graduate-level introduction to the study of Jewish culture and society. Focuses on the significations of Jewishness in modern history through a wide range of recent writings by historians, anthropologists, philosophers and cultural theorists. Key themes will include the relationship of Judaism to the other monotheistic religions, the varied pathways of Jewish modernization, the construction of Jewish Otherness in Europe and beyond, and responses to the Holocaust and the creation of the state of Israel.

JS 502 Holocaust Genocide Studies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/JS/502/)
Interdisciplinary graduate-level introduction to Holocaust, Genocide, and Memory Studies, focusing on the origins and unfolding of genocidal violence and the legacies of genocide in collective memory, literature, and artistic representation. Key themes will include the relationship between perpetrators, victims, and bystanders; the problems of historical comparison; trauma and testimony; violence and representation.

JS 551 Seminar in Jewish Culture credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/JS/551/)
Analysis of selected topics of special interest in Jewish Studies. May be repeated in the same term to a maximum of 8 hours. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Consent of instructor.

JS 552 Seminar Holocaust & Genocide credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/JS/552/)
Analysis of selected topics of special interest in Holocaust, Genocide, Memory Studies. May be repeated in the same term to a maximum of 8 hours. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Consent of instructor.

JOUR - JOURNALISM

JOUR Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/JOUR/)

Courses

JOUR 101 Interactive Media & You credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/101/)
Introduces students to research and theory surrounding new media and technology. We will examine the impacts of interactive media (e.g., social media, video games) on society and, ultimately, our everyday lives. We will look beyond "good/bad" classifications of new media in favor of seeking a more balanced understanding of the significance of these evolving technologies. A goal of the course is to reflect on the role interactive media technologies play in our increasingly digital society/lives and how we can leverage them for positive purposes while minimizing the potential for negative consequences.

JOUR 102 Surviving Social Media credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/102/)
Offers students a comprehensive understanding of the role that big tech companies and their platforms and products play in daily life. Topics include hashtag activism, digital surveillance, algorithmic inequality and search bias, data privacy, monopoly and anti-trust, changes to the news industry, and the "internet yuck" of hate speech and harassment. Students will be required to take a 24-hour technology fast. Credit not given for JOUR 102 if credit already received for JOUR 199 section "Social Media".

JOUR 199 Undergraduate Open Seminar credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/199/)
A changing array of courses focusing on special topics in journalism. Approved for Letter and S/U grading. May be repeated to a maximum of 12 hours, if topics vary.

JOUR 200 Introduction to Journalism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/200/)
Discussion of the history, freedom, technologies, ethics, and functions of the news media. Training in clear, descriptive writing techniques, using journalistic models.
This course satisfies the General Education Criteria for:
Advanced Composition

JOUR 205 History of American Journalism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/205/)
Surveys the history of the field of journalism since pre-colonial times. Includes the evolution of the media in the United States and the evolution of cultural concepts concerning the media, including rights granted under the First Amendment.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil

JOUR 210 Newsgathering Across Platforms credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/210/)
Fundamentals of journalistic reporting and writing across print, broadcast and digital platforms. Credit is not given for JOUR 210 if credit for JOUR 400 has been earned. Prerequisite: JOUR 200.

JOUR 215 Multimedia Reporting credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/215/)
Designed to acquaint students with the fundamentals of digital photography, video, audio and multimedia as it applies to journalism. Instruction will include conceptual frameworks and techniques to create multimedia journalism content; the conception, planning and creation of multimedia projects; coverage of events with audio, video and photographs; the technical and creative aspects of digital photography, video, and multimedia; delivery platforms for multimedia content including the Web and evolving communication technologies. Credit is not given for JOUR 215 if credit for JOUR 410 has been earned. Prerequisite: JOUR 210 or consent of Journalism Department.

JOUR 217 Content Producing for UI7 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/217/)
Students will learn videography, editing, writing, and producing video content for student programs Good Morning Illini and Illini Sports Night. Class will also include studio production jobs for Good Morning Illini's live Friday broadcasts and taped studio segments for Illini Sports Night. May be repeated for a maximum of 6 hours in separate semesters. JOUR 217 cannot substitute for JOUR 340 as a prerequisite for JOUR 445. Prerequisite: Students may not be concurrently enrolled in JOUR 340 or JOUR 445.

JOUR 220 News Editing credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/220/)
Editing and headline writing, news judgment, ethics and leadership. Credit is not given for JOUR 220 if credit for JOUR 320 has been given.

JOUR 240 Introduction to Documentary Storytelling & Production credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/240/)
Offers an introduction to beginning production techniques for documentary filmmaking. Students will learn how documentaries have evolved since the early days of film in content, style and production techniques. Students will create a short (2-3 minute) documentary using a journalistic approach. Students must incorporate journalistic ethics and standards into creating their own non-fiction film. This course will introduce students to media archives and archival research, ethical and legal issues associated with documentary production and theories and styles of non-fiction prose and documentary editing. Student will learn basic videography, audio recording and basic media editing techniques. Credit not given if credit for JOUR 199 section "Intro to Documentary Prod" has been given. Eligible for the Journalism minor.

JOUR 250 Journalism Ethics & Diversity credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/250/)
Focuses on media decision-making and news judgment, specifically ethics and diversity in newsgathering with regard to scope, privacy, bias, economic concerns, and accountability. Examines real-life news decisions and the thoughts of journalists who lived through famous and infamous ethics situations. Key provisions in the Society of Professional Journalists Code of Ethics regarding use of diverse voices will be discussed and applied in practical ways, and both students and the instructor will find current examples of ethics issues to present to the class. Diversity education is part of the required standard for achieving journalism accreditation from the discipline's national accrediting body.

JOUR 280 Specialized Skills and Practices credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/280/)
A changing array of courses addressing specialty writing, reporting, audio, video and multimedia skills, topics and projects. Approved for Letter and S/U grading. May be repeated up to 8 hours in the same semester and up to 12 hours in separate semesters, if topics vary.

JOUR 293 Digital Photography for Everyone credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/293/)
Foundations of digital photography, techniques to produce photographs; the conception and planning of pictures; the pictorial coverage of locations, events and human interest situations; and the planning and execution of photos in print, on the web and other electronic media are the focus of this hands-on course. You will develop a practical understanding of the potentials and realities of photographic communication to better use them for full expression of your vision. Approved for Letter and S/U grading.

JOUR 311 Media Law credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/311/)
Detailed analysis of the theories of freedom of expression, the legal doctrines of greatest concern to mass communicators, and contemporary issues related to free speech and press, including libel, copyright, and news-gathering in a digital age. Credit is not given for JOUR 311 if credit for JOUR 411 has been earned.

JOUR 315 Adv Public Affairs Reporting credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/315/)
Study and extensive practice of in-depth public affairs reporting - its concepts, techniques, traditions, ethics, and social obligations. Credit is not given for JOUR 315 if credit for JOUR 415 has been earned. Prerequisite: JOUR 210.

JOUR 317 On-Camera Performance for UI7 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/317/)
Students who have successfully completed JOUR 217 or JOUR 340 will learn advanced videography, editing and reporting skills to be on-air reporters for the Good Morning Illini show. Class will also include on-camera talent lab for Good Morning Illini's live broadcast on Fridays. May be repeated for a maximum of 6 hours in separate semesters. Prerequisite: JOUR 217 or JOUR 340. May be taken concurrently with JOUR 340 or JOUR 445.

JOUR 335 Audio Journalism credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/335/)
Reporting and writing news for audio programs and websites. Credit is not given for JOUR 335 if credit for JOUR 435 has been earned. Prerequisite: JOUR 210.

JOUR 340 Video Reporting & Storytelling credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/340/)
An introduction to video storytelling techniques. Covers field reporting, writing, editing and studio production for news stories. Students learn to create video for broadcast and online and how to use social media to engage the viewer. Prerequisite: JOUR 215. Concurrent enrollment with JOUR 317 is allowed. May not be taken concurrently with JOUR 217.

JOUR 356 Image of the Journalist in Popular Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/356/)
Our images of journalists are shaped and formed by the popular culture and mythologies surrounding news that we see reflected in Hollywood, on the big screen and on the little screen. This class aims to offer a comprehensive look at how news is portrayed in popular culture, balancing what we see in the movies and learn from books with the actual history of news at that time. From this class, you will get a wide-ranging view of the history of journalism. You will see the developments of the news production process from giant machines to the speed of the web, and you will learn about some of the ethical dilemmas facing journalists.

JOUR 360 Working with the Press credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/360/)
Surveys contemporary public relations to distinguish publicity, advertising, branding, press agentry, public affairs, issues management, lobbying, investor relations and development. The core issue of working with the media will encompass guidelines for good media relations, guidelines for working with the press, and understanding the ethical dimensions of the relationships that form. The course will employ real and hypothetical case studies.

JOUR 361 Classics of Sports Journalism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/361/)
Students in this course will read, view, analyze and discuss long-form sports journalism. Some of the books, articles and documentaries are considered classics of the form; others may be fairly recent but on their way to classic status. All will represent varied approaches to sports journalism across media platforms.

JOUR 400 Newsroom Experience credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/400/)
In this experiential learning course, students work as journalists for a local news outlet under the supervision of Journalism faculty. Those outlets include Illinois Public Media, UI-7, and CU-CitizenAccess and may include newsroom experiences at editorially independent student publications with faculty coaching and critiquing of work. Depending on the section, students might report, write and edit for the web, television or radio; work on data and investigative journalism projects; create podcasts, multimedia graphics, data visualizations. The course is repeatable, allowing students to gain experience in different roles and at more than one outlet and to progress toward more independent work. Standards for all sections will be established by the department. 2 to 4 undergraduate hours. 2 to 4 graduate hours. May be repeated to a maximum of 12 hours. Credit is not given for JOUR 400 if credit for JOUR 495 is given for the same work experience. Prerequisite: Vary according to section. See section notes.

JOUR 417 Producing for UI7 Programming credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/417/)
Students in this class will take leadership roles in producing live and live to tape programming to be aired on UI7 and master skills in pre-production, production and post-production. Students will oversee one of two UI7 programs: a live production of Good Morning Illini or a live-to-tape production of Illini Sports Night. Registration by instructor permission. 4 undergraduate hours. 4 graduate hours. Meets with JOUR 217 and JOUR 317. Prerequisite: Either JOUR 317 or JOUR 340. May not be taken concurrently with JOUR 445. Registration by instructor permission. Prospective students will submit a resume and writing sample. Finalists will be selected for interviews.

JOUR 421 Editing for Publication credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/421/)
Principles and practice of editing across disciplines. Content includes style, grammar, punctuation, word usage, clarity and brevity. Both print and digital environments are considered. Students will edit text and display copy such as headlines and photo captions. 3 undergraduate hours. 3 graduate hours. Credit is not given for both JOUR 421 and JOUR 320. Journalism majors should enroll in JOUR 320. Prerequisite: Advanced Composition.

JOUR 425 Multimedia Editing and Design credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/425/)
Principles of visual reporting and editing; seeks to instill application-level competency in a wide array of non-linear, non-narrative techniques of journalistic storytelling across various media. 4 undergraduate hours. 4 graduate hours. Prerequisite: JOUR 215.

JOUR 430 Augmented and Virtual Reality credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/430/)
Examines the importance and application of immersive technologies such as virtual reality, augmented reality, and mixed reality. Students will learn about the history of these technologies, research regarding their effectiveness, and how to apply them to solve real-world problems and convey non-fiction narrative experiences. Students will also receive an introduction to designing content for these technologies (a formal design background is NOT required). This course will be tailored to students interested in the application of these emerging technologies in fields such as journalism, advertising, and media studies. 3 undergraduate hours. 4 graduate hours. Credit is not given for JOUR 430 if credit for JOUR 460 (section - Ext Reality and Immersive Tech) or JOUR 460 (section - Immersive Technologies) has been given. Prerequisite: Junior, senior or graduate standing.

JOUR 440 Advanced Documentary Storytelling & Production credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/440/)
Offers the chance to build on video production skills and further explore the craft of visual journalism by producing a short documentary film. Films meeting professional criteria will be distributed online, on UI7 and WILL-TV. Students will use journalistic storytelling techniques to research, write, film, direct, produce and edit a broadcast quality story on a topic of cultural / historical significance or newsworthiness. Final films will be 10 – 15 minutes in length and must meet all standards of journalism ethics. 4 undergraduate hours. 4 graduate hours. Credit not given if credit for JOUR 480 (Advanced Documentary Production) already given. Prerequisite: JOUR 240 or JOUR 340 or instructor consent.

JOUR 445 Video Storytelling 2-Producing credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/445/)
Advanced techniques for reporting, producing, writing, shooting, and editing video news stories and for producing and airing regularly scheduled news programs on deadline. 4 undergraduate hours. 4 graduate hours. Prerequisite: JOUR 340. May not be taken concurrently with JOUR 217 or JOUR 417. May be taken concurrently with JOUR 317.

JOUR 450 Media and Public Opinion credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/450/)
Theory of public opinion and communications; relation of communication systems to public opinion, social systems, and the political order. 3 undergraduate hours. 3 graduate hours. Prerequisite: Completion of Quantitative Reasoning I.

JOUR 451 Research Methods in Journalism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/451/)
Introduction to social science principles of measurement, sampling, statistical inferences and logic of research design in collection, analysis and interpretation of information used in journalism and mass media. 3 undergraduate hours. 3 graduate hours. Prerequisite: Completion of Quantitative Reasoning I requirement. JOUR 200 recommended, or graduate standing.
This course satisfies the General Education Criteria for:
Quantitative Reasoning II

JOUR 452 Great Books of Journalism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/452/)
Books written by journalists have had great impact on U.S. public policy and understanding, covering such topics as corporate power, political corruption, rural poverty, the atomic bombing of Japan, Watergate, and a soldiers-eye view of war. From hard-edged investigations to nonfiction literature, the readings broaden and deepen understanding of the power and purpose of journalism beyond breaking news and celebrities. Readings from eight groundbreaking books, assessment of social and professional impact, ethical issues, reporting and writing approaches, and extensive class discussion. 3 undergraduate hours. 3 graduate hours.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

JOUR 453 Crisis Communications credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/453/)
Students will take on the role of a public relations/public affairs officer to learn how to deal with the media when managing a crisis for a client, whether a multinational corporation or a professional athlete. Students will use case studies of actual events to examine how the media dealt with the crisis. Students will get a look at the inner workings of a major PR firm devoted to telling the truth while managing the message. 3 undergraduate hours. 3 graduate hours.

JOUR 454 Propaganda & the News Media credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/454/)
The course examines techniques and processes of propaganda in a democratic society. It draws from contemporary theories of influence and persuasion to identify propaganda in the context of modern journalism, to delinerate differences between propaganda and information, and to assess the impact of propaganda on democratic decision making in the digital age. Particular attention is given to the news media practices and consumption patterns that unwittingly facilitate strategies of modern propagandists. 3 undergraduate hours. 4 graduate hours. Prerequisite: Junior, Senior or Graduate standing.

JOUR 460 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/460/)
A changing array of special projects, research or reading in journalism. Additional fees may apply. See Class Schedule. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated if topics vary.

JOUR 470 International Reporting credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/470/)
Role of international news in daily lives. Examines those who report it and those who pioneered it. Students monitor how U.S. and international media cover selected countries and learn how to write international news. In selected semesters, students may research issues and life in a foreign country in preparation for an international reporting trip. 3 undergraduate hours. 3 graduate hours.

JOUR 471 Science Journalism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/471/)
Students will explore media coverage of science. They will examine the interconnections of scientific advances and public understanding. The seminar format will allow students to interview scientists and journalists, to discuss work, and to become science communicators. Subject matter of reporting projects will be determined by the background and interests of the students. Field trips and Illinois science will be featured. 3 undergraduate hours. 3 graduate hours.

JOUR 472 Business Reporting credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/472/)
Learning to follow the money is a key part of covering corporate America, professional sports or Hollywood. No need to fear financial statements: This course shows you easy methods to pick them apart and turn them into smart stories. Students learn to report and write stories using the Wall Street Journal's feature methods. 3 undergraduate hours. 3 graduate hours. Prerequisite: JOUR 210 or JOUR 400. Journalism or Agricultural Communications major(s). Restricted to students with Sophomore, Junior, Senior, or Graduate class standing.

JOUR 475 In-Depth Writing Styles credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/475/)
Explores and produces feature, literary and longform writing and alternative forms of journalistic narratives. 3 undergraduate hours. 3 graduate hours. Prerequisite: JOUR 210.

JOUR 480 Advanced Reporting Topics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/480/)
Advanced reporting projects or techniques, with separate sections for a varying array of topics such as investigative reporting, immersion journalism, literary journalism, business and financial journalism, online publishing, radio news features, sports writing, broadcast documentary production, digital journalism, and photo journalism. 3 undergraduate hours. 3 graduate hours. May be repeated in the same or subsequent semesters if topics vary. Prerequisite: JOUR 210.

JOUR 481 Literary Feature Writing credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/481/)
Course focuses on concept, reporting practice, and ethics of literary approaches to create evocative, story-like journalism articles. Students report and write a single in-depth story that will be re-reported and re-written three times. Includes extensive readings illustrating the finest literary journalism. The class includes extensive self, class and professor criticism and editing. Articles for this class have been published in the News-Gazette and other publications. An archive of published stories can be found at intimatejournalism.com. 3 undergraduate hours. 3 graduate hours. Prerequisite: JOUR 210. Journalism majors only.

JOUR 482 Immersion Journalism credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/482/)
The interview methodology students learn is seen as the best way to provide the ethnographer/writer/reporter with insight into social phenomena. The methodology can be used to examine living conditions, family history and attitudes of ethnic groups at any class level -- wealthy, affluent, middle class, poor or underclass. Students with insatiable curiosity about behavior will be able to extract from participants surprising revelations about their needs, desires and motivations. Students will learn how personalities, circumstances, and choices made by participants' parents and forebears affect the participant's life today. Same as AFRO 482. 3 undergraduate hours. 4 graduate hours. Prerequisite: Juniors, Seniors and Graduate students of any discipline.

JOUR 483 Investigative Journalism credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/483/)
Integrates traditional and innovative methods of investigative reporting, including data analysis and text mining of documents and social media. Students will learn how to do deep research, organize complex material, and produce presentations that are easy for the public to understand. Students will delve deeply into one topic throughout the semester and have the opportunity to create and publish a multi-media project. 4 undergraduate hours. 4 graduate hours.

JOUR 490 Professional Project credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/490/)
Individual and team-produced advanced enterprise projects in specialized fields. 3 undergraduate hours. 3 graduate hours. May be repeated in the same or subsequent semesters if topics vary.

JOUR 494 Navigating the Job Market credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/JOUR/494/)
Covers how to get noticed when you're out searching for an internship or job, including how to produce a resume that attracts positive attention, how to write a cover letter designed for the job you're applying to, how to present yourself in an interview, what employers are looking for in those interviews, and where to look to find internships and jobs. 1 undergraduate hour. 1 graduate hour. Approved for S/U grading only.

JOUR 495 Internship Seminar credit: 0 to 1 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/495/)
Seminar based on internship experience. Offered for College of Media students who complete an approved professional, industry related internship. 0 to 1 undergraduate hours. 0 to 1 graduate hours. Approved for S/U grading only. May be repeated in the same term to a maximum of 2 undergraduate hours or 2 graduate hours. May be repeated in separate terms to a maximum of 3 undergraduate hours or 3 graduate hours. Prerequisite: Consent of instructor.

JOUR 500 Current Issues in Journalism credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/500/)
Seminar on issues of contemporary importance in journalism in their historical, multicultural contexts. Emphasis on ethical, legal, social, professional aspects of those issues. Aimed at helping students to develop their own journalism philosophies and high standards of conduct. Prerequisite: Consent of department.

JOUR 501 Multimedia Storytelling credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/501/)
The course is designed to equip graduate students who have little or no journalism experience to report in a multimedia environment. In the first part of the course, students learn where to find stories and how to develop story ideas, as well as basic research and interviewing techniques. Students will then be introduced to the various ways in which stories can be told using media platforms such as print, radio, television and the web. Prerequisite: Graduate students only.

JOUR 505 Journalism Proseminar credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/505/)
Introduction to scholarship and research in journalism and mass communication examining theoretical approaches to the meanings, uses, and effects of mass media in society; discussion of media freedom and accountability; humanistic and social scientific contributions to understanding mass communication. Prerequisite: Consent of department.

JOUR 515 Master's Project credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/515/)
A professional journalism project demonstrating development of analytical and critical thinking abilities appropriate to the profession and effective application of journalism methodology. May be repeated up to 8 hours. Prerequisite: Consent of department.

JOUR 590 Advanced Topics in Journalism credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/JOUR/590/)
Advanced special projects, research or reading in journalism at the master's and doctoral level. Approved for letter and S/U grading. May be repeated in the same term to a maximum of 8 hours; may be repeated in separate terms to a maximum of 24 hours.

KIN - KINESIOLOGY

KIN Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/KIN/)

Courses

KIN 100 Development Activities credit: 1 to 2 Hours. (https://courses.illinois.edu/schedule/terms/KIN/100/)
Skills and knowledge essential for leisure-time activities which are classified as developmental activities. Prerequisites and descriptions for each developmental activity are provided in the Class Schedule. More than one activity (Sections A through Z) may be taken in the same term. Additional fees may apply. See Class Schedule. May be repeated to a maximum of 2 hours.

KIN 101 Dance Activities credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/KIN/101/)
Skills and knowledge essential for leisure-time activities which are classified as dance activities. May be repeated; more than one activity (Sections A through Z) may be taken in the same term. Prerequisite: See Class Schedule for prerequisites for each dance activity.

KIN 102 Individual and Dual Activities credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/KIN/102/)
Skills and knowledge essential for leisure-time activities which are classified as individual and dual activities. Prerequisites for each individual or dual activity are provided in the Class Schedule. More than one activity (Sections A through Z) may be taken in the same term. Additional fees may apply. See Class Schedule.

KIN 103 Indoor Court Activities credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/KIN/103/)
Skills and knowledge essential for leisure-time activities which are classified as indoor court activities. Prerequisites for each indoor court activity are provided in the Class Schedule. More than one activity (Sections A through Z) may be taken in the same term.

KIN 104 Skating Activities credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/KIN/104/)
Skills and knowledge essential for leisure-time activities which are classified as skating activities. Prerequisites for each skating activity are provided in the Class Schedule. Additional Ice Skating Rink Facility charges are required and provided in the Class Schedule. More than one activity (Sections A through Z) may be taken in the same term. Additional fees may apply. See Class Schedule.

KIN 107 Aquatic Sport Activities credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/KIN/107/)
Skills and knowledge essential for leisure-time activities which are classified as aquatic sport activities. Prerequisites for each aquatic sport activity are provided in the Class Schedule. More than one activity (Sections A through Z) may be taken in the same term. Additional fees may apply. See Class Schedule.

KIN 109 Team Sport Activities credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/KIN/109/)
Skills and knowledge essential for leisure-time activities which are classified as team sport activities. Prerequisites for each team sport activity are provided in the Class Schedule. More than one activity (Sections A through Z) may be taken in the same term.

KIN 110 Intro to the Health Sciences credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/110/)
Same as CHLH 110. See CHLH 110.

KIN 111 Prescribed Exercise credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/KIN/111/)
Prescribed exercises adapted to individual needs, capacities, and interests; open to persons with paraplegia, permanently disabled, and individuals with significant temporary disabilities who will require long term rehabilitation. Students must be registered or eligible to register with DRES. May be repeated to a maximum of 4 hours. Prerequisite: Enrollment restricted to students with permanent disabilities or disabilities which are long-term in nature. Student should be registered or eligible to register with DRES.

KIN 120 Injuries in Sport credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/KIN/120/)
Emphasizes injury mechanisms, means of injury prevention, and emergency care applied to various types of sport injuries; laboratory sessions emphasize preventive and therapeutic taping and emergency first aid. Additional fees may apply. See Class Schedule.

KIN 121 Survey of Sports Medicine credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/121/)
Introduction to sports medicine for non-kinesiology majors; includes discussion of training, conditioning, preparation for sports, injury aspects of sports, and rehabilitation.

KIN 122 Physical Activity and Health credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/122/)
Provides the scientific evidence of physical activity in preventing disease and optimizing quality of life. Teaches behavioral change strategies to achieve an active lifestyle.

KIN 125 Orientation KIN & Comm Health credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/KIN/125/)
Serves as an introduction to the Kinesiology and Community Health Department and provides an overview of the Kinesiology and Community Health curricula, areas of study, and opportunities available for a career in the field. Enrollment required for Kinesiology freshmen and transfer students. Credit is not given for both KIN 125 and CHLH 125.

KIN 130 Analysis of Basic Movement credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/KIN/130/)
Introduction to human movement through development of skills and knowledge relative to structure and function of the human body in selected physical activities including: basic postural and locomotion patterns and fundamental throwing patterns; also studies developmental aspects of typical and atypical movement skills. Emphasizes performance and qualitative analysis of movement skills.

KIN 140 Social Sci of Human Movement credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/140/)
Introduction to the social scientific aspects of human movement including sport; particular emphasis on concepts derived from the social sciences (including psychology) that are appropriate to human movement. Additional fees may apply. See Class Schedule.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

KIN 142 Contemporary Issues in Sport credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/142/)
Examines current issues in sport relative to competition, economics, race, sex, youth, educational institutions, deviant behavior, religion, psychology, and the media.

KIN 150 Bioscience of Human Movement credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/150/)
Integrates anatomical and physiological aspects of human movement; emphasizes how the body moves, physiological responses to exercise stress, physical conditioning and physical fitness. Additional fees may apply. See Class Schedule.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Life Sciences

KIN 160 Introduction to Kinesiology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/160/)
Kinesiology is the interdisciplinary study of physical activity that includes a number of sub-disciplines. This course will examine these areas of study within Kinesiology from scientific, applied, and experiential perspectives. Students will study fundamental/introductory concepts associated with each area of Kinesiology, explore those concepts within research and applied contexts, and complete activities in which they experience various dimensions of those concepts.

KIN 199 Undergraduate Open Seminar credit: 0 to 5 Hours. (https://courses.illinois.edu/schedule/terms/KIN/199/)
Topics will vary each semester. Please see section topic. Approved for Letter and S/U grading. May be repeated.

KIN 201 Physical Activity Research Methods credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/201/)
This course provides an introduction of physical activity measurement and methods. The course will focus on (a) defining physical activity and associated terms and concepts; (b) providing detailed understanding of approaches and tools for measuring physical activity; and (c) facilitating understanding of scientific methods for physical activity research (e.g., experimental and non-experimental designs).
This course satisfies the General Education Criteria for:
Quantitative Reasoning II

KIN 230 Diversity in Recreation, Sport, and Tourism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/230/)
Same as HDFS 263 and RST 230. See RST 230.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

KIN 247 Intro to Sport Psychology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/247/)
Analysis of the competitive sport process, with study of how personality and situational variables affect motivation, anxiety, and aggression in sport. Attention is given to the psychological skills needed by coaches and athletes for successful and enjoyable sports participation.

KIN 249 Sport & Modern Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/249/)
The sociological analysis of sport in modern societies with regard to social class, politics, community, education, and collective behavior.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

KIN 259 Motor Development and Control credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/259/)
This course provides students with an overview of motor development across the life span as well as an introduction to the discipline of motor behavior/control. Specifically, it focuses on the concepts and principles of coordination, the control of movement, and development of skilled action throughout the life span. The course focuses on such topics as the development of fundamental movement activities; movement control processes; acquisition, retention and transfer skill; and the role of constraints to action. Same as HDFS 259. Additional fees may apply. See Class Schedule. Credit is not given for both KIN 259 and KIN 257.
This course satisfies the General Education Criteria for:
Social Beh Sci - Beh Sci

KIN 260 Teaching Activities I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/260/)
An activity-based course focusing on skills, knowledge, and teaching progressions related to territorial and net sports for school age students. Students will develop knowledge of the basic skills and teaching progressions related to the activities covered in the class.

KIN 261 Teaching Activities II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/KIN/261/)
An activity-based course focusing on skills, knowledge, and teaching progressions related to target sports, rhythms, dance and fitness activities, and adventure education activities for school age students. Students will develop knowledge of the basic skills and teaching progressions related to the activities covered in the class.

KIN 262 Motor Develop, Growth & Form credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/262/)
Examination of the concepts of motor development, physical growth, and body form throughout the lifespan. Major emphasis is on the period of birth through adolescence. Same as HDFS 262.
This course satisfies the General Education Criteria for:
Social Beh Sci - Beh Sci

KIN 268 Children's Movement credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/268/)
Introduction and overview of kinesiology principles and physical activity related to children. Laboratory portion of class focuses on the application of information to teaching physical activity to elementary school children. Prerequisite: For non-kinesiology majors.

KIN 340 Social & Psychological Aspects of Physical Activity credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/340/)
Discusses how social and psychological processes and constraints affect human action in physical activity environments. Attention is given to socialization, personal dynamics, stratification, and ideological and economic constraints upon the manifestations of physical activity. Prerequisite: KIN 140 or PSYC 100 and completion of the Campus Composition I general education requirement.
This course satisfies the General Education Criteria for:
Advanced Composition

KIN 342 Health Behaviors and Cognition credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/342/)
Examines the relationship between health behaviors (diet and physical activity) and cognitive health across the lifespan. The main focus of the course is on human cognitive function, in particular a subset referred to as executive functions (e.g., inhibition, working memory, and cognitive flexibility), and the interaction with different behavior/health-related factors. We will also cover broader topics areas, such as contemporary dietary and physical activity patterns as well as cognitive development and aging, to provide relevant context to better understand how health behaviors may support cognitive health.

KIN 345 Sport and Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/345/)
Same as HIST 390. See HIST 390.

KIN 346 Case Study: Endless Summer credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/346/)
The 1966 classic film --The Endless Summer-- and related films and literature are used as lenses for the historical-cultural study of human movement in the form of riding waves of water. Surf culture and films are global phenomena and by using such as unique cases, students gain mastery in cultural-interpretive theories, themes, and vocabulary, and in articulating perspectives on social roles, knowledge, and power. Same as RST 346 and MACS 346.

KIN 352 Bioenergetics of Movement credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/352/)
Study of the nature of energy transfer during physical activity; mechanisms of metabolic control, force production, cardiorespiratory support and adaptation relative to physical activity. Additional fees may apply. See Class Schedule.

KIN 355 Biomechanics of Human Movement credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/355/)
Studies the biological and mechanical principles of human motor performance; analyzes selected movement skills in depth. Additional fees may apply. See Class Schedule.

KIN 360 Adapted Physical Education credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/360/)
Organization, administration, and conduct of physical education programs for the most prevalent types of medical conditions found in school settings; emphasis on analyzing motoric needs and prescribing programs of motor activity for special populations, including individuals with mental retardation and learning disabilities Prerequisite: Junior standing or above and enrollment in the Teacher Certification program or consent of instructor.

KIN 361 Curriculum in Grades K-6 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/361/)
Examines the theoretical and philosophic curricular principles necessary to the development of a sound, professionally grounded, and research-based curriculum for children in grades K-6. Requires planning a variety of developmentally appropriate learning activities that are taught to children during micro-teaching experiences in the field. Prerequisite: Junior standing or above and enrollment in the Teacher Certification program or consent of the instructor.

KIN 362 Curriculum in Grades 7-12 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/362/)
Provides students with theoretical knowledge and professional practice in secondary physical education curriculum and instruction. This research-based course emphasizes effective teaching, development of content, and analysis of curricular models in grades 7-12. Prerequisite: Junior standing or above and enrollment in the Teacher Certification program or consent of instructor.

KIN 363 Instructional Strategies in PE credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/363/)
Analyzes the teaching-learning process, emphasizing the identification of instructional strategies specific to the development of skilled performance in movement activities. Prerequisite: Junior standing or above and enrollment in the Teacher Certification program.

KIN 364 Exper in the Common School credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/364/)
Supervised practice in observing, assisting, and teaching children in elementary, junior high school, and senior high school. Emphasis is on understanding motor behavior, teacher-learner behavior, and interrelatedness with other aspects of the learning environment. May be repeated to a maximum of 6 hours. Prerequisite: Junior standing or above and enrollment in the Teacher Certification program or consent of the instructor.

KIN 365 Civic Engagement in Wellness credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/365/)
Provides scholarly knowledge and practical experience related to environmental, intellectual, physical, psychological, spiritual, and social wellness. Students acquire leadership and real-world skills while working in teams to develop and implement projects that facilitate health and well-being in the population of adults living in the community. Projects emphasize integrative learning and are showcased in both written and oral formats. Same as AHS 365, CHLH 365, RST 365, and SHS 370.

KIN 369 Coaching Strategies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/369/)
Examination of philosophy, ethics, strategies, motivational techniques, performance analysis, program organization, contest administration, and equipment and facility management related to coaching.

KIN 375 Comm Partners & Health credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/375/)
Same as AHS 375 and SHS 375. See SHS 375.

KIN 385 Exper in Kinesiology Research credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/385/)
Supervised laboratory experiences in kinesiology research; individual work under the supervision of members of the faculty in their respective fields. The student assists with data collection, processing, and analysis for research in progress. May be repeated to a maximum of 12 hours. Prerequisite: Consent of instructor.

KIN 386 Exercise Instruction & Elderly credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/386/)
This course is designed to offer practical experience opportunities to undergraduate Kinesiology students aspiring to work in applied exercise fields with a diverse aged population. It will entail extensive "on the job" training through the Lifetime Fitness Program, an older adult service program of the Department of Kinesiology. Additionally, students will gain training in current program management practicies. May be repeated to a maximum of 6 hours. Prerequisite: KIN 352 or consent of instructor is required. A current CPR is required at the beginning of the term and certification must remain current.

KIN 387 Exper in the Agency Setting credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/387/)
Supervised practical experience in leadership roles in nonschool agency settings; emphasis on observing, planning, and conducting physical activity programs for children and/or adults in preschool, recreation, or other social agencies. May be repeated for a maximum of 6 hours.

KIN 390 Honors credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/KIN/390/)
Course is restricted to James Scholars pursuing the Civic Commitment and Leadership Tracks. Designed to support completion of the James Scholar honors project. Same as CHLH 390 and RST 390. May be repeated to a maximum of 6 hours. Prerequisite: James Scholar standing.

KIN 391 Special Project-Problems credit: 2 or 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/391/)
Special projects in research and independent investigation in any phase of health, kinesiology, physical education, and related areas selected by the students. May be repeated to a maximum of 6 hours. Prerequisite: Junior or senior standing; grade-point average of 2.5; consent of instructor.

KIN 393 Honors Thesis credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/393/)
Planning, researching and writing of an honors thesis, under supervision of a faculty member, on a problem of appropriate scope and character. Paper will be presented at a suitable meeting and/or seminar. May be repeated to a maximum of 6 hours. Prerequisite: Senior standing when enrolling; minimum grade point average (total, University and Kinesiology prefix courses) of 3.25; a minimum of one full year (2 semesters) remaining at the University of Illinois, Urbana-Champaign campus; and submission of a written proposal.

KIN 401 Measure & Eval in Kinesiology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/KIN/401/)
Examines the concepts of observation, measurement, and evaluation of human motor performance and functioning in physical activity contexts. 3 undergraduate hours. 4 graduate hours. Prerequisite: KIN 140 and KIN 150, or graduate standing, or consent of instructor.
This course satisfies the General Education Criteria for:
Quantitative Reasoning II

KIN 407 Disability, Culture & Society credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/KIN/407/)
Same as ANTH 404, CHLH 407, and REHB 407. See CHLH 407.

KIN 442 Body, Culture & Society credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/KIN/442/)
Analysis of the significant social aspects of the human body including anthropological, historical, psychological and sociological perspectives. Places emphasis on cross-culture and cross-national studies of bodily behavior with particular stress on exercise, health and sport practices. Same as GWS 442. 3 undergraduate hours. 4 graduate hours. Prerequisite: KIN 249 or SOC 249, or graduate standing; or consent of instructor.

KIN 443 Psychophysiology in Ex & Sport credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/KIN/443/)
Designed to give the student an understanding of the interaction between psychological processes and physiological parameters in exercise and sport. Examines psychophysiological exercise and sport research with particular attention to relevant models and theories. Same as PSYC 443. 3 undergraduate hours. 4 graduate hours. Prerequisite: Junior or senior standing, KIN 340, or graduate standing, or consent of instructor.

KIN 444 Physical Activity and Chronic Diseases credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/KIN/444/)
Focuses on the scientific evidence regarding the health benefits of exercise, physical activity, and physical fitness in the prevention and management of chronic diseases. 3 undergraduate hours. 4 graduate hours.

KIN 447 Psych of Sport Performance credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/KIN/447/)
Outlines the social psychological parameters which influence behavior and performance in sport; emphasizes the impact of social influences upon the individual within the sport context, including such factors as achievement motivation, competition, anxiety, aggression, and personality. Same as PSYC 447. 3 undergraduate hours. 4 graduate hours. Prerequisite: KIN 140, KIN 247, or PSYC 201, or graduate standing, or consent of instructor.

KIN 448 Exercise & Health Psychology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/KIN/448/)
Examines the psychological determinants and consequences of exercise and physical activity as a health promoting behavioral process. Same as CHLH 448. 3 undergraduate hours. 4 graduate hours. Prerequisite: Junior standing or above, or graduate standing, or consent of instructor.

KIN 449 Rehabilitation Biomechanics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/KIN/449/)
This course is for students who are interested in occupational therapy, physical therapy, and prosthetics and orthotics. General principles for application in injury prevention and rehabilitation will be taught. Students will learn how to use biomechanical models to estimate joint compression forces and muscle forces, and use this information to design training and rehabilitation programs for people with musculoskeletal and neuromuscular injury. 3 undergraduate hours. 4 graduate hours.

KIN 450 Biochemistry of Exercise credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/KIN/450/)
Introduces the metabolic and biochemical adaptation of the body in response to acute and chronic physical activity. Primary focus is given to the subcellular and enzymatic regulation and integration during exercise. Substrate metabolism, bioenergetics, hormonal action and nutritional influences as related to exercise are emphasized. 3 undergraduate hours. 4 graduate hours. Prerequisite: KIN 352 or MCB 450; or consent of instructor.

KIN 451 Skeletal Muscle Physiology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/KIN/451/)
Offers basic information on skeletal muscle anatomy, physiology and function which will provide a basis for understanding changes in muscle structure and function during periods of increased or decreased us. Knowledge gained in this course can be used in areas such as design of training programs, physical therapy, or injury prevention. 3 undergraduate hours. 4 graduate hours. Prerequisite: KIN 352 or prior consent of the instructor.

KIN 452 Clin & Applied Ex Physiology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/KIN/452/)
Physical fitness appraisal and guidance in clinical and applied settings with emphasis on medical clearance, risk factor assessment, physical fitness assessment and exercise prescription. 3 undergraduate hours. 4 graduate hours. Prerequisite: KIN 352, or graduate standing, or consent of instructor.

KIN 453 Nutrition for Performance credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/KIN/453/)
Nutrition for performance is the fusion of two disciplines, nutrition and exercise physiology, which provides the knowledge-base to support and optimize training, performance, and recovery. This course will provide information regarding the use of nutrition to increase performance in athletes training for strength or endurance. Same as FSHN 453. 3 undergraduate hours. 4 graduate hours.

KIN 457 Motor Learning & Control credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/KIN/457/)
Discussion and analysis of scientific principles related to the learning and control of motor skills; review of related literature and research in motor learning and control. The focus of the course is on mechanisms for the control of movement and recent theories of how movements are acquired and performed. 3 undergraduate hours. 4 graduate hours. Prerequisite: Graduate standing or consent of instructor.

KIN 458 Neurobio of Aging credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/KIN/458/)
Same as PSYC 451 and NEUR 451. See PSYC 451.

KIN 459 Physical Activity & Aging credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/KIN/459/)
Examines aging and age-related changes in the cells, tissues, organs, and systems of the human body; emphasizes the role of physical activity and other lifestyle choices in modifying the aging process and in influencing the onset and progression of the chronic diseases which accompany aging. Same as HDFS 459. 3 undergraduate hours. 4 graduate hours. Prerequisite: Junior, Senior, or graduate standing or consent of instructor.

KIN 460 Technology & Pedagogical KINES credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/KIN/460/)
Promotes mastery of technology skills and complex computer applications through the analysis of research and critical issues related to technology in Kinesiology. The completion of technology modules, requiring problem solving and the collection and analysis of assessment data, will culminate in an interactive, multimedia project. 3 undergraduate hours. 4 graduate hours. Prerequisite: Junior standing.

KIN 470 Exercise Endocrinology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/KIN/470/)
The objective of this course is to gain a better understanding of the endocrine system and its response to physical exercise. Therefore, this course will provide a basic review of 1) the major glands and tissues that secrete chemical messengers, 2) the ability of acute exercise and exercise training to regulate chemical messengers, and 3) the physiological consequences of endocrine adaptation to exercise. Clinical disorders associated with endocrine dysfunction will also be discussed when relevant. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: KIN 352.

KIN 473 Skill Acquisition Strategies credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/KIN/473/)
Examines theory and practice related to structuring practice conditions to maximize the acquisition and performance of motor skills. The nature of skill, activities, and strategies for enhancing skill are discussed with particular emphasis placed on strategies that instructors, teachers, and/or coaches can use to enhance skill acquisition and performance. 3 undergraduate hours. 4 graduate hours. Prerequisite: KIN 257 or graduate standing or consent of instructor.

KIN 474 Tech-Driven Health Intervention credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/KIN/474/)
Course will review and critique the state of the science of technology-driven health behavior interventions. A broad scope of technologies and health behaviors will be covered and students will acquire an understanding of current uses of technology for facilitating health behavior change and maintenance. Students will examine the efficacy and potential for large-scale adoption and dissemination; and develop skills necessary to apply technology-based solutions to address public health problems. 3 undergraduate hours. 4 graduate hours.

KIN 485 Clin Exper in Sports Medicine credit: 2 to 8 Hours. (https://courses.illinois.edu/schedule/terms/KIN/485/)
Clinical experiences in medical supervision of sports programs, in the areas of therapeutic exercises, fitness programming, and cardiac rehabilitation. 2 to 8 undergraduate hours. 2 to 8 graduate hours. May be repeated to a maximum of 8 hours. Prerequisite: Consent of instructor.

KIN 494 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/KIN/494/)
Lecture course on topics of current interest; specific topics announced in the Class Schedule. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated.

KIN 501 Kinesiology Research Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/KIN/501/)
Review and appraisal of common research procedures; application of statistical procedures, library methods, evaluation procedures, and experimental methods.

KIN 530 Childhood Obesity I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/530/)
Same as CHLH 530, FSHN 530, HDFS 551, NUTR 530, SOCW 570. See NUTR 530.

KIN 531 Childhood Obesity II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/KIN/531/)
Same as CHLH 531, FSHN 531, HDFS 552, NUTR 531, SOCW 571. See NUTR 531.

KIN 540 Health Behavior: Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/KIN/540/)
Same as CHLH 540. See CHLH 540.

KIN 542 Mind-Body Exercise Approaches to Health credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/KIN/542/)
Explores the theory and application of a variety of integrative mind-body health practices (e.g., meditation traditions, mindfulness, yoga, tai-chi, etc.). Students will learn about the epidemiology and popularity of these practices and the scientifically documented physical and psychosocial health benefits. 4 graduate hours. No professional credit.

KIN 543 Physical Activity & Cognition credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/KIN/543/)
Examines the relationship between physical activity and fitness on brain and cognition across the lifespan. The psychobiology of physical activity effects on cognition is emphasized. Other areas of study include aging, development, and psychosocial factors. Methodological issues as well as human and animal models of research will be studied.

KIN 551 Sci Basis of Phys Performance credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/KIN/551/)
Contemporary trends in the study of human performance and exercise stress; analysis of the research literature, experimental strategies, and research instrumentation. Lecture-discussion and laboratory.

KIN 552 Adv Skeletal Muscle Physiology credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/KIN/552/**)**
Course provides an in-depth understanding of skeletal muscle anatomy, cell biology, and physiology. Classroom discussions of primary literature and other activities will focus on muscle structure and function. Information will also be provided on the molecular and cellular basis for adaptations that occur with increased use, such as endurance or strength training, or periods of disuse, such as injury and disease.

KIN 553 Circulorespiratory Physiology credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/KIN/553/**)**
Aerobic performance responses to short-term, intermittent, and prolonged physical activity; special consideration given to endurance training methods and assessment techniques, ergogenic aids, and problems associated with growth, environmental influences, and competitive sport. Prerequisite: KIN 551 or consent of instructor.

KIN 557 Stress Immunology credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/KIN/557/**)**
This course will examine the role of stress in modulating immune function and the pathobiological mechanisms resulting in disease. An emphasis will be placed upon the reciprocal communication pathways that exist between the central nervous, endocrine and immune systems. Prerequisite: Consent of the instructor. It will be assumed that students will have introductory knowledge in biochemistry, endocrinology, and immunology.

KIN 560 Research on Teacher Education credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/KIN/560/**)**
Critically examines advanced theories, trends, problems, and implications of research on teacher education in Kinesiology. Students will complete a series of written assignments that are grounded in theory, illustrate critical thinking skills, and demonstrate extensive knowledge of the literature. Prerequisite: Graduate standing.

KIN 564 Qualitative Research Methods credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/KIN/564/**)**
Introduces students to qualitative methodology in the educational and health-related professions settings. Students will learn to interpret qualitative research, understand its theoretical underpinnings, acquire interviewing and observation skills, design and evaluate a community-based group research project, learn to collaborate with others, and critically assess the contributions to the project of self and peers.

KIN 565 Teaching in the Professoriate credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/KIN/565/**)**
Provides scholarly knowledge and practical experience necessary for effectively assuming the roles of teaching, mentoring, and presenting in the professoriate. Students will team teach an undergraduate course with an assigned faculty mentor, give a scholarly research presentation, and attend a series of theoretically grounded lectures focusing on instructional design, learner characteristics, and successfully conveying information to others. Same as CHLH 565, RST 560, and SHS 565. Prerequisite: Must be a PhD student in the College of Applied Health Sciences.

KIN 590 Independent Study credit: 2 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/KIN/590/**)**
Independent research on special projects. May be repeated.

KIN 591 Seminar credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/KIN/591/**)**
Lectures, discussions, and critiques on kinesiology and community health related subjects by faculty members and visiting professional leaders; presentation and criticism of student research. Approved for S/U grading only. May be repeated in subsequent terms as topics vary.

KIN 594 Special Topics credit: 1 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/KIN/594/**)**
Lecture course in topics of current interest; specific subject matter announced in the Schedule. May be repeated.

KIN 599 Thesis Research credit: 0 to 16 Hours. **(**https://courses.illinois.edu/schedule/terms/KIN/599/**)**
Preparation of theses in kinesiology. Approved for S/U grading only. May be repeated.

KOR - KOREAN

KOR Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/KOR/)

Courses

KOR 201 Elementary Korean I credit: 5 Hours. **(**https://courses.illinois.edu/schedule/terms/KOR/201/**)**
First semester of Korean for students without any background of the Korean language, starting from the Korean alphabet (Hangul) and learning basic grammar, vocabulary, and commonly used expressions, to achieve beginning level of speaking, listening, reading, writing, and basic grammar skills in Korean. Credit is not given for KOR 201 if credit for KOR 221 has been earned.

KOR 202 Elementary Korean II credit: 5 Hours. **(**https://courses.illinois.edu/schedule/terms/KOR/202/**)**
Continuation of KOR 201, and second semester of first year Korean. Students learn basic grammar, vocabulary, and commonly used expressions by practicing conversations and reading conversation based texts, to achieve beginning-intermediate levels of speaking, listening, reading, and writing in the Korean language. Credit is not given for KOR 202 if credit in KOR 222 has been earned. Prerequisite: KOR 201 or as determined by placement test and instructor. Students must have taken KOR 201 at this University. Otherwise, they must take the placement test given in January. Sign up for the test in the office of the EALC Department (244-2725).

KOR 203 Intermediate Korean I credit: 5 Hours. **(**https://courses.illinois.edu/schedule/terms/KOR/203/**)**
Continuation of KOR 202 and first semester of the second year Korean. Students practice conversations, study grammar based on conversational materials with variety of styles and levels of discourse and usage, and learn about Korean culture, to achieve intermediate-level fluency. Credit is not given for KOR 203 if credit for KOR 222 has been earned; determination is based on the placement test. Prerequisite: KOR 202 or as determined by a placement exam and an instructor. Students must have taken KOR 202 at this University. Otherwise, they should take the placement exam in August. Sign up for the test in the office of the EALC Department (244-2725).

KOR 204 Intermediate Korean II credit: 5 Hours. **(**https://courses.illinois.edu/schedule/terms/KOR/204/**)**
Continuation of KOR 203 and second semester of the second year Korean. Students practice conversations and study grammar based on conversational materials with variety of styles and levels of discourse and usage, to achieve intermediate-level fluency in speaking, listening, reading and writing in the Korean language. Credit is not given for KOR 204 if credit for KOR 241 has been earned. Prerequisite: KOR 203 or as determined by a placement exam and an instructor. Students must have taken KOR 203 at this University. Otherwise, they should take the placement exam in January. Sign up for the test in the office of the EALC Department (244- 2725).

KOR 221 Korean Reading and Writing I credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/KOR/221/**)**
First semester of spoken and written Korean for students with background in spoken Korean. Starting from the Korean alphabet (Hangul) students learn basic grammar, vocabulary, and commonly used expressions, to achieve the beginning level proficiency in reading and writing as well as in speaking. Credit is not given for KOR 221 if credit for KOR 202 has been earned. Prerequisite: Ability to speak and understand spoken Korean as determined by a placement test and an instructor. Students with prior knowledge of Korean must take the placement test in August. Sign up for the test in the office of the EALC Department (244-2725).

KOR 222 Korean Reading and Writing II credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/KOR/222/**)**
Continuation of KOR 221 and second semester of spoken and written Korean for the students with background in Korean. Students learn basic grammar, vocabulary, and commonly used expressions, to achieve the beginning-intermediate level proficiency in reading and writing as well as in speaking of Korean. Credit is not given for KOR 222 if credit for KOR 202 has been earned; determination is based on the placement test. Prerequisite: KOR 221 or as determined by a placement test and an instructor. Students must have taken KOR 221 at this University. Otherwise, those with prior knowledge of Korean must take placement test in January. Sign up for the test in the office of the EALC Department (244-2725).

KOR 241 Korean Reading and Writing III credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/KOR/241/**)**
Continuation of KOR 222 and first semester of the second year of spoken and written Korean. Students learn grammar and vocabulary to achieve intermediate-level speaking, listening, reading and writing in Korean. Credit is not given for KOR 241 if credit for KOR 204 has been earned; determination is based on the placement exam. Prerequisite: KOR 222 or as determined by a placement exam and an instructor. Students must have taken KOR 222 at this University. Otherwise, those with prior knowledge of Korean must take the placement exam in August. Sign up for the test in the office of the EALC Department (244-2725).

KOR 242 Korean Reading and Writing IV credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/KOR/242/**)**
Continuation of KOR 241 and second semester of the second year of spoken and written Korean. Students are exposed to theme-related passages and dialogues, practicing speaking, listening, reading, and writing, in order to achieve advanced-intermediate level proficiency in Korean. Credit is not given for KOR 242 if credit for KOR 306 has been earned. Prerequisite: KOR 241 or as determined by a placement exam and an instructor. Students must have taken KOR 241 at this University. Otherwise, those with prior knowledge of Korean must take the placement test in January. Sign up for the test in the office of the EALC Department (244-2725).

KOR 305 Advanced Korean I credit: 5 Hours. **(**https://courses.illinois.edu/schedule/terms/KOR/305/**)**
Continuation of KOR 204 and first semester of third year Korean. Concentrates on enhancing the level of fluency in speaking, listening, reading and writing of Korean. Students learn more advanced-level vocabulary and expressions and read more authentic texts in Korean. Credit is not given for KOR 305 if credit for KOR 241 has been earned; determination is based on placement test. Prerequisite: KOR 204 or as determined by a placement exam and an instructor. Students must have taken KOR 204 at this University. Otherwise, they should take the placement test in August. Sign up for the test in the office of the EALC Department (244-2725).

KOR 306 Advanced Korean II credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/KOR/306/)
Continuation of KOR 305 and second semester of third year Korean. Concentrates on enhancing the level of fluency in speaking, listening, reading and writing of Korean. Students will learn about more advanced-level vocabulary and everyday expressions and read texts in Korean where Korean culture is introduced and discussed. Credit is not given for KOR 306 if credit for KOR 242 has been earned. Prerequisite: KOR 305 or as determined by a placement test and an instructor. Students must have taken KOR 305 at this University. Otherwise, they should take the placement text in January. Sign up for the exam in the office of the EALC Department (244-2725).

KOR 440 Fourth Year Korean I credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/KOR/440/)
Develop the ability to engage in fluent discourse, to understand authentic texts through the acquisition of advanced-level vocabulary and expressions, and to refine and improve their writing in Korean. Students are expected to engage in class discussions on various topics of Korean culture and society. 3 undergraduate hours. 4 graduate hours. Prerequisite: KOR 306 or KOR 242 or as determined by a placement test and an instructor. Students must have taken KOR 306 or KOR 242 at this University. Otherwise, those with prior knowledge of Korean should take the placement exam in August. Sign up for the test in the office of the EALC Department (244-2725).

KOR 441 Fourth Year Korean II credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/KOR/441/)
Allows advanced students to further develop their reading comprehension of authentic texts through the acquisition of advanced-level vocabulary and expressions, and to discuss and write on various topics and issues related to contemporary Korea. 3 undergraduate hours. 4 graduate hours. Prerequisite: KOR 440 or as determined by a placement test and an instructor. Students must have taken KOR 440 at this University. Otherwise, those with prior knowledge of Korean should take the placement test in January. Sign up for the test in the office of the EALC Office (244-2725).

LER - LABOR AND EMPLOYMENT RELATIONS

LER Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/LER/)

Courses

LER 100 Introduction to Labor Studies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LER/100/)
Provides an overview of workers and unions in American society. Looks at economic, political, and workplace issues facing working people, why and how workers join unions, how unions are structured and function, and how unions and management bargain a contract. Provides a historical overview of the American labor movement, and discusses the contemporary struggles workers and unions face in a rapidly changing global economy.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

LER 110 Labor and Social Movements credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LER/110/)
Explores the role of labor unions in American society. Discusses the role of labor unions in initiating actions on social issues that impact the U.S. working class, the economy, public policy, and politics. Analyzes the labor movement's interaction with the civil rights, women's, student, global justice, and living wage movements.

LER 120 Contemporary Labor Problems credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LER/120/)
Focuses on problems and challenges facing American workers and the U.S. labor movement. Topics include the deterioration of the labor-management "social contract" in recent decades; a review of labor and employment law; the health care crisis; globalization and cross-border union alliances; and union democracy.

LER 130 Intro Labr Wrkng Class History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LER/130/)
Do working people have a history worth studying? What does the history of the U.S. look like when viewed from the point of view of those who built the country? Introduces U.S. labor and working class history. Examines the conditions of life and work of the various groups of working people: enslaved, indentured, small farmers, but especially wage workers and their families from the civil War to the present. Studies the main collective actions workers have taken to protect and improve their lives and the organizations and social movements they created to do this. Students who complete LER 130 and want a more in-depth look at the subject should enroll in HIST 480.

LER 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/LER/199/)
May be repeated.

LER 200 Globalization and Workers credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LER/200/)
Is globalization good for working people in the United States and around the world? Globalization is the driving force in the world economy but it is also provoking tremendous debate and popular resistance. Students will learn the basics about globalization and its institutions from the perspective of workers' right in the U.S. and the Third World. Analyzes the debate over free trade and sweatshops, trade agreements such as the North American Free Trade Agreement, and institutions such as the World Trade Organization and the International Monetary Fund. Closely examines working conditions in several Third World countries, and explores the role of the global justice movement.

LER 210 Images of Labor in Film credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LER/210/)
Uses feature-length film to take an in-depth look at key labor strikes and organizing drives from the 1910s through the 1980s. Students will view some of the most powerful films on worker and labor themes ever produced. Studies the work lives and labor unions of miners; railroad porters; packinghouse workers; textile workers; and farm workers. Discusses the meaning of the events depicted in the films by situating them in historical context with detailed readings; engage the debates raised in the films about labor organizing methods and strike strategies that are relevant to today's labor movement; reflect on issues of race, gender, class consciousness, working conditions, union goals, anti-communism, and labor-management relations raised in the films and readings; analyze how effectively the films, and Hollywood in general, portray workers and unions; and compare and contrast the films.

LER 220 The Media, Workers, and Unions credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LER/220/)
Workers, unions, and how the news media tells their stories. Looks at the past, the present and future. Analyzes how these stories are told in the mainstream and independent news media in the U.S., and examines the Internet's explosion and impact on these stories. Looks at how blogs, online videos, citizen journalism, and the fast changing world of Internet communication has given voice to workers and their issues. Compares the print and online media with the work done in documentaries and the cinema. Looks at the global telling of these stories. Lastly, examines the ways that unions can better tell their stories.

LER 225 Labor Issues in Sports credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LER/225/)
Introduces students to critical historical and contemporary labor issues in the sports industry. Despite popular notions of athletics as "only a game," the world of sports is an expansive global industry with a complex architecture of labor relations systems. Thanks to spectator sports' status as a pervasive form of mass entertainment, the industry also serves as an influential source of cultural meaning in the wider world of work. Day after day, the sports world is home to mass-mediated conversations about key labor issues ranging from unionization to workplace safety to sexual harassment.

LER 240 China's Labor Relations credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LER/240/)
This course analyzes how China is reshaping the world economy, labor markets, unions, forms of worker resistance, and the lives of workers around the globe. We will examine China's transition from socialism to state capitalism; working conditions facing Chinese workers; evolving labor and employment relations; the role and function of the All-China Federation of Trade Unions; and worker protests and strikes demanding improved conditions.

LER 290 Introduction to Employment Law credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LER/290/)
Addresses and critiques the content, interpretation, and applications of the laws that govern employer-employee relations in the American workplace. Explores the historical sources, underlying ideology, and current content of anti-discrimination and civil rights laws, of laws that seek to guarantee a safe and healthy workplace for all Americans, of laws that guarantee minimum wages and overtime pay, of legal protections of privacy on the job, of unemployment insurance and workers' compensation laws, and of laws that guarantee workers the right to collective action and collective bargaining.

LER 300 Workers, Unions, and Politics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LER/300/)
What is the meaning and impact of politics seen from the perspective of those at the bottom of the pyramid of political power rather than from the usual focus on the actions and perceptions of political elites? In what ways do workers become involved in politics? Under what circumstances are they likely to be successful in bringing about change? This course addresses these questions by exploring political power, political participation, and political change from a broad historical and cross-cultural perspective, but always focusing on a view of politics from the bottom up. The course analyzes the political economy of labor, and the labor movement's political influence in politics.

LER 320 Gender, Race, Class and Work credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LER/320/)
Provides a historical and contemporary overview of the impact and interplay of gender, race, class and other issues of identity in the workplace. Topics include: pay gap, occupational segregation, workplace harassment, low wage work, and employment discrimination laws. The response of labor unions to identity issues will also be examined. Prerequisite: LER 100, LER 110 or one course that covers race or gender issues is required.

LER 330 Comparative Labor Relations credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LER/330/)
Designed as an overview of comparative labor movements and labor relation systems. Develops a framework for understanding union formation and the development of industrial relations system in a variety of countries around the world. An emphasis will be placed on each country's interaction between unions and political organizations, national labor policies, the machinery for the resolution of workplace problems, the level of shop floor disturbances, bargaining coverage of employees, and the issues of workers' control. Also addresses how globalization has transformed the capacity of any nation's labor relations' system to respond to economic challenge and workplace conflicts. Examines the possibility of developing transnational union.

LER 410 Labor and the European Union credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/410/)
Addresses the formation of European Union (EU) labor policy; the role of trade unions in EU member nations; worker immigration in the EU; diversity issues in the EU labor market and a comparative analysis of industrial relations in Europe. Same as EURO 410. 4 undergraduate hours. 4 graduate hours. Prerequisite: Consent of the instructor.

LER 440 Economics of Labor Markets credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/440/)
Same as ECON 440. See ECON 440.

LER 450 European Working Class History credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/450/)
Same as HIST 450 and SOC 422. See HIST 450.

LER 480 US Work Class Hist Since 1780 credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/480/)
Same as HIST 480. See HIST 480.

LER 522 Government Regulation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/522/)
Focuses on federal and state legislation, court and agency rulings, and executive orders that regulate a wide range of private and public employment practices including: Title VII and Affirmative Action Compliance; American with Disabilities Act; drug-, HIV-, and genetic testing; Fair Labor Standards Act; Civil Service procedures; Equal Pay Act, Family and Medical Leave Act, and employment-at-will; constitutional protection for employees, job-applicants, and others. Prerequisite: LER 547 or LER 591, or consent of instructor.

LER 523 Org Fundamentals for HR credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/523/)
Increases students' effectiveness in analyzing and understanding organizations and the organizational context. It relies on the case method and focuses a number of important themes such as organization design; strategy; decision-making; and culture. In order to prepare students for the various transformations that they will experience in their careers, it examines many of these topics in the context of organizational change. Exposes students to basic ideas about key organizational topic - as well as a number of applications of these ideas - in order to give them a framework for organizing past experience. The topics covered do not offer a recipe for what to do in all situations, but rather give students a set of skills and different ways of thinking that can help them address novel problems they will face throughout their lives.

LER 530 Found of Ind Org Psych credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/530/)
Same as PSYC 530. See PSYC 530.

LER 540 Labor Economics I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/540/)
Same as ECON 540. See ECON 540.

LER 541 Labor Economics II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/541/)
Same as ECON 541. See ECON 541.

LER 542 Collective Bargaining credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/542/)
Examination of: social values and social science concepts to develop a framework for explaining the basis and shape of collective bargaining as it has been practiced in the United States; government and law, unions, and employers as part of the development of this framework; the environment of collective bargaining with respect to the role of economics and bargaining structure; the negotiating process as the interactive basis for union-management relations; conflict and conflict resolution as part of the negotiating process; wage and other effects of collective bargaining as bargaining outcomes; contemporary changes in union management relations. Case materials and exercises may be used to supplement course materials. Same as ECON 542. Prerequisite: Consent of instructor.

LER 543 Workplace Dispute Resolution credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/543/)
Examination of the use of procedures to resolve employment disputes in both union and nonunion workplaces; comparative analysis of grievance arbitration, interest arbitration, mediation, fact-finding, and combinations of these procedures; special emphasis given to the role of third party intervention. Same as ECON 543 and LAW 665. 3 professional hours. 4 graduate hours.

LER 545 Economics of Human Resources credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/545/)
Study of the economics of personnel with the modern corporation. Topics include hiring, promotion, evaluation, discrimination, raiding, job definition, pay schemes, benefits, and design of work. Same as EPOL 575 and HRD 534. 4 graduate hours. No professional credit. Prerequisite: LER 593 or equivalent, or consent of instructor.

LER 547 Labor Law I credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/547/)
Same as LAW 662. See LAW 662.

LER 556 Industrial Relations Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/556/)
Integrated analysis of the principles of industrial relations through the study of the works of the major theorists and their critics. Prerequisite: Consent of instructor.

LER 557 Human Resources Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/557/)
Continuation of LER 556. Focuses on contemporary research in human resource management and related fields.

LER 558 Faculty-Student Workshop credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/558/)
Training and experience for Ph.D. students in the application of social science and industrial relations theory and research methodology to contemporary industrial relations problems through presentation and discussion of faculty and student research. Ph.D. students are required to make presentations and to participate in workshop discussions during the entire period of their campus residency. Approved for letter and S/U grading.

LER 559 Micro Research Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/559/)
Provides doctoral students a foundation for conducting independent, scholarly micro research (i.e., individuals or small groups as the primary unit of analysis) by addressing the components of the research process. This foundation for conducting independent research is based on the research process as an open system of interconnected choices that unfold sequentially: (1) Choosing and framing a research question, (2) Choosing an hypothesis to address the research question, (3) Choosing a Strategy and Design, (4) Choosing modes for treating constructs, (5) Choosing Forms for Converting Data into Observations, (6) Choosing procedures to analyze data, and (7) Choosing conclusions for interpreting results. Prerequisite: Doctoral degree student in LER, Department of Psychology, Economics, College of Business, College of Education. Master's degree students who are considering a doctoral degree program subject to instructor approval.

LER 561 Compensation Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/561/)
Compensation theory and practice. Course addresses the theoretical and practical issues associated with the design of effective compensation systems. The design phases include establishing internal equity, external equity, and individual equity. Budgeting and administration are also addressed. Case analyses and computer simulations may be used to supplement course materials.

LER 562 HR Planning and Staffing credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/562/)
Examines conceptual issues, policies, and practices relating to the attraction, selection, development, and planning for the most effective utilization of human resources.

LER 564 HR Training and Development credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/LER/564/)
Provides students a firm understanding of human resource training and development systems in today's business environment. A constant theme setting the back drop for this course will be on the various kinds of change facing organizations and how these changes relate to human resource training and development. Aspiring HR professionals will gain essential knowledge to effectively manage employee training and development systems in a variety of companies.

LER 565 HR Management and Strategy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/565/)
Designed to provide integration across the specific functional areas of the human resources management (HRM) field, while at the same time demonstrating the linkages horizontally within HRM and vertically with strategic management of the firm. This case-focused course places emphasis on human resources issues of strategic importance to the organization. Same as BADM 512. Prerequisite: One prior course from the Organizational Behavior and Personnel Management distribution subject area list (in the MHRIR degree requirements for the graduate degree in Labor and Employment Relations).

LER 566 International HR Management credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/566/)
Human resource management issues examined from the perspective of the multinational firm. Topics include globalization and human resource strategy, management and the structure of multinational firms, dealing with intercultural differences, selecting employees for foreign assignments, training and developing expatriate employees, evaluation and compensation of employees in international assignments. Individual and group projects. Prerequisite: Graduate standing.

LER 567 Negotiation in HR Decisions credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/LER/567/)
General survey course concerning the strategies and tactics of bargaining and negotiation, with special emphasis on applications in human resource management contexts. Topics covered include: the structure of negotiated outcomes; integrative bargaining tactics; distributive bargaining tactics; negotiation planning; power, persuasion and influence; communication; negotiating in teams and groups; negotiating using 3rd parties (arbitrators, mediators, agents); cross-cultural negotiations. Students will discuss negotiation issues and build negotiation skills through a series of experiential exercises and cases. Credit is not given for both LER 567 and MBA 505 (Sections W1 and W2: Managerial Negotiations). Prerequisite: Graduate standing. An introductory course in social psychology or organizational behavior is preferred but not required.

LER 568 Firm Performance and HR credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/568/)
The purpose of this course is to enable students to understand some basic ideas about and measures of firm performance with heavy emphasis on the role of human resource managers. Students will gain an understanding of how human resource professionals fit into the organization, structure, and function of business firms. Many basic ideas from the field of finance will be studied. The course covers theoretical ideas and has many empirical, policy, and practitioner-relevant applications, all with the goal of providing human resource managers fundamental financial analysis tools to enable them to function effectively in their post-graduate corporate workplaces.

LER 569 Power & Influence in HRM credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/LER/569/)
Designed to help prospective human resource managers learn how to use power and influence as effective tools for understanding the surroundings in which they will be working with and managing people, and achieving the goals that they set for themselves. It provides frameworks and practical tools that allow students to make sense of on-the-job learning experiences and equip them with basic diagnostic and action-planning skills that they can use at different points in their careers - and to consider difficult ethical questions in the process. Prepares students to get things done in the real world, where personalities and office politics sometimes hinder rather than help them.

LER 570 Leadership for HR Managers credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/LER/570/)
In contemporary organizations, the HR function is often called on to serve a variety of leadership roles. Thus, HR managers will not only need to learn how to utilize and improve their leadership skills in different and changing contexts, but also how to help other employees become effective leaders. The goals of this course are (1) to analyze and discuss a number of key frameworks that will provide students with knowledge of leadership in different types of organizations, and (2) to provide students with practical tools to help them make sense of their own on-the-job experiences and equip them with basic action-planning skills that they can use on the job.

LER 580 Internship credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/LER/580/)
Full or part-time practice of human resources or employment relations in an off-campus government, corporate or not-for-profit environment. Approved for S/U grading only. May be repeated in separate terms. Prerequisite: Must be a student in the LER program.

LER 590 Individual Topics credit: 0 to 8 Hours. (https://courses.illinois.edu/schedule/terms/LER/590/)
Students in labor and industrial relations may register for this unit with the consent of the curriculum adviser and the adviser under whom the student will perform individual study or research. Such individual work may include special study in a subject matter for which no course is available or an individual research project, including on-the-job research in industry, which is not being undertaken for a thesis. 0 to 8 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated if topics vary; unlimited credit hours for graduate and professional students.

LER 591 Employment Relations Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/591/)
General framework for the analysis of employment relationships. Topics include industrial relations theory, the American system of collective bargaining, intercountry system differences, and human resource management strategies and practices. Prerequisite: Graduate standing.

LER 593 Quantitative Methods in LER credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/593/)
Application of statistical methods to problems in human resources and industrial relations. Analysis and presentation of results using computer software. Covers statistical techniques through analysis of variance and multiple regression. Prerequisite: Any elementary statistics course.

LER 594 Tutorial Seminar credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/594/)
Research experience for Master's students in carrying out a problem solving project from formulation to written report in a chosen area of labor and industrial relations. Each student selects an individual topic with the approval and guidance of a faculty member and participates in a Tutorial Workshop. Approved for both letter and S/U grading. Prerequisite: Completion of no fewer than 24 graduate hours of LER course work.

LER 595 Managing Diversity Globally credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/595/)
In a global economy workplace diversity is not a trend; it is a reality faced by corporate leaders, human resource professionals and management consultants. Within the US, immigration, migration, and gender and racial differences have been major trends shaping workplace composition. Globalization places additional pressures on managing workplace diversity effectively. In this setting, training managers and human resource professionals to manage differences and adapt to multiple national and cultural contexts is an imperative. Course provides an in-depth understanding of how managers and HR professionals can be effective in not only managing diversity in a global context, but also in leveraging global diversity as a competitive advantage. By the end of this course students will have a holistic appreciation of the tools necessary to implement effective diversity management practices for a globally inclusive workplace.

LER 597 Employee Motivation & Perfmnce credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/597/)
Managing and motivating employees effectively is one of the most complex and challenging issues facing companies today. While business leaders acknowledge the need for implementing effective performance management systems, recent studies indicate that an overwhelming majority of performance management systems are unsuccessful. Takes a strategic approach to employee motivation and performance starting with a firm level view to reviewing current approaches to employee motivation and performance management. Aims at providing students with practical and conceptual tools that will aid them in future endeavors to design and implement employee development and performance management systems. Format includes in-class discussions, case studies and individual assignments and papers.

LER 598 Impl High Perf Work Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LER/598/)
Intensive analysis of all aspects of high performance work systems, including work design, reward systems, training, team operations, lean/six sigma systems, and labor-management partnership. Special focus on skills and principles for effective implementation, in ways that advance employee well-being and to organizational effectiveness.

LER 599 Thesis Seminar credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/LER/599/)
For all students writing theses in LER at the MHRIR and Ph.D. levels. May be repeated. Approved for S/U grading only.

LA - LANDSCAPE ARCHITECTURE

LA Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/LA/)

Courses

LA 101 Introduction to Landscape Arch credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/LA/101/)
Introduction to primary concepts and methods of landscape inquiry as a means to understand experiential qualities of landscape and to guide landscape design and planning projects.

LA 199 First-Year Seminar credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/LA/199/)
Survey topics in landscape architecture. Additional fees may apply. See Class Schedule. Prerequisite: For undergraduate students.

LA 212 Water and Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LA/212/)
A comparative investigation of built landscapes and hydraulic resources through history. Examines problems of water scarcity, abundance and changes in ecology, human social organization, economy, law, and cultural values related to natural water conditions and human management. Comparative case studies include the ancient Near East and modern Middle East, ancient and modern Egypt, the Roman empire, Peru, the Netherlands, South Asia, Illinois River basin, and the American West.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

LA 218 S Asian Cultural Landscapes credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LA/218/)
Survey of Hindu, Buddist, and Islamic landscapes of South Asia. Examines urban structures, building typologies, and open space types through history as influenced by concepts of the natural, sacred, political, and social. Same as ASST 218.

LA 220 Exploring African Cities credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LA/220/)
Examines the buildings, landscapes, and societies of pre-colonial, sub-Saharan African cities from the third century BCE until the nineteenth century CE. Same as ANTH 223.

LA 221 History of the Prison credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LA/221/)
History of prison architecture, landscapes, and carceral regimes from ancient times until the present. Topics include: philosophy of punishment, the invention of the modern prison, the advent of mass incarceration, and 21st century geographies of incarceration. The course focuses on the western experience, but also includes international examples, e.g. from China, East Africa, and Japan. Interdisciplinary approach includes readings in architectural history, urban planning, sociology, philosophy, psychology, history, and landscape studies. Same as AFRO 221 and HIST 219.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

LA 222 Islamic Gardens & Architecture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LA/222/)
Study of the formation, history, and meaning of the landscape and architecture of the Islamic world. Same as ARCH 222 and ARTH 219.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

LA 233 Foundation Design Studio credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/LA/233/)
Introduction to the fundamentals of design, including studies in two- and three-dimensional abstract and applied problems, basic elements and procedures of design, and principles of landscape composition. Additional fees may apply. See Class Schedule. Open to Landscape Architecture majors only. Prerequisite: Credit or concurrent registration in LA 280 or consent of instructor.

LA 234 Site Design Studio credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/LA/234/)
Site as the fundamental unit of landscape design. Involves ecological, cultural and experiential understanding of sites, and the creation of place-specific designs. Field trip required. Additional fees may apply. See Class Schedule. Prerequisite: LA 233 or consent of instructor.

LA 241 Landform Design & Construction credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LA/241/)
Introduction to landform design, drainage, stormwater management, surveying, and materials. Prerequisite: MATH 014 or 016.

LA 242 Nature and American Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LA/242/)
Same as RST 242, and NRES 242. See RST 242.
This course satisfies the General Education Criteria for:
Cultural Studies - Western

LA 250 Environmental Site Analysis credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LA/250/)
Principles and practices of identifying, analyzing, and recording landscape resources. Field trip required. Prerequisite: GEOL 100, 101, 103 or GEOG 103 or consent of instructor.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences

LA 270 Behavioral Factors in Design credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LA/270/)
Introduces the impacts of cultural and social factors, such as age, gender, physical ability, economic status, ethnicity and how people interact with the environment. Reading assignments, short exercises, field trips, and evaluation of space will enable students to evaluate and potentially design more socially and ecologically responsive environments.

LA 280 Design Communications I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LA/280/)
Fundamentals of visual communication in the design process and presentation for landscape architecture. Includes freehand and constructed drawing, color, media, and models. Open to Landscape Architecture majors only. Prerequisite: Concurrent registration in LA 233.

LA 281 Design Communications II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LA/281/)
Advanced principles and techniques of visual communication in landscape architectural rendering, emphasizing computer-based techniques. Open to Landscape Architecture majors only. Prerequisite: Concurrent registration in LA 234; completion of LA 280 and completion of campus Composition I general education requirement or consent of instructor.

LA 301 Senior Honors credit: 1 to 6 Hours. (https://courses.illinois.edu/schedule/terms/LA/301/)
Independent guided study and research in a selected area of landscape architecture; for candidates for honors in landscape architecture. May be repeated to a maximum of 9 hours. Prerequisite: Senior standing in landscape architecture, a university grade-point average of 3.0, and consent of head of department.

LA 314 History of World Landscapes credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LA/314/)
Analysis of the development of landscape architecture as a result of environmental and cultural influences. Same as ARCH 314.
This course satisfies the General Education Criteria for:
Advanced Composition
Humanities - Hist Phil
Cultural Studies - Western

LA 315 History of Modern Landscape Architecture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LA/315/)
A selected overview of developments in landscape architecture in the western world from 1900 to the present. Same as ARCH 315. Prerequisite: LA 314.

LA 335 Community & Open Space Studio credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/LA/335/)
Development of design solutions at site and master plan scale relative to community, urban and open space problems; emphasizes development of analysis and design techniques to integrate physical context of place with social context. Additional fees may apply. See Class Schedule. Prerequisite: LA 234 or consent of instructor.

LA 336 Design Workshop Studio I credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/LA/336/)
Project design at various scales utilizing problems of a wide range of complexity and subject matter; rural, community, and urban problems, housing, recreation, and natural areas; emphasizes problem analysis and generation of innovative design alternatives. Students select from several sections depending on specific interests. Additional fees may apply. See Class Schedule. Prerequisite: LA 335 or consent of instructor.

LA 342 Site Engineering credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LA/342/)
Principles of site engineering including landform design, stormwater management, site surveying, circulation systems and site utility planning. Prerequisite: LA 241 and college trigonometry; or consent of instructor.

LA 343 Landscape Construction credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LA/343/)
Construction methods, materials, and procedures related to the design of landscape structures; development of design details and cost estimating. Prerequisite: LA 342 or consent of instructor.

LA 345 Professional Internship credit: 0 to 10 Hours. (https://courses.illinois.edu/schedule/terms/LA/345/)
Professionally supervised field experience in design offices and public agencies intended to introduce students to practice. Students work in the department-approved firm or agency of their choice. Seventy five hours of employment is required for each one hour of course credit or a zero-credit option is available. Approved for S/U grading only. May be repeated to a maximum of 10 hours. Prerequisite: Upper division undergraduate standing or consent of instructor. Restricted to undergraduate students enrolled in the Department of Landscape Architecture.

LA 346 Professional Practice credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/LA/346/)
Study of the profession of landscape architecture including an introduction to modes of practice, career evolution, organizational theory, office procedures, project management and professional ethics. Field trip required. Additional fees may apply. See Class Schedule. Prerequisite: Junior standing or consent of instructor.

LA 370 Environmental Sustainability credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LA/370/)
Explores the challenges of creating a sustainable world. Examines: a) trends and conditions of the earth's major ecosystems, b) ways in which our economic system has created levels of consumption that threaten sustainability, c) the extent to which equity and justice contribute to sustainable systems, and d) evidence demonstrating how human creativity and innovation can create a more sustainable world. Same as ENSU 300 and NRES 370.

LA 387 Undergraduate Seminar credit: 1 to 6 Hours. (https://courses.illinois.edu/schedule/terms/LA/387/)
Topics in current and future areas of landscape architectural application. Additional fees may apply. See Class Schedule. May be repeated to a maximum of 6 hours if topics vary. Prerequisite: Restricted to students with junior or senior standing.

LA 390 Independent Study I credit: 1 to 6 Hours. (https://courses.illinois.edu/schedule/terms/LA/390/)
Supervised independent study, research, or special project in a selected area related to landscape architecture. May be repeated to a maximum of 6 hours. Prerequisite: Junior or senior standing, or consent of instructor. Consent of instructor prior to registration.

LA 399 Off-Campus Study credit: 0 to 15 Hours. (https://courses.illinois.edu/schedule/terms/LA/399/)
Provides campus credit for off-campus study. Approved for letter and S/U grading. (Summer session, 0 to 6 undergraduate hours). Final determination of appropriate credit is made by a faculty review committee upon completion of the student's work. Maximum credit, 15 hours (summer session, 6 hours), all of which must be earned within one term. Prerequisite: Junior standing; prior review and approval of the student's written proposal by a faculty committee and the department head.

LA 427 Amer Vernacular Cultural Land credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LA/427/)
Focuses on vernacular structures in the cultural landscape, especially common houses, barns, and commercial and industrial structures; examines origin and geographical diffusion of vernacular architecture in the United States. 4 undergraduate hours. 4 graduate hours.

LA 430 Children and Nature credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/LA/430/)
Same as HORT 430. See HORT 430.

LA 433 Graduate Foundation Studio credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/LA/433/)
Graduate-level introduction, for students without a BLA, to the fundamentals of design, including studies in two- and three-dimensional abstract and applied problems, basic elements and procedures of design, and principles of landscape composition. Additional fees may apply. See Class Schedule. No undergraduate credit. 5 graduate hours. Prerequisite: Restricted to Landscape Architecture Graduate Students.

LA 434 Graduate Site Design Studio credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/LA/434/)
Graduate-level introduction for students without a BLA to site as the fundamental unit of landscape design. Involves ecological, cultural and experiential understanding of sites, and the creation of place-specific designs. Field trip required. Additional fees may apply. See Class Schedule. No undergraduate credit. 5 graduate hours. Prerequisite: Restricted to Landscape Architecture Graduate Students.

LA 437 Regional Design Studio credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/LA/437/)
Ecological design and planning studio emphasizing team approaches to design development and evaluation using current human and environmental research results. Projects require field work, analysis, problem-solving, and advanced design and presentation products. 5 undergraduate hours. 5 graduate hours. Prerequisite: LA 336 or consent of instructor.

LA 438 Design Workshop Studio II credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/LA/438/)
Project design at various scales utilizing problems of a wide range of complexity and subject matter; rural, community, and urban problems, housing, recreation, and natural areas; and emphasizes problem analysis and generation of innovative design alternatives. The student selects from several sections depending on specific interests. Additional fees may apply. See Class Schedule. 5 undergraduate hours. 5 graduate hours. May be repeated if topics vary. Prerequisite: LA 336 or consent of instructor.

LA 441 Land Resource Evaluation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LA/441/)
Examines concepts for the value of land, land resource problems and policy responses, methods for evaluating land resource development and policy alternatives, and case studies of land resource evaluation. Same as UP 441. 4 undergraduate hours. 4 graduate hours. Prerequisite: Graduate standing or consent of instructor.

LA 446 Sustainable Planning Seminar credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LA/446/)
Examines sustainability issues of concern to planners, such as resource conservation, urban growth, environmental justice, industrial development, social equity, sustainable agriculture, and economic development. Presents holistic approaches ranging from theoretical concepts to detailed case studies that combine urban and regional land use, physical design, and policymaking. Same as GEOG 446, NRES 446, and UP 446. 4 undergraduate hours. 4 graduate hours.

LA 450 Ecology for Land Restoration credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LA/450/)
Ecological implications of alternative land use patterns; equipment, field techniques, and nomenclature in current use by environmental consultants; and elements of a baseline ecosystem study. 4 undergraduate hours. 4 graduate hours. Prerequisite: Consent of instructor.

LA 452 Natural Precedent in Planting credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LA/452/)
Biogeography; identification of native species, uses of native plants in the landscape; and restoration and planting design projects. Field trips required. 3 undergraduate hours. 3 graduate hours. Additional fees may apply. See Class Schedule. Prerequisite: HORT 302 or consent of instructor.

LA 453 Cultural Precedent in Planting credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LA/453/)
Planting design issues; historic precedent and contemporary comprehensive design projects; management practices; technical documents; and plant use and identification. Field trips required. 3 undergraduate hours. 3 graduate hours. Prerequisite: LA 452.

LA 454 Landscape Archaeology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LA/454/)
Same as ANTH 453. See ANTH 453.

LA 460 Heritage Management credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LA/460/)
Same as ANTH 460 and RST 459. See ANTH 460.

LA 466 Energy & the Built Environment credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LA/466/)
Focuses on the study of buildings, including their past and present uses, their place in the environment, and most importantly, how they can become more sustainable. Teaches students to think about and plan physical space from an energy-and climate-centric perspective. Uses climate mitigation and building energy systems-modeling techniques to analyze potential energy systems reductions and approaches to affect a building's carbon footprint. Same as UP 466. 4 undergraduate hours. 4 graduate hours.

LA 470 Social/Cultural Design Issues credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LA/470/)
Critical discussion of notions and theories pertaining to the reciprocal effects of landscape architectural design and human behavior. 3 undergraduate hours. 3 graduate hours.

LA 472 Museum Theory and Practice credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LA/472/)
Same as ANTH 462 and ARTH 462. See ANTH 462.

LA 480 Sustainable Design Principles credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/LA/480/)
Introduction to key concepts for the sustainable design of buildings and landscapes, including concepts that form the core of the U.S Green Building Council rating system (LEED). Introduction to LEED accreditation. Same as UP 480. 2 undergraduate hours. 2 graduate hours.

LA 482 Advanced Communication in Urban Design credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LA/482/)
This intensive, advanced, representation course teaches the use of software and workflow procedures used to design urban settings, visualize design ideas for 21st-century urbanism, and communicate ideas about urban design to professionals and non-experts. Students will gain advanced skills for creating three-dimensional representation of urban designs. 4 undergraduate hours. 4 graduate hours. Prerequisite: Students should have skills at intermediate level representation and have the equivalent skills and knowledge of the material in LA 280 and LA 281.

LA 490 Independent Study II credit: 1 to 6 Hours. (https://courses.illinois.edu/schedule/terms/LA/490/)
Supervised advanced independent study, research, or special project in a selected area related to landscape architecture. 1 to 6 undergraduate hours. No graduate credit. May be repeated to a maximum of 6 hours. Prerequisite: LA 390. Junior or senior standing; consent of instructor and head of department prior to advance enrollment and registration.

LA 501 Landscape Arch Theory & Prac credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LA/501/)
Seminar to introduce the discipline, profession, and practice of landscape architecture. Emphasis is on understanding the skills and knowledge base of the profession including environmental, social, and historical factors in design. 4 graduate hours. No professional credit.

LA 505 Methods in Arch & LA History credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/LA/505/)
Seminar on the historiography of architectural and landscape history, including an introduction to the major concepts and figures in the discipline, past and present. Students will learn of approaches historians have used for analyzing the built environment from traditional methods to newer interpretive frameworks, and examine how contemporary values determine or inform the writing of history.

LA 506 Landscape and Vision credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LA/506/)
A study of the major 20th-century texts on vision, perception, and perspective as applied to architecture and landscape. Prerequisite: Doctoral students only; master's level students must receive permission from instructor.

LA 513 History of World Landscapes credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LA/513/)
Introduction to the landscape architectural heritage of the past in its social, environmental and historical context. Same as ARCH 510.

LA 515 History & Theory of Modern Landscape Architecture credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LA/515/)
A selected overview of developments in landscape architecture in the western world from 1900 to the present. Same as ARCH 515. 4 graduate hours. No professional credit. Prerequisite: LA 513 or approval of instructor.

LA 534 Design Workshop G-I credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/LA/534/)
Graduate project design at various scales utilizing problems of a wide range of complexity and subject matter; rural, community, and urban problems, housing, recreation, and natural areas; and emphasizes problem analysis and generation of innovative design alternatives. The student selects from several sections depending on specific interests. Additional fees may apply. See Class Schedule. 5 graduate hours. No professional credit. Prerequisite: LA 433/434 or consent of instructor.

LA 535 Local Policy & Immigration credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LA/535/)
Same as UP 535 and SOCW 535. See UP 535.

LA 537 Planning & Design Studio II credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/LA/537/)
Ecological design and planning studio emphasizing design that reflects evaluation and integration of human and environmental research results. Detailed investigation of design options. Additional fees may apply. See Class Schedule. 5 graduate hours. No professional credit. May be repeated. Prerequisite: LA 534 or consent of instructor.

LA 538 Urban Design Research Studio credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/LA/538/)
This advanced studio broadens and strengthens students' understanding of urban design research methods and prepares students to conduct independent urban design work. Students learn research strategies and methods and examine research precedents and texts during the first portion of the course. In the second portion, students develop and carry out individual research design proposals. The semester ends with formal presentations of the findings from the design research projects. 5 graduate hours. No professional credit.

LA 539 Design Workshop G-II credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/LA/539/)
Advanced graduate project design at various scales utilizing problems of a wide range of complexity and subject matter; rural, community, and urban problems, housing, recreation, and natural areas; and emphasizes problem analysis and generation of innovative design alternatives. The student selects from several sections depending on specific interests. Additional fees may apply. See Class Schedule. 5 graduate hours. No professional credit. Prerequisite: LA 534 or consent of instructor.

LA 562 Social Construction of Space credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LA/562/)
Same as ANTH 557. See ANTH 557.

LA 563 Soc/Beh Research Designed Env credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LA/563/)
Same as ARCH 563. See ARCH 563.

LA 570 Landscapes and Human Health credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LA/570/)
We will explore the challenge of, and science behind, creating healthy, sustainable places. We will engage this topic by learning about four mechanisms through which places impact health. We will examine the empirical evidence in support of each of these mechanisms. Learning in this course grows from a series of readings, active participation in class discussion, and the development of a review paper or a research proposal. Same as CHLH 580 and GEOG 561. 3 graduate hours. No professional credit.

LA 587 Graduate Seminar credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/LA/587/)
Preparation, presentation, and discussion of research papers on current and future areas of landscape architectural application. Additional fees may apply. See Class Schedule. 1 to 4 graduate hours. No professional credit. May be repeated if topics vary. Prerequisite: Consent of instructor.

LA 589 Sustainable Urban Design Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LA/589/)
This advanced theory seminar introduces students to key urban design theory literature that draw on a range of disciplines and subjects. This seminar situates urban design at the overlap of architecture, landscape architecture, and urban planning, and examines the historic and contemporary influences of those environmental arts on urban design theory and practice. 4 graduate hours. No professional credit.

LA 590 Directed Research credit: 1 to 8 Hours. (https://courses.illinois.edu/schedule/terms/LA/590/)
Nature and scope of projects to be determined by consultation between student and faculty adviser; open to landscape architecture majors as well as those from other disciplines who wish to engage in interdisciplinary work. Additional fees may apply. See Class Schedule. 1 to 8 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated. Prerequisite: Consent of instructor.

LA 592 Urban Design Capstone Studio credit: 6 Hours. **(**https://courses.illinois.edu/schedule/terms/LA/592/**)**
In this summer studio, students will work closely with their instructor to turn their design research strategies from LA 538 Urban Design Research Studio into solutions customized specifically for their particular site, client, and set of constraints. Students will draw upon previous coursework in theory, design, research, real estate, and representation to produce comprehensive and compelling design solutions and demonstrate how their solutions meet a variety of performance criteria. 6 graduate hours. No professional credit. Prerequisite: LA 538 Urban Design Research Studio. This course is open only to students enrolled in the Master of Sustainable Urban Design program.

LA 593 Islamic & S Asian Landscapes credit: 2 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/LA/593/**)**
Topics in Islamic and South Asian cultural landscape history, including historiography, methodology and recent scholarship. An advanced course that requires disciplinary familiarity with research on the built environment, material culture and visual culture. May be repeated to a maximum of 8 hours per semester; may be repeated to a maximum of 12 total hours.

LA 594 Cultural Heritage credit: 2 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/LA/594/**)**
Topics in cultural landscape heritage, conservation planning and design. Investigates theories of landscape, heritage, and their intersections, with readings drawn from anthropology, geography, and landscape studies, as well as applied work on historical landscape conservation, preservation and management. Same as ANTH 594. May be repeated to a maximum of 10 hours per semester; may be repeated to a maximum of 16 total hours. Prerequisite: Concurrent enrollment in LA 438 may be required in the spring semester; check Class Schedule.

LA 597 Research Design & Methods credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/LA/597/**)**
This graduate-level course provides instruction and application of research and scholarly methods for landscape architecture and related fields. Students are introduced to the basic steps of inquiry and development of a thesis/research proposal. Course content includes: problem identification; choosing and articulating a research topic; synthesis of topical/theoretical background from literature; choice of research strategy; design of a plan for investigation; selection of data sources, methods and analysis; proof of concept; feasibility planning; and other necessary components of a successful research proposal. 3 graduate hours. No professional credit. Prerequisite: Second year or post-professional MLA students; graduate students in other majors may enroll with permission of instructor.

LA 598 Master's Project credit: 0 to 8 Hours. **(**https://courses.illinois.edu/schedule/terms/LA/598/**)**
Major independent or small-group project synthesizing knowledge from previous coursework. Approved for letter and S/U grading. Prerequisite: Consent of instructor and program adviser.

LA 599 Thesis Research credit: 0 to 16 Hours. **(**https://courses.illinois.edu/schedule/terms/LA/599/**)**
Research toward Doctoral or Master's thesis. 0 to 16 graduate hours. No professional credit. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 10 hours for MLA and a maximum of 32 hours for PhD. Prerequisite: Graduate standing in landscape architecture.

LAT - LATIN

LAT Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/LAT/)

Courses

LAT 101 Elementary Latin I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LAT/101/)
Grammar and reading for students who have had no work in Latin.

LAT 102 Elementary Latin II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LAT/102/)
Grammar and reading of easy prose. Prerequisite: LAT 101 or one year of high school Latin.

LAT 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/LAT/199/)
May be repeated.

LAT 201 Intermediate Latin credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LAT/201/)
Review of grammar; reading of easy narrative prose. Prerequisite: LAT 102 or two years of high school Latin.

LAT 202 Intro to Latin Literature credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LAT/202/)
Continuation of LAT 201, with readings chiefly in Latin poetic literature.

LAT 401 Survey of Latin Literature credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAT/401/)
Advanced level readings in classical Latin literature. 3 undergraduate hours. 4 graduate hours. May be repeated for a total of 6 undergraduate hours or 8 graduate hours in separate semesters, if topics vary. Prerequisite: LAT 202 or four years of high school Latin.

LAT 411 Intermediate Prose Composition credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LAT/411/)
Practice in the writing of Latin prose. 3 undergraduate hours. 3 graduate hours. Prerequisite: LAT 202 (formerly LAT 104) or the equivalent.

LAT 460 Medieval Latin credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAT/460/)
Literary and historical texts in prose and poetry will be read in the original; the course will also cover patristic writings. Same as MDVL 460. 3 undergraduate hours. 4 graduate hours. Prerequisite: Two years of college Latin or consent of instructor.

LAT 491 Readings in Latin Literature credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAT/491/)
Readings in authors or special topics chosen by the instructor from the entire extant literature in Latin. 3 undergraduate hours. 3 or 4 graduate hours. May be repeated. Prerequisite: Three years of college Latin or equivalent; consent of instructor.

LAT 492 Senior Thesis credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAT/492/)
Thesis and honors. For candidates for honors in Latin and for other seniors. 2 or 4 undergraduate hours. No graduate credit. Prerequisite: Senior standing and consent of Classics Honors Program.

LAT 493 Independent Reading credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/LAT/493/)
See Department of the Classics for information. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated in separate terms to a maximum of 8 undergraduate hours or 12 graduate hours. Prerequisite: LAT 401 and consent of instructor.

LAT 511 Advanced Prose Composition credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/LAT/511/)
Practice in writing Latin prose, with special attention to stylistic questions.

LAT 520 Proseminar credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LAT/520/)
Alternating poetry and prose, concentrates on a major author from one of the following areas: epic, oratory, lyric and elegiac poetry, history, drama, philosophy, satire, or epistolography. Areas normally follow this sequence in successive years. May be repeated to a maximum of 20 hours if topics vary. Prerequisite: LAT 491 or equivalent.

LAT 531 Special Disciplines credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LAT/531/)
Same as GRK 531. See GRK 531.

LAT 580 Latin Seminar credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LAT/580/)
Research on special problems of Latin literature; required of all majors in classical philology. May be repeated if topics vary. Prerequisite: A Latin proseminar.

LAT 595 Intro to Classical Studies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LAT/595/)
Same as GRK 595. See GRK 595.

LAT 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/LAT/599/)
Guidance in writing theses for advanced degrees. Approved for S/U grading only. May be repeated.

LAST - LATIN AMERICAN & CARIBBEAN ST

LAST Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/LAST/)

Courses

LAST 170 Introduction to Latin America credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LAST/170/)
Interdisciplinary introduction to the ways of life of Latin American peoples, their origins and current expressions; discusses social, economic issues, and domestic and international policies related to them in the context of other societies in developing countries.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West
Social Beh Sci - Soc Sci

LAST 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/LAST/199/)
May be repeated.

LAST 210 Life in the Andes credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LAST/210/)
An overview of contemporary Andean culture, as practiced by the people in Peru, Bolivia, and Ecuador. This culture is the result of the resilience of the pre-Hispanic Andean heritage, and the continuous adaptation Andean people have practiced, first, to control their environment and, then, to survive and overcome colonial and postcolonial forms of subordination. No prior knowledge of Spanish, Quechua, or the Andes is required.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West
Social Beh Sci - Soc Sci

LAST 232 Spanish in the Community credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LAST/232/)
Same as SPAN 232. See SPAN 232.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

LAST 240 Constr Afr and Carib Identity credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LAST/240/)
Same as AFST 209, CWL 225, and FR 240. See FR 240.

LAST 308 The Caribbean Since 1492: From Columbus to Castro credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LAST/308/)
Same as HIST 308. See HIST 308.

LAST 325 Social Media and Global Change credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LAST/325/)
Same as AFST 325, ASST 325, EPOL 325, EPS 325, EURO 325, INFO 325, REES 325, and SAME 325. See EPOL 325.

LAST 342 Arts of Colonial Latin America credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LAST/342/)
Same as ARTH 342. See ARTH 342.

LAST 343 Arts of Modern Latin America credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LAST/343/)
Same as ARTH 343. See ARTH 343.

LAST 395 Special Topics credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/LAST/395/)
Topical survey of cultural, social, economic, and political factors in Latin American life. Each term a particular topic is considered. Prerequisite: A basic course in a humanities or social science discipline.

LAST 440 International Water Project I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LAST/440/)
Same as ABE 450. See ABE 450.

LAST 441 International Water Project II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LAST/441/)
Same as ABE 451. See ABE 451.

LAST 445 Native Latin Amer Languages credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/LAST/445/)
Upon the consent of the Director of the Center for Latin American and Caribbean Studies, tutorials are available in special native Latin American languages not regularly offered by the University (ie. Quechua, Kagchikel Mayan). Tutorials at the elementary, intermediate, and advanced levels may be arranged. Students registering for unit credit for the first two terms must first present satisfactory evidence of knowledge of the language at the elementary level, either in the form of credit earned at another institution or by passing a proficiency examination. 2 to 4 undergraduate hours. 2 to 4 graduate hours. May be repeated in 6 terms successively, to a maximum of 16 hours. Graduate credit is given only for work beyond the elementary level. Prerequisite: Consent of instructor.

LAST 490 Individual Study credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/LAST/490/)
Major tutorial normally taken in the senior year. Students read the works from list devised in consultation with a faculty tutor and write a term paper. 1 to 5 undergraduate hours. 1 to 5 graduate hours. May be repeated as topics vary to a maximum of 6 hours. Prerequisite: LAST 170; a declared major in Latin American and Caribbean Studies; consent of instructor.

LAST 550 Interdisc Seminar Latin Am St credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LAST/550/)
Examines the interconnections among research approaches and problems in the field of Latin American and CaribbeanStudies. May be repeated to a maximum of 8 hours if topics vary. Prerequisite: M.A. standing in Latin American and Caribbean Studies or consent of instructor.

LAST 590 Global STEAM Graduate Seminar credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/LAST/590/)
Provides graduate students with weekly explorations into the relationship between the sciences, humanities, and the arts in addressing issues of global significance through an interdisciplinary inquiry. Each week, Global STEAM Working Group faculty members will introduce a new topic that crosses disciplinary and geographical boundaries to provide insights and new perspectives on the global challenges of the 21st century. 0 graduate hours. No professional credit. Approved for S/U grading only.

LAST 597 M.A. Research credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LAST/597/)
Open to students who choose to complete their M.A. by submitting two departmental papers. May be repeated in the same or subsequent terms to a maximum of 8 hours. Prerequisite: M.A. standing in Latin American Studies and consent of instructor and advisor.

LAST 599 Thesis Research credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LAST/599/)
Preparation of M.A. thesis. Approved for S/U grading only. May be repeated to a maximum of 8 hours with approval. Students may register in more than one section per term. Prerequisite: M.A. standing in Latin American and Caribbean Studies and consent of instructor.

LLS - LATINA/LATINO STUDIES

LLS Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/LLS/)

Courses

LLS 100 Intro Latina/Latino Studies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/100/)
Interdisciplinary introduction to the basis for a Latina/Latino ethnicity in the United States. Topics include immigration and acculturation experiences and their commonalities and differences, comparison of Latina/Latino experiences to those of other racial, ethnic and immigrant groups, and the potential for a pan-ethnic identity.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - US Minority

LLS 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/LLS/199/)
May be repeated.

LLS 200 U.S. Race and Empire credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/200/)
Same as AAS 200. See AAS 200.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

LLS 201 US Racial & Ethnic Politics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/201/)
Same as AAS 201, AFRO 201, and PS 201. See PS 201.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - US Minority

LLS 215 US Citizenship Comparatively credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/215/)
Same as AAS 215, AFRO 215, AIS 295, and GWS 215. See AAS 215.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

LLS 220 Latina/o Migration credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/220/)
General overview of international migration to the United States, using Latin American migration to the U.S. as the focal point. Topics discussed include the history of international migration to the United States, the relationship between history and the contemporary context, the development of U.S. immigration policy, the incorporation of Latino immigrants in U.S. society, and immigrant and community responses to migration. Same as SOC 221.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - US Minority

LLS 230 Latina/o Genders & Sexualities credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/230/)
Survey of major theories and debates surrounding the gendered and sexualized dimensions of the Latina/o experience in the United States. The course is comprised of three major units: Gender, Sexuality, and Sex. In these units, students will read about and discuss issues pertaining to femininity/marianismo, masculinity/machismo, family/familism, desire, sexual behavior, sex work, sexual and gendered violence, and gendered and sexualized representations in pop culture. Same as GWS 230.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

LLS 235 Race and the Politics of Reproduction credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/235/)
Interdisciplinary exploration of the racial politics of reproduction in the United States with an emphasis on how ideologies of race, class, and citizenship shape meanings and experiences of reproduction, pregnancy, and motherhood. Topics include contraception, sterilization abuse, and abortion. Students will also learn how women of color have both been affected by the racial politics of reproduction and how they have advanced the movement for reproductive rights and justice in the United States. Same as GWS 235.

LLS 238 Latina/o Social Movements credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/238/)
Focuses on the history and theory of Latina/o social movements. Topics include immigrant mobilizations, transnational organizing, agrarian and farm worker movements, political representation, feminisms and reproductive rights, environmental justice, labor and educational struggles, and urban social movements. Same as HIST 292.

LLS 240 Latina/o Popular Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/240/)
Provides an introduction to Latina/o popular culture in the United States. Specific modes of popular culture might include mass media, music, film, video, performance, and other expressive forms. Lecture and readings are in English. Same as ENGL 224 and SPAN 240.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

LLS 242 Intro to Latina/o Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/242/)
Survey of literature by and about people of Mexican, Puerto Rican, Cuban, and other Latina/o descent in the United States. Taught in English. Same as ENGL 225 and SPAN 242.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - US Minority

LLS 246 Gender & Sexuality in Latina/o Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/246/)
Same as SPAN 246. See SPAN 246.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - US Minority

LLS 248 Latin American Diaspora through Film: Beyond Braceros, Narcos, and Latin Lovers credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/248/)
Same as SPAN 248. See SPAN 248.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - US Minority

LLS 250 Latina/os on the Bronze Screen credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/250/)
Critical, historical, and theoretical exploration of Latina/o representations in U.S. film from the 1900s to the present. Examination of cinematic representations as well as the social, political, and cultural context in which those representations are produced. The focus is on Mexican American and Puerto Rican images, but Hollywood's treatment of other Latina/o communities and ethnic groups will be discussed. Students will be required to attend weekly movie screenings. Same as MACS 250.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - US Minority

LLS 258 Muslims in America credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/258/)
Same as AAS 258 and REL 258. See AAS 258.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - US Minority

LLS 259 Latina/o Anthropology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/259/)
Same as ANTH 259. See ANTH 259.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - US Minority

LLS 260 Graffiti and Murals credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/260/)
Same as ARTH 260. See ARTH 260.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

LLS 265 Politics of Hip Hop credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/265/)
Examines hip hop as politics, culture, and commodity. Emphasis given to hip hop's relation to urban spaces deeply impacted by state surveillance, cuts in social welfare programs, immigration, and the global restructuring of capital. Also considers the viability of a "politics of hip hop" in the wake of the music's rising value as a global commodity and analyzes hip hop as a transnational site in which gendered and sexual identities are created, contested, and rearticulated. Same as AAS 265.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

LLS 278 Mapping Latina/o Inequalities credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/278/)
Explores contemporary structural forces that contribute to the concentration of Latinas/os in segregated neighborhoods, and the detrimental effects of housing inequality on Latina/o communities. Focuses on the influence of geographic context in creation and maintenance of racial inequalities as they affect urban, suburban, and small town locals. Further examines the role of space and place in the development and persistence of community identities. Same as SOC 278.

LLS 279 Mexican-American History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/279/)
Examination of the history of Mexican Americans living within the United States from the Spanish Conquest to the twentieth century. Explores the process of migration, settlement, assimilation, and discrimination with emphasis on continuity and change in Mexican cultural development. Same as HIST 279.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

LLS 280 Caribbean Latina/o Migration credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/280/)
Same as HIST 280. See HIST 280.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

LLS 281 Constructing Race in America credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/281/)
Same as AAS 281, AFRO 281, and HIST 281. See HIST 281.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

LLS 282 Feminist and Queer Activisms credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/282/)
Same as AAS 282 and GWS 282. See GWS 282.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

LLS 296 Topics Latina/o Studies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/296/)
Course examines specific topics in Latina/Latino Studies not addressed in regularly offered courses. Examples include theories of ethnic identity, historical foundations, cultural expression, and relevant topics in public policy studies of Latina/Latino communities. May be repeated in same or separate terms to a maximum of 6 hours.

LLS 301 19thC US Latina/o Lit-ACP credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LLS/301/)
Focuses on the fiction (historical novels and poetry) as well as the critical essays of the 1848 Mexican-American War and the 1898 Spanish-American War, the two key 19th century events that determined the status of the people of the Caribbean and Mexican descent in the United States. Prerequisite: Completion of campus Composition I general education requirement.
This course satisfies the General Education Criteria for:
Advanced Composition
Humanities - Hist Phil
Cultural Studies - US Minority

LLS 305 Theories of Race, Gender, and Sexuality credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/305/)
Same as AAS 300 and GWS 305. See AAS 300.
This course satisfies the General Education Criteria for:
Advanced Composition

LLS 308 Spanish in the United States credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/308/)
Same as SPAN 308. See SPAN 308.

LLS 310 Race and Cultural Diversity credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LLS/310/)
Same as AAS 310, AFRO 310, EPOL 310, and EPS 310. See EPOL 310.
This course satisfies the General Education Criteria for:
Advanced Composition
Cultural Studies - US Minority

LLS 316 Latina/Latino Politics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/316/)
Same as PS 316. See PS 316.

LLS 320 Gender & Latina/o Migration credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/320/)
Study of the gendered social process of international immigration, focusing on Latin American migration to the United States. Established theories of migration, the history of international immigration to the U.S., and historical and contemporary Mexico, Caribbean and Central American migration flows will be discussed in great detail. Primary focus on how gender shapes the migration experiences of immigrants and the gendered impact of migration on the economic, political, and social status of individuals. Same as SOC 321 and GWS 320. Prerequisite: LLS 100 or SOC 100.

LLS 322 US Latina and Latino Families credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/322/)
Same as HDFS 322. See HDFS 322.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

LLS 343 Criminalization and Punishment credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/343/)
Examines how populations are criminalized due to race/ethnicity, gender, sexuality, class, and immigration status. Readings analyze how laws are created and normalized. In order to effectively engage in critical inquiry, students will be asked to suspend moral judgments so that they can analytically approach the study of crime, criminals, and criminal activity. Same as AAS 343, AFRO 343, AIS 343, and GWS 343.

LLS 355 Race and Mixed Race credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/355/)
Explores the history of racial classification in the U.S. with special attention to the census and the role of the state more generally in defining race. Emphasis on how race-mixing has been understood in American culture, and on the current literature on "multiracials" and the future of "race" in the U.S. Readings are drawn from interdisciplinary sources, but examined from a sociological perspective. Same as AAS 355 and SOC 355. Prerequisite: Any lower division LLS or SOC or AAS course.

LLS 357 Literatures of the Displaced credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/357/)
Examines Latina/o, Asian-American, African-American, and Indigenous stories of displacement, (im)migration, and settlement. We will analyze the negotiated and contested narratives about race, gender, and sexuality that the texts evidence in order to form interpretive arguments that address the ways in which the texts unsettle ideas about the nation, nation building, and national belonging. Same as AAS 357, AIS 357, ENGL 357, and GWS 357.

LLS 360 Contemporary US Latina/o Lit credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/360/)
Focuses on the major U.S. Latina/Latino writers and texts and their depictions of the events that have shaped 20th-and 21st-Century U.S. Latina/Latino cultures.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - US Minority

LLS 365 Chicana/Latina Autobiography, Memoir, Testimonio credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/365/)
Focuses on how Chicanas/Latinas describe their own experiences and how they both understand and negotiate their sense of self, and centers on the new crop of memoir and autobiography, as represented in the most recent texts by well-established Chicana writers, such as Sandra Cisneros, Gloria Anzaldúa and Ana Castillo. We will also discuss the professionalization of the field of Latina/Latino Studies in the work of Tey Diana Rebolledo. Additionally, students will study the writing of self with a focus on gender, sexuality, and genre.

LLS 368 Latinas/os & Public Policy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/368/)
Examines the effectiveness of current U.S. public policies in addressing the social, economic, and political problems affecting Latina/o individuals and communities. Specifically, it evaluates current policy in the areas of public assistance, fair housing, criminal justice, immigration enforcement, and reproductive health. Although this interdisciplinary course primarily focuses on national policies and programs, it also addresses, as necessary, the particulars of public policy in the state of Illinois.

LLS 370 Latina/o Ethnography credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/370/)
Addresses the theoretical, methodological, and ultimately political implications and questions generated by a range of ethnographic materials on Latina/os. Specifically explores culture and power (e.g., racism, sexism, and activism) through ethnographic methods and modes of representation, including literature. Fundamental to the course is the requirement that students engage in ethnographic practice, producing ethnographic research on Latina/os at the University of Illinois. Same as ANTH 370. Prerequisite: Any lower division course in LLS or ANTH.

LLS 372 Immigration, Law, and Rights credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/372/)
Same as AAS 370. See AAS 370.
This course satisfies the General Education Criteria for:
Advanced Composition

LLS 375 Latina/o Media in the US credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/375/)
Same as MACS 375. See MACS 375.

LLS 377 Prisons, Race, and Terror credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/377/)
Same as AAS 375. See AAS 375.

LLS 379 Latina/os and the City credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/379/)
Examination of the migration and settlement of Latina/o populations (Mexicans, Puerto Ricans, Cubans, Dominicans, and Central and South Americans) in U.S. cities. Focus on the historic, economic, social and political factors that influenced these migrations and the choices migrants made to come to the United States and to urban areas in particular. Study of the regional variation among Latina/o groups, and coalition building and collaborative ventures between Latina/os and other communities of color in urban areas. Same as HIST 379.

LLS 382 Race and Migration in Chicago credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/382/)
As the "Second City" located in the heartland of America, Chicago is central to many debates on urban space, race, and nation. Specifically, it is an influential site in which Latina/os, African-Americans, Asian-Americans, and ethnic whites have come to understand meanings of race in a highly segregated setting. This course takes an interdisciplinary approach to the study of racial and ethnic groups in this city, examining issues of migration, gender, segregation, labor, and education from the late nineteenth century to the present. Same as HIST 382. Prerequisite: One course in either LLS or HIST.

LLS 385 Theory and Methods in LLS credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/385/)
Introduction to the interdisciplinary theories and methods of Latina/Latino Studies. Traditional approaches to the study of ethnicity and race will be interrogated through critical scholarship produced by Latina/Latino Studies scholars across a variety of approaches (anthropology, communications, literature, history, sociology, among others). By learning about a variety of methodological approaches, students will become proficient in conducting ethnic studies research projects about U.S. Latina/o populations. Prerequisite: LLS 100.
This course satisfies the General Education Criteria for:
Advanced Composition

LLS 387 Race, Gender and the Body credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/387/)
Focuses generally on the relation between power and the body. In western culture, the body is typically thought of as a natural, biological entity. However, as a number of social theorists have pointed out, the body can never be reduced to mere biology. It is also always a product of culture and therefore necessarily implicated in relations of dominance and subordination. Using this framework, the class is specifically concerned with how raced, gendered, and sexed bodies have been imagined in US culture (as abnormal, diseased, criminal, etc.) and with how such bodies have been rendered objects of surveillance, discipline, and regulation. Same as SOC 387. Prerequisite: LLS 100.

LLS 390 Independent Study credit: 0 to 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/390/)
Special topics not treated in regularly scheduled courses; designed especially for advanced Undergraduates. Approved for letter and S/U grading. May be repeated in the same or subsequent terms as topics vary to a maximum of 6 hours. Prerequisite: One course in Latina/Latino Studies and consent of instructor.

LLS 391 Oral History Methods credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/391/)
Same as HIST 391. See HIST 391.

LLS 392 Chicanas&Latinas: Self&Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/392/)
Explores the experiences of Chicanas and Latinas through the lens of contemporary sociological research. Topics to be discussed include: community formation and activism, Chicana/Latina feminisms, sexuality, religion, health, family, immigration, education, work, media, and artistic expression. Readings emphasize the link between the structural inequalities of society, and the day-to-day lived experiences of Chicana/Latinas. Same as GWS 392 and SOC 392. Prerequisite: Any 100, 200, or 300-level LLS, GWS, or SOC course.
This course satisfies the General Education Criteria for:
Advanced Composition

LLS 396 Adv Topics Latina/o Studies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LLS/396/)
Examines specific topics in Latina/Latino Studies not addressed in regularly offered courses. Examples include theories of ethnic identity, historical foundations, cultural expression, and relevant topics in public policy studies of Latina/Latino communities. May be repeated in the same or separate terms to a maximum of 6 hours.

LLS 410 Writing Latina/o Chicago credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LLS/410/)
Examination of novels, poetry, film and memoirs by Latinas and Latinos writing from and/or about Chicago. Through these texts, the course will simultaneously track a Chicago-based Latina/o literary history and analyze articulations of Latina/o everyday life and politics grounded in the city's distinct topographical and social contexts. Issues of migration, gentrification, segregation, youth culture, gender, sexuality, race, violence, poverty, class consciousness, and struggles for social justice will figure prominently in lectures and class discussions. 3 undergraduate hours. 4 graduate hours. Prerequisite: LLS 100.

LLS 412 Hispanics in the U.S. credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LLS/412/)
Same as SOCW 412. See SOCW 412.

LLS 433 Foundations of Bilingual Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LLS/433/)
Same as CI 433. See CI 433.

LLS 435 Commodifying Difference credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LLS/435/)
An interdisciplinary examination of how racial, ethnic and gender difference is negotiated through media and popular culture, and how racial, ethnic and gendered communities use cultural forms to express identity and difference. Among the theoretical questions explored are the politics of representation, ethnic/racial authenticity, cultural commodification and transnational popular culture. Some of the cultural forms examined are cultural festivals/parades, ethnic/race-based beauty pageants, cinematic and televisual texts and musical forms, such as Hip-Hop and Salsa. Same as AAS 435, AFRO 435, GWS 435, and MACS 432. 3 undergraduate hours. 4 graduate hours. Prerequisite: Any combination of 6 hours from Latina/o Studies, Asian American Studies, Afro-American Studies, Gender and Women Studies or Media and Cinema Studies; graduate standing, or consent of instructor.

LLS 442 Latina Literature credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LLS/442/)
Examines literary productions by and about women of Mexican, Puerto Rican, Cuban, and other Latina/o descent in the United States. Taught in English. Same as GWS 445 and SPAN 442. 3 undergraduate hours. 4 graduate hours. Prerequisite: At least one previous course in U.S. Latina/Latino Studies or Gender and Women's Studies, or consent of instructor.

LLS 449 Issues in Latina/o Education credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/LLS/449/)
Same as CI 449. See CI 449.

LLS 458 Latina/o Performance credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LLS/458/)
Focuses on Latina/o performances to underscore the relationship between practices of everyday life and acts on stage. Pays particular attention to the material (human) body and bodies of work. Students will critically engage with performance theory and scripts, media works of performances, and theorizations of Latinidad and the body. Same as ENGL 458. 3 undergraduate hours. 4 graduate hours.

LLS 460 Critical Ethnic Studies credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LLS/460/)
Same as AAS 400. See AAS 400.

LLS 465 Race, Sex, and Deviance credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LLS/465/)
Explores how racial stereotypes rely on sexual stereotypes by examining the intersections of ethnic studies, gender and women's studies, and queer studies. Interdisciplinary course that draws from critial legal studies, sociology, anthropology, literary criticism, and history. Same as AAS 465, AFRO 465, and GWS 465. 3 undergraduate hours. 4 graduate hours. Prerequisite: Any lower division course in LLS, AAS, AFRO, or GWS.

LLS 468 Latinas/os & the Law credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LLS/468/)
Examines the Latina/Latino experience in the U.S. how and when the law, through the courts, has most often operated as an instrument of subordination and oppression, but has also at times been leveraged for positive social transformation. Students will come to understand that the law is a deeply contested social space that is central to U.S. social hierarchies based upon race, ethnicity, sexuality, gender, class, immigration status, and religion. 3 undergraduate hours. 4 graduate hours.

LLS 472 Border Latina, Latino Cultures credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LLS/472/)
Same as ANTH 472. See ANTH 472.

LLS 473 Immigration, Health & Society credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LLS/473/)
This interdisciplinary seminar examines the social determinants of US racial and ethnic health inequalities through the lens of (im)migration. Topics to be addressed include: conceptualizations of race and ethnicity, immigrant-adaptation theories, discrimination, place, and the intersections of race, ethnicity, poverty, immigration, gender and health. Same as CHLH 473, SOC 473, and SOCW 473. 3 undergraduate hours. 4 graduate hours.

LLS 475 History of the American West credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LLS/475/)
Same as HIST 476. See HIST 476.

LLS 479 Race, Medicine, and Society credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LLS/479/)
The idea of race has historically been central to how Western cultures conceptualize and think about human difference. This course examines the historical significance of race through one domain of knowledge: medicine. Specifically, it will be concerned with "race" as a central category in the medical construction and management of individuals and populations. Case studies might focus on colonial medicine, race and public health, sexuality and reproduction, global health disparities, and genetics and genomics. Same as AAS 479 and ANTH 479. 3 undergraduate hours. 4 graduate hours. Prerequisite: LLS 100 or consent of instructor.

LLS 490 Research and Writing Seminar credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LLS/490/)
This capstone seminar, designed for advanced majors in LLS, will guide students through the process of writing a senior research paper relevant to the field of Latina/Latino Studies. Students will develop research skills through discussions, writing exercises, and workshops. 4 undergraduate hours. No graduate credit. Prerequisite: LLS 385; senior standing; and enrollment as a major in Latina/Latino Studies.

LLS 495 Senior Honors Thesis credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LLS/495/)
Research project leading to a thesis. 2 or 4 undergraduate hours. No graduate credit. May be repeated in separate terms to a maximum of 4 undergraduate hours. May be taken by honors students in partial fulfillment of department honors requirement. Prerequisite: Senior standing; enrollment as a major in Latina/Latino Studies; a cumulative grade point average of at least 3.25; a minimum 3.5 grade point average in the major; and consent of supervising professor.

LLS 496 Seminar in Latina/o Studies credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LLS/496/)
3 undergraduate hours. 4 graduate hours. May be repeated up to a maximum of 6 undergraduate hours or 12 graduate hours.

LLS 517 Bilingual and English as a Second Language Assessment credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LLS/517/)
Same as CI 517. See CI 517.

LLS 554 Inequalities In A Diverse Society credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LLS/554/)
Same as HDFS 541 and SOCW 554. See SOCW 554.

LLS 561 Race and Cultural Critique credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LLS/561/)
Same as AAS 561, AFRO 531, ANTH 565, and GWS 561. See AAS 561.

LLS 577 Perspectives in LLS credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LLS/577/)
Provides an overview of scholarly work and research in the field of Latina/o Studies. Prerequisite: One undergraduate or graduate course in Latina/Latino Studies or consent of instructor.

LLS 590 Independent Study credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/LLS/590/)
Independent study on special topics not treated in regularly scheduled courses. Approved for letter and S/U grading. May be repeated to a maximum of 8 hours.

LLS 596 Graduate Seminar in LLS credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LLS/596/)
Examination of specific topics in Latina/Latino Studies. Topics vary. May be repeated in the same or subsequent semesters to a maximum of 12 hours.

LAW - LAW

LAW Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/LAW/)

Courses

LAW 199 Undergraduate Open Seminar credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/LAW/199/)
Approved for letter and S/U grading. May be repeated in the same term up to 6 hours, if topics vary; May be repeated in separate terms up to 12 hours, if topics vary.

LAW 201 Basic Constitutional Law & Individual Rights credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LAW/201/)
An introduction to the main themes of the American Constitution - with an emphasis on the First and Fourteenth Amendments - and to basic techniques of constitutional interpretation. Attention will be paid to the interplay of constitutional text, judicial doctrine, and constitutional decision-making outside the judiciary. No prerequisites.

LAW 301 Introduction to Law credit: 2 or 3 Hours. (https://courses.illinois.edu/schedule/terms/LAW/301/)
Guides the undergraduate student in an initial study of law and legal reasoning. Covers the nature and function of rules/law, the distinctiveness of legal reasoning, and the way in which law responds to social phenomena and contributes to the development of different social, business and economic institutions. Includes both criminal and civil proceedings. Serves as a general foundation course for those interested in applying to law school. Also of interest to students who are not interested in pursuing a more formal law education, but for whom general legal training will enhance their career aspirations. Develops skills that are transferable to virtually any career.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil

LAW 302 Transitional Justice credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LAW/302/)
Wrongdoing is part of the history of many, if not most, political communities around the globe. This course examines the moral questions that dealing with past wrongdoing raise. Our focus is specifically on political wrongdoing, that is, wrongdoing inflicted on individuals by the state or groups contesting the state. Such wrongdoing has taken different forms, from slavery, to forced disappearances, to programs of torture and of land appropriation. We also focus on two specific political contexts: the United States and South Africa. In this course, we survey a range of legal measures including criminal punishment, truth commissions, reparations, and apology, that have been, and can be used, to deal with legacies of wrongdoing. Not available for Graduate or Professional credit.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - US Minority

LAW 303 Living the Law credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LAW/303/)
This course first applies the legal understanding developed in LAW 301 to situations in the real world, and then explores how the law is viewed through different social science lenses. Students interested in deepening their knowledge of how the law operates in today's world, and how the law is studied in the social sciences will benefit from this class. Prerequisite: LAW 301.

LAW 304 Introduction to Legal Research credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/LAW/304/)
Introduction to tools and techniques essential for legal practice and scholarship. Students will be able to identify legal issues and relevant facts from a fact pattern, devise a research strategy, find and identify relevant legal information using free and proprietary sources, identify legal rules and principles from a series of authorities, and write a plain-English summary of findings that includes an explanation of the relevant rules. Approved for Letter and S/U grading.

LAW 305 Art and Cultural Property Law credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LAW/305/)
This course concerns the emergence of "art" and "cultural property" law as a distinct field of legal inquiry and practice. Still, this subject draws from nearly the entire spectrum of traditional legal subjects – intellectual property, free speech, contracts, crime, treaties, tax, etc. Art and Cultural Property Law deals with the relationships, rights, transactions and disputes among collectors, artists (and their heirs), dealers, auction houses, museums and other art world participants (including local and foreign governments, sovereign nations and indigenous peoples, the entertainment industry, sports franchises and social media). Among the dozens of important relevant issues in this field are the successes and failures of law in policing cultural heritage crimes, the rise of artistic nationalism, cultural heritage as a casualty of war, censorship, and provenance studies. Approved for Letter and S/U grading.

LAW 499 LAW Study Abroad credit: 0 to 8 Hours. (https://courses.illinois.edu/schedule/terms/LAW/499/)
Provides campus credit for study at accredited foreign institutions or approved overseas programs. Final determination of credit granted is made after the student's successful completion of work. No undergraduate credit. 0 to 8 graduate hours. Approved for Letter and S/U grading. Prerequisite: Full academic standing in the College of Law or Graduate College; consent of major department. Law students, successful completion of the year's requirements.

LAW 500 LLM Legal Writing and Research credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/LAW/500/)
Designed and developed to equip incoming LL.M students with the necessary background in U.S. constitutional law, legal research, analysis, and writing for effective classroom performance. Approved for S/U grading only. Prerequisite: Admission to the U.S. LLM program.

LAW 501 Professional Responsibility credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/501/)
This course concerns itself with the laws, regulations, and customs that govern the legal profession in the United States, and considers those matters in the context of an increasingly globalized legal profession. 3 or 4 graduate hours. No professional credit. Students will be expected to attend class, review the assigned reading before class, participate in class discussions and exercises, complete written assignments, and examinations.

LAW 598 Law Partner Scholar Notation credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/LAW/598/)
Illinois Law Partner Scholars Program requirements provide designated students an opportunity to enhance their professional and personal competences in four areas: cultural awareness, leadership and team-building, academic excellence, and community involvement. The activities and contributions of designated students will advance the development of global law practice skills within the College of Law: 1) by providing points of comparison and contrast to U.S. Law; and 2) by understanding the social and business context of law outside the U.S. 0 graduate hours. No professional credit. Approved for S/U grading only. Prerequisite: For students who are identified by Illinois Law Partner schools for admission into the Illinois LL.M. program.

LAW 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/LAW/599/)
Approved for S/U grading only.

LAW 600 Pro Bono Service credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/LAW/600/)
Course carries no academic credit, but recognizes law students who provide at least sixty hours of pro bono legal service to the community. The sixty hours of service may be performed at any time during the student's three years of law school, and must be documented through reports to the Associate Dean for Academic Affairs. 0 graduate hours. 0 professional hours. Approved for S/U grading only. Students may enroll only with permission of the Associate Dean for Academic Affairs. Prerequisite: Enrollment in the J.D. or LL.M. program at the College of Law.

LAW 601 Contracts credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/601/)
Enforceability of promises including unjust enrichment and reliance, offer and acceptance, mistake, unfairness and overreaching, unconscionability, Statute of Frauds, interpretation of contract language, conditions, and third party beneficiaries. 4 graduate hours. 4 professional hours.

LAW 602 Property credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/602/)
Basic first-year course in property law, required of all students. Provides an overview of law of the land, with incidental coverage of personal property; includes the concept of property, acquisition of private property, recognized property interests, and gratuitous transfer of property interests. 4 graduate hours. 4 professional hours.

LAW 603 Torts credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/603/)
Basic course in civil wrongs, including intentional torts (such as assault and battery), negligence (duty, unreasonable risk analysis, actual and proximate cause), and strict liability. 4 graduate hours. 4 professional hours. Prerequisite: Law students only.

LAW 604 Criminal Law credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/604/)
Sources and purposes of the criminal law; the meaning of criminal responsibility; and the characteristics of particular crimes. 4 graduate hours. 4 professional hours. Prerequisite: Law students only.

LAW 605 Criminal Proc: Investigation credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/605/)
Problems in the administration of criminal justice with emphasis on right to counsel, arrest, search, interrogation, lineups, and the scope and administration of exclusionary rules. 4 graduate hours. 3 professional hours.

LAW 606 Constitutional Law I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/606/)
Basic first-year course provides an introduction to constitutional law, including the origins of judicial review, basic Article III limits on federal court jurisdiction, the nature and scope of federal legislative power, the Commerce Clause, and the relationship of the federal government to the states. 4 graduate hours. 4 professional hours.

LAW 607 Civil Procedure credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/607/)
Role and importance of procedure in litigation, including jurisdiction, pleadings and parties, pretrial motions and discovery, trial practice (except evidence), relationship between judge and jury, the effect of a decision in one case on subsequent litigation between the same or different parties (res judicata), verdicts and judgements, and appelate review. 4 graduate hours. 4 professional hours.

LAW 609 Legal Writing & Analysis credit: 2 or 3 Hours. (https://courses.illinois.edu/schedule/terms/LAW/609/)
Emphasis on development and improvement of skills in legal writing, and training in legal bibliography. Assignments may include brief writing and preparation of legal memoranda and opinions. 3 graduate hours. 2 professional hours.

LAW 610 Introduction to Advocacy credit: 2 or 3 Hours. (https://courses.illinois.edu/schedule/terms/LAW/610/)
Continuation of LAW 609. Introduction to Advocacy is required in the second semester of the first year for further development of legal research skills persuasive writing and oral advocacy. Each student will work on the preparation of a summary judgment motion and an appellate brief relating to their first semester assignment, then argue their assigned case before a panel of local attorneys and faculty. 2 graduate hours. 3 professional hours. Approved for Letter and S/U grading.

LAW 612 Constitutional Law III credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/612/)
This elective for second-and third-year law students is an intensive study of the First Amendment to the Constitution and its application to the states through the Fourteenth Amendment. Examines decisions of the U.S. Supreme Court in areas concerning freedom of speech, religion, and the press. Specific topics include punishment of criminal advocacy; regulation of picketing and public demonstrations; obscenity; commercial speech; regulation of news media; and religious exemptions from government regulation. 4 graduate hours. 3 professional hours. Prerequisite: LAW 606.

LAW 615 Administrative Law credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/615/)
Functions of administrative tribunals in federal, state, and municipal government; the procedure before such administrative tribunals; and judicial relief from administrative decisions. 4 graduate hours. 3 professional hours.

LAW 616 Environmental Law and Pol I credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/616/)
Course is the basic introduction to Environment Law; it considers the principal legal approaches used to deal with environmental problems, including common-law, statutory, regulatory, and economic-incentive systems. 4 graduate hours. 3 professional hours.

LAW 618 Natural Resources credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/618/)
Legal problems associated with the ownership and use of land, water, and mineral resources. 2 or 4 graduate hours. 3 professional hours.

LAW 619 Wildlife Law credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/619/)
Covers a variety of legal issues relating to the status and treatment of wildlife and the management of natural areas for the conservation of biodiversity. 4 graduate hours. 3 professional hours.

LAW 620 Health Law Policy credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/620/)
This course focuses on the profound legal and policy issues raised by changes in health law and the U.S. health care delivery system including: access to health law and the U.S. health care delivery system including: access to health services; the financing and organization of the health care system; development of legal standards to ensure quality of care; and issues of long-term care. In addition, we will focus on the process of making laws and polices; what entities, institutions, and individuals control decisions about the quality and cost of health care. We will also explore the need and basis for reform. 4 graduate hours. 3 professional hours.

LAW 622 Land Use Planning credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/622/)
Examination of the legal and administrative aspects of land development and regulation in an urban society, including the techniques and problems of planning; the tools of plan effectuation, such as zoning, subdivision regulation, renewal and redevelopment, and housing programs; and the allocation of decision-making among various levels of government. 2 to 4 graduate hours. 2 to 3 professional hours.

LAW 624 Real Estate Finance credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/624/)
Methods of financing land acquisition and residential and commercial development, including publicly owned and subsidized housing. 4 graduate hours. 3 professional hours.

LAW 625 State and Local Government credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/625/)
The law governing the structure, powers, and operation of local governments in urban and suburban areas with analysis of political, economic, and social implications. 4 graduate hours. 3 professional hours. Prerequisite: LAW 606.

LAW 627 Legal Research credit: 1 or 2 Hours. (https://courses.illinois.edu/schedule/terms/LAW/627/)
Introduction to the basic tools and methodology used in conducting legal research and will develop the skills necessary to identify and locate relevant, complete and current legal information in both print and digital formats. Weekly problem-based research exercises will be assigned. 1 graduate hour. 1 or 2 professional hours. Approved for letter and S/U grading. Required in the first year, fall term.

LAW 629 Bankruptcy credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/629/)
Study of the regulation of the relationship between debtors and creditors under the federal Bankruptcy Code. 4 graduate hours. 3 or 4 professional hours.

LAW 631 Secured Transactions credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/631/)
Study of secured transactions under Article 9 of the Uniform Commercial Code. 2 to 4 graduate hours. 2 to 3 professional hours.

LAW 633 Business Associations I credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/633/)
Examines the basic legal consequences for individuals, organizations, and society of the formation, control, and financing of organizations. Surveys agency relationships, partnerships, and close and public corporations. 4 graduate hours. 3 or 4 professional hours.

LAW 634 Securities Regulation credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/634/)
Explores the federal securities laws governing issuance of securities in the primary markets. Emphasis on regulatory requirements governing corporate financing. 4 graduate hours. 3 professional hours. Prerequisite: LAW 633.

LAW 635 Securities Litigation credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/635/)
Focuses in detail on the substantive law and strategic considerations that are important in securities litigation, whether private suits by individual investors, private class actions under federal securities laws, or federal and state government enforcement proceedings. Topics include: 10(b) fraud suits under the 1934 Act, 11 and 12(a)(2) suits under the 1933 Act, insider trader liability, procedural issues in class actions, and litigation under federal proxy solicitation and tender offer regulations. 4 graduate hours. 3 professional hours. Prerequisite: LAW 633.

LAW 636 Business Associations II credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/636/)
The second course in the sequence. Covers derivative suits, corporate finance, introduction to securities regulation, insider trading and mergers and acquisitions. 4 graduate hours. 3 professional hours. Prerequisite: LAW 633.

LAW 638 White Collar Crime credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/638/)
This course will focus on the federal statutes commonly invoked in corporate and white collar prosecutions, including those used in prosecutions for conspiracy, mail and wire fraud, RICO, extortion, bribery, tax offenses, obstruction of justice, and false statements. The class will investigate the theoretical and policy framework for individual and institutional responsibility in our criminal justice system and will also explore emerging theories of corporate criminal liability and the principles undergirding the sanctions imposed for white collar crime. 3 to 4 graduate hours. 2 to 4 professional hours. Prerequisite: This course is appropriate for law students who have completed introductory courses in criminal law and procedure. Some students have found it helpful to complete the course in LAW 633 before taking this course, but it is not a prerequisite.

LAW 639 Corporate Finance credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/639/)
Analysis of corporate and securities law problems using the tools of modern financial theory. Emphases will typically include valuation, capital structure, and fundamental changes of public corporations. 4 graduate hours. 3 professional hours. Prerequisite: LAW 633.

LAW 642 Antitrust Law credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/642/)
The limitations imposed by the Sherman Act, Clayton Act, and Federal Trade Commission Act on anticompetitive practices by business firms; emphasizes price fixing and other agreements among competitors, monopolization, mergers, exclusive dealing, tying arrangements. Considers applicability of traditional rules to intellectual property and new technologies. 4 graduate hours. 3 professional hours.

LAW 643 Trademark & Unfair Competition credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/643/)
Course introduces basic legal concepts relating to statutory and common-law trademark, interference with contractual relations and trade libel, the federalization of unfair competition law, and the role of the Federal Trade Commission in consumer protection activities. 4 graduate hours. 3 professional hours.

LAW 644 Copyright Law credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/644/)
Offers an in-depth look at the legal aspects of copyright with special emphasis on the application of traditional copyright principles to new technologies and media of expression. 4 graduate hours. 3 professional hours.

LAW 645 Patent Law credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/645/)
Historical development of protection of ideas, inventions, and discoveries; patentability; securing the patent; amendment and correction of patents; and infringement remedies, defenses, and procedure. 2 to 4 graduate hours. 2 to 3 professional hours.

LAW 647 Income Taxation credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/647/)
The fundamental course in federal income taxation. Includes materials relating to income taxation of individuals and an introduction to taxation of corporations and shareholders. 4 graduate hours. 3 or 4 professional hours.

LAW 648 Corporate Taxation credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/648/)
In-depth study of federal income tax law related to taxation of corporations, shareholders, partnerships, and partners. 4 graduate hours. 3 professional hours. Prerequisite: LAW 647.

LAW 649 Partnership Taxation credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/649/)
Involves the study of Subchapter K of the Internal Revenue Code, including partnership formation, allocations, distributions, and liquidations. Also examines the tax treatment of Subchapter S corporations. 4 graduate hours. 3 professional hours. Prerequisite: LAW 647.

LAW 651 Tax Exempt Organizations credit: 3 to 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/651/)
Covers the rationale and technical tax requirements for exempting charities from federal and state taxes. Subjects will include the rationale for exemption (especially with respect to churches, schools, and hospitals), qualification rules under I.R.C. Section 5 (c) (3), the Unrelated Business Income Tax, and if time permits, the charitable contributions deduction. 4 graduate hours. 3 professional hours. Prerequisite: LAW 647 is a prerequisite, though it may be waived in appropriate cases.

LAW 653 International Business Trans credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/653/)
Doing business abroad: export-import regulations, use of foreign commission merchants, licensing of patents and know-how, investment and exchange problems, establishing a foreign operation (including forms of business organization available abroad), and application of United States and foreign antitrust law to the business operation. 4 graduate hours. 3 professional hours.

LAW 654 International Trade Policy credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/654/)
Analysis of the regulation of trade between nations by international agreement (e.g., the GATT), by multinational organizations (e.g., the European Communities), and by individual countries; emphasizes U.S. import restraints, export controls, and related laws. 4 graduate hours. 3 professional hours.

LAW 655 European Union Law credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/655/)
Intensive study of the European Common Market, particularly of its laws relating to trade barriers, establishment of companies, and antitrust; and United States legislation in the field of international trade. 2 to 4 graduate hours. 2 to 3 professional hours.

LAW 656 International Law credit: 3 to 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/656/)
The nature, sources, and subjects of international law and its place in the control of international society; includes an examination of the law of jurisdiction, territory, recognition and succession of states, rights and immunities of states in foreign courts, diplomatic immunities, treaties, protection of citizens abroad, settlement of international disputes, war and neutrality, the United Nations, and the International Court of Justice. 4 graduate hours. 3 professional hours.

LAW 657 International Human Rights Law credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/657/)
Studies established and developing legal rules and procedures governing the protection of international human rights, including Marxist and Third World, as well as Western, conceptions of those rights. 4 graduate hours. 3 professional hours.

LAW 660 Individual Employee Rights credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/660/)
This course investigates the legal rights and responsibilities of employees in the non-union workplace. The course will emphasize particularly the role of law in adjusting the balance of power between individual employees and employers. It will study the regulation of contract, tort, and statute of such areas as hiring, discharge, compensation, employee privacy and dignity and the like. 4 graduate hours. 3 professional hours.

LAW 662 Labor Law I credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/662/)
Study of the National Labor Relations Act as amended, the pre-act history of the labor movement, and the judiciary's response thereto, with emphasis on understanding the problems, experiments, and forces leading to the enactment; includes the negotiation and administration of the collective bargaining agreement, especially the grievance arbitration procedure, its operation and place in national labor policy; and explores the relationship of the individual and the union. Same as LER 547. 4 graduate hours. 3 or 4 professional hours.

LAW 664 Employment Discrimination credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/664/)
Problems arising under federal statutory prohibitions of discrimination in employment, with particular emphasis on evidentiary problems and the use of statistical proofs; defining relevant labor pools, using statistical analyses of data, and establishing proof of test validation. 2 or 4 graduate hours. 2 to 3 professional hours.

LAW 665 Workplace Dispute Resolution credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/665/)
Same as ECON 543 and LER 543. See LER 543.

LAW 667 Family Law credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/667/)
The creation and dissolution of the family, and legal relationships established by marriage, cohabitation and procreation. Covers the law of marriage, divorce, annulment, separation, unmarried cohabitation, illegitimacy, adoption and rights of child custody, parental property on divorce, inheritance, and related rights. Legal rules are placed into the social setting in which they operate, and emphasis is given to family policy as reflected in current developments in family law reform, including constitutional law. 4 graduate hours. 3 professional hours.

LAW 668 Decedents' Estates and Trusts credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/668/)
Studies the means of transferring wealth, with primary emphasis on gratuitous transfers; the means available for making gratuitous transfers, including the validity and effect of testamentary instruments and trust deeds; and problems concerning the dispositive provisions of any type of instrument which transfers wealth. 4 graduate hours. 3 professional hours.

LAW 670 Elder Law credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/670/)
Examines the various legal implications of people living longer, with special emphasis on public policies and programs affecting the financing of medical care, housing arrangements, and income maintenance of persons aged 60 years and older. 4 graduate hours. 3 professional hours.

LAW 673 Workers Compensation credit: 2 or 3 Hours. (https://courses.illinois.edu/schedule/terms/LAW/673/)
A general survey class on rules relating to workers compensation claims and litigation. Begins with an overview of the historical development of workers compensation laws, then surveys the general principles applicable to such laws, with particular emphasis on the Illinois Workers Compensation Act. Guest speakers will include an arbitrator, a petitioner's attorney, and a claims manager. 3 graduate hours. 2 professional hours.

LAW 675 Products Liability credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/675/)
Substantive theories of products liability: negligence, breach of warranty, strict liability, and tortious misrepresentation; procedural and remedial problems with, and defenses to, each substantive theory. 2 to 4 graduate hours. 2 to 3 professional hours.

LAW 676 Insurance Law credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/676/)
Covers principles generally applicable to insurance law and includes distinctive rules governing certain types of insurance coverage; objectives are to examine the nature of the insurance contract, marketing of insurance, principles of indemnity, individuals and entities protected by insurance rules, and risks that are shifted by insurance coverage. 4 graduate hours. 3 professional hours.

LAW 678 Anthropology and Law credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/678/)
Same as ANTH 560. See ANTH 560.

LAW 679 Criminal Proc: Adjudication credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/679/)
Problems in the administration of criminal justice, with emphasis upon the commencement of formal proceedings (bail, decision to prosecute, grand jury, preliminary hearing, location of prosecution, scope of prosecution, speedy trial); the adversary system (pleas, discovery, jury trials, prejudicial publicity, ethical problems, double jeopardy); and post-conviction review (post-trial motions, appeals, habeas corpus, related post-conviction remedies). 4 graduate hours. 3 professional hours.

LAW 680 Professional Responsibility credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/680/)
Problem course analyzing ethical issues that arise in the practice of law and considering the approaches to such issues taken by the American Bar Association's Code of Professional Responsibility, Model Rules of Professional Conduct, and Code of Judicial Conduct. 2 to 4 graduate hours. 2 to 3 professional hours.

LAW 682 Evidence credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/682/)
Law governing the proof of disputed issues of fact; function of the court and jury; competence and examination of witnesses; standards of relevancy; privileged communications; illegal evidence; hearsay rule; best evidence rule; presumptions; and judicial notice. 4 graduate hours. 3 or 4 professional hours.

LAW 683 Complex Litigation credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/683/)
Legal and practical issues in "complex" cases: problems of joinder in multi-party cases, consolidation of cases brought independently (including the activities of the Judicial Panel of Multidistrict Litigation), class actions, discovery issues including the assertion and waiver of evidentiary privileges and use of computers, consequences of active judicial "management" of litigation at the pretrial stage, settlement of complex cases, and res judicata problems. 4 graduate hours.3 professional hours.

LAW 684 Federal Courts credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/684/)
Examination of the relationship of federal courts to other organs of federal government and to the states, including an analysis of cases dealing with congressional control over jurisdiction, federal review of state court decisions (including the relationship between state and federal substantive and procedural law), and application of law to fact; the scope of the federal question of jurisdiction in federal courts; abstention; federal injunctions of state criminal proceedings; and problems of justiciability, advisory opinions, and mootness. 4 graduate hours. 3 professional hours.

LAW 685 Dispute Resolution credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/685/)
Examination of the limitations, consequences, and costs, as well as the indispensability of some aspects of modern litigation; the possibilities, requirements, and legal problems of consensual and of court-annexed dispute resolution processes alternative to final judicial adjudication, including legal counseling, negotiation, mediation, arbitration, mini-trials, summary trials, summary jury trials, early neutral evaluation, private resolution providers, and settlement processes; current disputes used for illustration. 2 to 4 graduate hours. 2 to 3 professional hours.

LAW 686 Remedies credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/686/)
Survey of legal and equitable remedies for the protection of personal and property rights. Procedural and substantive aspects of injunctions; restitution of unjust enrichment in the context of the receipt of unsolicited benefits, benefits derived from the commission of tortious acts, and the mistaken acquisition of benefits; alternative remedies arising from bargain transactions; and remedies for violations of civil rights. 2 or 4 graduate hours. 2 to 3 professional hours.

LAW 687 Jurisprudence credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/687/)
The place of law in society; the nature, goals, and methods of law; and the relation of law and social science. 4 graduate hours. 3 professional hours.

LAW 688 American Legal History credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/688/)
Studies selected topics in the development of law and legal institutions in the United States with particular emphasis on the history of the legal profession, legal education, and the role of lawyers and courts in U.S. society. 4 graduate hours. 3 professional hours. Prerequisite: Some prior study of U.S. history, particularly social and intellectual, is helpful but not required.

LAW 689 Law and Economics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/689/)
Introduction to the economic analysis of law, including property, contracts, torts, criminal law, and related topics. 4 graduate hours. 3 professional hours.

LAW 692 Field Placements credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/692/)
Several field placements offer practical legal education, through field work in various agencies. Students engage in legal work under the supervision of experiences attorneys; the work may include conducting client interviews, doing legal research and fact investigation, preparing legal documents, negotiating, and in some cases, engaging in real trials. 1 to 4 professional hours. May be repeated in the same or separate terms.

LAW 693 Clinical Training credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/LAW/693/)
Several clinics offer practical legal education through a variety of in-house clinics. The clinics focus on specific lawyering skills that are relevant to a particular area of practice (e.g., litigation or family advocacy), and have a classroom component. Students engage in legal work under the supervision of experienced attorneys; the work may include conducting client interviews, doing legal research and fact investigation, preparing legal documents, negotiating, and in some cases, engaging in real trials. No graduate credit. 1 to 5 professional hours. Approved for Letter and S/U grading. May be repeated for up to 12 professional hours if topics vary.

LAW 694 Trial Advocacy credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/LAW/694/)
Examination of the problems of advocacy and tactics at the trial level. Students engage in all aspects of actual trial work, including witness preparation, opening and closing statements, direct and cross examination, and jury instructions; culminates in student conduct of a full jury trial in late spring; demonstrations are conducted by staff and visiting judges and practitioners. 2 professional hours. 3 graduate hours. May be repeated to a total of 4 hours. Approved for both letter and S/U grading. Prerequisite: Completed or enrolled concurrently with LAW 682.

LAW 695 Fundamentals of Trial Practice credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/695/)
Explores the theory and reality of trial practice, from developing a theory of the case through submission of jury instructions; topics include fact gathering, jury selection, opening statements, direct and cross-examination, exhibits, expert witnesses, and closing arguments. 3 professional hours. 4 graduate hours. Approved for both letter and S/U grading. Prerequisite: LAW 694 and completion or concurrent enrollment in LAW 682.

LAW 696 Legal Problems credit: 1 to 2 Hours. (https://courses.illinois.edu/schedule/terms/LAW/696/)
Preparation of articles and notes for publication in the University of Illinois Law Review, Elder Law Journal, Journal of Law Technology and Policy, Illinois Law Update section of the Illinois Bar Journal. Teaching practicums and clinical assistantships for Law courses and clinics. No graduate credit. 1 to 2 professional hours. Approved for letter and S/U grading. May be repeated to a maximum of 8 hours in the same term and to a maximum of 22 hours in separate terms.

LAW 697 Moot Court credit: 1 to 2 Hours. (https://courses.illinois.edu/schedule/terms/LAW/697/)
Preparation of an appellate brief; presentation of an appellate oral argument; participation in intramural, state, national, or international moot court competition. 1 to 3 graduate hours. 1 to 2 professional hours. Approved for S/U grading only. May be repeated to a maximum of 5 hours.

LAW 699 Independent Study credit: 0 to 2 Hours. (https://courses.illinois.edu/schedule/terms/LAW/699/)
Individual research on a special problem selected in consultation with the instructor. 0 to 2 graduate hours. 0 to 2 professional hours. Approved for letter and S/U grading. May be repeated to a maximum of 2 hours.

LAW 701 Leadership Project credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/LAW/701/)
Course carries no academic credit, but recognizes law students who participate in a prescribed number of lectures, book review session, seminars, and classes relating to principles of leadership. Participation in these activities may be performed at any time during the student's three years of law school, and must be documented through reports to the Director of the Leadership Project. 0 graduate hours. 0 professional hours. Approved for S/U grading only. Prerequisite: Students may enroll only with permission of the Director of the Leadership Project. Enrollment in the J.D. or LL.M. program at the College of Law.

LAW 792 Current Legal Problems credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/792/)
This is an umbrella course listing for specialty topics of current legal issues of interest. Additional fees may apply. See Class Schedule. 2 to 4 graduate hours. 1 to 4 professional hours. Approved for letter and S/U grading. May be repeated.

LAW 793 Advanced Litigation Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/793/)
This is an umbrella course listing for specialty topics of current interest in litigation. 1 to 4 graduate hours. 1 to 4 professional hours. Approved for letter and S/U grading. May be repeated if topics vary.

LAW 794 Adv Topics in Business Law credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/794/)
This is an umbrella course listing in business law for specialty topics of current interest. 1 to 4 graduate hours. 1 to 4 professional hours. Approved for letter and S/U grading. May be repeated if topics vary.

LAW 795 Adv Topics in Criminal Law credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/795/)
This is an umbrella course listing in criminal law for specialty topics of current interest. 1 to 4 graduate hours. 1 to 4 professional hours. May be repeated if topics vary.

LAW 796 Comparative Law Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/LAW/796/)
This is an umbrella course listing in comparative law for specialty topics of current interest. 1 to 4 graduate hours. 1 to 4 professional hours. Approved for letter and S/U grading. May be repeated if topics vary.

LAW 797 Intellectual Property Topics credit: 1 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/LAW/797/**)**
This is an umbrella course listing in intellectual property law for specialty topics of current interest. 1 to 4 graduate hours. 1 to 4 professional hours. May be repeated if topics vary.

LAW 798 Seminars credit: 1 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/LAW/798/**)**
This is an umbrella course listing for specialty topics of special interest. Approved for professional and graduate credit. May be repeated.

LCTL - LESS COMMONLY TAUGHT LANGUAGES

LCTL Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/LCTL/)

Courses

LCTL 101 Elementary Course in a Less Commonly Taught Language I credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/LCTL/101/)
Beginner or intensive language instruction in a selected less commonly taught language. May be repeated in separate terms, if topics vary. Prerequisite: Departmental approval is required.

LCTL 102 Elementary Course in a Less Commonly Taught Language II credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/LCTL/102/)
Continuing beginning or intensive language instruction in a selected less commonly taught language. May be repeated with approval. Prerequisite: Consent of instructor. May be repeated if topics vary. Prerequisite: Departmental approval is required.

LCTL 201 Intermediate Course in a Less Commonly Taught Language I credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/LCTL/201/)
Intermediate or intensive language instruction in a selected less commonly taught language. May be repeated with approval. Prerequisite: Consent of instructor. May be repeated in separate terms, if topics vary.

LCTL 202 Intermediate Course in a Less Commonly Taught Language II credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/LCTL/202/)
Intermediate or intensive language instruction in a selected less commonly taught language. May be repeated with approval. Prerequisite: Consent of instructor. May be repeated in separate semesters, if topics vary. Prerequisite: Departmental approval is required.

LCTL 301 Advanced Course in a Less Commonly Taught Language I credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/LCTL/301/)
Advanced or intensive language instruction in a selected less commonly taught language. May be repeated with approval. Prerequisite: Consent of instructor. May be repeated in separate semesters, if topics vary. Prerequisite: Departmental approval is required.

LCTL 302 Advanced Course in a Less Commonly Taught Language II credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/LCTL/302/)
Advanced or intensive language instruction in a selected less commonly taught language. May be repeated with approval. Prerequisite: Consent of instructor. May be repeated in separate semesters, if topics vary. Prerequisite: Departmental approval is required.

LAS - LIBERAL ARTS AND SCIENCES

LAS Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/LAS/)

Courses

LAS 100 Success in LAS for International Students credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/LAS/100/)
Prepares international students for their transition to campus by examining expectations and focusing on the purpose and value of the higher education experience from a US perspective. Introduces critical concepts to know about academic programs, and engages students in planning their program of study as well as their personal and professional development. Serves as a complement to LAS 101/LAS 102/LAS 122 for students new to the US education system.

LAS 101 Design Your First Year Experience credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/LAS/101/)
Design Your First Year Experience orients students to the academic environment at Illinois and establishes a useful framework for engaging in learning both inside and outside the classroom and articulating a purpose for their education. Using design-thinking, students explore campus resources, set goals for their academic, personal and professional development during their first year and make multiple (engagement) maps for reaching those goals. Prerequisite: Restricted to first-year students in LAS.

LAS 102 Transfer Advantage credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/LAS/102/)
Introduction for first-term transfer students to the college and campus. Familiarizes transfer student with the resources available to them and helps them connect with other students and form a bond with the college. Prerequisite: For first-term LAS transfer students only.

LAS 110 Workshop-Tutorial credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/LAS/110/)
Independent study and experimental seminars open to Unit One students and to others; specific offerings vary each term. Approved for letter and S/U grading. May be repeated if topics vary. Credit toward college or departmental requirements is contingent upon approval by the appropriate unit. A total of 12 hours of LAS 110 credit may be applied toward graduation in the College of Liberal Arts and Sciences. Prerequisite: Unit One students or consent of Unit One Director.

LAS 122 Leadership and Society credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/LAS/122/)
Engages first-year LAS honors students in the realms of citizenship, stewardship and leadership for the 21st century. En route to becoming competent and agile learners, first-year honors students experience an orientation to Illinois that fosters greater awareness and knowledge of campus resources and an examination of scholarly and personal leadership, global issues, and civic engagement. The course serves as a means for students to enhance their independence, cultural awareness and connection to community. Students work with a small cohort of peer scholars in a one-hour weekly graded session led by an upper-level LAS James Scholar peer mentor. Students are expected to work together and individually on projects involving community partners and campus groups. Assignments will incorporate the concept of service in connection with civic engagement.

LAS 199 Undergraduate Open Seminar credit: 0 to 5 Hours. (https://courses.illinois.edu/schedule/terms/LAS/199/)
Topics will vary. See class schedule. Additional fees may apply. See Class Schedule. Approved for Letter and S/U grading. May be repeated.

LAS 201 Design Your Illinois credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/LAS/201/)
Students reflect on and map out their Illinois experience to maximize life + career development. Topics include wellness and student success, career management, and design-thinking as a method for creating a life-career plan. Activities include both in-class and out-of-class engagement in reflection, information gathering, brainstorming, empathy-building, and problem-solving. Students are guided to identify how their undergraduate experiences relate to and advance their career development. Prerequisite: Restricted to first- and second-year undergraduate students.

LAS 250 Design Your Life + Career credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/LAS/250/)
Guides students from career exploration to job attainment and future life and career planning. Topics include career development, today's work world and skills needed, job attainment skills, and storytelling for career success. Students use aspects of design-thinking to understand their interests, gather information, reflect, and imagine their future life and career. In-class workshops prepare students for out-of-class assignments that advance job search. Approved for S/U grading only. Prerequisite: Junior or Senior Standing.

LAS 289 Internship Experience credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/LAS/289/)
Students follow a program of study and research through an approved internship. Written work report required. Approved for S/U grading only. May be repeated in separate semesters. Prerequisite: Consent of course instructor required. Restricted to students enrolled in the College of Liberal Arts and Sciences.
This course satisfies the General Education Criteria for:
UIUC: Ugrad Zero Credit Intern

LAS 290 FLAS Seminar credit: 0 to 12 Hours. (https://courses.illinois.edu/schedule/terms/LAS/290/)
Foreign Language and Area Studies Off-Campus Studies provides campus credit for off-campus study by undergraduate Foreign Language and Area Studies Fellows. Final determination of appropriate credit is made by a faculty review committee upon completion of the student's approved foreign language program. May be repeated in separate terms to a maximum of 12 hours. Prerequisite: Junior standing; intermediate or advanced study of a less-commonly taught language; awarding of FLAS fellowship by campus Title VI National Resource Center; prior review and approval of the student's program by Center's FLAS Fellowship Coordinator.

LAS 291 Global Perspectives for Intercultural Learning credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/LAS/291/)
Prepares students who are going abroad for a semester or academic year for their transition through a) examining expectations, b) focusing on the purpose and value of the abroad experience, c) preparing students culturally and logistically, d) addressing issues of culture shock, e) helping students with articulating their experience for future personal and professional goals, f) enhancing intercultural communication and global understanding, and g) assisting with re-entry planning. May be repeated in separate terms.

LAS 292 Global Perspectives in Cross-Cultural Contexts credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/LAS/292/**)**
Provides an opportunity for students studying abroad to consider how their journey might be articulated as a global learning experience. Requires students to discuss what they are learning, reflect upon it, and discern ways to apply the knowledge gained through their experiences. May be repeated in separate terms. Prerequisite: LAS 291.

LAS 299 LAS Study Abroad credit: 0 to 18 Hours. **(**https://courses.illinois.edu/schedule/terms/LAS/299/**)**
Provides credit toward the undergraduate degree for study at accredited foreign institutions or approved overseas programs. Final determination of credit is made upon the student's completion of the work. (Summer session, 0 to 8 hours). Approved for Letter and S/U grading. May be repeated to a maximum of 36 term hours per academic year or to a total of 44 term hours, all of which must be earned within one calendar year. Prerequisite: One year of residence at UIUC, good academic standing, and prior approval of the major department and the College of Liberal Arts and Sciences.

LAS 399 Leadership & Professional Development credit: 1 to 3 Hours. **(**https://courses.illinois.edu/schedule/terms/LAS/399/**)**
Leadership and professional development seminar for student interns. Interns will learn teaching, mentoring, leadership and professional skills that will enable them to lead a section of an LAS transition course or experience and share their successful academic experiences with undergraduate students who are new to the University. Interns will help their students develop the skills necessary to succeed at the U of I. May be repeated in separate terms to a maximum of 6 hours. Prerequisite: Instructor approval required.

LAS 490 LAS Advanced Seminar credit: 1 to 6 Hours. **(**https://courses.illinois.edu/schedule/terms/LAS/490/**)**
See Class Schedule for current topics. 1 to 6 undergraduate hours. 1 to 6 graduate hours. Approved for letter and S/U grading. May be repeated in the same or separate terms to a maximum of 6 hours.

LAS 494 Senior Project credit: 2 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/LAS/494/**)**
For students seeking graduation with distinction in IPS. 2 or 4 undergraduate hours. No graduate credit. May be repeated to a maximum of 4 undergraduate hours. Prerequisite: Consent of instructor and IPS Advisory Committee; open only to students whose major is IPS and who have a cumulative grade point average of at least 3.25.

LGLA - LINGALA

LGLA Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/LGLA/)

Courses

LGLA 408 Topics Lingala Lang & Lit II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LGLA/408/)
Continuation of LGLA 407 with increased emphasis on the reading and comprehension of literary texts exemplified in advanced level novels, plays, and poetry, as well as on advanced mastery of expository writing skills. Same as AFST 418. Prerequisite: LGLA 407.

LING - LINGUISTICS

LING Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/LING/)

Courses

LING 100 Intro to Language Science credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LING/100/)
Introduction to the theory and methodology of general linguistics; includes the various branches and applications of linguistics.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

LING 104 Talking Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LING/104/)
Same as ANTH 104. See ANTH 104.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

LING 110 Cultural Experiences of the Muslim World credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/LING/110/)
Explores the languages and cultures of the Muslim world through different co-curricular activities. Students will acquire a higher proficiency of the target language and exposure to other languages that are spoken within this region. They will expand their knowledge and gain a better understanding of the target culture as well as of those in the Muslim world. Only offered in conjunction with the Summer Institute for Languages of the Muslim World. Additional fees may apply. See Class Schedule. Approved for S/U grading only. May be repeated if SILMW language course varies.

LING 115 Language and Culture in India credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LING/115/)
Examines the relationship between language and culture in the multilingual and multicultural context of India. Special topics of focus are: linguistic and cultural diversity in India, impact of the language and cultural contact on the structure and function of languages (convergence, diglossia, code-mixing, pidgins and creoles), language and identity, language of religion, language and gender, language in the media, literature and culture, language and power, language and globalization. Same as HNDI 115 and REL 115.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West

LING 191 Freshman Honors Tutorial credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/LING/191/)
Study of selected topics on an individually arranged basis. Open only to honors majors or to Cohn Scholars. May be repeated once. Prerequisite: Consent of departmental honors advisor.

LING 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/LING/199/)
May be repeated.

LING 210 Language History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LING/210/)
Addresses the question "Why does language change?" Specific topics include: the history and origin of writing; why pronunciation changes; change in vocabulary and what it tells us about change in culture and society; the relation between "language" and "dialect"; multilingualism and its consequences, including Pidgins and Creoles; genetic relationship between languages, with focus on the "Indo-European" family (English, German, French, Russia, Latin, Greek, and Sanskrit, etc.) and the relationships between human languages. Prerequisite: Fulfillment of the foreign language requirement of the College of Liberal Arts and Sciences.

LING 221 American Sign Language II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/221/)
Same as SHS 221. See SHS 221.

LING 222 Language in Globalization credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LING/222/)
Introduction to the role of language in globalization by examining communication issues concerning language use across cultural, political and geographic boundaries. Explores the interaction of language and other cultural forms in the global context. Among the topics discussed are issues of identity, spread of English and its acculturation to local contexts of use, creativity in language mixing, language in global pop cultures, language in cyberspace, as well as minority language experiences, and loss of indigenous languages.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West

LING 225 Language, Mind, and Brain credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LING/225/)
Introduction to the theory and methodology of psycholinguistics with emphasis on language acquisition and linguistic behavior. Same as PSYC 225.
This course satisfies the General Education Criteria for:
Social Beh Sci - Beh Sci

LING 240 Language in Human History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LING/240/)
Role of language in the life of nations as a tool of communication, as a symbol of identity, and as a means of power. Scripts and orthographies, language planning, culture and language glossopolitics. Prerequisite: Three years of high school foreign language study or fulfillment of the foreign language requirement of Liberal Arts and Sciences.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil

LING 250 American Voices: Linguistic Diversity in the US credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LING/250/)
The United States has a vast and varied linguistic landscape that has been shaped by a unique medley of peoples and cultural practices. From the colonization of North America to contemporary politics and popular culture, language has helped to connect us in many ways, and has also served as a tool for making and maintaining difference. This course explores issues of standardization, language maintenance, linguistic discrimination, identity formation, and many others to consider the ways "diversity" is not only a multiplicity of different histories, beliefs, and practices, but can also become a means of interpersonal prejudice and structural inequity.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - US Minority

LING 270 Language, Technology & Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LING/270/)
What technologies have humans developed to augment the quintessential human ability: language? We start with the development of writing, the first technology that was specifically designed for language, and trace its history through the invention of printing, and into the digital age. With the advent of computers the relevance of language for technology has broadened significantly. We review technologies such as automatic speech recognition, speech synthesis and automatic translation, and discuss their implications for present and future human-machine interaction. Prerequisite: LING 100 or consent of instructor.
This course satisfies the General Education Criteria for:
Social Beh Sci - Beh Sci
Cultural Studies - Western

LING 290 Individual Study credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/290/)
Individual readings and research reports on special topics dealing with the theoretical or applied aspects of the linguistic sciences. May be repeated to a maximum of 8 hours. Prerequisite: Written consent of instructor.

LING 291 Linguistics Laboratory Research Experience credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/LING/291/)
Supervised participation in laboratory or other research, usually as an assistant to a senior researcher. May be repeated up to a maximum of 9 hours. Prerequisite: Consent of instructor.

LING 300 Anat & Physiol Spch Mechanism credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/300/)
Same as SHS 300. See SHS 300.

LING 301 Elements of Syntax credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LING/301/)
Introduction to concepts and techniques essential for syntactic analysis and description, with special attention to testing analyses and justifying them. Prerequisite: LING 100 or consent of instructor.
This course satisfies the General Education Criteria for:
Advanced Composition

LING 302 Elements of Phonology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LING/302/)
Introduces elements of phonological theory and data analysis. Emphasis is placed on both Structuralist and Generative theories, introducing students to the principles of phonological contrast, allophony, neutralization, and markedness. Formal phonological models are considered, including both distinctive feature theory and prosodic theory. Equal emphasis is placed on linguistic data analysis. Prerequisite: LING 100 or consent of instructor.

LING 303 General Speech Science credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/303/)
Same as SHS 301. See SHS 301.

LING 304 Elements of Morphology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LING/304/)
An introduction to the concepts and methods of morphology, the linguistic study of word formation. We examine the smallest units of word structure--how they are arranged and organized, and how they interact with sentence structures (syntax) and sound patterns (phonology). Students will consider data from many different languages, and investigate how those languages are similar and different in terms of how they form their words. Prerequisite: LING 100.

LING 307 Elmnts Semantics & Pragmatics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LING/307/)
Introduction to the theory of meaning for natural language, including techniques for the description of lexical meaning, compositional determination of phrase and sentence meaning, and pragmatic effects on interpretation in context. Same as PHIL 307. Prerequisite: LING 100 or consent of instructor.

LING 321 American Sign Language III credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/321/)
Same as SHS 321. See SHS 321.

LING 357 Intro to Conversation Analysis credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LING/357/)
Analysis of everyday conversation and talk in institutional settings, including basic organizational features of talk such as turn-taking, sequences of actions, openings and closings, and repair; ways that participants use talk to perform social actions such as complimenting, inviting, arguing, blaming, and apologizing; and ways that talk is used in professional settings such as 911 emergency calls, courtroom interactions, and doctor-patient interviews to perform the work of these social institutions. Same as CMN 357.

LING 391 Honors Individual Study credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/391/)
Study and research for honors thesis; open only to seniors in the linguistics major who are eligible for departmental distinction. May be repeated to a maximum of 8 hours. Prerequisite: Written consent of instructor and linguistics course average of 3.4.

LING 400 Intro to Linguistic Structure credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/400/)
Introduction to the theory and methodology of the science of linguistics with special reference to phonology, morphology, syntax and semantics. Not intended for undergraduate majors in linguistics. 3 undergraduate hours. 4 graduate hours.

LING 401 Intro to General Phonetics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/401/)
Introduction to the main branches of general phonetics and phonological theory; emphasis on analysis of non-Western languages and research techniques. 3 undergraduate hours. 4 graduate hours.

LING 402 Tools & Tech Spch & Lang Proc credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/402/)
Introduction to aspects of the tools and methods of studies in speech and natural language processing (NLP), with a focus on programming for NLP and speech applications, statistical methods for data analysis, and tools for displaying and manipulating speech data. 3 undergraduate hours. 4 graduate hours.

LING 403 Introduction to Field Methods credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/403/)
Hands-on (learn-by-doing) practical course in elicitation of linguistic data, and theoretical analysis of that data, from an unfamiliar language. Students will elicit, record, and transcribe data collected in group interviews. The class as a whole will work on a language archive: (i) recordings collected throughout the semester and their transcriptions, (ii) a dictionary with vocabulary translated into English, (iii) the final projects. This course provides advanced undergraduate students with the opportunity to integrate their previous training with this practical experience. Class focus will depend on the experience students have with phonology, phonetics, morphology, syntax, and semantics. 3 undergraduate hours. 4 graduate hours. May be repeated in separate semesters for up to 6 undergraduate hours or 8 graduate hours, if topics vary or if a new language is in the focus of investigation. Prerequisite: LING 301 and LING 302 or LING 401.

LING 404 Tutorials in Non-Western Lang credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/LING/404/)
Advanced or intensive language instruction in a selected non-Western language; excludes instruction in East or Southeast Asian languages. 1 to 5 undergraduate hours. 2 to 4 graduate hours. May be repeated with approval. Prerequisite: Consent of instructor.

LING 406 Introduction to Computational Linguistics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/406/)
Introduces the field of natural language processing and computational linguistics. Topics include finite-state methods, parsing, probabilistic methods, machine learning in NLP, computational semantics and applications of NLP technology. The course combines linguistic theory with computational modeling. 3 undergraduate hours. 4 graduate hours. Prerequisite: LING 100 or LING 400, and CS 225 or equivalent, and STAT 200 or STAT 212 or STAT 400 or CS 361 or equivalent.

LING 407 Logic and Linguistic Analysis credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/407/)
Introduction to the theory of logic as applied in linguistic analysis. Same as PHIL 407. 3 undergraduate hours. 4 graduate hours. Prerequisite: For undergraduate students: LING 307 or equivalent background with consent of instructor.

LING 410 Historical Linguistics credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/410/)
Introduction to historical and comparative linguistics with particular attention to theoretical issues. 3 undergraduate hours. 2 or 4 graduate hours. Prerequisite: LING 401 (or concurrent registration), and either LING 301 and LING 302, or LING 400.

LING 412 Lang in African Culture & Soc credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/412/)
Introductory survey of the role of language in African cultures and societies, with particular emphasis on the study of indigenous African linguae francae in multilingual settings, their spread, and use as media of communication in various domains, and as tools of development. Same as AFST 412. 3 undergraduate hours. 4 graduate hours.

LING 413 Corpus Linguistics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/413/)
An introduction to computational research methods applied to large natural language corpora (i.e. text analytics) which can uncover complexities in naturally occurring data and explore issues related to frequency of usage. Students will be introduced to corpus concepts, methods, and examples; computational skills needed to build, annotate, and search a corpus for patterns and phenomena of interest,; and get hands-on corpus analysis experience. Topics may include syntax (i.e., patterns and alternations), lexical semantics, language variation, pragmatics / language use, discourse analysis, psycholinguistics, as well as descriptive and exploratory text analytics models. 3 or 4 undergraduate hours. 4 graduate hours. Prerequisite: LING 100 or LING 400, and CS 225 or equivalent, and STAT 200 or STAT 212 or STAT 400 or CS 361 or equivalent.

LING 415 Machine Translation: History and Applications credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/415/)
Same as TRST 415. See TRST 415.

LING 416 Structure of French Language credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LING/416/)
Same as FR 416. See FR 416.

LING 418 Language & Minorities in Europe credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/418/)
Same as EURO 418, FR 418, GER 418, ITAL 418, PS 418, SLAV 418, and SPAN 418. See FR 418.

LING 423 Language Acquisition credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/423/)
Same as MACS 423 and PSYC 423. See PSYC 423.

LING 425 Intro to Psycholinguistics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/425/)
Introductory survey of psychological and linguistic approaches to the study of communication. Same as MACS 425. 3 undergraduate hours. 4 graduate hours. Credit is not given for both LING 425 and PSYC 425. Prerequisite: An introductory course in linguistics or psychology.

LING 426 Child & Adult Lang Acquisition credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/426/)
The study of first and second language acquisition by children and adults. Course topics will include the following: first language acquisition, including signed and spoken languages; bilingualism and second language acquisition; the comparison of monolingual and bilingual language development. 3 undergraduate hours. 4 graduate hours. Prerequisite: An introductory course in linguistics or psychology.

LING 427 Language and the Brain credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/427/)
Same as PSYC 427 and SHS 427. See SHS 427.

LING 430 Intro to East Asian Ling credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/430/)
Introduction to the genetic relation of the Far Eastern languages with other languages; concentration on synchronic analysis of phonology and syntax. Same as EALC 430. 3 undergraduate hours. 4 graduate hours. Prerequisite: LING 400; consent of instructor.

LING 438 Philosophy of Language credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/438/)
Same as PHIL 438. See PHIL 438.

LING 446 Fundamentals for Speech Signal Processing and Analysis credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/446/)
Provides an elementary introduction to concepts, principles and algorithms of digital signal processing. It focuses on computational implementations of contemporary methodologies in digital signal processing rather than underlying mathematical theories, and therefore requires students to have basic Python or MATLAB programming skills as prerequisite. This course comprises lectures and laboratory sessions, during which students are expected to produce their own computer code aided by ready-made programs to solve practical problems. 3 undergraduate hours. 4 graduate hours. Prerequisite: LING 402 or equivalent.

LING 450 Sociolinguistics I credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/450/)
Introduction to the fundamental concepts, philosophy, and research methods of the study of language in its social contexts. Special attention to language spread, and language variation; language attitudes; language diversity; code-switching; language standardization; and language identity and loyalty. 3 undergraduate hours. 4 graduate hours.

LING 462 Introduction to Romance Linguistics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/462/)
Same as FR 462, ITAL 435, PORT 435, RMLG 435, and SPAN 435. See SPAN 435.

LING 469 Structure of Semitic Languages credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/469/)
In-depth survey of comparative issues in Semitic Linguistics, with particular emphasis on morphology, syntax, phonology and language change from the perspectives of current linguistic theories. Same as AFST 469. 3 undergraduate hours. 4 graduate hours. Prerequisite: LING 100, LING 400, or consent of instructor.

LING 480 Intro to Slavic Linguistics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/480/)
Same as SLAV 480. See SLAV 480.

LING 489 Theoretical Foundations of SLA credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/489/)
General introduction to second language acquisition (SLA) theory. Examines nativist, interactionist and cognitive approaches to SLA and explores the role of learner characteristics. Same as FR 481, GER 489, ITAL 489, PORT 489, and SPAN 489. 3 undergraduate hours. 4 graduate hours. Prerequisite: An introductory course in linguistics or consent of instructor.

LING 490 Special Topics in Linguistics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/490/)
Course provides an opportunity to focus on various subfields of the linguistic sciences, depending on the interests of the faculty and student. 3 undergraduate hours. 4 graduate hours. May be repeated as topic varies to a maximum of 9 undergraduate hours or 12 graduate hours. Students may register for up to two sections in the same term. Prerequisite: LING 100, LING 400, or consent of instructor.

LING 501 Syntax I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/501/)
Introduction to the fundamental concepts, philosophy, and methods of syntactic theory. Prerequisite: LING 400 or equivalent.

LING 502 Phonology I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/502/)
Examination of language-specific phonological problems with a view toward formulating a language-independent theory of phonology. Prerequisite: LING 401 or consent of instructor.

LING 504 Practicum credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/LING/504/)
Supervised practical experience in extended linguistic research on individual topics of the student's choice. Concurrent enrollment in at least 2 hours of LING 590 is required. May be repeated to a maximum of 4 hours. Prerequisite: LING 501 and LING 502.

LING 506 Topics in Computational Ling credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/506/)
Provides an introduction to practical problems in computational linguistics in a laboratory setting. At the beginning of the semester, a substantial project will be assigned to the class, and the class will work as a team towards implementing a solution, and evaluating the final product against a test corpus, which will also be developed during the class. Topical readings will also be assigned and will be discussed. Approved for letter or S/U grading. May be repeated in more than one section per term to a maximum of 8 hours, if topics vary; may be repeated in subsequent terms to a maximum of 12 hours, if topics vary. Prerequisite: LING 406, and an introductory level Computer Science programming course, or consent of instructor.

LING 507 Formal Semantics I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/507/)
Introduction to formal semantic theory for natural language, with attention to quantification, anaphora, tense, intensionality, and related topics. Same as PHIL 507. Prerequisite: LING 407 or consent of the instructor.

LING 512 Language and Culture credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/512/)
Same as ANTH 512. See ANTH 512.

LING 514 Design and Methodology in Linguistic Research credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/514/)
Introduction to a quantitatively oriented approach to research design and methodology in language study, with emphasis on the construction of appropriate research designs for different subfields of linguistics (with a particular focus on designs for research in syntax/semantics and language acquisition / bilingualism). A variety of research methods are covered in detail, including both offline and online methodologies. Term paper required. 4 graduate hours. No professional credit. Prerequisite: LING 400 or equivalent; LING 425, or EIL 489 or consent of instructor.

LING 516 Field Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/516/)
Analysis of the phonetic, phonological, morphological, and syntactic structure of an undescribed language through the elicitation of data from a native language consultant. The class develops a linguistic sketch of the language, including a computerized lexicon. Prerequisite: LING 501 and LING 502.

LING 518 Language in Culture II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/518/)
Same as ANTH 518. See ANTH 518.

LING 520 Acoustic Phonetics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/520/)
Explores advanced issues in acoustic theory and digital signal processing in the context of linguistic phonetics and phonological research. Emphasis is placed on the spectral properties of speech sounds and their instrumental documentation. A significant portion of the course will utilize the phonetics laboratory. Prerequisite: LING 401 and LING 502.

LING 522 Articulatory Phonetics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/522/)
Explores advanced issues in sound production in the context of linguistic phonetics and phonological research. Three main areas of focus include an overview of vocal tract physiology and anatomy, laboratory/instrumental methodology, and linguistic patterns such as assimilations and coarticulations. Prerequisite: LING 401 or equivalent.

LING 524 Dev Psycholinguistics credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/524/)
Same as MDIA 524 and PSYC 524. See PSYC 524.

LING 525 Psycholinguistics credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/525/)
Same as MDIA 525 and PSYC 525. See PSYC 525.

LING 529 Second Lang Acq & Bilingualism credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/529/)
Research seminar: students will design and execute a research project on second language acquisition and/or bilingualism. Same as PSYC 529. Prerequisite: Consent of instructor.

LING 541 Syntax II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/541/)
Issues in the theory and practice of syntactic description, with special attention to implications for universal grammar. Prerequisite: LING 501 or consent of instructor.

LING 542 Phonology II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/542/)
Continuation of LING 502. Prerequisite: LING 502.

LING 547 Formal Semantics II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/547/)
A continuation of LING 507 covering advanced topics in formal semantic theory. Same as PHIL 547. Prerequisite: LING 507 or consent of instructor.

LING 550 Sociolinguistics II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/550/)
Focus on a critical examination of issues in the theory and practice of sociolinguistics concerning the study of language variation from a cross-linguistic perspective, language diversity, multilingualism, language ideology and power. Prerequisite: LING 450 or equivalent.

LING 551 Pragmatics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/551/)
Examination of the major theoretical frameworks in Gricean and post-Gricean pragmatics with an emphasis on theories of implicature, speech acts and im/politeness. Same as PHIL 551. Prerequisite: LING 501 and LING 507, or consent of instructor.

LING 559 Sem Romance Ling credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/559/)
Same as FR 559, ITAL 559, PORT 559, RMLG 559, and SPAN 557. See SPAN 557.

LING 560 Seminar in Bilingualism credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/560/)
Research-oriented seminar on theoretical and applied aspects of bilingualism; critical evaluation of linguistic, neurolinguistic, sociolinguistic, and psycholinguistic approaches to bilingualism; and concentration on selected case studies from Western and non-Western societies, especially Asia and Africa. May be repeated if topics vary. Prerequisite: LING 450 or an introductory course in linguistics.

LING 570 Seminar in Cognitive Science credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/570/)
Same as PSYC 514, ANTH 514, CS 549, EPSY 551, and PHIL 514. See PSYC 514.

LING 575 Exper Phon I Spch Physiol credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/575/)
Same as SHS 500. See SHS 500.

LING 576 Exper Phon II Spch Acous Perc credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/576/)
Same as SHS 501. See SHS 501.

LING 582 Topics in Phonological Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/582/)
Recent developments in the theory of phonology. May be repeated if topics vary. Prerequisite: LING 542 or consent of instructor.

LING 584 Theories in Second Language Acquisition credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/584/)
Same as CI 584, EALC 584, EPSY 563, FR 584, GER 584, ITAL 584, PORT 584, and SPAN 584. See SPAN 584.

LING 587 Topics in Sociolinguistics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/587/)
Discussion of current topics in sociolinguistics that have relevance to contemporary societies. Approved for both letter and S/U grading. May be repeated in more than one section per term to a maximum of 8 hours. May be repeated in subsequent terms to a maximum of 12 hours. Prerequisite: LING 450.

LING 588 Sem Second Lang Learn credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/588/)
Same as EALC 588, FR 588, GER 588, ITAL 588, PORT 588, and SPAN 588. See SPAN 588.

LING 590 Special Topics in Linguistics credit: 2 to 8 Hours. (https://courses.illinois.edu/schedule/terms/LING/590/)
Individual studies in the areas of linguistics not covered by regular course offerings. May be repeated.

LING 591 Seminar in Linguistic Analysis credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/LING/591/)
Discussion of advanced topics of current interest. May be repeated with approval. Prerequisite: LING 501 and LING 502.

LING 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/LING/599/)
Approved for S/U grading only. May be repeated.

SLCL - LITERATURES CULTURES LINGUISTICS

SLCL Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/SLCL/)

Courses

SLCL 200 Topics in Global Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SLCL/200/)
Explores the regional and global dimensions of a cultural theme or practice; topics vary and could include Global Languages and Cultures, Global Memory Studies, Global Cinema, Languages and Cultures of the Mediterranean, and Islands and Oceans. See Class Schedule for current topics. May be repeated in separate terms up to 9 hours if topics vary.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

SLCL 300 Languages and Literatures Career Preparation credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/SLCL/300/)
Same as SLAV 300. See SLAV 300.

SLCL 520 SLCL Practice credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/SLCL/520/)
Internship course for international graduate students in the School of Literatures, Cultures and Linguistics who are completing curricular practical training (CPT), either full-time or part-time, that is related to their major field of study and forms an important part of their program of study. 0 graduate hours. No professional credit. Approved for S/U grading only. May be repeated in separate terms.

MSE - MATERIALS SCIENCE & ENGINEERING

MSE Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/MSE/)

Courses

MSE 101 Materials in Today's World credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MSE/101/)
Introduction to the field of materials science. Examination and demonstration of materials and their properties in the context of their use in everyday objects. Survey of the role materials have played and will continue to play in shaping society. Intended for non-engineering majors. Technical elective credit is not given to College of Engineering majors.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences

MSE 182 Introduction to MatSE credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MSE/182/)
Overview of MatSE as a basis for understanding how structure, property, and processing relationships are developed and used for different types of materials. Case studies of advances in new materials and processes illustrating the role of materials in modern society. Laboratory-discussion demonstrations and experiments. Design-team analysis or synthesis of objects that use materials creatively.

MSE 183 Freshman Materials Laboratory credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MSE/183/)
Team-based laboratory developing concepts introduced in MSE 182. Practical descriptions of materials concepts, literature research, experimental design, concept validation, teamwork, and presentation of results. Prerequisite: MSE 182.

MSE 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/MSE/199/)
May be repeated to a maximum of 5 hours. May be repeated in the same term.

MSE 201 Phases and Phase Relations credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MSE/201/)
Understanding microstructure. Quantitative examination of phases (crystalline and non-crystalline structures) and the relationships between phases (phase diagrams). Commercial practices for producing desired microscopic phase configurations and macroscopic shapes (processing). Credit is not given for both MSE 201 and MSE 280. Prerequisite: MSE 182; credit or concurrent enrollment in CHEM 104, MATH 231 and PHYS 211.

MSE 206 Mechanics for MatSE credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MSE/206/)
Statics and mechanics of materials concepts pertinent to the fields of materials science and engineering: force resultants; stresses and strains produced in elastic bodies; microscopic effects of different loading states (tension, compression, torsion, and bending) on deformable bodies; beam stresses and deflections; three-dimensional stresses and strains. Credit is not given for both MSE 206 and TAM 251. Prerequisite: MATH 241 and PHYS 211. Credit or concurrent enrollment in CS 101 or CS 124 or CS 125; and MATH 225 or 257 or MATH 415; and MSE 201.

MSE 280 Engineering Materials credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MSE/280/)
Materials science and engineering of ceramics, electronic materials, metals and polymers. Bonding; crystallography; imperfections; processing and properties of semiconductors, polymers, metals, ceramics and composites; phase diagrams. Case studies. Credit is not given for both MSE 280 and any of CEE 300, ME 330, MSE 201. Prerequisite: CHEM 102 and PHYS 211.

MSE 304 Electronic Properties of Matls credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MSE/304/)
Electronic structure and bonding of materials, electrical conduction in metals and semiconductors, and dielectric and magnetic properties of solids. Credit is not given for both MSE 304 and PHYS 460. Prerequisite: PHYS 214.

MSE 307 Materials Laboratory I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MSE/307/)
Experiments using optical microscopy and various thermal and thermodynamic measuring techniques including differential scanning calorimetry. Experience with laboratory test instruments and technical communication, including reports and oral presentations. MSE 307 and MSE 308 are approved for General Education credit only as a sequence. Both courses must be completed to receive Advanced Composition credit. Prerequisite: Credit or concurrent registration in MSE 201 and MSE 401.
This course satisfies the General Education Criteria for:
Advanced Composition

MSE 308 Materials Laboratory II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MSE/308/)
Experiments characterizing mechanical, transport, and electronic properties of materials and the use of optical microscopy, quartz crystal microbalance, and various mechanical testing equipment. Technical communication is refined through the use of lab reports and oral presentations. MSE 307 and MSE 308 are approved for General Education credit only as a sequence. Both courses must be completed to receive Advanced Composition credit. Prerequisite: Credit or concurrent registration in MSE 307 and MSE 406.
This course satisfies the General Education Criteria for:
Advanced Composition

MSE 395 Materials Design credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MSE/395/)
Design of various engineering devices, objects, or systems. Team-based and faculty-guided projects directed toward the development of materials-based solutions to problems originating from student, faculty, and industrial suggestions. Solutions are based on the knowledge, skills, and design experience acquired in earlier course work and incorporate engineering standards and realistic constraints such as economic, environmental, sustainability, manufacturability, ethical, health and safety, social, and political concerns. Prerequisite: Credit or concurrent registration in MSE 404.

MSE 396 Introduction to Research credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/MSE/396/)
Fundamental tenets of research including an introduction to laboratory safety, constructing a hypothesis, and the design of experiments to test the hypothesis. Basics of mathematical modeling and statistical analysis of data, including the analysis of research data. Emphasis on exposure to the basic procedures comprising engineering communication and the importance of verbal and written communication. Approved for Letter and S/U grading. May be repeated in separate terms.

MSE 397 Independent Study credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MSE/397/)
Individual study of any topic in materials science and engineering selected by the student and conducted under the supervision of a member of the faculty. May be repeated to a maximum of 4 hours. Prerequisite: Consent of instructor.

MSE 398 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MSE/398/)
Subject offerings of new and developing areas of knowledge in materials science and engineering intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. May be repeated in the same or separate terms if topics vary.

MSE 401 Thermodynamics of Materials credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MSE/401/)
Basic thermodynamic principles including energy, entropy, and free energy; macroscopic properties of hard and soft materials systems, such as equilibrium states, phases, and phase transitions. Application of phase diagrams. Statistical interpretation of thermodynamics on the atomistic level. 3 undergraduate hours. 3 graduate hours. Credit is not given for both MSE 401 and CHEM 444 or PHYS 427. Prerequisite: MSE 201 or MSE 280; credit or concurrent registration in MATH 285.

MSE 402 Kinetic Processes in Materials credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MSE/402/)
Kinetics of chemical reactions; rate equations, reaction mechanisms; transport processes; diffusion equations, atomic and molecular diffusion; phase transformations; nucleation, crystallization, displacive, spinodal decomposition; surface and interface phenomena; sintering, grain growth, recovery, and recystallization. 3 undergraduate hours. 3 graduate hours. Prerequisite: MSE 201 and MSE 401.

MSE 403 Synthesis of Materials credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MSE/403/)
Fundamentals of the synthesis of materials. Principles of synthesis; processes, approaches, synthetic methodology and probes; methodologies in materials synthesis; polymerization, sol-gel processes, liquid and vapor phase synthesis, materials coupling reactions, and precursor-derived, radiation-induced and asymmetric synthesis. 3 undergraduate hours. 3 graduate hours. Prerequisite: MSE 201; credit or concurrent registration in MSE 401.

MSE 404 Laboratory Studies in Materials Science and Engineering credit: 1.5 Hours. (https://courses.illinois.edu/schedule/terms/MSE/404/)
Experiments include direct hands-on investigations or are performed through computational approaches. Laboratory experiences include both fundamental studies as well as investigations on more applied topics. 1.5 undergraduate hours. 1.5 graduate hours. May be repeated if topics vary. Prerequisite: MSE 307 and MSE 308 or permission of instructor. Senior standing.

MSE 405 Microstructure Determination credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MSE/405/)
Fundamentals and applications of various forms of microscopy and diffraction for characterization of physical microstructure of materials and of various forms of spectroscopy for characterization of chemical microstructure. 3 undergraduate hours. 3 graduate hours. Prerequisite: MSE 201, MATH 285 and PHYS 214.

MSE 406 Thermal-Mech Behavior of Matls credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MSE/406/)
Fundamentals of elastic, viscoelastic and plastic deformation of materials, elementary theory of statics and dynamics of dislocations; strengthening mechanisms; behavior of composites; fracture and fatigue behavior; fundamentals of thermal behavior: heat capacity, thermal expansion and conductivity; effects of thermal stress. 3 undergraduate hours. 3 graduate hours. Credit is not given for both MSE 406 and either ME 430 or TAM 424. Prerequisite: MSE 206; credit or concurrent registration in MSE 201 and 401.

MSE 420 Ceramic Materials & Properties credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MSE/420/)
Ceramic material fundamentals, emphasizing structure-property relations. Development, use, and control of the properties of a wide variety of ceramic materials from a physico-chemical point of view. 3 undergraduate hours. 3 graduate hours. Prerequisite: MSE 401. Credit or concurrent registration in MSE 405.

MSE 421 Ceramic Processing credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MSE/421/)
Microstructure development and processing of ceramic materials, with an emphasis on structure-property-processing relationships. Processing methodologies and their effects on microstructural development. Illustration and examination of several ceramic components within this context. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: MSE 420.

MSE 422 Electrical Ceramics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MSE/422/)
Electrical ceramics, from insulators to conductors, and magnetic and optical materials; the role of the processing cycle and microstructure development on the design and performance of electrical components; capacitors, resistors, and inductors; structure-property relations for pyro-, piezo-, and ferroelectric materials; perovskite and spinel based structures; varistors, thermistors, transducers, actuators, memory elements, multilayered components, and their applications. Design project. 3 undergraduate hours. 3 graduate hours. Prerequisite: MSE 420.

MSE 440 Mechanical Behavior of Metals credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MSE/440/)
Mechanical behavior of solids: crystal plasticity, dislocations, point defects and grain boundaries, creep and fatigue behavior, and fracture. 3 undergraduate hours. 3 graduate hours. Prerequisite: MSE 406.

MSE 441 Metals Processing credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MSE/441/)
Melt, mechanical, thermal, powder, and surface processing of metals. Extraction of metals, joining of metals, metal composites, and metal recycling. Relationships between the processing of metals, the microstructures that are produced, and the behavior of metal components. 3 undergraduate hours. 3 graduate hours. Prerequisite: MSE 406.

MSE 443 Design of Engineering Alloys credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MSE/443/)
Application of science and engineering principles to the design, selection, and performance of engineering alloys. Alloy classes, design, effect of alloying elements, relation to processing variables, and structure-property relationships; design project. 3 undergraduate hours. 3 graduate hours. Prerequisite: MSE 401 and MSE 402.

MSE 445 Corrosion of Metals credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MSE/445/)
Electrochemistry, thermodynamics, and kinetics of corrosion; behavior of ferrous and nonferrous metals; corrosion rates; corrosion control; cathodic and anodic protection; high-temperature corrosion; corrosion testing; electrolytic machining methods. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: MSE 401.

MSE 450 Polymer Science & Engineering credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MSE/450/)
Polymer solution properties, conformation, and molecular weight characterization. Rheological and viscoelastic behavior: relaxations and transitions, rubber elasticity. Crystallinity, morphology, and deformation of crystalline polymers. Blends and composites. Methods of fabrication. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: MSE 401.

MSE 453 Plastics Engineering credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MSE/453/)
Engineering characteristics of plastics; viscoelasticity, viscosity, yield, and fracture; reinforced polymers; processing; environmental considerations; applicability of technical data sheets; design (project); current advances. 3 undergraduate hours. 3 graduate hours. Prerequisite: MSE 450.

MSE 455 Macromolecular Solids credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MSE/455/)
Mechanical behavior of amorphous and semi-crystalline polymers; overview of polymer structure and characterization; polymer morphology; orientation effects, rubber elasticity, polymer linear viscoelasticity using Boltzmann superposition and mechanical models; measurement of viscoelastic properties; relaxation and transitions; polymeric yield phenomena and plastic flow; deformation mechanisms; fracture and craze formation; impact and fatigue. 3 undergraduate hours. 3 graduate hours. Prerequisite: MSE 206 or TAM 251.

MSE 456 Mechanics of Composites credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MSE/456/)
Behavior of composite materials and their use in engineering structures: behavior and properties of the constituent fibers and matrices, micromechanical predictions of composite properties, anisotropic elasticity, behavior of composite laminae, and classical lamination theory; fracture mechanisms, failure theories; behavior of composite plates and beams. Same as AE 428 and TAM 428. 3 undergraduate hours. 3 graduate hours. Prerequisite: AE 321, CEE 300, ME 330, or MSE 206.

MSE 457 Polymer Chemistry credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MSE/457/)
Methods used to make polymers including reaction mechanisms, kinetics, and analytical techniques. Emphasis on understanding how macromolecule structure, composition, and properties are controlled through a variety of synthetic approaches. Same as CHEM 480. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CHEM 232.

MSE 458 Polymer Physics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MSE/458/)
Physics of polymer systems. Equilibrium conformation, structure, properties and phase transitions of polymer solutions, dense melts, liquid crystals, mixtures, block copolymers, surfaces and interfaces, gels and rubbers, biopolymers, and electronic polymers. Same as CHEM 482. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: MSE 401.

MSE 460 Electronic Materials I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MSE/460/)
Materials science, engineering, and processing of semiconductors. Semiconductor structure and chemistry relationships to electronic and optical properties. Control of processing to achieve desired properties; design and production of novel materials. 3 undergraduate hours. 3 graduate hours. Prerequisite: ECE 340; MSE 304 or PHYS 460.

MSE 461 Electronic Materials II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MSE/461/)
Materials science, engineering, and processing of microlithographic materials, conductors, and dielectrics for electronic applications. Performance related to materials properties and processing. Processing commonly used in microelectronic circuit manufacture for metallization, dielectric formation, and lithography. 3 undergraduate hours. 3 graduate hours. Prerequisite: ECE 340.

MSE 466 Materials in Electrochem Syst credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MSE/466/)
Materials issues in electrochemical systems including fundamental thermodynamics, kinetics and electrode processes in electrochemical systems and materials specific issues in the materials design, materials in energy storage and conversion systems, and electrochemical corrosion. Emphasis placed on issues of materials selection, microstructure, systems design, materials limitations, and data analysis. 3 undergraduate hours. 3 graduate hours. Credit is not given for both MSE 466 and CHEM 524.

MSE 470 Design and Use of Biomaterials credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MSE/470/)
Characterization and use of biomaterials in medical applications. Concepts of biocompatibility in terms of structure and properties of materials and interactions between materials and proteins, cells, and tissue. Issues related to the design of biomaterials. Design of biomaterials to meet specific medical needs. 3 undergraduate hours. 3 graduate hours. Prerequisite: Credit or concurrent registration in both MCB 252 and either CHEM 232 or MSE 403.

MSE 473 Biomolecular Materials Science credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MSE/473/)
Fundamental and unifying principles in biomolecular materials science. Nucleic acids, proteins, lipids, and sugars. Specific and non-specific interactions which govern biomolecular behavior in a wide range of contexts (e.g., self-assembly, cell adhesion). Present knowledge and empirical evidence integrated with discussions of experimental characterization and manipulation techniques in biotechnology. Application of course content and expository research into current literature via a case study term project. 3 undergraduate hours. 3 graduate hours. Prerequisite: MCB 150; MSE 403 or CHEM 440 or CHEM 472.

MSE 474 Biomaterials and Nanomedicine credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MSE/474/)
Design and synthesis of polymeric biomaterials and nanobiomaterials for their applications in drug and gene delivery. Part (1) fundamental biopolymer synthesis: functional group protection and de-protection; bioconjugation; protein pegylation and design and synthesis of natural and synthetic non-degradable and degradable polymers, hydrogels, bio-inspired materials, and stimuli responsive biomaterials. Part (2) preparation of nanomedicines for drug and gene delivery: nanofabritation of micelles, nanoparticles, protein conjugates, drug conjugates, nanoencapsulates, and polymeric vesicles; in-vitro and in-vivo small-molecule, gene, and protein delivery. Impact of the chemical structures of biopolymers on the stability, biocompatibility, toxicity, and in-vitro and in-vivo efficacy; clinical translation of the resulting nanomedicines in drug delivery. 3 undergraduate hours. 3 graduate hours. Prerequisite: CHEM 236 or MSE 457; MCB 450.

MSE 480 Surfaces and Colloids credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MSE/480/)
Chemistry and physics of surfaces and interfaces, with emphasis on behavior in liquid media. Surface composition; surface and interfacial forces; colloidal stability and flocculation; amphiphilic molecules. Same as CHEM 488. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: MSE 401.

MSE 481 Electron Microscopy credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MSE/481/)
Theory and application of transmission electron microscopy and diffraction with emphasis on thin crystals; electron optics, interference phenomena, interpretation of images and diffraction patterns, specimen preparation. 3 undergraduate hours. 4 graduate hours. Prerequisite: MSE 405.

MSE 484 Composite Materials credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MSE/484/)
Metal, ceramic, and polymer matrix composites. Interrelationships between processing, microstructure, and properties. Selecting composite materials for different engineering applications. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: MSE 201 and MSE 206.

MSE 485 Atomic Scale Simulations credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MSE/485/)
Application of Monte Carlo and Molecular Dynamics techniques in primarily classical simulations to understand and predict properties of microscopic systems in materials science, physics, biology, and chemistry. Numerical algorithms, connections between simulation results and real properties of materials (structural or thermodynamic), and statistical and systematic error estimation using real simulation programs. Simulation project comprised of scientific research, algorithm development, and presentation. Same as CSE 485 and PHYS 466. 3 undergraduate hours. 4 graduate hours. Prerequisite: MSE 401; one of C, C++, or Fortran programming experience.

MSE 487 Materials for Nanotechnology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MSE/487/)
Survey of the synthesis, processing, structure properties and technological applications of materials with nanometer dimensions. Semiconductor nanocrystals and size-dependent optical properties; metal nanostructures and plasmonics; nanowires and nanotubes; electronics and optoelectronics; nanoscale heterostructures; assembly and fabrication. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: MSE 401 and PHYS 214.

MSE 488 Optical Materials credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MSE/488/)
Optical properties of materials of current and potential technological importance and application to devices. Applicable optics fundamentals based on Maxwell's equations. Liquid crystals for displays; photopolymers for holographic data storage; electro-optic materials for high speed light modulators; electroluminescent materials for light emitting diodes. Application of optics, materials and chemistry in design of practical devices. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: MATH 285 and PHYS 214.

MSE 489 Matl Select for Sustainability credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MSE/489/)
Quantitative methods to optimize the selection of materials including traditional (minimize mass or volume, maximize performance) and sustainability (minimize energy consumption and CO2 emission during synthesis, maximize recyclability) goals. Tradeoff methods to optimize both via engineering design and materials selection for product lifetime, economic outlay and return, time dynamics and materials consumption, recycling, and disposal. Application of commercial software to optimize selections. For engineering and science majors only. 3 undergraduate hours. 4 graduate hours. Prerequisite: MSE 201.

MSE 492 Lab Safety Fundamentals credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MSE/492/)
Key aspects of laboratory setups, operating procedures, and emergency preparedness measures necessary for the experimentalist. Same as CHEM 494. 1 undergraduate hour. 1 graduate hour. Approved for S/U grading only.

MSE 497 Independent Study credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MSE/497/)
Individual study of any topic in materials science and engineering under the supervision of a member of the faculty. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated to a maximum of 4 hours. Prerequisite: Consent of instructor.

MSE 498 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MSE/498/)
Subject offerings of new and developing areas of knowledge in materials science and engineering intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated in the same or separate terms if topics vary.

MSE 499 Senior Thesis credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/MSE/499/)
Individual research in an area of materials science and engineering under the supervision of members of the staff. 1 to 5 undergraduate hours. No graduate credit. May be repeated to a maximum of 6 hours. Prerequisite: Grade point average of 3.0 and consent of instructor.

MSE 500 Statistical Thermodyn of Matls credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MSE/500/)
Atomistic concepts of statistical thermodynamics and their relationship to classical phenomenological thermodynamics. Application of the methods of statistical thermodynamics and statistical mechanics to describe the structure, phase behavior, and properties of both hard and soft materials. Prerequisite: MSE 401.

MSE 501 Kinetic Processes in Materials credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MSE/501/)
Fundamentals of rate processes in materials, both from a phenomenological and an atomistic point of view, with special emphasis on the kinetics of transformations and the transport of matter in solids. Prerequisite: MSE 500 or PHYS 560.

MSE 529 Hard Materials Seminar credit: 0 to 1 Hours. (https://courses.illinois.edu/schedule/terms/MSE/529/)
Seminar on current research in science and engineering of hard materials; presentations by visiting lecturers, staff, and students. Approved for S/U grading only. May be repeated.

MSE 559 Soft Materials Seminar credit: 0 to 1 Hours. (https://courses.illinois.edu/schedule/terms/MSE/559/)
Seminar on current research in the science and engineering of soft materials; presentations by visiting lecturers, staff, and students. Approved for S/U grading only. May be repeated.

MSE 565 Thin Film Materials credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MSE/565/)
Thin solid films bonded to relatively thick substrates such as microelectronic devices, thermal barrier coatings in gas turbine engines, mems devices, flexible electronics, and biomedical instruments. Quantitative understanding of the consequences of mechanical stress in film-substrate structures, arising from fabrication methods or service conditions: substrate curvature, film delamination, film fracture, dislocation formation, plastic flow and stress-driven evolution of surface morphology.

MSE 580 Diffraction Physics of Matls credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MSE/580/)
Quantitative treatment of the physical basis of X-ray, electron, and neutron diffraction instrumentation and use for structural characterization. Applications in materials science and condensed matter physics including structure of condensed matter, defects, phase transitions, disorder, surfaces, and interfaces. Prerequisite: MSE 405 or PHYS 436.

MSE 581 Advanced Electron Microscopy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MSE/581/)
Theory of electron microscopy and use for materials structure characterization and microanalysis. Physics of electron microscopes; kinematic and dynamic electron diffraction theory; defect image contrast; high resolution electron microscopy; electron probe formation; STEM; inelastic scattering and microanalysis. Practical experience via laboratory demonstrations and project assignments. Prerequisite: MSE 405 and MSE 481.

MSE 582 Surface Physics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MSE/582/)
Theory and experiment describing atomic behavior on crystal surfaces; thermodynamics of surfaces; surface energy; diffraction and structure; gas-solid collisions; Brownian motion, diffusion, and evaporation; electron and ion emission, tunneling; Van der Waals forces; theory of chemical interactions; kinetics and statistics of adsorption. Prerequisite: MSE 501 or PHYS 560.

MSE 583 Dynamics of Complex Fluids credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MSE/583/)
Microscopic statistical treatment of the structure and dynamics of polymers, colloids, gels, and other soft materials. Fundamental connections between molecular architecture, intermolecular forces, collective fluid structure, and time-dependent phenomena; Brownian motion, Langevin equation theory, and viscoelasticity; diffusion in colloidal suspensions, gels, and glasses; dynamics of polymer solutions and melts. Prerequisite: MSE 401.

MSE 584 Point and Line Defects credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MSE/584/)
Formation and interactions of point and line defects in solids including metals, semiconductors, dielectrics, and ionic conductors. Theoretical treatment of thermal equilibrium and non-equilibrium conditions. Application to impurity diffusion, ion irradiation, dislocation generation and motion, ionic conductivity, and deep level electronic defects. Prerequisite: MSE 401 or MSE 501; PHYS 460 or PHYS 560.

MSE 585 Materials Engrg Practicum credit: 0 to 2 Hours. (https://courses.illinois.edu/schedule/terms/MSE/585/)
Internships or co-ops in industrial or governmental settings pre-approved by the department to foster engineering educational aspects and utilized prior MatSE course work. A paper describing the general area of the practicum, with appropriate references and, to the extent permitted by employer confidentiality, the student's contribution required. In addition to the paper, a report documenting work completed, verified by the work supervisor, to the extent permitted by confidentiality, and a questionnaire answered by the work supervisor form the basis for the grade. Approved for S/U grading only. May be repeated in separate terms to a maximum of 4 hours.

MSE 590 Research Seminars credit: 0 to 1 Hours. (https://courses.illinois.edu/schedule/terms/MSE/590/)
Discussions and lectures on current research under the direction of individual staff members. Approved for S/U grading only. May be repeated. Prerequisite: Consent of instructor.

MSE 595 Materials Colloquium credit: 0 to 1 Hours. (https://courses.illinois.edu/schedule/terms/MSE/595/)
Presentation of (i) cutting-edge materials research by visiting lectures from academia as well as national and industrial research laboratories and (ii) some of the current research conducted in the Department. Approved for S/U grading only. May be repeated.

MSE 597 Independent Study credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MSE/597/)
Individual study of any topic in materials science and engineering under the supervision of a member of the faculty. May be repeated to a maximum of 4 hours. Prerequisite: Consent of instructor.

MSE 598 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MSE/598/)
Subject offerings of new and developing areas of knowledge in materials science and engineering intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. May be repeated in the same or separate terms if topics vary.

MSE 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/MSE/599/)
Approved for S/U grading only. May be repeated.

MATH - MATHEMATICS

MATH Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/MATH/)

Courses

MATH 101 Thinking Mathematically credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MATH/101/)
Designed for students in majors that do not specifically require a mathematics course beyond the level of precalculus. Focus is on critical thinking and applications. All topics are covered from a contextual standpoint. Topics include proportional reasoning and modeling, functions, sets, consumer math, probability, and statistics. Other topics may be covered as time permits. Prerequisite: Three years of high school mathematics. Undergraduates only.

MATH 103 Theory of Arithmetic credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/103/)
Analyses of the mathematical issues and methodology underlying elementary mathematics in grades K-5. Topics include sets, arithmetic algorithms, elementary number theory, rational and irrational numbers, measurement, and probability. There is an emphasis on problem solving. Priority registration will be given to students enrolled in teacher education programs leading to certification in elementary or childhood education. Prerequisite: MATH 112 (formerly MATH 012) or equivalent.
This course satisfies the General Education Criteria for:
Quantitative Reasoning I

MATH 112 Algebra credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MATH/112/)
Rapid review of basic techniques of factoring, rational expressions, equations and inequalities; functions and graphs; exponential and logarithm functions; systems of equations; matrices and determinants; polynomials; and the binomial theorem. Prerequisite: An adequate ALEKS placement score as described at http://math.illinois.edu/ALEKS/, demonstrating knowledge of 1.5 units of high school algebra and 1 unit of high school geometry.

MATH 114 Trigonometry credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MATH/114/)
Studies degrees and radians, the trigonometric functions, identities and equations, inverse functions, oblique triangles and applications. Credit is not given for MATH 114 and either MATH 014 or MATH 115. Prerequisite: 1.5 units of high school algebra; 1 unit of high school geometry.

MATH 115 Preparation for Calculus credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MATH/115/)
Reviews trigonometric, rational, exponential, and logarithmic functions; provides a full treatment of limits, definition of derivative, and an introduction to finding area under a curve. Intended for students who need preparation for MATH 220, either because they lack the content background or because they are not prepared for the rigor of a university calculus course. Credit is not given for both MATH 115 and either MATH 014 or MATH 114. Credit is not given for MATH 115 if credit for either MATH 220 or MATH 221 has been earned. Prerequisite: An adequate ALEKS placement score as described at http://math.illinois.edu/ALEKS/, demonstrating knowledge of the topics of MATH 112.
This course satisfies the General Education Criteria for:
Quantitative Reasoning I

MATH 117 Elementary Mathematics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/117/)
Analyses of the mathematical issues and methodology underlying elementary mathematics in grades 6-8. Topics include the Real number system and field axioms, sequences and series, functions and math modeling with technology, Euclidean and non-Euclidean geometry, probability and statistics. Priority registration will be given to students enrolled in teacher education programs leading to certification in elementary education. Prerequisite: MATH 112 (formerly MATH 012) or equivalent.
This course satisfies the General Education Criteria for:
Quantitative Reasoning I

MATH 119 Ideas in Geometry credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MATH/119/)
General education course in mathematics, for students who do not have mathematics as a central part of their studies. The goal is to convey the spirit of mathematical thinking through topics chosen mainly from plane geometry. Prerequisite: Two units of high school algebra; one unit of high school geometry; or equivalent.
This course satisfies the General Education Criteria for:
Quantitative Reasoning I

MATH 124 Finite Mathematics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MATH/124/)
Introduction to finite mathematics for students in the social sciences; introduces the student to the basic ideas of logic, set theory, probability, vectors and matrices, and Markov chains. Problems are selected from social sciences and business. Prerequisite: MATH 112 (formerly MATH 012) or an adequate ALEKS score.
This course satisfies the General Education Criteria for:
Quantitative Reasoning I

MATH 125 Elementary Linear Algebra credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MATH/125/)
Basic concepts and techniques of linear algebra; includes systems of linear equations, matrices, determinants, vectors in n-space, and eigenvectors, together with selected applications, such as Markov processes, linear programming, economic models, least squares, and population growth. Credit is not given for both MATH 125 and any of MATH 225, ASRM 406, or MATH 415. Prerequisite: MATH 112 (formerly MATH 012) or an adequate ALEKS score.

MATH 181 A Mathematical World credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MATH/181/)
Introduction to selected areas of mathematical sciences through application to modeling and solution of problems involving networks, circuits, trees, linear programming, random samples, regression, probability, inference, voting systems, game theory, symmetry and tilings, geometric growth, comparison of algorithms, codes and data management. Prerequisite: Three years of high school mathematics, including two years of algebra and one year of geometry.
This course satisfies the General Education Criteria for:
Quantitative Reasoning I

MATH 198 Freshman Seminar credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MATH/198/)
Guides the student in the study of selected topics not considered in standard courses. Prerequisite: Enrollment in the mathematics honors program; consent of department.

MATH 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/MATH/199/)
Approved for both letter and S/U grading. May be repeated.

MATH 213 Basic Discrete Mathematics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MATH/213/)
Beginning course on discrete mathematics, including sets and relations, functions, basic counting techniques, recurrence relations, graphs and trees, and matrix algebra; emphasis throughout is on algorithms and their efficacy. Credit is not given for both MATH 213 and CS 173. Prerequisite: MATH 220 or MATH 221, or equivalent.
This course satisfies the General Education Criteria for:
Quantitative Reasoning II

MATH 220 Calculus credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/MATH/220/)
First course in calculus and analytic geometry; basic techniques of differentiation and integration with applications including curve sketching; antidifferentation, the Riemann integral, fundamental theorem, exponential and trigonometric functions. Credit is not given for both MATH 220 and either MATH 221 or MATH 234. Prerequisite: An adequate ALEKS placement score as described at http://math.illinois.edu/ALEKS/, demonstrating knowledge of topics of MATH 115. Students with previous calculus experience should consider MATH 221.
This course satisfies the General Education Criteria for:
Quantitative Reasoning I

MATH 221 Calculus I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/221/)
First course in calculus and analytic geometry for students with some calculus background; basic techniques of differentiation and integration with applications including curve sketching; antidifferentation, the Riemann integral, fundamental theorem, exponential and trigonometric functions. Credit is not given for both MATH 221 and either MATH 220 or MATH 234. Prerequisite: An adequate ALEKS placement score as described at http://math.illinois.edu/ALEKS/ and either one year of high school calculus or a minimum score of 2 on the AB Calculus AP exam.
This course satisfies the General Education Criteria for:
Quantitative Reasoning I

MATH 225 Introductory Matrix Theory credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MATH/225/)
Systems of linear equations, matrices and inverses, determinants, and a glimpse at vector spaces, eigenvalues and eigenvectors. Credit is not given for both MATH 225 and any of MATH 125, ASRM 406, or MATH 415. Prerequisite: MATH 220 or MATH 221; or equivalent.

MATH 227 Linear Algebra for Data Science credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MATH/227/)
Linear algebra is the main mathematical subject underlying the basic techniques of data science. Provides a practical computer-based introduction to linear algebra, emphasizing its uses in analyzing data, such as linear regression, principal component analysis, and network analysis. Students will also explore some of the strengths and limitations of linear methods. Students will learn how to implement linear algebra methods on a computer, making it possible to apply these techniques to large data sets. Credit is not given for both MATH 227 and any of MATH 125, MATH 225, MATH 257, MATH 415, or ASRM 406. Prerequisite: Assumes an introductory knowledge of Python, such as students acquire in STAT 107.

MATH 231 Calculus II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MATH/231/)
Second course in calculus and analytic geometry: techniques of integration, conic sections, polar coordinates, and infinite series. Prerequisite: MATH 220 or MATH 221.
This course satisfies the General Education Criteria for:
Quantitative Reasoning I

MATH 234 Calculus for Business I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/234/)
Introduction to the concept of functions and the basic ideas of the calculus. Credit is not given for both MATH 234 and either MATH 220 or MATH 221. Prerequisite: An adequate ALEKS placement score as described at http://math.illinois.edu/ALEKS/, demonstrating knowledge of the topics of MATH 112.
This course satisfies the General Education Criteria for:
Quantitative Reasoning I

MATH 241 Calculus III credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/241/)
Third course in calculus and analytic geometry including vector analysis: Euclidean space, partial differentiation, multiple integrals, line integrals and surface integrals, the integral theorems of vector calculus. Credit is not given for both MATH 241 and MATH 292. Prerequisite: MATH 231.
This course satisfies the General Education Criteria for:
Quantitative Reasoning II

MATH 249 Honors Supplement credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MATH/249/)
Supplemental credit hour for honors courses with additional material or special projects. Prerequisite: Concurrent registration in a specially designated honors section and consent of department.

MATH 257 Linear Algebra with Computational Applications credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MATH/257/)
Introductory course incorporating linear algebra concepts with computational tools, with real world applications to science, engineering and data science. Topics include linear equations, matrix operations, vector spaces, linear transformations, eigenvalues, eigenvectors, inner products and norms, orthogonality, linear regression, equilibrium, linear dynamical systems and the singular value decomposition. Credit is not given for both MATH 257 and any of MATH 125, MATH 225, MATH 227, MATH 415 or ASRM 406. Prerequisite: MATH 220 or MATH 221; CS 101 or equivalent programming experience.

MATH 284 Intro Differential Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/284/)
First order differential equations; mathematical models and numerical methods; linear systems and matrices; higher-order linear differential equations; eigenvalues and eigenvectors; linear systems of differential equations; Laplace transform methods. Credit is not given for both MATH 284 and either MATH 285 or MATH 286. Prerequisite: MATH 231 or equivalent.

MATH 285 Intro Differential Equations credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MATH/285/)
Techniques and applications of ordinary differential equations, including Fourier series and boundary value problems, and an introduction to partial differential equations. Intended for engineering majors and others who require a working knowledge of differential equations. Credit is not given for both MATH 285 and any of MATH 284, MATH 286, MATH 441. Prerequisite: MATH 241.
This course satisfies the General Education Criteria for:
Quantitative Reasoning II

MATH 286 Intro to Differential Eq Plus credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/286/)
Techniques and applications of ordinary differential equations, including Fourier series and boundary value problems, linear systems of differential equations, and an introduction to partial differential equations. Covers all the MATH 285 plus linear systems. Intended for engineering majors and other who require a working knowledge of differential equations. Credit is not given for both MATH 286 and any of MATH 284, MATH 285, MATH 441. Prerequisite: MATH 241.
This course satisfies the General Education Criteria for:
Quantitative Reasoning II

MATH 292 Vector Calculus Supplement credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MATH/292/)
Course in multivariable calculus. Topics include gradient, divergence, and curl; line and surface integrals; and the theorems of Green, Stokes, and Gauss. Intended for transfer students whose multivariable calculus course did not include the integral theorems of vector calculus. Credit is not given for both MATH 292 and MATH 241. Prerequisite: Consent of instructor.

MATH 299 Topics in Mathematics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/299/)
Topics course; see Class Schedule or department office for current topics. May be repeated in the same or subsequent semesters to a maximum of 8 hours. Prerequisite: MATH 220 or MATH 221; consent of instructor.

MATH 347 Fundamental Mathematics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MATH/347/)
Fundamental ideas used in many areas of mathematics. Topics will include: techniques of proof, mathematical induction, binomial coefficients, rational and irrational numbers, the least upper bound axiom for real numbers, and a rigorous treatment of convergence of sequences and series. This will be supplemented by the instructor from topics available in the various texts. Students will regularly write proofs emphasizing precise reasoning and clear exposition. Credit is not given for both MATH 347 and MATH 348. Prerequisite: MATH 231.
This course satisfies the General Education Criteria for:
Quantitative Reasoning II

MATH 348 Fundamental Mathematics-ACP credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/348/)
Course is identical to MATH 347 except for the additional writing component. Credit is not given for both MATH 348 and MATH 347. Prerequisite: MATH 231 and completion of the campus Composition I general education requirement.
This course satisfies the General Education Criteria for:
Advanced Composition
Quantitative Reasoning II

MATH 357 Numerical Methods I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MATH/357/)
Same as CS 357. See CS 357.

MATH 362 Probability with Engrg Applic credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MATH/362/)
Same as ECE 313. See ECE 313.

MATH 390 Individual Study credit: 0 to 3 Hours. (https://courses.illinois.edu/schedule/terms/MATH/390/)
Guided individual study of advanced topics not covered in other courses. May be repeated to a maximum of 8 hours. Approved for both letter and S/U grading. Prerequisite: Consent of instructor.

MATH 399 Math/Actuarial Internship credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/MATH/399/)
Full-time or part-time practice of math or actuarial science in an off-campus government, industrial, or research laboratory environment. Summary report required. Approved for S/U grading only. May be repeated in separate terms. Prerequisite: After obtaining an internship, Mathematics majors must request entry from the Mathematics Director of Undergraduate Studies; Actuarial Science majors must request entry from the Director of the Actuarial Science Program.
This course satisfies the General Education Criteria for:
UIUC: Ugrad Zero Credit Intern

MATH 402 Non Euclidean Geometry credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/402/)
Historical development of geometry; includes tacit assumptions made by Euclid; the discovery of non-Euclidean geometries; geometry as a mathematical structure; and an axiomatic development of plane geometry. 3 or 4 undergraduate hours. 3 or 4 graduate hours. 4 hours of credit requires approval of the instructor and department with completion of additional work of substance. Prerequisite: MATH 241; MATH 347 or MATH 348, or equivalent; or consent of instructor.

MATH 403 Euclidean Geometry credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/403/)
Selected topics from geometry, including the nine-point circle, theorems of Cera and Menelaus, regular figures, isometries in the plane, ordered and affine geometries, and the inversive plane. 3 or 4 undergraduate hours. 3 or 4 graduate hours. 4 hours of credit requires approval of the instructor and department with completion of additional work of substance. Prerequisite: MATH 241; MATH 347 or 348, or equivalent; or consent of instructor.

MATH 405 Teacher's Course credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/405/)
In-depth, advanced perspective look at selected topics covered in the secondary curriculum. Connects mathematics learned at the university level to content introduced at the secondary level. Intended for students who plan to seek a secondary certificate in mathematics teaching. 3 or 4 undergraduate hours. 3 or 4 graduate hours. 4 hours of credit requires approval of the instructor and department with completion of additional work of substance. Prerequisite: MATH 241; MATH 347 or MATH 348, or equivalent; or consent of instructor.
This course satisfies the General Education Criteria for:
Quantitative Reasoning II

MATH 406 History of Calculus credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/406/)
Examination of the historical origins and genesis of the concepts of the calculus; includes mathematical developments from the ancient Greeks to the eighteenth century. 3 or 4 undergraduate hours. 3 or 4 graduate hours. 4 hours of credit requires approval of the instructor and department with completion of additional work of substance. Prerequisite: MATH 241 or equivalent.

MATH 412 Graph Theory credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/412/)
Examines basic concepts and applications of graph theory, where graph refers to a set of vertices and edges that join some pairs of vertices; topics include subgraphs, connectivity, trees, cycles, vertex and edge coloring, planar graphs and their colorings. Draws applications from computer science, operations research, chemistry, the social sciences, and other branches of mathematics, but emphasis is placed on theoretical aspects of graphs. 3 or 4 undergraduate hours. 3 or 4 graduate hours. 4 hours of credit requires approval of the instructor and department with completion of additional work of substance. Prerequisite: MATH 347 or MATH 348 or equivalent experience or CS 374.

MATH 413 Intro to Combinatorics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/413/)
Permutations and combinations, generating functions, recurrence relations, inclusion and exclusion, Polya's theory of counting, and block designs. Same as CS 413. 3 undergraduate hours. 3 or 4 graduate hours. 4 hours of credit requires approval of the instructor and completion of additional work of substance. Prerequisite: MATH 347 or MATH 348 or equivalent experience.

MATH 414 Mathematical Logic credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/414/)
Introduction to the formalization of mathematics and the study of axiomatic systems; expressive power of logical formulas; detailed treatment of propositional logical and predicate logic; compactness theorem and Godel completeness theorem, with applications to specific mathematical theories; algorithmic aspects of logical formulas. Proofs are emphasized in this course, which can serve as an introduction to abstract mathematics and rigorous proof; some ability to do mathematical reasoning required. 3 or 4 undergraduate hours. 3 or 4 graduate hours. 4 hours of credit requires approval of the instructor and department with completion of additional work of substance. Prerequisite: MATH 347 or MATH 348 or equivalent experience.
This course satisfies the General Education Criteria for:
Quantitative Reasoning II

MATH 415 Applied Linear Algebra credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/415/)
Introductory course emphasizing techniques of linear algebra with applications to engineering; topics include matrix operations, determinants, linear equations, vector spaces, linear transformations, eigenvalues, and eigenvectors, inner products and norms, orthogonality, equilibrium, and linear dynamical systems. 3 or 4 undergraduate hours. 3 or 4 graduate hours. Credit is not given for both MATH 415 and any of MATH 125, MATH 225, ASRM 406, or MATH 416. 4 hours of credit requires approval of the instructor and department with completion of additional work of substance. Prerequisite: MATH 241 or consent of instructor.

MATH 416 Abstract Linear Algebra credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/416/)
Rigorous proof-oriented course in linear algebra. Topics include determinants, vector spaces over fields, linear transformations, inner product spaces, eigenvectors and eigenvalues, Hermitian matrices, Jordan Normal Form. 3 or 4 undergraduate hours. 3 or 4 graduate hours. Credit is not given for both MATH 416 and either ASRM 406 or MATH 415. 4 hours of credit requires approval of the instructor and department with completion of additional work of substance. Prerequisite: MATH 241 or consent of instructor; MATH 347 is recommended.

MATH 417 Intro to Abstract Algebra credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/417/)
Fundamental theorem of arithmetic, congruences. Permutations. Groups and subgroups, homomorphisms. Group actions with applications. Polynomials. Rings, subrings, and ideals. Integral domains and fields. Roots of polynomials. Maximal ideals, construction of fields. 3 or 4 undergraduate hours. 3 or 4 graduate hours. 4 hours of credit requires approval of the instructor and department with completion of additional work of substance. Prerequisite: Either MATH 416 or one of ASRM 406, MATH 415 together with one of MATH 347, MATH 348, CS 374; or consent of instructor.

MATH 418 Intro to Abstract Algebra II credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/418/)
Rings of quotients of an integral domain. Euclidean domains, principal ideal domains. Unique factorization in polynomial rings. Fields extensions, ruler and compass constructions. Finite fields with applications. Modules. Structure theorem for finitely generated modules over principal ideal domains. Application to finitely generated abelian groups and canonical forms of matrices. Introduction to error-correcting codes. 3 or 4 undergraduate hours. 3 or 4 graduate hours. 4 hours of credit requires approval of the instructor and department with completion of additional work of substance. Prerequisite: MATH 417 or consent of instructor.

MATH 423 Differential Geometry credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/423/)
Applications of the calculus to the study of the shape and curvature of curves and surfaces; introduction to vector fields, differential forms on Euclidean spaces, and the method of moving frames for low- dimensional differential geometry. 3 or 4 undergraduate hours. 3 or 4 graduate hours. 4 hours of credit requires approval of the instructor and department with completion of additional work of substance. Prerequisite: MATH 241 or equivalent.

MATH 424 Honors Real Analysis credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MATH/424/)
A rigorous treatment of basic real analysis via metric spaces recommended for those who intend to pursue programs heavily dependent upon graduate level Mathematics. Metric space topics include continuity, compactness, completeness, connectedness and uniform convergence. Analysis topics include the theory of differentiation, Riemann-Darboux integration, sequences and series of functions, and interchange of limiting operations. As part of the honors sequence, this course will be rigorous and abstract. 3 undergraduate hours. No graduate credit. Credit is not given for both MATH 424 and either MATH 444 or MATH 447. Approved for honors grading. Prerequisite: An honors section of MATH 347 or an honors section of MATH 416, and consent of the department.

MATH 425 Honors Advanced Analysis credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MATH/425/)
A theoretical treatment of differential and integral calculus in higher dimensions. Topics include inverse and implicit function theorems, submanifolds, the theorems of Green, Gauss and Stokes, differential forms, and applications. As part of the honors sequence, this course will be rigorous and abstract. 3 undergraduate hours. No graduate credit. Approved for honors grading. Prerequisite: MATH 424 and either MATH 415 or MATH 416, and consent of the department.

MATH 427 Honors Abstract Algebra credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MATH/427/)
Group theory, counting formulae, factorization, modules with applications to Abelian groups and linear operators. As part of the honors sequence, this course will be rigorous and abstract. 3 undergraduate hours. No graduate credit. Approved for honors grading. Credit is not given for both MATH 427 and MATH 417. Prerequisite: Consent of the department is required. Prerequisite courses are either an honors section of MATH 416, or MATH 415 together with an honors section of MATH 347.

MATH 428 Honors Topics in Mathematics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MATH/428/)
A capstone course in the Mathematics Honors Sequences. Topics will vary. As part of the honors sequence, this course will be rigorous and abstract. 3 undergraduate hours. No graduate credit. May be repeated in the same or separate terms to a maximum of 12 hours. Prerequisite: Consent of the department.

MATH 432 Set Theory and Topology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/432/)
Informal set theory, cardinal and ordinal numbers, and the axiom of choice; topology of metric spaces and introduction to general topological spaces. 3 or 4 undergraduate hours. 3 or 4 graduate hours. 4 hours of credit requires approval of the instructor and department with completion of additional work of substance. Prerequisite: MATH 347 or MATH 348 or consent of instructor.

MATH 439 Philosophy of Mathematics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/439/)
Same as PHIL 439. See PHIL 439.

MATH 441 Differential Equations credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/441/)
Basic course in ordinary differential equations; topics include existence and uniqueness of solutions and the general theory of linear differential equations; treatment is more rigorous than that given in MATH 285. 3 or 4 undergraduate hours. 3 or 4 graduate hours. Credit is not given for both MATH 441 and any of MATH 284, MATH 285, MATH 286. 4 hours of credit requires approval of the instructor and completion of additional work of substance. Prerequisite: MATH 241; MATH 347 or MATH 348 is recommended.

MATH 442 Intro Partial Diff Equations credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/442/)
Introduces partial differential equations, emphasizing the wave, diffusion and potential (Laplace) equations. Focuses on understanding the physical meaning and mathematical properties of solutions of partial differential equations. Includes fundamental solutions and transform methods for problems on the line, as well as separation of variables using orthogonal series for problems in regions with boundary. Covers convergence of Fourier series in detail. 3 or 4 undergraduate hours. 3 or 4 graduate hours. 4 hours of credit requires approval of the instructor and completion of additional work of substance. Prerequisite: One of MATH 284, MATH 285, MATH 286, MATH 441.

MATH 444 Elementary Real Analysis credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/444/)
Careful treatment of the theoretical aspects of the calculus of functions of a real variable intended for those who do not plan to take graduate courses in Mathematics. Topics include the real number system, limits, continuity, derivatives, and the Riemann integral. 3 or 4 undergraduate hours. 3 or 4 graduate hours. Credit is not given for both MATH 444 and either MATH 424 or MATH 447. 4 hours of credit requires approval of the instructor and department with completion of additional work of substance. Prerequisite: MATH 241; MATH 347 or MATH 348, or equivalent.

MATH 446 Applied Complex Variables credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/446/)
For students who desire a working knowledge of complex variables; covers the standard topics and gives an introduction to integration by residues, the argument principle, conformal maps, and potential fields. Students desiring a systematic development of the foundations of the subject should take MATH 448. 3 or 4 undergraduate hours. 3 or 4 graduate hours. Credit is not given for both MATH 446 and MATH 448. 4 hours of credit requires approval of the instructor and department with completion of additional work of substance. Prerequisite: MATH 241.

MATH 447 Real Variables credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/447/)
Careful development of elementary real analysis for those who intend to take graduate courses in Mathematics. Topics include completeness property of the real number system; basic topological properties of n-dimensional space; convergence of numerical sequences and series of functions; properties of continuous functions; and basic theorems concerning differentiation and Riemann integration. 3 undergraduate hours. 3 or 4 graduate hours. Credit is not given for both MATH 447 and either MATH 424 or MATH 444. 4 hours of credit requires approval of the instructor and completion of additional work of substance. Prerequisite: MATH 241 or equivalent; junior standing; MATH 347 or MATH 348, or equivalent experience; or consent of instructor.

MATH 448 Complex Variables credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/448/)
For students who desire a rigorous introduction to the theory of functions of a complex variable; topics include Cauchy's theorem, the residue theorem, the maximum modulus theorem, Laurent series, the fundamental theorem of algebra, and the argument principle. 3 or 4 undergraduate hours. 3 or 4 graduate hours. Credit is not given for both MATH 448 and MATH 446. 4 hours of credit requires approval of the instructor and department with completion of additional work of substance. Prerequisite: MATH 447.

MATH 450 Numerical Analysis credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/450/)
Same as CS 450, CSE 401 and ECE 491. See CS 450.

MATH 453 Number Theory credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/453/)
Basic introduction to the theory of numbers. Core topics include divisibility, primes and factorization, congruences, arithmetic functions, quadratic residues and quadratic reciprocity, primitive roots and orders. Additional topics covered at the discretion of the instructor include sums of squares, Diophantine equations, continued fractions, Farey fractions, recurrences, and applications to primality testing and cryptopgraphy. 3 or 4 undergraduate hours. 3 or 4 graduate hours. 4 hours of credit requires approval of the instructor and department with completion of additional work of substance. Prerequisite: MATH 241 or equivalent.
This course satisfies the General Education Criteria for:
Quantitative Reasoning II

MATH 461 Probability Theory credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/461/)
Introduction to mathematical probability; includes the calculus of probability, combinatorial analysis, random variables, expectation, distribution functions, moment-generating functions, and central limit theorem. 3 or 4 undergraduate hours. 3 or 4 graduate hours. Credit is not given for both MATH 461 and either STAT 408 or ECE 313. 4 hours of credit requires approval of the instructor and department with completion of additional work of substance. Prerequisite: MATH 241 or equivalent.

MATH 463 Statistics and Probability I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/463/)
Same as STAT 400. See STAT 400.

MATH 464 Statistics and Probability II credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/464/)
Same as STAT 410. See STAT 410.

MATH 473 Algorithms credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/473/)
Same as CS 473 and CSE 414. See CS 473.

MATH 475 Formal Models of Computation credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/475/)
Same as CS 475. See CS 475.

MATH 481 Vector and Tensor Analysis credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/481/)
Introductory course in modern differential geometry focusing on examples, broadly aimed at students in mathematics, the sciences, and engineering. Emphasis on rigorously presented concepts, tools and ideas rather than on proofs. The topics covered include differentiable manifolds, tangent spaces and orientability; vector and tensor fields; differential forms; integration on manifolds and Generalized Stokes Theorem; Riemannian metrics, Riemannian connections and geodesics. Applications to configuration and phase spaces, Maxwell equations and relativity theory will be discussed. 3 or 4 undergraduate hours. 3 or 4 graduate hours. 4 hours of credit requires approval of the instructor and department with completion of additional work of substance. Prerequisite: MATH 241 and one of MATH 415 or MATH 416 or equivalent.

MATH 482 Linear Programming credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/482/)
Rigorous introduction to a wide range of topics in optimization, including a thorough treatment of basic ideas of linear programming, with additional topics drawn from numerical considerations, linear complementarity, integer programming and networks, polyhedral methods. 3 or 4 undergraduate hours. 3 or 4 graduate hours. 4 hours of credit requires approval of the instructor and department with completion of additional work of substance. Prerequisite: ASRM 406, MATH 415, or MATH 416.

MATH 484 Nonlinear Programming credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/484/)
Iterative and analytical solutions of constrained and unconstrained problems of optimization; gradient and conjugate gradient solution methods; Newton's method, Lagrange multipliers, duality and the Kuhn-Tucker theorem; and quadratic, convex, and geometric programming. 3 or 4 undergraduate hours. 3 or 4 graduate hours. 4 hours of credit requires approval of the instructor and department with completion of additional work of substance. Prerequisite: MATH 241; MATH 347 or MATH 348; or equivalent; MATH 415 or equivalent; or consent of instructor.

MATH 487 Advanced Engineering Math credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/487/)
Complex linear algebra, inner product spaces, Fourier transforms and analysis of boundary value problems, Sturm-Liouville theory. Same as ECE 493. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: One of MATH 284, MATH 285, MATH 286, MATH 441.

MATH 489 Dynamics & Differential Eqns credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/489/)
Studies mathematical theory of dynamical systems, emphasizing both discrete-time dynamics and nonlinear systems of differential equations. Topics include: chaos, fractals, attractors, bifurcations, with application to areas such as population biology, fluid dynamics and classical physics. Basic knowledge of matrix theory will be assumed. 3 or 4 undergraduate hours. 3 or 4 graduate hours. 4 hours of credit requires approval of the instructor and completion of additional work of substance. Prerequisite: One of MATH 284, MATH 285, MATH 286, MATH 441.

MATH 490 Advanced Topics in Mathematics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/490/)
Deals with selected topics and applications of mathematics; see Class Schedule or department office for current topics. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated with approval. Prerequisite: Consent of instructor.

MATH 492 Undergraduate Research in Math credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/MATH/492/)
Work closely with department faculty on a well-defined research project. Topics and nature of assistance vary. Capstone paper or computational project required. 1 to 3 undergraduate hours. No graduate credit. Approved for Letter and S/U grading. May be repeated in separate terms up to 8 hours. Prerequisite: Evidence of adequate preparation for such study; consent of faculty member supervising the work; and approval of the department head.

MATH 495 Models in Mathematical Biology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/495/)
Research-motivated subject material from Mathematical Biology with emphasis on modeling. 3 undergraduate hours. 4 graduate hours. Prerequisite: MATH 220 or equivalent.

MATH 496 Honors Seminar credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MATH/496/)
Careful study of a selected area of mathematics, carried out either deductively from axioms or inductively through problems; subject matter varies with instructor. 3 undergraduate hours. No graduate credit. May be repeated to a maximum of 6 hours. Prerequisite: Consent of Mathematics Honors Committee.

MATH 499 Introduction Graduate Research credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MATH/499/)
Seminar is required of all first-year graduate students in Mathematics. It provides a general introduction to the courses and research work in all of the areas of mathematics that are represented at the University of Illinois at Urbana-Champaign. 1 undergraduate hour. 1 graduate hour. Approved for S/U grading only. May be repeated to a maximum of 2 hours. Prerequisite: Graduate standing or consent of instructor.

MATH 500 Abstract Algebra I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/500/)
Isomorphism theorems for groups. Group actions. Composition series. Jordan-Holder theorem. Solvable and nilpotent groups. Field extensions. Algebraic and transcendental extensions. Algebraic closures. Fundamental theorem of Galois theory, and applications. Modules over commutative rings. Structure of finitely generated modules over a principal ideal domain. Applications to finite Abelian groups and matrix canonical forms. Prerequisite: MATH 417 and MATH 418.

MATH 501 Abstract Algebra II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/501/)
Modules over non commutative rings. Direct sums and products. Direct and inverse limits. Categories and functors. Projective and injective modules. Noetherian and Artinian rings and modules. Semisimple modules. Wedderburn's theorem on semisimple Artinian rings. Application to representation theory of groups. Multilinear algebra, tensor products and flat modules. Tensor, symmetric and exterior algebras. Additional advanced topics. Prerequisite: MATH 500.

MATH 502 Commutative Algebra credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/502/)
Commutative rings and modules, prime ideals, localization, noetherian rings, primary decomposition, integral extensions and Noether normalization, the Nullstellensatz, dimension, flatness, Hensel's lemma, graded rings, Hilbert polynomial, valuations, regular rings, singularities, unique factorization, homological dimension, depth, completion. Possible further topics: smooth and etale extensions, ramification, Cohen-Macaulay modules, complete intersections. Prerequisite: MATH 501 or consent of instructor.

MATH 503 Intro Geometric Group Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/503/)
Free groups, groups given by generators and relations, van Kampen diagrams. Free product with amalgamations and HNN-extensions, Bass-Serre theory. Solvable and nilpotent groups. Quasi-isometries and geometric properties of groups. Prerequisite: MATH 500 or equivalent.

MATH 505 Homological Algebra credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/505/)
Topics include: 1. Snake lemma, homology, long exact sequence in homology; 2. Projective and injective modules and resolutions; 3. Categories, functors and derived functors. Tor and Ext, local cohomology; 4. Group cohomology, bar resolution; 5. Spectral sequences, techniques of computation, Serre spectral sequence. Grothendieck spectral sequence of composite functors; 6. Time permitting: Derived categories, Gysin sequence, Kunneth formula, universal coefficient theorm, Eilenberg-Moore sequence. Prerequisite: MATH 501 or equivalent.

MATH 506 Group Representation Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/506/)
Representation of groups by linear transformations, group algebras, character theory, and modular representations. Prerequisite: MATH 501 or equivalent.

MATH 510 Riemann Surf & Algebraic Curv credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/510/)
An introduction to Riemann Surfaces from both the algebraic and function-theoretic points of view. Topics include holomorphic and meromorphic differential forms, integration of differential forms, divisors and linear equivalence, the genus of a compact Riemann surface, projective algebraic curves, the Riemann-Roch theorem, and applications. Prerequisite: MATH 542.

MATH 511 Intro to Algebraic Geometry credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/511/)
An introduction to the study of algebraic sets defined by polynomial equations; affine and projective space and their subvarieties; rational and regular functions and mappings; divisors, linear systems, and projective embeddings; birational geometry, blowing up; Grassmannians and other special varieties. Prerequisite: MATH 500.

MATH 512 Modern Algebraic Geometry credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/512/)
An introduction to the tools and ideas of contemporary algebraic geometry, with particular focus on the language of schemes. 4 graduate hours. No professional credit. Prerequisite: MATH 500, and one of MATH 510, MATH 511, or consent of instructor.

MATH 514 Complex Algebraic Geometry credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/514/)
Hodge theory of complex manifolds; examples, applications, and topological invariants. 4 graduate hours. No professional credit. Credit is not given for MATH 514 if credit for MATH 524 has been earned. Prerequisite: MATH 448 or consent of instructor.

MATH 518 Differentiable Manifolds I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/518/)
Definitions and properties of differentiable manifolds and maps, (co)tangent bundles, vector fields and flows, Frobenius theorem, differential forms, exterior derivatives, integration and Stokes' theorem, DeRham cohomology, inverse function theorem, Sard's theorem, transversality and intersection theory. Prerequisite: MATH 423 or MATH 481, or consent of instructor.

MATH 519 Differentiable Manifolds II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/519/)
Vector bundles, principal bundles, connections, parallel transport, curvature, Chern-Weyl theory, Hodge-DeRham theory. Other topics may include Riemannian geometry, symplectic geometry, spin geometry, and harmonic maps. Prerequisite: MATH 518 or consent of instructor.

MATH 520 Symplectic Geometry credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/520/)
Introduction to the foundational tools, ideas, examples and theorems of symplectic geometry. It is intended for PhD students studying symplectic geometry, Poisson geometry, and symplectic topology, as well as students in related areas such as dynamical systems, algebraic geometry, complex geometry and low dimensional topology. Covers the local and global structure of symplectic manifolds, their submanifolds, the special automorphisms they support (Hamiltonian flows), their natural boundaries (contact manifolds), their special geometric features (almost complex structures), and their symmetries. The last three weeks of the course will be devoted to a more advanced topic to be determined by the interests of both the instructor and the students. 4 graduate hours. No professional credit. Approved for Letter and S/U grading. Prerequisite: MATH 518.

MATH 522 Lie Groups and Lie Algebras I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/522/)
A general introduction to Lie groups and algebras and their representation theory. Theory of finite group representations, Lie groups as matrix groups, and as differentiable manifolds, Lie algebras as tangent spaces and as abstract objects, and their representations. Examples of the classical groups. May be repeated up to 8 hours. Prerequisite: Undergraduate linear algebra, abstract algebra, point set topology, differentiation on manifolds.

MATH 525 Algebraic Topology I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/525/)
Introduction to the study of topological spaces by means of algebraic invariants. Topics include the fundamental group, covering spaces and their classification, simplicial and singular homology, applications such as the Brouwer fixed point theorem and the Jordan curve theorem. Prerequisite: MATH 417 and MATH 448 or consent of instructor.

MATH 526 Algebraic Topology II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/526/)
CW-complexes, relative homeomorphism theorem, cellular homology, cohomology, Kunneth theorem, Eilenberg-Zilber theorem, cup products, Poincare duality, examples. Prerequisite: MATH 525, MATH 500; or consent of instructor. MATH 501 is recommended but not required.

MATH 527 Homotopy Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/527/)
Homotopy groups, fibrations and cofibrations, Hurewicz theorem, obstruction theory, Whitehead theorem and additional topics perhaps drawn from Postnikov towers, Freudenthal suspension theorem, Blakers-Massey theorem, spectra. Prerequisite: MATH 526. MATH 501 is recommended but not required.

MATH 530 Algebraic Number Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/530/)
Further development of the theory of fields covering topics from valuation theory, ideal theory, units in algebraic number fields, ramification, function fields, and local class field theory. Prerequisite: MATH 500 or equivalent.

MATH 531 Analytic Theory of Numbers I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/531/)
Problems in number theory treated by methods of analysis; arithmetic functions, Dirichlet series, Riemann zeta function, L-functions, Dirichlet's theorem on primes in progressions, the prime number theorem. Prerequisite: MATH 448 and either MATH 417 or MATH 453.

MATH 532 Analytic Theory of Numbers II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/532/)
Development of themes from MATH 531 and further topics chosen from additive number theory, asymptotic properties of multiplicative functions, circle method, diophantine approximation, lattice point problems, metric theory, modular forms, sieve theory. May be repeated. Prerequisite: MATH 531.

MATH 533 Fiber Spaces and Char Classes credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/533/)
Study of fiber bundles and their associated characteristic classes; applications to geometric problems. Prerequisite: MATH 526.

MATH 535 General Topology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/535/)
Study of topological spaces and maps, including Cartesian products, identifications, connectedness, compactness, uniform spaces, and function spaces. Prerequisite: Consent of instructor.

MATH 540 Real Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/540/)
Lebesgue measure on the real line; integration and differentiation of real valued functions of a real variable; and additional topics at discretion of instructor. Prerequisite: MATH 447 or equivalent.

MATH 541 Functional Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/541/)
Fundamental results in functional analysis; spectral theory of compact operators; further topics chosen by the instructor. Prerequisite: MATH 540.

MATH 542 Complex Variables I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/542/)
Topics include the Cauchy theory, harmonic functions, entire and meromorphic functions, and the Riemann mapping theorem. Prerequisite: MATH 446 and MATH 447, or MATH 448.

MATH 543 Complex Variables II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/543/)
Continuation of MATH 542. Topics include Riemann Surfaces, Hyperbolic Metric, Potential Theory and Quasiconformal Mappings. Prerequisite: MATH 542.

MATH 545 Harmonic Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/545/)
Harmonic analysis on the circle, the line, and the integers, i.e., Fourier series and transforms; locally compact Abelian groups; convergence and summability; conjugate functions; Hardy spaces; uniqueness; Tauberian theorems; almost-periodic functions; commutative Banach algebras. Prerequisite: MATH 448 and MATH 541; knowledge of Banach spaces.

MATH 546 Hilbert Spaces credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/546/)
Geometrical properties of Hilbert spaces, spectral theorems for compact, bounded and unbounded operators, basic theory of operator algebras, and additional material depending on the instructor. Prerequisite: MATH 541.

MATH 547 Banach Spaces credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/547/)
Basic properties and fundamental theorems of Banach spaces and bounded linear maps, trace duality, absolutely summing maps, local theory, type and cotype, probabilistic techniques in Banach spaces, and further topics depending on the instructor. 4 graduate hours. No professional credit. Prerequisite: MATH 541.

MATH 550 Dynamical Systems I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/550/)
An introduction to the study of dynamical systems. Considers continuous and discrete dynamical systems at a sophisticated level: differential equations, flows and maps on Euclidean space and other manifolds. Emphasis will be placed on the fundamental theoretical concepts and the interaction between the geometry and topology of manifolds and global flows. Discrete dynamics includes Bernoulli shifts, elementary Anosov diffeomorphisms and surfaces of sections of flows. Bifurcation phenomena in both continuous and discrete dynamics will be studied. Prerequisite: MATH 489 or consent of instructor.

MATH 552 Numerical Methods for PDEs credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/552/)
Same as CS 555 and CSE 510. See CS 555.

MATH 553 Partial Differential Equations credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/553/)
Basic introduction to the study of partial differential equations; topics include: the Cauchy problem, power-series methods, characteristics, classification, canonical forms, well-posed problems, Riemann's method for hyperbolic equations, the Goursat problem, the wave equation, Sturm-Liouville problems and separation of variables, Fourier series, the heat equation, integral transforms, Laplace's equation, harmonic functions, potential theory, the Dirichlet and Neumann problems, and Green's functions. Prerequisite: Consent of instructor.

MATH 554 Linear Analysis and Partial Differential Equations credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/554/)
Course will provide students with the basic background in linear analysis associated with partial differential equations. The specific topics chosen will be largely up to the instructor, but will cover such areas as linear partial differential operators, distribution theory and test functions, Fourier transforms, Sobolev spaces, pseudodifferential operators, microlocal analysis, and applications of the above topics. 4 graduate hours. No professional credit. Prerequisite: MATH 553 or consent of instructor.

MATH 555 Nonlinear Analysis and Partial Differential Equations credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/555/)
Course will provide students with the basic background in nonlinear analysis associated with partial differential equations. The specific topics chosen will be largely up to the instructor, but will cover such areas as existence and uniqueness techniques, nonexistence and finite time blow-up results, hyperbolic conservation laws, weak solutions, stability theory, nonlinear elliptic theory, regularity theory. 4 graduate hours. No professional credit. May be repeated as topics vary. Prerequisite: Consent of instructor.

MATH 558 Methods of Applied Mathematics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/558/)
Introduction to modern methods of applied mathematics, including nondimensionalization and scaling analysis, regular and singular asymptotics, analysis of multiscale systems, and analysis of complex systems. Each technique is illustrated with applications from science and engineering. The mathematical frameworks will include ordinary, partial and stochastic differential equations, point processes, and Markov chains. Prerequisite: Undergraduate background in ODEs, PDEs, and probability theory (MATH 441, MATH 442, and MATH 461, or equivalents), or consent of instructor.

MATH 561 Theory of Probability I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/561/)
Mathematical foundations of probability and stochastic processes; probability measures, random variables, distribution functions, convergence theory, the Central Limit Theorem, conditional expectation, and martingale theory. Same as STAT 551. Prerequisite: MATH 541 or consent of instructor.

MATH 562 Theory of Probability II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/562/)
Continuation of MATH 561. Same as STAT 552. Prerequisite: MATH 561.

MATH 563 Risk Modeling and Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/563/)
Quantitative tools for measuring risks and modeling dependencies. Topics include risk measures, stochastic orders, copulas, dependence measures, and their statistical inferences. Same as STAT 558. 4 graduate hours. No professional credit. Prerequisite: MATH 408 or MATH 461.

MATH 564 Applied Stochastic Processes credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/564/)
Introduction to topics such as spectral analysis, filtering theory, and prediction theory of stationary processes; Markov chains and Markov processes. Same as STAT 555. Prerequisite: MATH 446 and MATH 447.

MATH 570 Mathematical Logic credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/570/)
Development of first order predicate logic; completeness theorem; formalized number theory and the Godel incompleteness theorem. Prerequisite: MATH 417 or consent of instructor.

MATH 571 Model Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/571/)
Techniques for constructing models, including compactness and Lowenheim-Skolem theorems, unions of elementary chains, and omitting types construction; categorical theories; ultraproducts; saturated models; quantifier elimination; applications to algebraically closed fields, real closed fields, and other fundamental structures of mathematics. Prerequisite: MATH 570 or consent of instructor.

MATH 573 Recursive Function Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/573/)
Various characterizations of the class of recursive (i.e., computable) functions; the Church-Turing thesis; unsolvability of the halting problem; the recursion theorem and the enumeration theorem; relative computability, the jump operation, and the arithmetical hierarchy; recursively enumerable sets; degrees of unsolvability; and the priority method. Prerequisite: MATH 570 or consent of instructor.

MATH 574 Set Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/574/)
Zermelo-Fraenkel axiomatic set theory; basic concepts in set theory such as ordinal, cardinal, rank, and definition by transfinite recursion; Godel's constructible universe; introduction to forcing; Boolean valued universes; large cardinals; consistency and independence of the continuum hypothesis and the axiom of choice. Prerequisite: MATH 570 or consent of instructor.

MATH 580 Combinatorial Mathematics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/580/)
Fundamental results on core topics of combinatorial mathematics: classical enumeration, basic graph theory, extremal problems on finite sets, probabilistic methods, design theory, discrete optimization. Same as CS 571. Prerequisite: Consent of instructor.

MATH 581 Extremal Graph Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/581/)
Extremal problems and parameters for graphs. Distance and connectivity, matching and factors, vertex and edge colorings, perfect and imperfect graphs, intersection classes and intersection parameters, Turan's theorem, graph Ramsey theory, graph decomposition and other extremal problems. Same as CS 572. Prerequisite: MATH 580 or consent of instructor.

MATH 582 Structure of Graphs credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/582/)
Structure of graphs and properties of special classes of graphs. Degree sequences and reconstruction, structure of k-connected graphs, Hamiltonian cycles and circumference, planar graphs and their properties, graph minors, cycle coverings, matroidal and algebraic aspects of graphs. Prerequisite: MATH 580 or consent of instructor.

MATH 583 Partial Orders and Comb Optim credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/583/)
Combinatorial aspects of partially ordered sets and their relation to optimization problems. Structure of posets and lattices, Dilworth's theorem and generalizations, linear extensions and sorting, dimension of posets, order ideals, extremal set theory, integer programming and minmax relations, matroids and their applications. Prerequisite: MATH 580 or consent of instructor.

MATH 584 Methods of Combinatorics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/584/)
Combinatorial methods and other mathematical methods for combinatorial problems. Enumeration by bijections and generating functions, probabilistic methods for existence proofs and asymptotic analysis, randomized algorithms, Ramsey's theorem and related topics, combinatorial designs and their applications, geometric problems and methods. Same as CS 575. Prerequisite: MATH 580 or consent of instructor.

MATH 585 Probabilistic Combinatorics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/585/)
Techniques and applications of probabilistic methods in combinatorics. Draws applications from a variety of areas, but emphasizes theoretical aspects of random graphs, including connectivity, trees & cycles, planarity, and coloring problems. Techniques include the second moment method, Lovasz Local Lemma, martingales, Talgrand's Inequality, the Rodl Nibble, and Szemeredi's Regularity Lemma. Applications may come from discrete geometry, coding theory, algorithms & complexity, additive number theory, percolation, positional games, etc. Prerequisite: MATH 580 or consent of instructor.

MATH 586 Algebraic Combinatorics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/586/)
Prepares students for research in modern algebraic combinatorics by focusing on its three principal components: enumerative techniques, symmetric functions, and multivariate polynomials. 4 graduate hours. No professional credit. Prerequisite: MATH 580 or consent of instructor.

MATH 589 Conjugate Duality and Optim credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/589/)
Convex analysis for constrained extremum problems; convex sets, cones, and functions; separation; Fenchel transform; duality correspondences; differential theory; nonlinear programming; sensitivity; and perturbational duality for primal, dual, and Lagrangian problems. Prerequisite: MATH 415 and MATH 447, or consent of instructor.

MATH 593 Mathematical Internship credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/MATH/593/)
Full-time or part-time practice of graduate-level mathematics in an off-campus government, industrial, or research laboratory environment. Summary report required. 0 graduate credit. No professional credit. Approved for S/U grading only. May be repeated in separate terms.

MATH 595 Advanced Topics in Mathematics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/595/)
See Class Schedule for current topics. 1 to 4 graduate hours. No professional credit. May be repeated in the same or separate semesters. Prerequisite: Consent of instructor.

MATH 597 Reading Course credit: 1 to 8 Hours. (https://courses.illinois.edu/schedule/terms/MATH/597/)
Independent study in Mathematics. 1 to 8 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated in the same or separate terms, with a maximum of 8 hours per semester. Prerequisite: Consent of instructor.

MATH 598 Literature Seminar in Math credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MATH/598/)
Seminar on topics of current interest in mathematics. Students present seminars and discussions on various topics. See Class Schedule for current topics. Recommended for all Mathematics students. 0 to 4 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated in the same or separate semesters as topics vary. Prerequisite: Consent of instructor.

MATH 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/MATH/599/)
Approved for S/U grading only. May be repeated. Prerequisite: Consent of instructor.

MBA - MBA PROGRAM

MBA Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/MBA/)

Courses

MBA 500 Issues in Business credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/MBA/500/)
MBA students are faced with a wide variety of issues in the work place. This course will introduce and encourage discussions related to careers transitions, leadership, ethics, and uses of technology in the work place. Guest lecturers and experts in their field will discuss different approaches to these issues and give students the opportunity to discuss strategies and practice skills that will prepare them for the business environment. 0 graduate hours. No professional credit. Approved for Letter and S/U grading. Prerequisite: Co-requisite MBA 501 and MBA 502.

MBA 501 Foundations of Business I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MBA/501/)
Provides foundations in the form of principles, concepts, tools, and skills important both to the study of business and to the development of business acumen. Specific foundation topics include planning and measuring firm resources, economic theory of the firm, decision making under uncertainty, consumer behavior, financial management, business communication and computing. May be repeated in the same term. Credit is not given for MBA 501 and either ACCY 500, BADM 520, BADM 572, or ECON 567. Prerequisite: Admission to the Master of Business Administration program.

MBA 502 Foundations of Business II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MBA/502/)
Provides additional foundations in the form of principles, concepts, tools, and skills important both to the study of business and to the development of business acumen. Specific foundation topics include organizational theory and design, financial accounting and reporting, manufacturing and services processes, marketing management, business communications and computing. May be repeated in the same term. Credit is not given for MBA 502 and either ACCY 500, BADM 509, BADM 520, or BADM 567. Prerequisite: Enrollment in good standing in the MBA program.

MBA 503 Prin & Proc of Management I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MBA/503/)
Presents management topics important to the study of business organizations and the economic landscapes within which they exist. Specific topics include financial resources management, human resources management, strategic management and management of technology. May be repeated in the same term. Students who receive credit for MBA 503 may not receive credit for the following courses: FIN 520, BADM 508, and BADM 544. Prerequisite: Enrollment in good standing in the MBA program.

MBA 504 Prin & Proc of Management II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MBA/504/)
Presents additional management topics important to the study of business organizations and the economic landscapes within which they exist. Specific topics include financial management, global strategy, decision and risk analysis, leadership, and ethics. May be repeated in the same term. Prerequisite: Enrollment in good standing in the MBA program.

MBA 505 Topics in Management credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MBA/505/)
Special topics important to the study of business and management. Examples of topics include international business, strategic thinking, operations analysis, project management, information technology, negotiations. May be repeated in the same term. Prerequisite: Enrollment in good standing in the MBA program.

MBA 520 Corporate and Global Strategy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MBA/520/)
Focuses on key issues in formulating and implementing corporate strategies with an emphasis on the international operations of firms. Issues are approached from the orientation of the general manager, whose job is to diagnose what is critical in complex business situations and find realistic solutions to strategic and organizational problems. Designed to integrate various functional areas and provide a "total business" perspective on issues pertaining to corporate and international strategy. Builds on learning experiences in previous modules, and acts as an integrative capstone module. Prerequisite: Completion of the first year of the Master of Business Administration Program, including MBA 501, MBA 502, MBA 503, MBA 504, and MBA 505.

MBA 530 Internship credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/MBA/530/)
Approved for S/U grading only. May not be repeated for credit. Prerequisite: Completion of first year of Master of Business Administration program.

MBA 531 Special Projects credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MBA/531/)
Individual projects selected by the student in consultation with a faculty member and approved by the executive officer of the program. Approved for letter and S/U grading. May be repeated in the same or subsequent terms to a maximum of 12 hours. Prerequisite: Completion of first year of Master of Business Administration program.

MBA 541 Marketing in a Digital World credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MBA/541/)
Explores new digital tools and students will discuss the dynamic of power shifting from firms to consumers. Managers will learn how to use these tools to strengthen their marketing efforts, while consumers will learn how to use these tools to enhance their consumption experience. This course also reviews the foundations of marketing (i.e., product, promotion, placement, and price) and discusses how these foundations are being shifted by the rise of new digital tools. A variety of learning techniques will be used, including video lectures, case studies, and interviews with both digital marketers and digital consumers. The learning approach will be highly interactive; and students will have the opportunity to engage in a variety of hands on activities, such as offering new product ideas to various companies. 2 graduate hours. No professional credit. Credit is not given for both MBA 541 and BADM 590, Marketing in a Digital World.

MBA 542 Digital Marketing Analytics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MBA/542/)
Introduces students to the science of web analytics while casting a keen eye toward the artful use of numbers found in the digital space. The goal is to provide the foundation needed to apply data analytics to real-world challenges marketers confront daily. Students will learn to identify the web analytic tool right for their specific needs; understand valid and reliable ways to collect, analyze, and visualize data from the web; and utilize data in decision making for agencies, organizations or clients. 4 graduate hours. No professional credit. Credit is not given for both MBA 542 and BADM 590, Digital Marketing Analytics.

MBA 543 Digital Media & Marketing credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MBA/543/)
Aims to give students ample understanding of the critical role of digital media as the delivery channels of marketing communication and the impacts of digital revolution in marketing and the rise of marketing technology industry, through interaction with the instructor, the content, and other students in the course. 4 graduate hours. No professional credit. Credit is not given for both MBA 543 and BADM 590, Digital Media & Marketing.

MBA 544 Marketing in an Analog World credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MBA/544/)
Begins with an exploration of the key differences between the Analog and the Digital and then examine four ways in which the Analog World has been affected by the Digital Revolution: Domination, Resistance, Synergy, and Transformation. Several examples of each of these concepts and explore their implications for both marketers and consumers will be explored. This course will also employ a variety of learning techniques, including video lectures, case studies, hands-on exercises, and interviews with leading marketing scholars. The learning approach will be highly interactive. 2 graduate hours. No professional credit. Credit is not given for both MBA 544 and BADM 590, Marketing in an Analog World.

MBA 545 Marketing in Our New Digital World credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MBA/545/)
Offers a strategic perspective and examination on how the digital revolution is changing the marketing landscape. We will explore this new digital realm and discuss its revolutionary impact upon both firms and consumers. This exploration comes in two parts. In the first part (the first four weeks), we will explore how the digital revolution has affected our analog (or physical) world. Specifically, we will examine four ways in which the Analog World has been affected by the Digital Revolution: Domination, Resistance, Synergy, and Transformation. In the second part (the second four weeks), we will review the foundations of marketing (i.e., product, promotion, placement, and price) and examine how these foundations are being shifted by the rise of the digital revolution. In this portion of the course, we will explore a variety of new digital concepts and tools, including, customer co-creation, user-generated content, and 3D printing. This course will contain several examples of each of these concepts and explore their implications for both marketers and consumers. This course will also employ a variety of learning techniques, including video lectures, case studies, hands-on exercises, and interviews with leading marketing scholars. The learning approach will be highly interactive; you will have the opportunity to engage in a variety of hands-on activities and be a member of a rich learning community. I hope you will join us in this educational adventure. Please note that this is not an e-commerce class. We will not examine social media analytics, search engine optimization, or other digital marketing tactics. The other courses in our Digital Marketing Specialization will cover these topics in considerable detail. Instead, this course is broader in focus and more strategic in orientation. 4 graduate hours. No professional credit.

MBA 546 Global Business Horizons credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MBA/546/)
This course provokes an appreciation for the global challenges as well as opportunities that lie ahead and the important role that businesses can play in addressing these challenges. This course will consist of two immersive and interactive experiences organized around understanding global challenges and designing business solutions on the topics of poverty and environmental sustainability. 4 graduate hours. No professional credit. Credit is not given for both MBA 546 and BADM 590, Global Business Horizons.

MBA 547 Global Impact: Cultural Psychology & Business Ethics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MBA/547/)
This course enables students to understand how globalization changes consumers at a psychological level, and provides tools for infusing brands with cultural meanings—creating iconic brands—that can resonate with global consumers. The focus is on understanding that culture exists in the mind (e.g., values and beliefs) as well as in the environment (e.g., objects, brands, and institutions), and that globalization creates multi-cultural spaces in contemporary societies. In addition, this course seeks to examine some of the ways in which people evaluate problems associated with human conduct and moral conflict. This course in business ethics and corporate responsibility seeks to bridge the gap between the moral behavior of the individual as a private citizen and the challenges afforded by organized business activity in the marketplace. 4 graduate hours. No professional credit. Credit is not given for both MBA 547 and BADM 590, Global Impact: Cultural Psychology & Business Ethics.

MBA 548 Global Strategy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MBA/548/)
This course seeks to understand how firms adapt to, react towards, and shape the global economy. Students should be able to evaluate markets and the best strategies firms should follow when operating globally. 4 graduate hours. No professional credit. Credit is not given for both MBA 548 and BADM 590, Global Strategy.

MBA 551 Strategic Innovation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MBA/551/)
This course will cover the strategic perspective on innovation and the management side of innovation efforts – leadership and design of innovation initiatives such that employees are able to effectively execute them. It also covers how to successfully implement innovation efforts while working alongside established businesses at the same firm, the challenges of leading product development teams, the analysis of planning and evaluation systems for innovation initiatives, and how to manage innovation when the initiative spans organizational boundaries. 4 graduate hours. No professional credit. Credit is not given for both MBA 551 and BADM 590, Strategic Innovation.

MBA 552 Fostering Creative Thinking credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MBA/552/)
This course will examine what prompts us to be creative, how to navigate the process of generating creative ideas, how to help our teams be creative, how to evaluate the ideas we generate, and how to pitch ideas so that others appreciate them. The end result is that you will be able to think more flexible, make wiser decisions, generate more effective solutions, get more out of your teams, reject fewer good ideas, and communicate more effectively. 4 graduate hours. No professional credit. Credit is not given for both MBA 552 and BADM 590, Fostering Creative Thinking.

MBA 553 Entrepreneurship: From Startup to Growth credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MBA/553/)
Will explore the earlier stages of the entrepreneurial venture process. The course modules will be focused on practical ideas and techniques that entrepreneurs can use to evaluate the potential of market opportunities and make decisions about whether to pursue them in a startup company. This course will also build on concepts, outline strategies, and tactics for forming, financing, and launching the new venture. Topics to be addressed will include developing a go-to market strategy, selecting appropriate revenue and pricing strategies, preparing financial models, raising startup and initial growth financing, and preparing for and managing growth. 4 graduate hours. No professional credit. Credit is not given for both MBA 553 and BADM 590, Entrepreneurship: From Startup to Growth.

MBA 561 Introduction to Business Analytics with R credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MBA/561/)
For businesses to capitalize on data analytics, they need leaders who understand the data analytic process. Even more valuable are leaders who know how to analyze big data. This course addresses the human skills gap by providing a foundational set of data analytic skills that can be applied to many business settings. You will gain first-hand experience with key steps of the data assembly process, as well as with tools for communicating data analytic results. Specifically, you will have the opportunity to install R, a popular data analytic language. You will also install and gain familiarity with RStudio, and integrated development environment (IDE), that makes it easier to code with R. You will also be introduced to notebooks and dashboards—powerful tools for communicating code and analytic results. Finally, you will get some practice executing some data manipulation tasks that are required before data can be analyzed with machine learning algorithms. 2 graduate hours. No professional credit. Credit is not given for both MBA 561 and BADM 590, section title "Introduction to Business Analytics: Data and the Firm".

MBA 562 Introduction to Business Analytics: Communicating with Data credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MBA/562/)
Introduces students to the science of business analytics while casting a keen eye toward the artful use of numbers found in the digital space. The goal is to provide businesses and managers with the foundation needed to apply data analytics to real-world challenges they confront daily in their professional lives. Students will learn to identify the ideal analytic tool for their specific needs; understand valid and reliable ways to collect, analyze, and visualize data; and utilize data in decision making for their agencies, organizations or clients. 2 graduate hours. No professional credit. Credit is not given for both MBA 562 and BADM 590, Introduction to Business Analytics: Communicating with Data.

MBA 563 Data Toolkit: Business Data Modeling & Predictive Analytics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MBA/563/)
The ultimate goal for data analytics in business is to obtain actionable insight. In this course, you will learn to use several tools—including the most important tool, your mind--for processing business data to gain that insight. You will perform tasks including extracting, transforming and loading (ETL) data to conducting exploratory data analytics (EDA). You will also gain experience in finding patterns in the data by using machine learning (ML) algorithms. You will develop a conceptual foundation for why ML algorithms are useful and how the resulting models from those algorithms are used to find actionable insight related to business problems. In the end, you will be equipped with the skillset to evaluate when an algorithm should be used and the ability to run these algorithms with R and RStudio and communicate the results using notebooks. Completion of this course requires downloading and using certain software on specific operation systems; details can be found in the course syllabus. 4 graduate hours. No professional credit. Credit is not given for both MBA 563 and BADM 590, Data Toolkit: Business Data Modeling & Predictive Analytics.

MBA 564 Data Analytics Applications in Business credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MBA/564/)
Develops students' knowledge regarding the role, methods, and implications of business and data analytics in business. Application opportunities span multiple areas of business. Special topics may include marketing, finance, supply chain, and accounting. Topics covered may include forecasting using time series models, modern portfolio theory, measurement and scaling, A/B testing, ANOVA, and conjoint analysis. 2 graduate hours. No professional credit. May be repeated in the same or separate semesters, if topics vary. Credit is not given for both MBA 564 and MBA 592.

MBA 565 Infonomics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MBA/565/)
This course provides a non-technical perspective on and methods for monetizing, managing and measuring information as if it were any other kind of corporate asset. Topics also will include information's unique economic characteristics and legal status, the importance of alternative data sources, new and emerging information-related roles, and concerns surrounding information ownership, sovereignty, privacy, and ethics. 4 graduate hours. No professional credit. Credit is not given for both MBA 565 and ACCY 593, Infonomics.

MBA 590 Specialization Capstone credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/MBA/590/)
This course covers various topics from each iMBA Specialization. Group projects and individual assignments will be required. Students are required to take 2 Specialization Capstones for their iMBA degree. Additional fees may apply. See Class Schedule. 0 graduate hours. No professional credit. Approved for S/U grading only. May be repeated if topics vary; student cannot take the same section more than once.

MBA 591 Program Capstone credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/MBA/591/)
This course is the final course of the University of Illinois iMBA degree and is designed to bridge the 'knowing – doing' gap, challenging students to apply their iMBA courses, work experience, industry acumen, business knowledge and skills. Students will work through a case study in which the deliverables for each module will build upon one another. The course culminates with the final case presentation. 0 graduate hours. No professional credit. Approved for S/U grading only.

MBA 592 Current Topics in Business credit: 0 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/MBA/592/**)**
Subject offerings of new and developing areas of knowledge in Business. See Class Schedule or departmental course information for topics. 0 to 4 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated up if topics vary to a maximum of 20 hours in the same semester and a maximum of 30 hours in separate semesters.

ME - MECHANICAL ENGINEERING

ME Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/ME/)

Courses

ME 170 Computer-Aided Design credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ME/170/)
Geometry and topology of engineered components: creation of engineering models and their presentation in standard 2D blueprint form and as 3D wire-frame and shaded solids; meshed topologies for engineering analysis and tool-path generation for component manufacture; ISO and ANSI standards for coordinate dimensioning and tolerancing; geometric dimensioning and tolerancing. Use of solid-modeling software for creating associative models at the component and assembly levels with automatic blueprint creation, interference checking, and linked bill of materials. Credit is not given for both ME 170 and GE 101 or SE 101.

ME 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/ME/199/)
May be repeated.

ME 200 Thermodynamics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ME/200/)
Classical thermodynamics through the second law; system and control-volume analyses of thermodynamic processes; irreversibility and availability; relations for ideal gas mixtures. Prerequisite: MATH 241.

ME 270 Design for Manufacturability credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ME/270/)
Introduction to DFM methodologies and tools; material selection (new and traditional materials); designing for primary manufacturing processes (cutting fundamentals, casting, forming, and shaping); designing with plastics (snap-fits, integral hinges, etc.); design for assembly (DFA); geometric dimensioning and tolerancing (GD&T). Same as TAM 270. Prerequisite: ME 170. ME and EM majors only.

ME 290 Seminar credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/ME/290/)
Lectures by faculty and invited authorities, concerning the ethics and practices of mechanical engineering/engineering mechanics, as well as its relationship to other fields of engineering, to economics, and to society. Offered fall term only. Approved for S/U grading only.

ME 297 Introductory Independent Study credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/ME/297/)
Independent study and/or individual projects related to mechanical engineering. Approved for Letter and S/U grading. May be repeated to a maximum of 6 credit hours for letter grade; no limit for S/U grade mode. Prerequisite: Consent of Instructor.

ME 310 Fundamentals of Fluid Dynamics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/310/)
Fundamentals of fluid mechanics with coverage of theory and applications of incompressible viscous and inviscid flows, and compressible high speed flows. Credit is not given for both ME 310 and TAM 335. Prerequisite: MATH 285 OR MATH 286 OR MATH 441; credit or concurrent registration in ME 200.

ME 320 Heat Transfer credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/320/)
Principles and application of heat transfer by conduction, convection, and thermal radiation. Prerequisite: MATH 285 or MATH 286 or MATH 441; ME 310 or TAM 335; credit or concurrent registration in ME 200.

ME 330 Engineering Materials credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/330/)
Structures of polymers, metals, and ceramics as the basis for their mechanical behavior. Manipulation of structure through such processes as heat treatment and solidification. Mechanisms of material failure in service (yielding, fracture, fatigue, creep, corrosion, and wear) and simple design techniques to avoid these failures. Strategies for materials selection in design. Credit is not given for both ME 330 and either CEE 300 or MSE 280. Prerequisite: CHEM 102 and TAM 251.

ME 340 Dynamics of Mechanical Systems credit: 3.5 Hours. (https://courses.illinois.edu/schedule/terms/ME/340/)
Dynamic modeling of mechanical components and systems; time-domain and frequency-domain analyses of linear time-invariant systems; multi-degree-of-freedom systems; linearization of nonlinear systems. Credit is not given for both ME 340 and either SE 320 or AE 353. Prerequisite: MATH 285 or MATH 286 or MATH 441; TAM 212; credit or concurrent registration in MATH 257 or MATH 415; credit or concurrent registration in ECE 205.

ME 360 Signal Processing credit: 3.5 Hours. (https://courses.illinois.edu/schedule/terms/ME/360/)
Basic electromechanical techniques used in modern instrumentation and control systems. Use of transducers and actuators. Signal conditioning, grounding, and shielding. Analog and digital signal processing and feedback control methods with emphasis on frequency domain techniques. Frequency response of continuous and discrete systems. Credit is not given for both ME 360 and ABE 425. Prerequisite: ME 340.

ME 370 Mechanical Design I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ME/370/)
Kinematics and dynamics of machinery, including introduction to user-centered design and design thinking, analytical and computer-aided design of kinematics, dynamic force analysis, principle of virtual work, cam and gear design, and balancing. Project-based learning of multi-mechanism system design, analysis, fabrication, and evaluation. Prerequisite: ME 270, TAM 212, and TAM 251.

ME 371 Mechanical Design II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ME/371/)
Design and analysis of machinery for load-bearing and power transmission. Consideration of material failure modes, including yielding, fracture, and fatigue. Design and selection of machine elements: threaded fasteners, springs, rolling-element bearings, fluid film lubrication, gears and friction drives. Prerequisite: ME 330 OR CEE 300; ME 370.

ME 400 Energy Conversion Systems credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/400/)
Processes and systems for energy conversion, including power and refrigeration cycles, air conditioning, thermoelectrics and fuel cells; ideal-gas mixtures and psychrometrics. 3 undergraduate hours. 4 graduate hours. Prerequisite: ME 200.

ME 401 Refrigeration and Cryogenics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/401/)
Theory of operation and design of equipment for production of low temperatures, from below ambient to near absolute zero; industrial, consumer, aerospace, medical, and research applications. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: Credit or concurrent registration in ME 320.

ME 402 Design of Thermal Systems credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/402/)
Selection of components in fluid- and energy-processing systems to meet system-performance requirements; computer-aided design; system simulation; optimization techniques; investment economics and statistical combinations of operating conditions. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: Credit or concurrent registration in ME 320.

ME 403 Internal Combustion Engines credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/403/)
Theory and analysis of reciprocating internal-combustion engines; fuels, carburetion, combustion, exhaust emissions, detonation, fuel injection, and factors affecting performance; laboratory work on variables that affect performance. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: Credit or concurrent registration in ME 400 or ABE 466.

ME 404 Intermediate Thermodynamics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/404/)
Classical thermodynamics, including the TdS equations and the Maxwell relations; development of thermodynamic property relations, behavior of real gases, thermodynamics of mixtures, phase equilibrium and chemical reactions and equilibrium with an emphasis on combustion reactions; statistical thermodynamics including the effect of molecular and atomic structure, statistical concepts and distributions, calculation of thermodynamic properties of gas-phase atoms and molecules, kinetic theory of gases, and vibrations in crystals and the electron gas in metals; selected applications. 4 undergraduate hours. 4 graduate hours. Credit is not given for both ME 404 and any of PHYS 427, CHEM 442, or CHEM 444. Prerequisite: ME 200.

ME 410 Intermediate Gas Dynamics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/410/)
Solution of internal compressible-flow problems by one-dimensional techniques, both steady and unsteady; flows with smooth and abrupt area change, with friction, with heat addition, and with mass addition; flows with weak and strong waves, multiple confined streams, and shock waves. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: ME 200; ME 310, TAM 335 or AE 311.

ME 411 Viscous Flow & Heat Transfer credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/411/)
Same as AE 412. See AE 412.

ME 412 Numerical Thermo-Fluid Mechs credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/412/)
Numerical techniques for solving the equations governing conduction and convective heat transfer in steady and unsteady fluid flows: finite-difference and finite-volume techniques, basic algorithms, and applications to real-world fluid-flow and heat-transfer problems. Same as CSE 412. 2 or 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: ME 310 OR TAM 335; ME 320.

ME 420 Intermediate Heat Transfer credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/420/)
Conduction heat transfer, radiation heat transfer, mass transfer, phase change, heat exchangers; numerical methods. 4 undergraduate hours. 4 graduate hours. Prerequisite: ME 310 OR TAM 335; ME 320.

ME 430 Failure of Engrg Materials credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/430/)
Material anisotropy and elasto-plastic properties at the crystal level; microstructural basis for fatigue, fracture, and creep in metals, polymers, and ceramics; failure mechanisms and toughening in composites; structure and behavior of metal-matrix composites, ceramic-matrix composites, and polymer composites. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: ME 330 OR TAM 324.

ME 431 Mechanical Component Failure credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/431/)
Relationship of materials and mechanics concepts to the design of structures and components: elasticity, plasticity, thermal loading, creep, fatigue, fracture, and residual-life assessments as they relate to materials selection and design. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: ME 330 and ME 371; Recommended: ME 430.

ME 432 Fundamentals of Photovoltaics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/432/)
In this course, we will develop a fundamental understanding of how solar cells convert light to electricity, how solar cells are made, how solar cell performance is evaluated, and the photovoltaic technologies that are currently on the market and/or under development. Using thermodynamics, materials physics, and engineering analysis we will assess and critique the potential and drawbacks of modern photovoltaic technologies, including single- and multi- crystalline silicon, tandem cells, CdTe, CIGS, PVT, bulk heterojunctions (organic), Graetzel cells, nanostructure-based, and third generation PV. 3 undergraduate hours. 4 graduate hours. Approved for Letter and S/U grading. Prerequisite: PHYS 212 and ME 330 or equivalent.

ME 440 Kinem & Dynamics of Mech Syst credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/440/)
Kinematics and dynamics of constrained rigid-body mechanical systems; use of modern computer-based analysis software packages. 3 undergraduate hours. 4 graduate hours. Prerequisite: ME 370.

ME 445 Introduction to Robotics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/445/)
Same as AE 482 and ECE 470. See ECE 470.

ME 446 Robot Dynamics and Control credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/446/)
Same as ECE 489 and SE 422. See SE 422.

ME 447 Computational Design and Dynamics of Soft Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/447/)
Provides a hands-on introduction to modern modeling and simulations techniques for heterogeneous structures made of assemblies of soft, elastic slender elements. Such systems are ubiquitous in nature, from animal musculoskeletal architectures to 'birds-nest' composite materials. They are also becoming increasingly relevant in robotics. Students will implement in python their own Cosserat rods-based solver. The developed solver will be then coupled with evolutionary optimization techniques for design, and reinforcement learning for control. 4 undergraduate hours. 4 graduate hours. Prerequisite: CS 101 OR CS 125; MATH 415.

ME 451 Computer-Aided Mfg Systems credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/451/)
The application of computer technology and operations research to manufacturing systems. Use of microprocessors for direct numeric control of machine tools, adaptive control and optimization, and integrated manufacturing systems. Applications of industrial robots. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: ME 270.

ME 452 Num Control of Mfg Processes credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/452/)
Numerical control systems, manufacturing processes, principles and practices basic to numerical control, and programming methodology for numerical control. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 101 and ME 270.

ME 453 Data Science in Manufacturing Quality Control credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/453/)
Manufacturing quality management in the big data era; quality improvement philosophies; statistical modeling of process quality; inferences about quality; statistical process control; control charts; machine learning and applications in quality engineering; quality classification/prediction with machine learning; design and implementation of quality monitoring systems based on supervised learning; measurement system analysis (gage R&R study); design of experiments. 3 or 4 undergraduate hours. 3 or 4 graduate hours. Prerequisite: ME 270; either IE 300 or STAT 400; either MATH 257 or MATH 415.

ME 455 Micromanufacturing Process & Automation credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/455/)
Scaling laws in miniaturization, Micro-machine tools design and characterization, Micromanufacturing process modeling, simulation and automation, Micro-metrology and Micro-assembly systems. 3 undergraduate hours. 4 graduate hours. Prerequisite: ME 270 or equivalent or consent of instructor.

ME 458 Additive Manufacturing and Product Design credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/458/)
Additive manufacturing fundamentals, how and why to design products using additive manufacturing, theory, and practice of product innovation, modern product design. 3 undergraduate hours. 4 graduate hours. Prerequisite: ME 371 or consent of instructor. Senior or graduate standing, or instructor permission.

ME 460 Industrial Control Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/460/)
Industrial control techniques; case studies of industrial systems; design, selection, and maintenance of industrial control systems, including electromechanical, pneumatic, thermal, and hydraulic systems. 4 undergraduate hours. 4 graduate hours. Credit is not given for both ME 460 and ECE 486. Prerequisite: ME 340 and ME 360.

ME 461 Computer Cntrl of Mech Systems credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/461/)
Microcomputer control of thermal and mechanical systems: sensors and transducers, signal transmission and conversion, and regulator actuation. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: ME 360 or ABE 425.

ME 462 Advanced Computer Control credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/462/)
Computer-based design of modern real-time controllers through progression from basic theory to advanced control algorithms proven successful in applications. Both discrete and continuous time formats are employed and linked through sampled-data concepts. The course has 8 2-hour labs providing exposure to 1) controller enhancement through AI and machine learning, 2) the related MATLAB toolboxes, 3) controller implementation on modern computing platforms (GPUs and FPGAs), and 4) applications in aerospace, power generation, manufacturing, and other areas. The lecture focus will be on clear control problem statement, analytical expressions of the control laws solving the problem, and applicability limitations. The corresponding MATLAB-based controller design tools and applications will be provided in the labs. Rigorous mathematical proofs will be given in the lectures for only a few key results. 4 undergraduate hours. 4 graduate hours. Prerequisite: ME 460 and MATH 415 or consent of instructor.

ME 465 Optics: Theory & Applications credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/465/)
Introduction to basic concepts in electromagnetic fields and waves as they pertain to measurement science and subsurface imaging. Related applications using wave-based probes, such as acoustic fields and waves with an emphasis on current phenomena and technologies. 4 undergraduate hours. 4 graduate hours. Prerequisite: PHYS 212, MATH 285 OR MATH 286 OR MATH 441. Restricted to students with Senior or Graduate standing, or instructor permission.

ME 470 Senior Design Project credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ME/470/)
Solution of a real-world design problem: development, evaluation, and recommendation of alternative solutions subject to realistic constraints that include most of the following considerations: economics, environment, sustainability, manufacturability, ethics, health and safety, society, and politics. 3 undergraduate hours. No graduate credit. Departmental approval required. Prerequisite: Concurrent enrollment in no more than two required ME courses; completion of all required courses. This course satisfies the General Education Criteria for:
Advanced Composition

ME 471 Finite Element Analysis credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/471/)
The finite element method and its application to engineering problems: truss and frame structures, heat conduction, and linear elasticity; use of application software; overview of advanced topics such as structural dynamics, fluid flow, and nonlinear structural analysis. Same as AE 420 and CSE 451. 3 or 4 undergraduate hours. 3 or 4 graduate hours. Credit is not given for both ME 471 and CEE 470. Prerequisite: CS 101 and ME 371 or TAM 470. Alternatively, AE 370 for AE students.

ME 472 Introduction to Tribology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/472/)
Friction, wear, and lubrication; engineering surfaces; surface properties and surface topography; Hertzian contacts and contact of rough surfaces; friction of surfaces in contact; wear and surface failures; boundary lubrication; fluid properties; hydrodynamic lubrication; elastohydrodynamic lubrication; bearing selection; introductory micro- and nanotribology. 3 undergraduate hours. 3 or 4 graduate hours.

ME 475 Bioinspired Design credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/475/)
The bioinspired design course offers interdisciplinary, advanced design and critical thinking experience. Students will work in teams to integrate biological knowledge into the engineering design process. The course uses case studies to show how biological solutions can be transferred into engineering design. The case studies will include themes such as locomotion, materials, and sensing. By the end of the course, students will be able to use analogical design concepts to engineer a prototype based on biological function. Same as IB 480. 3 undergraduate hours. 4 graduate hours. Prerequisite: ME 370 or consent of instructor. Restricted to senior or graduate standing or consent of instructor.

ME 481 Whole-Body Musculoskel Biomech credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/481/)
Exploration of the human musculoskeletal system with an emphasis on the whole-body or organism level; modeling and analysis techniques for examining human movement, such as rigid-body modeling techniques, forward and inverse dynamics, and Lagrangian mechanics; examination of current topics, such as orthopedic biomechanics, prosthetics and orthotics, postural control, and locomotion; use of computerized motion-capture equipment and software to examine, simulate, and analyze human movement. Same as BIOE 481. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: TAM 212 and TAM 251.

ME 482 Musculoskel Tissue Mechanics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/482/)
Composition-structure-function relationships for musculoskeletal tissues, including bone, tendon, ligament, cartilage, and muscle; hierarchical structure of tissues from the macro- to nano-scales; relation of composition to mechanical properties of health and diseased tissue; experimental methods used to obtain mechanical properties. Same as BIOE 482. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: TAM 251.

ME 483 Mechanobiology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/483/)
Integrative approach to mechanobiology; mechanics of cell adhesion; cytoskeletal structure and mechanics; mechanotransduction; mechanics of cell proliferation, apoptosis, cancer cells, and stem cells; aging; critical issues facing the mechanobiological sciences. 4 undergraduate hours. 4 graduate hours. Prerequisite: CHEM 102 and TAM 251.

ME 485 MEMS Devices & Systems credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ME/485/)
Same as ECE 485. See ECE 485.

ME 487 MEMS-NEMS Theory & Fabrication credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/487/)
Physical and chemical theory, design, and hands-on fabrication of micro- and nano-electromechanical systems (MEMS and NEMS); cleanroom fabrication theory, including general cleanroom safety, lithography, additive and subtractive processes, bulk and surface micromachining, deep reactive ion etching (DRIE), lithographic Galvanoformung Abformung (LIGA), packaging, scaling, actuators, and micro-nanofluids; fabrication of two take-home devices, such as piezoresistive sensors and microfluidic logic chips, that demonstrate advanced fabrication processing. 4 undergraduate hours. 4 graduate hours. Prerequisite: PHYS 212.

ME 496 Honors Project credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/496/)
Special project or reading course for James Scholars in engineering. 1 to 4 undergraduate hours. No graduate credit. May be repeated. Prerequisite: Consent of instructor.

ME 497 Independent Study credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/ME/497/)
Independent study of advanced problems related to mechanical engineering. 1 to 3 undergraduate hours. No graduate credit. May be repeated in separate terms to a maximum of 6 hours, as topics vary. Prerequisite: Consent of Instructor. Students with Junior or Senior standing.

ME 498 Special Topics credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/498/)
Subject offerings of new and developing areas of knowledge in mechanical engineering intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. 0 to 4 undergraduate hours. 0 to 4 graduate hours. May be repeated in the same or separate terms if topics vary to a maximum of 9 hours.

ME 501 Combustion Fundamentals credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/501/)
Fundamentals of kinetic theory, transport phenomena, chemical equilibria, and reaction kinetics; flames, their gross properties, structure, and gas dynamics including oscillatory and turbulent burning; solid and liquid propellant combustion; one-dimensional detonation theory including structure and initiation; three-dimensional and other complex detonation waves; supersonic burning. Same as AE 538. Prerequisite: AE 311 or ME 410.

ME 502 Thermal Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/502/)
Steady-state simulation and optimization of thermal systems, dynamic performance, and probabilities in system design. Prerequisite: ME 402.

ME 503 Design of IC Engines credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/503/)
Design of internal combustion engines, including gas forces, inertia loads, bearing analysis, torsional vibration, balance, lubrication, valve and cam design, and stress analysis of major engine components. Prerequisite: ME 403.

ME 504 Multiphase Systems & Processes credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/504/)
Dynamics and thermodynamics of multiphase and multicomponent systems with special relevance to air-pollution control and energy conversion; relaxation phenomena; general motion of systems of disparate elemental masses; diffusion in gravitational and electric fields, and boundary-layer motion with mass transport; dispersion and collection of particulate matter; transport with surface reactions. Prerequisite: ME 404.

ME 510 Advanced Gas Dynamics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/510/)
Theoretical gas dynamics; fundamental laws and basic equations for subsonic, transonic, and supersonic steady and unsteady flow processes. Same as AE 510. Prerequisite: ME 410.

ME 512 Physicochemical Hydrodynamics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/512/)
Introduces basic concepts of molecular diffusion in liquids with interactions due to stationary or flowing fluid. Uncharged and charged solutions/dispersions/suspensions of molecules, macromolecules, and particles are considered in enclosed and porous media flows. Particular emphasis is placed on analysis using the equations that govern concentration and velocity fields, flux and flow constitutive relations, driving forces, and transport properties and parameters. Applications are presented in energy, environmental, chemical, and biological systems. 4 graduate hours. No professional credit. Prerequisite: ME 420, ME 411, CEE 442, CEE 451, CHBE 421, or consent of instructor.

ME 520 Heat Conduction credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/520/)
Fundamentals of heat conduction in isotropic and anisotropic materials; methods of solution to steady and transient heat conduction problems in one, two, and three dimensions; internal heat sources; periodic flow of heat; problems involving phase change; approximate analytical techniques; numerical methods; study of current articles on the subject. Prerequisite: ME 420.

ME 521 Convective Heat Transfer credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/521/)
Fundamentals of convective heat transfer; calculation of heat transfer within ducts and over submerged objects for laminar and turbulent flow; natural convection; film condensation and boiling; liquid metals. Prerequisite: ME 411.

ME 522 Thermal Radiation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/522/)
Fundamentals of radiant-energy transport in absorbing and nonabsorbing media; pyrometry; applications to selected problems involving combined energy-transport mechanisms. Prerequisite: ME 420.

ME 523 Nanoscale Energy Transport credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/523/)
An advanced treatment of diverse transport phenomena at the nanometer scale involving solids, liquids and gases emphasizing common features in transport by molecules, electrons, phonons, photons, and other quasi-particles of interest, oriented toward applied research in the areas of nanoscale heat transfer and nanoscale energy conversion. Topics include intermolecular forces at surfaces and in the bulk, momentum and species transport in microfluidics, linear response theory, free molecular flow in gases, electron and phonon transport in crystals, Boltzmann equation and its moments, ballistic and diffusive transport, thermoelectric energy conversion, interfacial transport, energy transport in nanostructures and radiative transport in the near-field. Approved for letter and S/U grading.

ME 530 Fatigue Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/530/)
Fatigue analysis methods for the design of structures and components: stress-life, strain-life, and crack-propagation approaches; multiaxial and high-temperature fatigue; interrelationship among material properties, geometry, and design methodology appropriate for a wide range of mechanical engineering components. Prerequisite: ME 430.

ME 531 Inelastic Design Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/531/)
Material deformation under combined mechanical and thermal loading; constitutive equations and their application in engineering design and in inelastic finite element methods; material and structural degradation under fatigue and creep conditions. Prerequisite: ME 471 and ME 430.

ME 540 Control System Theory & Design credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/540/)
Same as ECE 515. See ECE 515.

ME 543 Applied Control System Design & Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/543/)
Covers advanced design and analysis of control systems by state-space methods: classical control review, Laplace transforms, review of linear algebra (vector space, change of basis, diagonal and Jordan forms), linear dynamic systems (modes, stability, controllability, state feedback, observability, observers, canonical forms, output feedback, separation principle and decoupling), nonlinear dynamic systems (stability, Lyapunov methods). Frequency domain analysis of multivariable control systems. State space control system design methods: state feedback, observer feedback, pole placement, linear optimal control. Design exercises with CAD (computer-aided design) packages for engineering problems. Key to the course are the applied/real-world examples and CAD homework problems used to teach and reinforce the learnings of the material. Aerospace control system pose some of the most difficult and challenging control system design problems. In addition to designing feedback control system gains, the course teaches filtering techniques needed in real-world implementation of flight controls systems. 4 graduate hours. No professional credit. Credit will not given for both ME 543 and ECE 515/ME 540. Prerequisite: MATH 257 or MATH 415 or equivalent; ME 340, TAM 412 or equivalent.

ME 544 Dynamic System Reliability credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/544/)
Same as ECE 554. See ECE 554.

ME 546 Analysis of Nonlinear Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/546/)
Same as ECE 528 and SE 520. See ECE 528.

ME 561 Convex Methods in Control credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/561/)
Use of convex optimization in analysis and control of dynamical systems; robust control methods and the use of semidefinite programming; linear matrix inequalities, operator theory, model reduction, H-2 and H-infinity optimal control, S-procedure and integral quadratic constraints, structured singular value and mu-synthesis, and Markovian jump systems; applications in control design. Prerequisite: ECE 515.

ME 562 Robust Adaptive Control credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/562/)
Mathematical foundation for synthesis and analysis of adaptive control systems: Lyapunov stability theory; methods of direct and indirect model reference adaptive control; recent methods, such as L1 adaptive control, that enable adaptive control with desired transient and steady-stage performance specifications. Prerequisite: Any of ECE 486, ECE 515, ECE 528, GE 424, ME 460.

ME 570 Nonlinear Solid Mech Design credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/570/)
Optimality conditions; finite element methods; design sensitivity analysis; nonlinear analysis; transient analysis; thermo-mechanical solid mechanics. Same as AE 524. 4 graduate hours. No professional credit. Prerequisite: One of AE 420, CEE 470, ME 471, TAM 470; TAM 445, TAM 551.

ME 586 Mechanics of MEMS credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/586/)
Mechanics and dynamics of microelectromechanical systems (MEMS); scaling laws in electrostatics, magnetics, and fluidics; analytical models for thin-film growth and etching; effect of surface tension in small dimensions in relations to stability of MEMS during web fabrication; size effects on mechanical properties of MEMS materials; equations of motion for MEMS, involving coupled elastic and electric fields that give rise to nonlinear dynamical behavior; Mathieu behavior and chaotic systems. Prerequisite: ME 485.

ME 590 Seminar credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/ME/590/)
Presentation and discussion of significant developments in mechanical engineering. Approved for S/U grading only. May be repeated.

ME 591 Interest Group Seminar credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/ME/591/)
Seminars on current topics in mechanical science and engineering. May be repeated in the same term if topics vary. May be repeated in separate terms.

ME 597 Independent Study credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/597/)
Independent study of advanced problems related to mechanical engineering. May be repeated in the same term or in separate terms if topics vary to a maximum of 12 hours. Prerequisite: Consent of instructor.

ME 598 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/ME/598/)
Subject offerings of new and developing areas of knowledge in mechanical engineering intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. May be repeated in the same or separate terms if topics vary.

ME 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/ME/599/)
Approved for S/U grading only. May be repeated.

MDIA - MEDIA

MDIA Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/MDIA/)

Courses

MDIA 100 College of Media Orientation credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MDIA/100/)
College of Media Orientation is designed to build academic and social integrity and to give students the resources they need to be responsible members of the University of Illinois community who earn degrees in a timely manner.

MDIA 199 Special Topics credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/MDIA/199/)
Subject offerings of new and developing areas of knowledge and practice in the fields of media. The course is intended to augment the existing curriculum. See Class Schedule or college course information for topics and prerequisites. Approved for letter and S/U grading. May be repeated in the same term to a maximum of 6 hours if topics vary; may be repeated in separate terms to a maximum of 12 hours if topics vary.

MDIA 223 Watching the Environment credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MDIA/223/)
This course examines how films portray the health environment and the need for environmental protection. The course focuses on series of questions including: To what extent does a film suggest that the world has environmental concerns? What are the constraints that narrative form, production routines, financing and distribution put on representing environmental problems and environmentalists? Is the information in the film to be trusted? In documentaries, are physical and social scientists' explanations of environmental problems and solutions reliable? What cues can we use from within and outside the film to evaluate the film for credibility? During the course participants will compare the science and economics of selected environmental issues with film presentations, examine what drives of environmental participation (and the limits of film in presenting science), and look at the constraints of producing special interest versus broad distribution films on presentations of the environment. Class includes viewing blockbuster, Oscar, and award-winning documentaries. Lecture attendance is mandatory. Same as NRES 223.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

MDIA 290 Undergraduate Open Seminar credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/MDIA/290/)
Experimental course on special topics pertinent to the disciplines studied within the College of Media. Topics will vary. Approved for letter and S/U grading. May be repeated in the same or separate terms to a maximum of 6 hours if topics vary.

MDIA 299 Media Study Abroad credit: 0 to 18 Hours. (https://courses.illinois.edu/schedule/terms/MDIA/299/)
Provides credit toward the undergraduate degree for study at accredited foreign institutions or approved overseas programs. Final determination of credit is made upon the student's completion of the work. Approved for Letter and S/U grading. Prerequisite: One year of residence at UIUC; good academic standing, and prior approval of the College of Media.

MDIA 390 Special Topics in Media credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/MDIA/390/)
Special topics course focusing on cultural, economic, historical, political, and social themes and issues that influence or are influenced by the media. Topics will vary. Additional fees may apply. See Class Schedule. Approved for Letter and S/U grading. May be repeated for a maximum of 6 hours if topics vary. Prerequisite: One year of Media courses, Junior or senior standing in the College of Media, or consent of instructor.

MDIA 400 Special Topics credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/MDIA/400/)
Varying topics including the cultural, social, historical, legal, economic, political, and other issues that influence or are influenced by Media. 1 to 3 undergraduate hours. 1 to 3 graduate hours. May be repeated in the same or separate terms to a maximum of 6 hours if topics vary. Prerequisite: Previous classes in either AGCM, ADV, JOUR, or MACS.

MDIA 512 History of Libraries credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MDIA/512/)
Same as IS 512. See IS 512.

MDIA 524 Dev Psycholinguistics credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MDIA/524/)
Same as LING 524 and PSYC 524. See PSYC 524.

MDIA 525 Psycholinguistics credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MDIA/525/)
Same as LING 525 and PSYC 525. See PSYC 525.

MDIA 560 Feminist Media Studies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MDIA/560/)
Addresses major areas of theoretical debate or interest in the broad topic of "Feminist Media Studies" and looks in depth at a number of theoretical issues which define it. Develops an understanding of historical, psychoanalytic, interpretive, and social scientific approaches to the study of film and television texts, their reception, and their production. Readings are extensive and directed toward illustrating the range of theoretical and empirical approaches applied to addressing questions of central interest in the field. Viewings will emphasize some lesser-known historical texts central to theoretical debates in the field. Viewings and readings are focused on "popular" film and television. Same as GWS 560.

MDIA 568 Political Economy of Comm credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MDIA/568/)
Analyzes the structure, policy, and behavior of such media of communication as newspapers, magazines, books, postal service, telegraph, telephone, broadcasting, and film; special emphasis on their relationships to the political order and the economy. Prerequisite: Consent of department.

MDIA 570 Popular Culture credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MDIA/570/)
Examines problems of cultural analysis related to the media of communications and the social implications of communications research.

MDIA 571 Proseminar I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MDIA/571/)
Addresses the mass media of communications, their role as social institutions, and their control and support. Examines evolution of research on mass media content, audience, and effects. Prerequisite: Consent of department.

MDIA 572 Proseminar II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MDIA/572/)
Addresses the problems of communications, including the individual as a communicating system, symbolic processes, analysis of messages, psycholinguistics, and language as social behavior. Prerequisite: Consent of department.

MDIA 573 Freedom of Expression credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MDIA/573/)
Examines the development of the Anglo-American press system and the idea of freedom of the press; explores contemporary mass media and their implications for freedom and democracy.

MDIA 575 Cultural Studies and Critical Interpretation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MDIA/575/)
Same as EPS 575 and ERAM 573. See ERAM 573.

MDIA 577 Philosophy of Technology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MDIA/577/)
Introduces students to those thinkers who understand technology philosophically as a central component in modern culture. Examines major perspectives on the nature of technology, rooted in Norbert Weiner, Karl Marx, and Martin Heidegger. Links media technologies, information systems, and global communications background problems and basic issues to technology more generally. Develops instrumentalism, feminist and critical approaches, ethical concerns, and alternative technologies in the context of technology as a cultural activity.

MDIA 578 Communication Ethics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MDIA/578/)
This course introduces the latest literature in, or directly relevant to, communication, media and information ethics. It examines current efforts in applied and professional ethics, feminist ethics, and social ethics to develop ethical models that are cross-cultural, gender inclusive and international. The major ethical issues are considered in such areas as global communication, new media technologies, information systems, news, and entertainment.

MDIA 580 Advanced Interpretive Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MDIA/580/)
Same as SOC 580. See SOC 580.

MDIA 590 Special Topics credit: 2 to 8 Hours. (https://courses.illinois.edu/schedule/terms/MDIA/590/)
May be repeated in the same or in multiple semesters if topics vary.

MDIA 592 Quantitative Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MDIA/592/)
Introduces the methods of empirical research in the behavioral sciences applicable to research problems in human communication, with emphasis on studies of mass communication. Lectures, readings, and laboratory practice.

MDIA 593 Qualitative Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MDIA/593/)
Introduces qualitative concepts and strategies in the social sciences and humanities which apply to research problems in mass communications.

MDIA 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/MDIA/599/)
Approved for S/U grading only. May be repeated to a maximum of 16 hours.

MACS - MEDIA AND CINEMA STUDIES

MACS Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/MACS/)

Courses

MACS 100 Intro to Popular TV & Movies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/100/)
The goal of this course is for students to begin to develop a critical understanding of the role of popular movies and television in their own lives and in U.S. culture. The course looks at issues of the relationship of media to social violence, gender identities, sexual identities, adolescents, minority cultures, and the role of the U.S. media globally. It also considers some of the major media genres that characterize U.S. popular television and movies.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

MACS 101 Introduction to the Media credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/101/)
Introduces students to core issues in communication, ranging from the role of language in human history to political questions posed by electronic and digital technologies. Exploring key contemporary problems through timely readings, students learn and write about how the media affect everyday life.
This course satisfies the General Education Criteria for:
Advanced Composition

MACS 104 Introduction to Film credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/104/)
Same as ENGL 104. See ENGL 104.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

MACS 117 Shakespeare on Film credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/117/)
Same as ENGL 117. See ENGL 117.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

MACS 140 Smartphone Cinema credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/140/)
Smartphone Cinema will give students an introduction to the basic components, strategies, methodology, vocabulary and techniques used to create short films and other media in a professional way using their own smartphones. Classwork will include viewing and discussion examples as well as practical instruction in video production from initial script through shooting and editing. Students will learn through practical exercises and will produce their own audiovisual projects. Lab work will consist of theoretical and practical case discussions, through a total of five different filming exercises. Students will work in groups of 2 to 5 people depending on the exercise, and they will complete those five projects outside of class time. In addition, class sessions will include training sessions in the lab, learning smart phone camera operation, and digital editing. Credit is not given for MACS 140 if credit for MACS 199: Smartphone Cinema has already been given.

MACS 150 Introduction to Digital Media Production credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MACS/150/)
An introduction to aesthetic, conceptual, and technical skills needed to create audiovisual media for digital distribution. Students will learn to communicate and creatively express themselves through new and emerging technologies while becoming more critical digital media consumers and producers. No prior media production experience or equipment is necessary to enroll. Additional fees may apply. See Class Schedule.

MACS 166 Contemporary Media Literacy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/166/)
Develops critical media production skills to assess the importance of new media in contemporary culture. The course emphasizes both social and technical aspects of media. As part of the course, students prepare their own media and evaluate current media literacy projects.

MACS 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/MACS/199/)
May be repeated to a maximum of 12 hours in separate semesters if topics vary.

MACS 202 Social Aspects Info Tech credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/202/)
Same as INFO 202 and IS 202. See IS 202.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

MACS 203 Contemporary Movies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/203/)
Provides a critical context for recent international cinema by exploring several kinds of genres, aesthetics, and technologies. We will discuss transnational trends in cinema relating to the influence of other media such as gaming, social networking, and personal electronics, as well as consider impacts of economic structures of global filmmaking production and exhibition. We will view popular and art movies, and query longstanding categories such as the teen pic, "woman's" film, and documentary.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

MACS 204 Gender in Gaming credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/204/)
Same as ENGL 277 and GWS 204. See GWS 204.

MACS 205 Introduction to Documentary credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/205/)
This course introduces students to one of the fastest growing areas in media today: the documentary. It's designed for students who want to expand their knowledge and appreciation of documentaries in all their forms. Using weekly in-class screenings, discussion, readings, ad writing, students will examine a wide variety of documentaries, looking at their styles, purposes, and storytelling "voices", as well as learning the language and other fundamentals of documentary. We will also cover some of the basic methods involved in planning and creating a documentary. Please note: this is NOT a hands-on production course.
Prerequisite: Sophmore standing or above required.

MACS 207 Indian Cinema in Context credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/207/)
Same as CWL 207. See CWL 207.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Non-West

MACS 211 Intro to African-American Film credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/211/)
Examination of the history, theory, and aesthetics of African-American filmmaking from the silent era to the present. Films are analyzed within their sociocultural contexts, with particular attention to how constructions of race, identity, and community interact with class, gender, and sexuality; and the link between film and other forms of Black expressive culture. The impact of African-American film on popular culture, links to the African Diaspora, and relations with other communities of color will also be discussed. Same as AFRO 211.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

MACS 224 Sportsmedia Technology & Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/224/)
This course is designed for students who are curious about (a) how new technologies are changing sportsmedia cultures, and (b) the kinds of knowledges and skills needed to effectively engage with this powerful cultural and economic industry. We'll use four primary focal points (ESPN, Sport Fandom, Action-Sports, Data Production / Smart Stadiums) to help us understand today's sportsmedia cultural industry's challenges and possibilities, and the kinds of challenges and possibilities that the sportsmedia cultural industry creates for society. We'll also use our course focal points and related industry websites to concretize the key concepts (drawn from theoretical readings and applied studies in media studies, sociology, sport studies, and technology studies).

MACS 227 Studies in Black Television credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/227/)
Same as AFRO 227. See AFRO 227.

MACS 250 Latina/os on the Bronze Screen credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/250/)
Same as LLS 250. See LLS 250.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - US Minority

MACS 260 Film Production credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MACS/260/)
This course serves as an introduction to the many phases of narrative film production. Students will explore—through technical application—the formal qualities of motion pictures and the ways that film communicates space and time, stories, and experiences. Through lectures and labs, students will learn the technical skills and concepts that will enable them to complete a number of production projects outside of class. They will also gain a fundamental grounding in all of the essential skills of the film production workflow. This course is a prerequisite for all upper-level MACS cinema production courses. Additional fees may apply. See Class Schedule. Prerequisite: MACS 140 OR MACS 150 OR sophomore standing. Sophomore standing required unless credit has been given for MACS 140 or MACS 150.

MACS 261 Survey of World Cinema I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/261/)
Survey of world cinema considered from stylistic, cultural, institutional, and technological perspectives. Covers the history of film from its origins through the 1940s. Lectures, discussions, and screenings of selected films.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

MACS 262 Survey of World Cinema II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/262/)
Survey of world cinema considered from stylistic, cultural, institutional, and technological perspectives. Covers the history of film from the 1940s to the present day. Lectures, discussions, and screenings of selected films.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

MACS 264 Creative and Information Economies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MACS/264/)
An introduction to the political economy of the media in the U.S. The purpose of the class is to acquaint students with a core understanding of how the media system operates, and with what effects, in a capitalist society. The course examines the role of advertising, public relations, corporate concentration, and government regulation upon journalism, entertainment, culture, and participatory democracy. The class also examines issues such as the Internet, globalization, and public broadcasting.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

MACS 265 Innovation Illinois: From Accessible Design to Supercomputing Cultures credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/265/)
Innovation Illinois introduces the histories of UIUC interdisciplinary innovations that brought together students and researchers in engineering, humanities, sciences and the arts. We will explore how local histories of Illinois innovations help us understand today’s innovation trends and processes, from the growth of new design centers on university campuses to contemporary accessibility design, online education, and electronic music. As part of a final research project, students will be introduced to the basics of video editing and will team produce a short-form video using various primary sources. Same as CS 265 and IS 265.

MACS 266 Community Innovation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/266/)
Same as IS 266. See IS 266.

MACS 273 American Cinema, 1950-2000 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/273/)
Same as ENGL 273. See ENGL 273.

MACS 275 Am Indian and Indigenous Film credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/275/)
Same as AIS 275 and ENGL 275. See AIS 275.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - US Minority

MACS 282 A World of Death and Blood: The Horror Movie credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/282/)
MACS 282 offers a deep dive into the phenomenon of the Horror Movie. Through the semester we will explore the enduring fascination with the act of scaring one's self in public. Our class' first section will discuss tendencies within the narrative itself, the frequent stylistic flourishes deployed by its storytellers and the subtexts these experiences inevitably articulate. The next section will visit a few of the many discourses addressed by the Horror Movie while noting some of the reoccurring themes and motifs that emerge and intersect across the films we will screen. Finally, the Semester will close with a consideration of the Horror Spectacle: the tactics these pictures utilize to keep audiences in seats and eyes on the screen. Through the coming weeks we will discuss the social, political and cultural implications of the Horror Movie's expressions of gender, sexuality, race, religion, science, and philosophy.

MACS 284 Animated Media from Mickey to GIFs credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/284/)
This course examines the technological, stylistic, industrial, and cultural history of animated media from the late 19th century to the present day. Topics covered include animation in the silent era, Disney and Warner Bros., Japanese anime, television animation, abstract animation, cartoons and race, computer-generated animation, GIFs, and motion capture. Weekly required screenings. Using source footage and voiceover narration, students will create several video essays that offer an original analysis of animated works in a historical context.

MACS 295 Intro Media/Cinema Topics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/295/)
Introduction to the study of special topics in media and cinema studies, including cultural, social, historical, economic, and/or political issues in media and/or cinema. Topics vary but may include: genres, stars, historical movements, thematic studies, television, convergence culture, new media. Additional fees may apply. See Class Schedule. May be repeated in the same or separate terms to a maximum of 6 hours if topics vary.

MACS 300 Topics in Film and History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/300/)
Same as HIST 300. See HIST 300.

MACS 301 Cinema Decades credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/301/)
Surveys the trends and tendencies within the context of cinema of a particular decade, as well as the industry or industries from which it emerged. Rather than move chronologically through the decade, this course will approach the decade through an exploration of the significant movements within the industry and counter-movements that occurred in response. We will look at how significant artists navigated the mainstream studios and distribution companies and will also look at niche-specific independent filmmakers and the movements of the era. This class will allow students the opportunity to challenge preconceived notions of the decade's cinema. It will also encourage students to synthesize their analyses of this decade's films with information regarding the shifting nature of the film industry.

MACS 317 Media History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/317/)
Presents the nature and development of communication systems; history of communication media; history of journalism, advertising, and broadcasting; and communications in the modern world.

MACS 320 Popular Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/320/)
Examines the critical literature on mass media entertainment; reviews significant contemporary issues and develops perspectives for understanding popular culture.

MACS 321 Film Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/321/)
Introduces students to key issues of, major theoretical approaches to, and current debates about the cultural function of films. Course addresses theories of spectatorship, the politics of pleasure, the culture of entertainment, and the cinematic construction of race, class, and gender.
This course satisfies the General Education Criteria for:
Cultural Studies - Western

MACS 322 Politics and the Media credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/322/)
Same as CMN 325 and PS 312. See PS 312.

MACS 323 Studies Film/Media Production credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/323/)
Provides analytical framework for pursuing film/media production. Emphasizes critical analysis of various aspects of production: e.g., scriptwriting, storyboarding, cinematography, editing, set and costume design, location and studio shooting, sound. Covers theories of representation, narrative, meaning-making, experimentation, and audience in relation to film/media production practices. Does not, however, teach students how to do film and media production (e.g., how to work a camera, etc.). Therefore, students must come to the course with experience in film and/or media production (can be self-taught). Both individual and group projects are encouraged. Students should expect to work as crew for other students in class. Culminates in a public screening at which students present an analysis of their own project--both the process and the finished product. To apply for course, students (individually or in groups) must propose an idea or concept for a film/media project they would like to produce during the class. May be repeated in separate terms to a maximum of 6 hours. May be repeated by students who wish to pursue a longer project in two consecutive semesters (may include summer). Students may not repeat the course to pursue separate projects. Prerequisite: Consent of instructor.

MACS 326 New Media, Culture & Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/326/)
Digital media is an immensely pervasive and powerful form of communication that despite its rapid growth has yet to reach most of the world's population. This lecture-based survey course for undergraduates traces the history and formation of personal computing and the Internet, the development of virtual communities and virtual worlds, evolving forms of digital representation and communication, digital visual cultures, features of new media industries, and the rise of participatory media. Evaluation and assessment is based on written exams, quizzes, class discussion in section, and practice-based assignments using new media technologies such as wikis, blogs, games, and digital video. Emphasis is on mastering key concepts of digital media through theory and history, and on critical discussion of distinctive features of digital media objects. Lectures and discussion sections are held in computer-equipped classrooms. Same as INFO 326.

MACS 331 Media and Democracy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/331/)
Studies the philosophical bases of the functions and the responsibilities of mass communications.

MACS 335 Film, TV, and Gender credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/335/)
Same as GWS 335. See GWS 335.

MACS 345 Digital & Gender Cultures credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/345/)
Same as GWS 345, INFO 345, and SOC 345. See GWS 345.

MACS 346 Case Study: Endless Summer credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/346/)
Same as KIN 346 and RST 346. See KIN 346.

MACS 351 Social Aspects of Media credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/351/)
Explores media structures in relation to cultural content and social functions; examines problems of life and society as treated in mass-produced communications.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

MACS 352 Attitude Theory and Change credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/352/)
Same as PSYC 352. See PSYC 352.

MACS 356 Sex & Gender in Popular Media credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/356/)
Examines the notion that the mass media influence our development as gendered individuals, looking at those who argue for and against this notion. Considers different forms of feminist theory applied to the study of mass media, the history and scholarly criticisms of the media and their portrayal of women, and feminist attempts to create alternatives to mainstream media images. Throughout, the course considers representation of minorities in the dominant media and examines newly created alternative representations. Same as GWS 356.
This course satisfies the General Education Criteria for:
Cultural Studies - Western

MACS 361 Film Theory and Criticism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/361/)
Study of major aesthetic and critical theories about film; study of theory and practice of film criticism.

MACS 364 Topics in Media Business credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/364/)
Addresses the business, industry, and economic implications of the interaction of Internet, television, radio, film, and print outlets through digitization-driven platform and interactive technologies. Explores historical and emergent business models, ownership and work patterns, and investment arrangement related to media convergence. Investigates novel forms of individual and collective labor structures and globally distributed modes of production and consumption. Includes attention to economic and scholarly models seeking to analyze media business structures. Specific topics vary by semester, but may include Google, Disney, and Hollywood studio system, or activist media organizations. May be repeated for a maximum of 6 hours if topics vary.

MACS 365 Asian American Media and Film credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/365/)
Same as AAS 365. See AAS 365.

MACS 370 Cinematography and Sound Design credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MACS/370/)
Teaches students advanced principles of sync-sound moving image production, including cinematography, lighting, sound recording, and production logistics. With an emphasis on dramatic visual storytelling, students will produce five scenes from existing scripts, rotating the production roles of director of photography, assistant camera, gaffer, mixer, and boom operator for each script. Directing, editing, and color grading will be covered, and students will be responsible for casting, location scouting, and set-building in order to successfully produce each scene. Students will leave the course knowing the interworking of a film crew, the operation of digital cinema technologies, and advanced visual and aural aesthetics and techniques for narrative filmmaking. A prerequisite for MACS 480 & MACS 481, the department's capstone seminar in advanced cinema production. Additional fees may apply. See Class Schedule. Prerequisite: MACS 260: Film Production.

MACS 371 Editing and Post-production for Cinema credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MACS/371/)
Students in this course focus on the theory and practice of video editing and post-production. Through weekly assignments and four larger projects, they gain a thorough understanding of narrative editing techniques, color correction, audio post-production and the requisite software. The class covers the art of post-production and how post-production affects narrative function in moving picture media (concentrating on cinema, but looking as well at music videos and television). Assignments include editing a short film, color correction, and sound editing/mixing, among others. Strongly suggested for students who wish to be considered for the editing and postproduction positions in MACS 480/481. Requires MACS 260 as prerequisite. Credit is not be given for MACS 371 if credit for MACS 323: Video and Audio Postproduction has been given. Prerequisite: MACS 260: Film Production.

MACS 372 Screenwriting credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/372/)
This course examines the practice of writing for the screen. Students will better understand the fundamentals of visual storytelling and learn standard formats of screenwriting. In a classroom environment that combines lecture, screening, film analysis, and workshop discussion of students' work, the student will be exposed to a wide variety of concepts related to the preparation and writing of the screenplay. Special emphasis will be given to the ideas of plot structure and character development, the two pillars on which the screenplay is built. This intensive scriptwriting class is intended to 1.) help students create a variety of writing tools and short scenes that will serve as the building blocks for 2.) constructing, writing and revising a short narrative screenplay. Issues of industry professionalization with regard to screenwriting will also be covered. Prerequisite: MACS 260: Film Production.

MACS 373 Special Topics in Film Studies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/373/)
Same as ENGL 373. See ENGL 373.

MACS 375 Latina/o Media in the US credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/375/)
Examines the portrayal and participation of Latinas and Latinos in the U.S. media using a variety of interdisciplinary approaches. Addresses historical and political movements that have been critical to Latina/Latino print, broadcast, and electronic communication within the broader context of cultural diversity. Same as LLS 375.

MACS 377 Global Communications credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/377/)
Introduces students to the multiple dimensions of cross-national and comparative communications. Specific topics will vary according to instructor's focus, but may include human dimensions of global communication, intercultural communication, media impact, structure and processes of institutional communication (i.e. propaganda, diplomacy).

MACS 380 21st Century Documentaries credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/380/)
Documentary has exploded in the past decade, with more being created, screened and watched than at any time in history. But what has this growth meant to documentary, and how has it impacted what we see on screen and how documentary stories are being told? We will examine the changes and trends taking place in film and television documentaries over the past decade. We will watch and analyze a variety of contemporary documentaries, examining some of the different stylistic, production, and story-telling methods that have developed over this time. If you enjoy watching documentaries and want to learn more about them, you will find this an enjoyable and thought-provoking course.

MACS 381 Black Women and Film credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/381/)
Same as AFRO 381. See AFRO 381.

MACS 382 French & Comparative Cinema I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/382/)
Same as CWL 387 and FR 387. See FR 387.

MACS 383 French & Comparative Cinema II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/383/)
Same as CWL 389 and FR 389. See FR 389.

MACS 389 International Communications credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/389/)
Provides an interdisciplinary approach to international communications; its structure and content; the role of international communications in conflict and conflict resolution; the semantics of international communication; the technical and economic aspects of international mass communications; and government-industry relations in communications. Same as PS 389.

MACS 391 Individual Study credit: 0 to 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/391/)
Individual research and exploration of media and cinema studies topics under the guidance of a faculty advisor. May be repeated in the same or in multiple semesters, if topics vary. Prerequisite: Consent of instructor.

MACS 395 Special Media/Cinema Topics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/395/)
Cultural, social, historical, economic, and/or political issues in media and/or cinema; topics vary but may include: genres, historical movements, thematic studies, television, convergence culture, new media. May be repeated to a maximum of 6 hours if topics vary.

MACS 408 TV Studies credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MACS/408/)
Examines factors reshaping TV and its relationship to culture, including genres, industry practices (advertising, production, distribution), new media technologies (YouTube, Twitter, and newer developments), and computer gaming. Analyzes places/spaces of television, mobility, surveillance, television as instruction/guide (dating, cooking, fashion), citizenship, consumption, and TV in everyday life. Focuses on contemporary aspects of TV, with some attention to earlier forms and practices of television. Students required to view and analyze some television programs outside of class. 3 undergraduate hours. 4 graduate hours.

MACS 410 Media Ethics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MACS/410/)
Surveys the major ethical problems in news, advertising, publications and entertainment media; includes case studies and moral reasoning on confidentiality, privacy, conflicts of interest, deception, violence, and pornography. 3 undergraduate hours. 4 graduate hours.

MACS 419 Russian & East European Film credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MACS/419/)
Same as SLAV 419. See SLAV 419.

MACS 423 Language Acquisition credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MACS/423/)
Same as LING 423 and PSYC 423. See PSYC 423.

MACS 425 Intro to Psycholinguistics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MACS/425/)
Same as LING 425. See LING 425.

MACS 432 Commodifying Difference credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MACS/432/)
Same as AAS 435, AFRO 435, GWS 435, and LLS 435. See LLS 435.

MACS 461 Politics of Popular Culture credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MACS/461/)
Same as AIS 461. See AIS 461.

MACS 464 Film Festivals credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MACS/464/)
Examines the history and significance of film festivals: What they mean for the film industry (marketing, distribution, production), audiences (both at the festival and beyond), film history, and the evolution of filmmaking. Covers specific local, national, and international festivals including festivals focused on particular issues (e.g., Chicago International Children's Film Festival, San Francisco International Asian American Film Festival, Miami Gay and Lesbian Film Festival, and our own local IUB 48-Hour Film Contest). Coordinated with Roger Ebert's Film Festival (which is held in Champaign every April) including internship/volunteer opportunities, screenings, and meetings with guests. Class culminates with a UIUC student film festival, organized, judged, and sponsored by the class. 3 undergraduate hours. 4 graduate hours.

MACS 466 Japanese Cinema credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MACS/466/)
Examines the influence of Japan's traditional aesthetics on its cinema and surveys its major film movements, genres, and directors. Same as CWL 467 and EALC 466. 3 undergraduate hours. 4 graduate hours. Prerequisite: One course in the College of Media or East Asian Languages and Cultures, or consent of instructor.

MACS 470 Topics in Italian Cinema credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MACS/470/)
Same as ITAL 470. See ITAL 470.

MACS 480 Advanced Filmmaking credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/480/)
This is an intensive pre-professional course in cinema production. It is designed to provide advanced film production students with a workshop opportunity to refine their skills by making a 30-minute narrative film over the course of the semester. The main focus of the class will involve the cinematic treatment of a selected screenplay—from script to final edited stage. The philosophy of the class is learning by doing. Students will be instructed in the finer points of professional film production, including casting, rehearsal, scheduling, blocking, assembly, rushes, and other aspects of the workflow of fiction filmmaking. There will be a division of labor on each project. The class will be divided into two crews consisting of assigned positions. These positions are assigned by the instructor based on a student's previous performance in MACS production courses (particularly MACS 370). The positions are: Producer (production manager/assistant director, location scout), Director, Production Designer (promotion and graphics, unit still photographer; script supervisor), Director of Photography (assistant sound mixer), Assistant Camera (colorist), Gaffer (assistant colorist), Sound Designer (recordist/mixer), and Editor (production designer's assistant; boom operator). Each group will collectively choose a short film to produce from a series of selected scripts. The semester will culminate in a public screening of the class projects of both groups. Additional fees may apply. See Class Schedule. 3 undergraduate hours. No graduate credit. Prerequisite: MACS 370: Cinematography and Sound Recording. Concurrent enrollment in MACS 481: Advanced Filmmaking Studio is required. Junior or Senior standing recommended for this course.

MACS 481 Advanced Filmmaking Studio credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/481/)
This is an intensive pre-professional course in cinema production. It is designed to provide advanced film production students with a workshop opportunity to refine their skills by making a 30-minute narrative film over the course of the semester. The main focus of the class will involve the cinematic treatment of a selected screenplay—from script to final edited stage. The philosophy of the class is learning by doing. Students will be instructed in the finer points of professional film production, including casting, rehearsal, scheduling, blocking, assembly, rushes, and other aspects of the workflow of fiction filmmaking. There will be a division of labor on each project. The class will be divided into two crews consisting of assigned positions. These positions are assigned by the instructor based on a student's previous performance in MACS production courses (particularly MACS 370). The positions are: Producer (production manager/assistant director, location scout), Director, Production Designer (promotion and graphics, unit still photographer; script supervisor), Director of Photography (assistant sound mixer), Assistant Camera (colorist), Gaffer (assistant colorist), Sound Designer (recordist/mixer), and Editor (production designer's assistant; boom operator). Each group will collectively choose a short film to produce from a series of selected scripts. The semester will culminate in a public screening of the class projects of both groups. 3 undergraduate hours. No graduate credit. Prerequisite: MACS 370: Cinematography and Sound Recording. Concurrent enrollment in MACS 480: Advanced Filmmaking Studio is required. Junior or Senior standing recommended for this course.

MACS 485 Making Video Essays credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MACS/485/)
This course examines the theory and practice of videographic criticism, a burgeoning scholarly practice in media and cinema studies, in a workshop-style environment. Through weekly parameter-based videographic exercises using pre-existing media of their choice, students will learn how to conduct videographic research by critically exploring media texts using non-linear editing software (Adobe Premiere Pro). A diverse variety of explanatory, algorithmic, and poetic approaches to the video essay will be covered. Assignments will include several videographic projects as well as a final synoptic video essay. An intellectual curiosity for the videographic medium is crucial, but no prior experience in media production or non-linear editing is required. Students will be responsible for storing and backing up their data, but all coursework will be conducted using University equipment and software. 3 undergraduate hours. 4 graduate hours. Credit is not given for MACS 485 if credit for MACS 496: Making Video Essays has been given. Prerequisite: Junior standing required.

MACS 490 Green Screen: Film and Nature credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MACS/490/)
Same as EURO 489 and SCAN 490. See SCAN 490.

MACS 492 Scandinavian Cinema credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MACS/492/)
Same as SCAN 492. See SCAN 492.

MACS 493 German Cinema I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/493/)
Same as GER 493. See GER 493.

MACS 494 German Cinema II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MACS/494/)
Same as GER 494. See GER 494.

MACS 495 Internship Seminar credit: 0 to 1 Hours. (https://courses.illinois.edu/schedule/terms/MACS/495/)
Seminar based on internship experience. Offered for College of Media students who complete an approved internship. 0 to 1 undergraduate hours. No graduate credit. Approved for S/U grading only. May be repeated in the same term to a maximum of 2 undergraduate hours. May be repeated in separate terms to a maximum of 3 undergraduate hours. Prerequisite: Consent of instructor.

MACS 496 Advanced Media/Cinema Topics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MACS/496/)
Advanced study of cultural, social, historical, economic, and/or political issues in media and/or cinema; topics vary but may include national and transnational cinemas, directors, genres, historical movements, social and political movements, thematic studies, television, convergence culture, new media and media production. 3 undergraduate hours. 4 graduate hours. May be repeated in separate terms to a maximum of 6 undergraduate hours or 8 graduate hours, if topics vary. Prerequisite: One College of Media course or consent of instructor.

MACS 499 Senior Project credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/MACS/499/)
Required of Media and Cinema Studies majors, a senior project (0 credits) to be completed in conjunction with a 300- or 400-level MACS course taken in their senior year. 0 undergraduate hours. No graduate credit. Approved for S/U grading only. Prerequisite: Consent of instructor and a completed/submitted MACS Senior Project Learning Agreement. Restricted to Senior Media and Cinema Studies majors.

MACS 503 Historiography of Cinema credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/MACS/503/**)**
Seminar on historical perspectives on cinema as an institution, a body of signifying practices, a product to be consumed, a phenomenon of modernity, and a cultural artifact, and on cinema in relation to other screen media. Same as CWL 503 and ENGL 503.

MACS 504 Theories of Cinema credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/MACS/504/**)**
Seminar on influential theories and accompanying debates about the textual/extra-textual mechanisms and cultural/political impact of cinema and related screen media. Same as CWL 504 and ENGL 504.

MSP - MEDICAL SCHOLARS PROGRAM

MSP Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/MSP/)

Courses

MSP 600 MSP. Pre-M1 Completion credit: 0 to 20 Hours. **(**https://courses.illinois.edu/schedule/terms/MSP/600/**)**

MSP 601 MSP. Post-M1 Completion credit: 0 to 20 Hours. **(**https://courses.illinois.edu/schedule/terms/MSP/601/**)**

MSP 620 Nursing Holding Sections credit: 0 Hours. **(**https://courses.illinois.edu/schedule/terms/MSP/620/**)**

MDVL - MEDIEVAL STUDIES

MDVL Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/MDVL/)

Courses

MDVL 111 Ancient to Medieval Art credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/111/)
Same as ARTH 111. See ARTH 111.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

MDVL 122 Swords, Sorcery & Sex: The Middle Ages in Popular Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/122/)
Same as ENGL 122. See ENGL 122.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

MDVL 201 Medieval Literature and Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/201/)
Same as CWL 253 and ENGL 202. See ENGL 202.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

MDVL 216 Legends of King Arthur credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/216/)
Same as CWL 216 and ENGL 216. See ENGL 216.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

MDVL 222 Medieval Art credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/222/)
Same as ARTH 222. See ARTH 222.

MDVL 231 Northern Renaissance Art credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/231/)
Same as ARTH 231. See ARTH 231.

MDVL 240 Italy Middle Ages & Renaiss credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/240/)
Same as CWL 240 and ITAL 240. See ITAL 240.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

MDVL 245 Wives, Workers and Witches in Pre-Modern Europe credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/245/)
Same as GWS 245 and HIST 245. See HIST 245.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

MDVL 247 Medieval Europe credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/247/)
Same as HIST 247. See HIST 247.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

MDVL 251 Viking Mythology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/251/)
Same as CWL 251, REL 251, and SCAN 251. See SCAN 251.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

MDVL 252 Viking Sagas in Translation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/252/)
Same as CWL 252 and SCAN 252. See SCAN 252.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

MDVL 255 British Isles to 1688 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/255/)
Same as HIST 255. See HIST 255.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

MDVL 344 Medieval Jewish Thought credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/344/)
Same as JS 344 and REL 344. See REL 344.

MDVL 345 Medieval Civilization credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/345/)
Same as HIST 345 and REL 345. See HIST 345.

MDVL 346 The Age of the Renaissance credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/346/)
Same as HIST 346 and REL 346. See HIST 346.

MDVL 403 European Education to 1600 credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/403/)
Same as EPS 403 and HIST 440. See EPS 403.
This course satisfies the General Education Criteria for:
Advanced Composition
Humanities - Hist Phil
Cultural Studies - Western

MDVL 407 Introduction to Old English credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/407/)
Same as ENGL 407. See ENGL 407.

MDVL 410 Topics in Medieval British and Irish Literature credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/410/)
Same as CWL 417 and ENGL 412. See ENGL 412.

MDVL 411 Chaucer credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/411/)
Same as ENGL 411. See ENGL 411.

MDVL 412 Medieval Architecture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/412/)
Same as ARCH 412. See ARCH 412.

MDVL 413 Dante credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/413/)
Same as CWL 413 and ITAL 413. See ITAL 413.

MDVL 414 Petrarch & Boccaccio credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/414/)
Same as CWL 414 and ITAL 414. See ITAL 414.

MDVL 415 Classical Rhetorics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/415/)
Same as CLCV 415 and CMN 415. See CMN 415.

MDVL 417 Topics in the History of Romance Languages credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/417/)
Same as FR 417 and RMLG 417. See FR 417.

MDVL 420 Masterpieces Renaiss Lit credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/420/)
Same as CWL 420 and ITAL 420. See ITAL 420.

MDVL 423 Romanesque Art credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/423/)
Same as ARTH 423. See ARTH 423.

MDVL 424 Gothic Art credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/424/)
Same as ARTH 424. See ARTH 424.

MDVL 431 Topics: Northern Art 1300-1500 credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/431/)
Same as ARTH 431. See ARTH 431.

MDVL 433 Fifteenth-Century Italian Art credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/433/)
Same as ARTH 433. See ARTH 433.

MDVL 440 Early Christian Thought credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/440/)
Same as REL 440. See REL 440.

MDVL 443 Byzantine Empire AD 284-717 credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/443/)
Same as HIST 443. See HIST 443.

MDVL 444 Medieval England credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/444/)
Same as HIST 445. See HIST 445.

MDVL 460 Medieval Latin credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/460/)
Same as LAT 460. See LAT 460.

MDVL 470 Middle Ages to Baroque credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/470/)
Same as GER 470. See GER 470.

MDVL 500 Seminar in Medieval Studies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/500/)
Team-taught, interdisciplinary seminar on varying topics in Medieval Studies drawing on faculty from UIUC and invited scholars from other universities. Approved for letter and S/U grading. May be repeated to a maximum of 12 hours.

MDVL 501 Topics in Medieval Studies credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/501/)
Experimental and Temporary Courses. May be repeated in separate terms as topics vary.

MDVL 504 Genesis in History credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/504/)
Same as REL 504. See REL 504.

MDVL 505 Old Norse-Icelandic I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/505/)
Same as SCAN 505. See SCAN 505.

MDVL 506 Old Norse-Icelandic II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/506/)
Same as SCAN 506. See SCAN 506.

MDVL 512 Seminar in Medieval Architecture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/512/)
Same as ARCH 512. See ARCH 512.

MDVL 514 Seminar in Medieval Literature credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/514/)
Same as ENGL 514. See ENGL 514.

MDVL 515 Middle High German credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/515/)
Same as GER 515. See GER 515.

MDVL 522 Seminar in Medieval Art credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/522/)
Same as ARTH 522. See ARTH 522.

MDVL 530 Old High German credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/530/)
Same as GER 530. See GER 530.

MDVL 540 Seminar in N. Renaissance Art credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/540/)
Same as ARTH 531. See ARTH 531.

MDVL 542 Problems in Medieval History credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/542/)
Same as HIST 542. See HIST 542.

MDVL 543 Research Seminar: Medieval credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/543/)
Same as HIST 543. See HIST 543.

MDVL 570 Seminar Old French Literature credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/570/)
Same as FR 570. See FR 570.

MDVL 571 Medieval German Studies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MDVL/571/)
Same as GER 571. See GER 571.

MFST - METROPOLITAN FOOD & ENVIRONMENTAL SYSTEMS

MFST Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/MFST/)

Courses

MFST 101 Experiencing Food Systems credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MFST/101/)
This course uses a guided, discovery-based learning approach designed for students to understand, apply, and analyze key principles of a food system: what food is, where it comes from, how it gets to our plate, and what happens to food waste. Students will develop an understanding of the interrelatedness and interdependence of the food system components. Students will also "experience the food system" through activities related to food production, processing, retail, and post-consumption operations.

MFST 198 Food Systems Reflection credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MFST/198/)
This course is the final course in a series needed to obtain a Food Systems Certificate. In this course, the students will link and construct meaning from the individual Certificate courses by developing their own view of a food system based on the previously learned concepts. In addition, this course will guide student reflection on their role in the food system. Approved for S/U grading only. Prerequisite: MFST 101, NRES 102, HORT 100, FSHN 120, and ACE 100. Concurrent enrollment in any of the prerequisite courses is allowed. Restricted to students enrolled in the Food Systems Certificate program.

MFST 301 Experiential Learning Preparedness & Planning credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MFST/301/)
First of a three part "plan-do-review" series with the goal of immersing students in a professional metropolitan food and environmental systems-related experience. Students will learn what experiential learning is and what defines the best practices of an experiential learning experience. Students will actively participate in developing their learning experience, including defining what they want to learn and how their learning will be assessed. Approved for S/U grading only. Prerequisite: Instructor approval required. MFST majors receive registration priority.

MFST 396 Honors Research or Thesis credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MFST/396/)
Individual research, independent study, special problems, thesis, development and/or design work under the direction of the instructor/Honors advisor. May be repeated in the same or subsequent semesters to a maximum of 12 hours. No more than 12 hrs may be counted towards degree. Prerequisite: Junior standing, admission to the ACES Honors Program, consent of instructor. Restricted to students majoring in MFST.

MFST 397 Experiential Learning credit: 3 to 9 Hours. (https://courses.illinois.edu/schedule/terms/MFST/397/)
Second of a three part "plan-do-review" series with the goal of immersing students in a professional metropolitan food and environmental systems-related experience. In this course, students will complete the learning experience developed in MFST 301, including the previously defined learning objectives, work product, and grading rubric. At least two weeks of full-time (40 hrs of work) or its equivalent is required for each term hour of credit. May be repeated in the same or separate terms for a total of 9 credit hours. Credit is not given for more than 12 combined credit hours of MFST 397 and MFST 450. Prerequisite: MFST 301. Instructor approval required. MFST majors receive registration priority.

MFST 401 Experiential Learning Review and Reflection credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MFST/401/)
This is the third of a three part "plan-do-review" series with the goal of immersing students in a professional metropolitan food and environmental systems-related experience. In this course, students will review and reflect on their previous MFST 397 "on-the-job" learning experience in multiple ways. Students will learn how to effectively communicate what they did and why it matters, how this job relates to other jobs in a food system, and how this job impacts the food system. 3 undergraduate hours. No graduate credit. Prerequisite: MFST 301 and MFST 397. Restricted to MFST majors.

MFST 450 Social Impact Learning Experience credit: 3 to 9 Hours. (https://courses.illinois.edu/schedule/terms/MFST/450/)
The objective of this course is for students to understand the direct impact of a food system on society through a service-learning or community-based learning activity. Using skills gained in MFST 301 and 397, students will find an organization to work with and complete the social impact learning experience. Students will reflect on the service activity in such a way as to gain further understanding of metropolitan food and environmental systems concepts, a broader appreciation of the discipline, and an enhanced sense of civic responsibility. At least two weeks of full-time (40 hrs of work) or its equivalent is required for each term hour of credit. 3 to 9 undergraduate hours. No graduate credit. May be repeated in the same or separate terms for a total of 9 credit hours. Credit is not given for more than 12 combined credit hours of MFST 397 and MFST 450. Prerequisite: MFST 301, MFST 397. Instructor approval required. MFST majors receive registration priority.

MFST 498 Metropolitan Food & Environmental Systems Capstone credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MFST/498/)
The students will work in groups to develop a Champaign-Urbana Food System Report that provides an assessment and recommendations for regional planning around local food. Individual and group field trips will be required for the students to be exposed to how and where policies and infrastructure decisions are made and to meet with additional people involved in those decisions. 3 undergraduate hours. No graduate credit. Prerequisite: Restricted to seniors majoring in MFST.

MICR - MICROBIOLOGY

MICR Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/MICR/)

Courses

MICR 590 Individual Topics credit: 1 to 16 Hours. **(**https://courses.illinois.edu/schedule/terms/MICR/590/**)**
Approved for S/U grading only. May be repeated. Prerequisite: Consent of instructor.

MICR 595 Microbiology Graduate Seminar credit: 0 to 1 Hours. **(**https://courses.illinois.edu/schedule/terms/MICR/595/**)**
Required of all graduate students whose major is microbiology. Approved for S/U grading only. May be repeated. Prerequisite: Consent of instructor.

MICR 599 Thesis Research credit: 0 to 16 Hours. **(**https://courses.illinois.edu/schedule/terms/MICR/599/**)**
Approved for S/U grading only. May be repeated.

MILS - MILITARY SCIENCE

MILS Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/MILS/)

Courses

MILS 101 Introduction to the Army credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MILS/101/)
Introduces you to the professional challenges and competencies that are critical for effective leadership and are pertinent for effective execution of the Profession of Arms. Cadets learn how the personal development of life skills such as critical thinking, time management, goal setting, stress management, and comprehensive fitness relate to leadership, and the Army profession. The focus is on developing basic knowledge and comprehension of Army leadership dimensions while gaining an understanding of the Reserve Officers' Training Corps (ROTC) program, its purpose in the Army, and its advantages for the student. Topics for this course include: Army Leadership, Fitness, Basic Map Reading and Land Navigation. Prerequisite: Course is intended for students who have less than 60 credit hours.

MILS 102 Introduction to the Profession of Arms credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MILS/102/)
This course introduces you to the professional challenges and competencies that are needed for effective execution of the profession of arms and Army communication. Through this course, you will learn how Army ethics and values shape the U.S. Army and the specific ways that these factors are inculcated into Army culture. You will gain a better understanding of the Laws of the Land Warfare and the Principles of War and how they affect and Army Leader's decision making process. You will understand the fundamentals of military and USGS map reading including methods such as intersection and resection, terrain association, and orienteering.

MILS 112 Leadership Laboratory credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/MILS/112/)
Introductory practical application of military skills and leadership; includes basic military mountaineering and rappelling, first aid, individual marching and weapons familiarization. Field trip may be required. Approved for S/U grading only. May be repeated.

MILS 114 Leadership Laboratory credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/MILS/114/)
Continuation of MILS 112 to include actual firing of weapons. Field trip may be required. Approved for S/U grading only. May be repeated.

MILS 120 Intro to US Armed Forces credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MILS/120/)
Surveys the four major branches of the United States military (Army, Navy, Marines, and Air Force) and their historical development into "Professions of Arms." Topics include historical surveys of each branch highlighting key historical developments, organization, structure and customs. Other topics include a discussion of the United States National Command Authority. United States joint military operations and structure, the relationship of the United States Military with its civilian constituency and a survey of emerging Department of Defense issues. Same as AFAS 120 and NS 120.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil

MILS 201 Leadership and Ethics credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MILS/201/)
Focuses on leadership and ethics. The course adds depth to the Cadets' knowledge of the different leadership styles. Cadets will conduct a leadership analysis of famous leaders and self-assessment of their own leadership style. The Army Profession is also stressed through understanding values, ethics and how to apply both to different situations they may encounter as a leader. Army Values and Ethics and their relationship to the Law of Land Warfare and philosophy of military service are also stressed. Students are then required to apply their knowledge outside the classroom in a hands-on performance-oriented environment during a weekly lab facilitated by MS III Cadets, supervised by MS IVs and Cadre. Prerequisite: Course is intended for students who have less than 60 credit hours.

MILS 202 Leadership and Teamwork credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MILS/202/)
MILS 202 focuses on Army doctrine and team development. The course begins the journey to understand and demonstrate competencies as they relate to Army doctrine. Army Values, Teamwork, and Warrior Ethos and their relationship to the Law of Land Warfare and philosophy of military service are also stressed. The ability to lead and follow is also covered through Team Building exercises at squad level. Students are then required to apply their knowledge outside the classroom in a hands-on performance-oriented environment during a weekly lab facilitated by MS III Cadets and supervised by cadre. Prerequisite: Only available to students who have less than 60 credit hours.

MILS 212 Leadership Laboratory credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/MILS/212/)
Intermediate level practical application of military skills and leadership; includes mountaineering and rappelling, first aid, small unit marching, weapons firing, and physical fitness. Field trip required. Approved for S/U grading only. May be repeated.

MILS 214 Leadership Laboratory credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/MILS/214/)
Continuation of MILS 212 to include military radio communication procedures and small unit tactics. Field trip required. Approved for S/U grading only. May be repeated.

MILS 301 Training Management and the Warfighting Functions credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MILS/301/)
The first in a sequence of courses specifically designed for Army ROTC Advanced Course Cadets. This academically challenging class will require you to will study, practice, and apply the fundamentals of Army Leadership, Officership, Army Values and Ethics, Personal Development, and small unit tactics at the squad level. At the conclusion of this course, you will be capable of planning, coordinating, navigating, motivating and leading a squad in the execution of a mission during classroom practical exercises, Leadership Labs, and during a Field Training Exercises (FTX). You will be required to write peer evaluations and receive feedback on your abilities as a leader as well as how to improve those leader skills that can further develop you in to a successful officer. This course includes reading assignments, homework assignments, small group assignments, briefings, case studies, practical exercises, a mid-term exam, and a final exam. You will receive systematic and specific feedback on your leader attributes and core leader competencies from your instructor, other ROTC cadre, and MS IV Cadets who will evaluate you using the Cadet Officer Evaluation System. Successful completion of this course will help prepare you for the ROTC Advanced Camp, which you will attend in the summer at Fort Knox, KY. Prerequisite: Successful completion of MILS 101, MILS 102, MILS 201 and MILS 202 is required to enroll in MILS 301. This course is intended for Army ROTC Cadets who have successfully passed the Basic Course or Basic Camp and are contracted into the Advanced Course.

MILS 302 Leadership and Ethics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MILS/302/)
Principles of leadership including management practices and their relationship to leadership, problem solving, decision making, human behavior and motivation, superior-subordinate relations, and leadership problems in the military environment. Includes field practical application. Prerequisite: Successful completion of MILS 301 is required to enroll in MILS 302.

MILS 312 Leadership Laboratory credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/MILS/312/)
Advanced level practical application of military skills and leadership with emphasis on the student's ability to direct and supervise others; includes advanced land navigation, advanced first aid, platoon and company drill and ceremonies, and advanced communications procedures. Field trip required. Approved for S/U grading only. May be repeated.

MILS 314 Leadership Laboratory credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/MILS/314/)
Continuation of MILS 312 to include small unit tactics and patrolling techniques. Field trip required. Approved for S/U grading only. May be repeated.

MILS 322 Leadership Laboratory credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/MILS/322/)
Unique opportunity for advanced course students to fully plan, execute, and supervise the military training and activities of other military science students. Emphasis is on leadership, organizing and managing activities, decision making, and effective instructional techniques. Field trip required. Approved for S/U grading only. May be repeated.

MILS 324 Leadership Laboratory credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/MILS/324/)
Continuation of MILS 322. Field trip required. Approved for S/U grading only. May be repeated.

MILS 325 Independent Study credit: 1 or 2 Hours. (https://courses.illinois.edu/schedule/terms/MILS/325/)
Supervised reading and research in a selected area of Military Science. May be repeated to a maximum of 6 hours.

MILS 341 Leadership and Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MILS/341/)
MILS 341 is the third in a sequence of four college courses that comprise the Advanced Course, specifically designed for Army ROTC Advanced Course Cadets. This is an academically challenging course where you will study, practice, develop, and apply critical thinking skills pertaining to Army leadership, officer skills, Army Values and Ethics, personal development, and Army doctrine. This course includes reading assignments, homework assignments, small group assignments, briefings, case studies, practical exercises, a mid-term exam, and final exam. You will be assessed on your execution of missions during classroom PEs, Leadership Labs, and during the Field Training Exercise (FTX). You will receive systematic and specific feedback on your leader attributes, values, and core leader competencies from your cadre, PMS and other MS IV Cadets who will evaluate you using the Cadet Officer Evaluation Report (COER). You will be required to write peer evaluations and receive feedback on your abilities as a leader and how to improve those leader skills. Successful completion of this course will assist in preparing you for your BOLC B course and is a mandatory requirement for commissioning. Prerequisite: Successful completion of MILS 301/MILS 312 and MILS 302/MILS 314 is required to enroll in MILS 341. This course is intended for contracted Army ROTC Cadets who have successfully completed the Basic Course and the Military Science 301/312, 302/314 courses.

MILS 342 Officership credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MILS/342/)
Basic examination of all military management systems: personnel, supply, logistics, training, maintenance, finance, and administration. Includes instruction on military administrative skills - written and verbal communications, meeting management, and briefing techniques. Discusses motivation and counseling techniques. Basic instruction on Army environmental protection policies. Prerequisite: Successful completion of MILS 341 required to enroll in MILS 342.

GRKM - MODERN GREEK

GRKM Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/GRKM/)

Courses

GRKM 199 Undergraduate Open Seminar credit: 1 to 5 Hours. **(**https://courses.illinois.edu/schedule/terms/GRKM/199/**)**
May be repeated in separate terms.

GRKM 201 Elementary Modern Greek I credit: 5 Hours. **(**https://courses.illinois.edu/schedule/terms/GRKM/201/**)**
Develops elementary proficiency in spoken and written Modern Greek, and introduces elements of cultural knowledge. Familiarizes beginning students with the Greek alphabet and modern Greek pronunciation rules, and introduces Modern Greek morphology and syntax. Emphasizes listening comprehension, reading skills, and basic conversational skills. Online language laboratory and internet assignments required. Same as GRK 251.

GRKM 202 Elementary Modern Greek II credit: 5 Hours. **(**https://courses.illinois.edu/schedule/terms/GRKM/202/**)**
Develops elementary proficiency in spoken and written Modern Greek, including familiarity with elements of cultural knowledge and Modern Greek morphology and syntax. Emphasizes listening comprehension, reading skills, writing and conversational abilities. Online language laboratory and internet assignments required. Same as GRK 252. Prerequisite: GRKM 201.

GRKM 403 Intermediate Modern Greek I credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/GRKM/403/**)**
Advances students' knowledge of Modern Greek grammar and vocabulary and enables them to converse in Modern Greek by exposing them to different uses of Modern Greek in day-to-day communication, and to expand their knowledge of Modern Greek culture. Online language laboratory and internet assignments required. Same as GRK 403. 4 undergraduate hours. 4 graduate hours. Prerequisite: GRKM 202 or consent of the instructor.

GRKM 404 Intermediate Modern Greek II credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/GRKM/404/**)**
Consolidates students' knowledge of Modern Greek grammar and vocabulary and enables them to converse in Modern Greek by exposing them to different uses of Modern Greek in day-to-day communication. Also offers an introduction to aspects of Modern Greek literature. In addition to listening comprehension and reading skills, the course emphasizes writing and conversational abilities. Online language laboratory and internet assignments required. Same as GRK 404. 4 undergraduate hours. 4 graduate hours. Prerequisite: GRKM 403 or consent of instructor.

GRKM 453 Advanced Modern Greek I credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/GRKM/453/**)**
Practice to enable students to attain conversational fluency and to become independent users of the language who deal effectively and with a good deal of accuracy with familiar communication situations. 3 undergraduate hours. 3 graduate hours. Prerequisite: GRKM 404 or consent of instructor.

GRKM 454 Advanced Modern Greek II credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/GRKM/454/**)**
Continued practice to enable students to improve their fluency and use Modern Greek effectively in a variety of contexts. 4 undergraduate hours. 4 graduate hours. Offered Spring terms only. Prerequisite: GRKM 453 or consent of instructor.

MCB - MOLECULAR AND CELL BIOLOGY

MCB Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/MCB/)

Courses

MCB 100 Introductory Microbiology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/100/)
Introduction to the principal activities and properties of microorganisms, including bacteria, yeasts, molds, and viruses; consideration of the role of natural processes, such as photosynthesis; and man's use and control of microorganisms in the production of antibodies and vaccines in industrial fermentations, in sanitation and public health, and in agriculture. Credit is not given for both MCB 100 and MCB 300. Prerequisite: There are no prerequisites for MCB 100, but some chemistry is recommended.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Life Sciences

MCB 101 Intro Microbiology Laboratory credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MCB/101/)
Laboratory introduction to the techniques employed in the investigation of microbial activities and properties; experiments designed to familiarize the student with the handling, identification, and characterization of microorganisms and their activities, particularly those of interest to man. Credit is not given for both MCB 101 and MCB 301. Prerequisite: Credit or concurrent registration in MCB 100.

MCB 150 Molec & Cellular Basis of Life credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MCB/150/)
Introductory course focusing on the basic structure, metabolic, and molecular processes (including membranes, energy metabolism, genes) common to all cells. Emphasis on unique properties that differentiate the major sub-groups of organisms (Archaea, Bacteria, plants, and animals), and will discuss how cells are integrated into tissues and organs in multicellular organisms.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Life Sciences

MCB 151 Molec & Cellular Laboratory credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MCB/151/)
Introductory laboratory course focusing on basic techniques in molecular and cellular biology. Credit is not given for MCB 151 for students majoring in Molecular and Cellular Biology, or Integrative Biology; Credit is not given for both MCB 151 and MCB 251. Prerequisite: Concurrent enrollment in MCB 150.

MCB 170 Society and the Brain credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/170/)
Presents recent findings concerning the brain-society interaction. The facts will span many levels, from molecular and cellular interactions, to the functions of specific brain regions, and on to the behaviors of individuals, groups and societies. Intended to bring a broad range of neurobiological data and ideas into an interesting and relevant context.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Life Sciences

MCB 180 Human Reproduction & Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/180/)
Lectures and discussions on topics in human reproduction where technological and clinical advances are having economic, social, and ethical consequences.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Life Sciences

MCB 198 Internship credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/MCB/198/)
Full-time or part-time internship at another University or an off-campus medical facility, research institute or other approved institution. Approved for S/U grading only. May be repeated. Prerequisite: For MCB and Biochemistry majors only.
This course satisfies the General Education Criteria for:
UIUC: Ugrad Zero Credit Intern

MCB 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/MCB/199/)
Approved for letter and S/U grading. May be repeated to a maximum of 10 hours.

MCB 215 Foundation in Mol & Cell Bio credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/215/)
Online course that will provide transfer students with the essential bases in Molecular and Cellular Biology needed to succeed in the MCB core curriculum, when entering it at the sophomore level. Students will be exposed to the major concepts and the experimental aspects of MCB and be presented with an integrated view of a cell and its inner workings. In addition, a strong peer mentoring program will help students transitioning from their previous institutions by introducing them to the complex setting of a large undergraduate campus. Prerequisite: Successful completion of two semesters of college biology. Credit or concurrent enrollment in CHEM 101, CHEM 102, or equivalent, or consent of instructor.

MCB 244 Human Anatomy & Physiology I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/244/)
Organ system biology with an emphasis on normal human anatomy and physiology, physiological processes and associated disease processes of the following systems; skeletal, muscle, nervous, sensory, and endocrine. Prerequisite: Credit or concurrent enrollment in CHEM 101, CHEM 102, or equivalent; or consent of instructor.

MCB 245 Human Anat & Physiol Lab I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MCB/245/)
Laboratory exploration of normal human anatomy and physiology and relevant disease processes for the following systems: tissue, skeletal, nervous, muscular, sensory, and endocrine. Previously dissected human cadavers are an important part of the learning experience in this course, but students will not dissect human cadavers. Neither animal dissection or animal use are elements of this course. Prerequisite: Credit or concurrent enrollment in CHEM 101, CHEM 102, or equivalent; or consent of instructor.

MCB 246 Human Anatomy & Physiology II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/246/)
Organ system biology with an emphasis on normal human anatomy and physiology, physiological processes and associated disease processes of the following systems: digestion, cardiovascular, respiratory, renal, and reproductive. Prerequisite: MCB 244 and credit or concurrent enrollment in CHEM 101, CHEM 102, or equivalent or consent of instructor.

MCB 247 Human Anat & Physiol Lab II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MCB/247/)
Laboratory exploration of normal human anatomy and physiology and relevant disease processes for the following systems: digestive, cardiovascular, respiratory, renal, and reproductive. Previously dissected human cadavers are an important part of the learning experience in this course, but students will not dissect human cadavers. Neither animal dissection or animal use are elements of this course. Prerequisite: MCB 245 and credit or concurrent enrollment in CHEM 101, CHEM 102, or equivalent; or consent of instructor.

MCB 250 Molecular Genetics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/250/)
Fundamentals of molecular biology including structure of DNA, RNA and proteins, mechanisms of DNA replication, transcription and translation, gene organization, genetic variation and repair, and regulation of gene expression in Bacteria, and Eukarya. Students who enter the University Fall 2011 or later are responsible for additional course-based tuition of $300 unless they are already paying differential tuition during the term of course enrollment. Additional fees may apply. See Class Schedule. Prerequisite: MCB 150, CHEM 102 and CHEM 104, or equivalents or consent of instructor.

MCB 251 Exp Techniqs in Molecular Biol credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MCB/251/)
Laboratory course emphasizing a range of molecular biology questions, and the experimental approaches and methodologies needed to answer these questions. Lectures will accompany labs to explain theoretical background and experimental rationale. Students who enter the University Fall 2011 or later are responsible for additional course-based tuition of $300 unless they are already paying differential tuition during the term of course enrollment. Additional fees may apply. See Class Schedule. Credit is not given for both MCB 251 and MCB 151. Prerequisite: Concurrent or prior enrollment in MCB 250 or consent of instructor.

MCB 252 Cells, Tissues & Development credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/252/)
Functional organization and physiology of cells and tissues, including cellular signaling, cellular interactions, and developmental processes. Students who enter the University Fall 2011 or later are responsible for additional course-based tuition of $300 unless they are already paying differential tuition during the term of course enrollment. Additional fees may apply. See Class Schedule. Prerequisite: MCB 250 or equivalent with consent of instructor.

MCB 253 Exp Techniqs in Cellular Biol credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MCB/253/)
Laboratory course emphasizing experimental techniques in cellular biology, cellular physiology, and developmental biology. Students who enter the University Fall 2011 or later are responsible for additional course-based tuition of $300 unless they are already paying differential tuition during the term of course enrollment. Additional fees may apply. See Class Schedule. Credit is not given for both MCB 253 and MCB 151. Prerequisite: Concurrent or prior enrollment in MCB 252 or consent of instructor.

MCB 270 Medical Genetics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/270/)
Addresses key issues in medical genetics, defined as human genetics for pre-health care professionals. The course covers basic principles of medical ethics, modes of inheritance, the molecular basis of genetic disorders, treatment approaches, gene therapy and emerging technologies like whole genome sequencing. Prerequisite: MCB 252 or equivalent or consent of instructor.

MCB 290 Undergraduate Research credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/MCB/290/)
Students assist in and /or conduct research under faculty supervision in an MCB research laboratory. The topics and nature of the work will vary but will be defined as work conducted in MCB research laboratories. For each hour of course credit in fall and spring terms, the student will be expected to complete 5 hours of work in the lab as directed. 75-80 total hours would be the expectation for 1 credit hour during 15-16 week terms. May be repeated to a maximum of 10 hours. Prerequisite: Consent of instructor.

MCB 292 Experiential Learning in MCB credit: 1 or 2 Hours. (https://courses.illinois.edu/schedule/terms/MCB/292/)
Supervised experiential learning activity related to the major of or career development within Molecular and Cellular Biology. Requires an Experiential Learning Proposal prior to the term, a minimum time commitment of 75 documented hours per credit hour within the term, regular documentation and reflection within the term, and a final culminating project at the end of the term. Approved for S/U grading only. Prerequisite: Restricted to declared undergraduates in any School of MCB major.

MCB 297 MCB Honors Discussion credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MCB/297/)
Honors discussion section associated with MCB 250, MCB 252, and MCB 354. Concurrent enrollment in the appropriate lecture course is required. May be repeated in separate terms to a maximum of 3 hours.

MCB 298 MCB Honors Lab Discussion credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MCB/298/)
Discussion section associated with the Honors lab sections of MCB 251 and MCB 253. Concurrent enrollment in the appropriate Honors lab section is required. May be repeated in separate terms to a maximum of 2 hours.

MCB 299 MCB Merit Program Discussion credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MCB/299/)
Provides the extra earned credit hours for students enrolled in the Merit Program in MCB 250, MCB 252, or MCB 354. Approved for letter and S/U grading. May be repeated up to 6 hours in a semester, to a maximum of 10 total hours. Prerequisite: Consent of instructor.

MCB 300 Microbiology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/300/)
Emphasizes fundamental concepts of microbiology, including nutrition, physiology, genetics, molecular biology, ecology and evolution of microorganisms, and their role in nature, human health and disease. Credit is not given for both MCB 300 and MCB 100. Prerequisite: MCB 250 and credit or concurrent registration in MCB 252 or consent of instructor.

MCB 301 Experimental Microbiology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/301/)
Laboratory emphasizing the fundamentals of microbiology. Topics include growth, isolation, and identification of bacteria; restriction endonuclease analysis of DNA, genetic cloning, and gene transfer. Computer methods are used for the identification of microorganisms and for the analysis of recombinant DNA molecules. Prerequisite: MCB 250 and 251 and credit or concurrent registration in MCB 300, or consent of instructor.

MCB 314 Introduction to Neurobiology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/314/)
Introduction to functional and organizational principles of the mammalian nervous system. Topics include the function of nerve cells, neural signaling, sensory and motor systems, learning and memory, attention, motivation, emotions, language, neural development and neurological disorders. A general introduction appropriate for all majors. Same as NEUR 314. Prerequisite: Junior or senior standing.

MCB 316 Genetics and Disease credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MCB/316/)
Introduction of the structure, expression, and regulation of genes of higher eukaryotes with an emphasis upon animal cells. Specific topics will include chromatin structure and its relation to gene expression, regulation of gene expression during development, recombination, molecular genetic technologies, gene replacement therapy, and the molecular genetics of cancers. Credit is not given for both MCB 316 and MCB 317. Prerequisite: MCB 150 and credit or concurrent registration in MCB 250 or consent of instructor.

MCB 317 Genetics and Genomics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MCB/317/)
Study of genetics as a discipline, genetic analysis as a tool to understand biology and the role of genome sciences in biology. Credit is not given for both MCB 317 and MCB 316. Prerequisite: MCB 250, MCB 251, MCB 252, and MCB 253; or consent of instructor.

MCB 320 Mechanisms of Human Disease credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/320/)
The advent of molecular biology and the Human Genome Project has dramatically increased our understanding of the mechanisms of human disease. The underlying molecular causes for many diseases have been elucidated. This course examines how abnormalities that occur at the molecular and cellular level manifest as pathologies affecting the structure and function of human tissues and organs. In addition, this course focuses on the pathophysiology of common human diseases and the environmental, genetic and epigenetic causes of specific disease types. Prerequisite: MCB 252 or consent of instructor.

MCB 354 Biochem & Phys Basis of Life credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/354/)
Introduction to biochemistry and structural biology emphasizing the physical and chemical properties of macromolecules. Credit is not given for both MCB 354 and MCB 450. Prerequisite: CHEM 232 or CHEM 236, and MCB 250 and MCB 252, or consent of instructor.

MCB 364 Eukaryotic Cell Biology Laboratory credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MCB/364/)
Laboratory course emphasizing biochemical, immunological and molecular biological techniques used to probe the molecules and processes of eukaryotic cells. Special emphasis will be given to the cell cycle, intracellular trafficking, and cellular differentiation. Students will also learn proper data handling and reporting techniques. Prerequisite: MCB 252 and MCB 253 or consent of instructor. Priority is given to undergraduate MCB and Biochemistry majors.

MCB 400 Cancer Cell Biology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/400/)
Principles of eukaryotic cell biology with an emphasis on cancer cell biology; consideration of molecular and fine structural components of the cell with an emphasis on experimental analysis of the relationship of structure to function of gene, membrane, cytoskeleton, and extracellular matrix. 3 undergraduate hours. 3 graduate hours. Prerequisite: MCB 250, MCB 251, MCB 252, MCB 253, and credit or concurrent registration in MCB 354 or MCB 450 or consent of instructor.

MCB 401 Cellular Physiology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/401/)
Foundational principles of cellular physiology. Topics include solute/water transport, membrane bio electricity, action potentials, ion channel physiology, neuromuscular transmission, muscle physiology, and central neurophysiology and plasticity. 3 undergraduate hours. 3 graduate hours. Prerequisite: MCB 252 or consent of instructor.

MCB 402 Sys & Integrative Physiology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/402/)
Examines human systems physiology. Topics to be covered include the nervous and endocrine systems, muscle physiology, cardiac physiology, respiratory physiology, blood and immune homeostasis, renal physiology, and gastrointestinal physiology and energy homeostasis. Special emphasis is on homeostatic control and integration of body systems in both health and disease. 3 undergraduate hours. 3 graduate hours. Prerequisite: MCB 252 or consent of instructor.

MCB 403 Cell & Membrane Physiology Lab credit: 1 or 2 Hours. (https://courses.illinois.edu/schedule/terms/MCB/403/)
Experimental investigation of cellular functions common to most eukaryotic cells; emphasis on biochemical, electrical, and mechanical recording techniques. Some animal dissection and the use of animal tissues are required in this course. Alternatives are not available. Inquiries concerning the use of or the dissection of animal tissues can be directed to the Instructor or Head of the Department. 2 undergraduate hours. 1 graduate hour. Prerequisite: Credit or concurrent registration in MCB 401 and previous biology laboratory experience.

MCB 404 Sys & Integrative Physiol Lab credit: 1 to 2 Hours. (https://courses.illinois.edu/schedule/terms/MCB/404/)
Experimental investigation of organ systems of vertebrates with emphasis on biochemical, electrical and physical recording techniques. Some animal dissection and the use of animal tissues are required in this course. Alternatives are not available. Inquiries concerning the use of, or the dissection of animal tissues can be directed to the instructor or Head of the Department. 2 undergraduate hours. 1 graduate hour. Prerequisite: Credit or concurrent registration in MCB 402 and previous biology laboratory experience.

MCB 406 Gene Expression & Regulation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/406/)
Provides in-depth and up-to-date coverage of gene expression and regulation. Lectures are centered on the principles of regulating gene expression in eukaryotic cells. The course covers macromolecule structure and function in gene expression; molecular mechanisms of the key gene expression events including transcription, RNA processing, localization and translation. Applications of these principles in medicine and therapeutics such as aging, cancer and drug design are also discussed. Same as BIOC 406. 3 undergraduate hours. 3 graduate hours. Prerequisite: MCB 354 or consent of instructor.

MCB 408 Immunology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/408/)
Introduction to fundamentals of immunology with emphasis on biological application; basic background for understanding immunological responses and techniques applicable to biological research. 3 undergraduate hours. 3 graduate hours. Prerequisite: MCB 250, MCB 251, MCB 252, MCB 253, and MCB 354; or consent of instructor.

MCB 410 Developmental Biology, Stem Cells and Regenerative Medicine credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/410/)
Survey of molecular and cellular mechanisms involved in development and growth of animals, as well as recent advancement in stem cell and Regenerative medicine research. Topics to be covered include fertilization and early cell lineage, body axis formation, gastrulation, neural induction and patterning, segmentation, and other aspects of pattern formation including organogenesis and limb development, as well as embryonic stem cells, induced pluripotent stem cells, adult stem cells, regeneration and regenerative medicine. 3 undergraduate hours. 3 graduate hours. Prerequisite: MCB 252 or consent of instructor.

MCB 413 Endocrinology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/413/)
Physiology and biochemistry of the endocrine system and its hormones with special reference to vertebrates and to human endocrine disorders. 3 undergraduate hours. 3 graduate hours. Prerequisite: MCB 252 or consent of instructor. One semester of biochemistry is recommended.

MCB 419 Brain, Behavior & Info Process credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/419/)
Exploration of the neural basis of animal behavior. Emphasis on the information processing problems that animals face in complex natural environments and how nervous systems have evolved to solve these problems. Introduction to the use of computer modeling and simulation techniques for exploring principles of nervous system design and function. Current literature in computational neurobiology and neuroethology will be incorporated in readings and class discussion. Same as BIOP 419 and NEUR 419. 3 undergraduate hours. 3 graduate hours. Prerequisite: CS 101; and PHYS 102 or PHYS 212; and MCB 252; or equivalent or consent of instructor.

MCB 421 Microbial Genetics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/421/)
Prokaryotic microbial genetic systems; emphasis on typical data analyses, together with the basic classes of genetic phenomena. 3 undergraduate hours. 3 graduate hours. Prerequisite: MCB 300 or consent of instructor.

MCB 424 Microbial Biochemistry credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/424/)
Examines the biochemical ecology of diverse microbial groups with emphasis on anaerobic systems. 3 undergraduate hours. 3 graduate hours. Prerequisite: MCB 250 and MCB 354 or MCB 450, or consent of instructor.

MCB 426 Bacterial Pathogenesis credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/426/)
Emphasizes prokaryotes that cause important diseases in humans and other animals; host-parasite bacteriology; and chemistry and genetics of mechanisms of pathogenesis. 3 undergraduate hours. 3 graduate hours. Prerequisite: MCB 300 and MCB 354, or consent of instructor.

MCB 428 Microbial Pathogens Laboratory credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MCB/428/)
Laboratory study of methods of recognition and differentiation, diagnostic tests, and mechanisms of bacterial and viral pathogenesis. Topics include infections of the urinary tract, respiratory tract, gastrointestinal tract, and sexually transmitted diseases. 2 undergraduate hours. 2 graduate hours. Prerequisite: MCB 300 and MCB 301 or consent of instructor.

MCB 429 Cellular Microbiology &Disease credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/429/)
Emphasizes cell biology of infectious diseases, using cellular, molecular, and animal models. Will stress molecular cross-talk that drives host-pathogen interactions, state-of-the art approaches for investigating host and microbial cell and molecular biology, latest paradigms in host cell biology, and, the evolutionary basis by which pathogens can manipulate host cell cytoskeleton, membranes, organelles, cell cycle, gene expression, and signaling in eukaryotic cells. 3 undergraduate hours. 3 graduate hours. Prerequisite: MCB 300 and MCB 354 or consent of instructor.

MCB 430 Molecular Microbiology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/430/)
Modern contributions to the science of microbiology; emphasizes the structure, function, and synthesis of informational macromolecules and on the role microorganisms have played in molecular biology. 3 undergraduate hours. 3 graduate hours. Prerequisite: MCB 300 and credit or concurrent registration in MCB 354, or consent of instructor.

MCB 431 Microbial Physiology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/431/)
Examines bacterial physiology, including discussions of energetics, regulation of metabolism, and cell structure. 3 undergraduate hours. 3 graduate hours. Prerequisite: MCB 300 or equivalent; credit or concurrent registration in a biochemistry course.

MCB 432 Computing in Molecular Biology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/432/)
Examination of computational aspects of biology with an emphasis on the relationships between biological questions and their recastings as mathematical or logical problems. Topics are drawn from biochemistry, genetics, molecular sequence analysis, and molecular structure. 3 undergraduate hours. 3 graduate hours. Prerequisite: MCB 250, MCB 252, MCB 354, and calculus I (MATH 220 or MATH 221), and calculus II (MATH 231) or biostatistics (STAT 212); or consent of instructor.

MCB 433 Virology & Viral Pathogenesis credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/433/)
Same as PATH 433. See PATH 433.

MCB 434 Food & Industrial Microbiology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/434/)
Same as FSHN 471. See FSHN 471.

MCB 435 Evolution of Infectious Disease credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/435/)
Understanding the evolution and ecology of the microbial world is of great importance to human health and the health of our planet. Students will explore the ecology and evolution principles that apply to viruses, microbial eukaryotes, archaea and bacteria. The primary literature on historical and emerging infectious diseases will be used to illustrate critical applications of these basic principles. Examples include applying genomics tools to understand the evolutionary basis for antibiotic resistance, the spread of emerging pathogens, and the ecology of probiotics and the human microbiome. The objective of this class is to better understand how humans shape the diversity and dynamics of the microbial world living in and around us every day. Same as IB 442. 3 undergraduate hours. 3 graduate hours. Prerequisite: MCB 300 or consent of instructor.

MCB 436 Global Biosecurity credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MCB/436/)
Designed to provide students with broad coverage of key areas of scientific, legal, social, ethical, and political aspects of biosecurity, emphasizing current problems and research in the areas of biodefense, emerging infectious diseases, synthetic biology, and other topics. In combination with related reading assignments, the weekly special topics-based seminar will integrate knowledge of modern biomedical research, advances in biotechnology, and natural and manmade biological threats with the skills to analyze and develop public policies and strategies for enhancing global biosecurity. 1 undergraduate hour. 1 graduate hour. Prerequisite: MCB 150 or the equivalent or consent of instructor.

MCB 442 Comparative Immunobiology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MCB/442/)
Same as ANSC 450 and PATH 410. See ANSC 450.

MCB 446 Physical Biochemistry credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/446/)
Same as CHEM 472 and BIOC 446. See BIOC 446.

MCB 450 Introductory Biochemistry credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/450/)
Chemistry and metabolism of carbohydrates, lipids, proteins, nucleic acids, vitamins, and coenzymes and their relation to the regulation and processes of organisms, cells, and subcellular components. Students who enter the University Fall 2011 or later are responsible for additional course-based tuition of $300 unless they are already paying differential tuition during the term of course enrollment. Additional fees may apply. See Class Schedule. 3 undergraduate hours. 3 graduate hours. Credit is not given for both MCB 450 and MCB 354. Prerequisite: CHEM 232 or CHEM 236, or equivalent, or consent of instructor. Not intended for students in the MCB or biochemistry curricula.

MCB 458 Basic Human Pathology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/458/)
Introduction to the basic mechanisms of human disease with a focus on the building blocks of pathological processes at the sub-organismal and organismal level. Basic biological processes will be stressed including tissue adaptation, injury, inflammation, repair and neoplasia. Pathology synthesizes cellular and molecular biology, biochemistry and immunology holistically so as to understand the body's limited responses to the cornucopia of experienced physiological insults. 3 undergraduate hours. No graduate credit. Prerequisite: MCB 354 or equivalent, or consent of instructor. For MCB and Biochemistry undergraduate majors only.

MCB 460 Neuroanatomy Laboratory credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MCB/460/)
Laboratory course emphasizing the fundamentals of neuroanatomy. The major sensory, motor, and integrative neural systems of the human brain are explored. Based on an understanding of normal neural connections and brain function, the anatomical and physiological bases for multiple neurological disorders are also discussed. Primary literature and clinical case studies will inform discussions throughout the course. 2 undergraduate hours. 2 graduate hours. Prerequisite: MCB 314 or consent of instructor.

MCB 461 Cell & Molecular Neuroscience credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/461/)
Designed as an in-depth foundation course for graduate and undergraduate students with strong neuroscience interests. Covers up-to-date cellular and molecular neurobiology (including basic principles of neuronal function, signaling, and plasticity) and introductory brain anatomy that underlie brain function and animal behaviors. Pathogenic mechanisms of neurological diseases and disorders from the latest research will be heavily explored. Same as NEUR 461. 3 undergraduate hours. 3 graduate hours. Prerequisite: MCB 252, MCB 250 or equivalent, or consent of instructor. May be taken concurrently with MCB 462.

MCB 462 Integrative Neuroscience credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/462/)
Employs integrative, multi-level systems approaches to nervous system and behavior. Focuses on neural circuits in sensory integration, pattern generation, the integration of sensation, internal states and learning in behavioral decision, the neuronal natures of pain, sleep, and biological rhythms, neuroeconomics, new vistas in neural modeling and interfacing brain and machine. Students are presented in neuroethological contexts of evolution and the economics of behavior and physiology. Same as NEUR 462. 3 undergraduate hours. 3 graduate hours. Prerequisite: MCB 252 or consent of instructor. May be taken concurrently with MCB 461.

MCB 465 Human Metabolic Disease credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/465/)
Examination of the molecular and physiological basis of human metabolic disease. Disruption of metabolic and energy homeostasis plays key roles leading to metabolic disorders. We will examine how lipid/glucose levels and energy balance are controlled in health and how they are abnormally regulated in disease sates. In addition, we will cover current topics related to control of metabolism including aging and circadian rhythms. Methodologies leading to scientific discoveries and potential preventive and therapeutic agents will also be discussed. 3 undergraduate hours. 3 graduate hours. Prerequisite: MCB 250, MCB 252, or consent of instructor.

MCB 466 Neuro & Molecular Pharmacology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/466/)
Introduction to fundamental principles of pharmacology that provides a comprehensive understanding of the principles and concepts applied to modern pharmacology, including pharmacokinetics, pharmacodynamics, neuropharmacology, toxicology, drug development and clinical trials, and drugs targeting various diseases. Emphasis is placed on the mechanisms of action. The course will cover several classes of drugs, including anti-infective agents, autonomic/central nervous system modulators, neuropharmacology, anti-cancer therapeutics and drugs targeting the major organ systems of the body. In an active learning style, case studies and sample MCAT questions will be used to bring relevance to covered topics. This course is ideal for those interested in pharmacology, neuropharmacology, pharmacy, medicine, veterinary medicine, nursing, kinesiology, or graduate school in the life sciences. 3 undergraduate hours. 3 graduate hours. Prerequisite: MCB 252 and MCB 354, or consent of instructor.

MCB 471 Cell Structure and Dynamics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/471/)
Molecular basis of cellular organization focusing on how cells secrete, move, adhere, divide, communicate, and die. Material will emphasize critical analysis of experiments, current controversies and hypothesis testing. 3 undergraduate hours. 3 graduate hours. Prerequisite: MCB 250 and MCB 252 or consent of instructor. Prior or concurrent enrollment in MCB 354 desirable.

MCB 480 Eukaryotic Cell Signaling credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/480/)
General principles of molecular signaling regulating membrane, cytoplasmic, and nuclear events in eukaryotic cells with emphasis on mammalian systems. Contemporary methods of investigation and the principles of identifying and solving problems related to signal transduction will be emphasized. 3 undergraduate hours. 3 graduate hours. Prerequisite: MCB 252 or consent of instructor.

MCB 492 Senior Thesis credit: 3 to 5 Hours. (https://courses.illinois.edu/schedule/terms/MCB/492/)
Research conducted under the direction of a faculty member in the School of Molecular and Cellular Biology. Normally, the student enrolls in MCB 492 during the last semester on campus prior to graduation. In the semester preceding enrollment, interested students should consult with their faculty advisors concerning enrollment procedures. A minimum of 3 credit hours is required, and a thesis must be presented for credit to be received. Successful completion of MCB 492 is required in order to be eligible for graduation with distinction in MCB. 3 to 5 undergraduate hours. No graduate credit. Prerequisite: Two consecutive semesters of at least 2 credit hours of MCB 290 under the guidance of the same faculty member, or consent of instructor.

MCB 493 Special Topics Mol Cell Biol credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MCB/493/)
Discussion of current topics of interest within the broad domain of molecular and cellular biology; seminar or lecture format. Topics vary. May be repeated to a maximum of 12 hours. Prerequisite: Junior standing and consent of instructor.

MCB 501 Advanced Biochemistry credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MCB/501/)
Focuses upon structure-function analyses of biomolecules and the chemical and evolutionary foundations of metabolic networks. Emphasis is on research methodology and current problems.

MCB 502 Advanced Molecular and Cell Biology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MCB/502/)
An advanced course in molecular and cell biology. Emphasis is on research methodology and current problems. 4 graduate hours. No professional credit.

MCB 509 Curr Topics Mol & Int Physiol credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MCB/509/)
Advanced seminars in current physiological research. May be repeated once for credit. Prerequisite: Consent of instructor.

MCB 511 Mol Bio of Microbe-Plant Inter credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/511/)
Same as PLPA 509. See PLPA 509.

MCB 520 Advanced Molecular Biology credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MCB/520/)
Advanced graduate level, primary literature-based discussion course on molecular microbiology. Graduate level companion course for MCB 430. Prerequisite: Concurrent registration in MCB 430 or consent of instructor.

MCB 521 Advanced Microbial Genetics credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MCB/521/)
Advanced level, primary literature-based discussion course on microbial genetics. Graduate level companion course for MCB 421. Prerequisite: Concurrent or prior enrollment in MCB 421 or consent of instructor.

MCB 526 Adv Bacterial Pathogenesis credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MCB/526/)
Advanced primary literature-based discussion course on bacterial pathogenesis. Graduate level companion course for MCB 426. Prerequisite: Concurrent or prior enrollment in MCB 426 or consent of instructor.

MCB 529 Special Topics in Cell and Developmental Biology credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MCB/529/)
Discussion of current topics of interest in higher eukaryotic cellular and molecular biology, development, neurobiology; seminar or lecture format. Topics vary. 1 to 4 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated if topics vary, to a maximum of 8 hours. Prerequisite: Consent of instructor.

MCB 530 Reproductive Physiol Seminar credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MCB/530/)
Presentation and discussion of current literature as well as graduate student and staff research proposals and findings in reproductive physiology. May be repeated to a maximum of 4 hours. Prerequisite: Consent of instructor.

MCB 532 Advanced Microbial Physiology credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MCB/532/)
Advanced primary literature-based discussion course on microbial physiology. Graduate level companion course for MCB 431. Prerequisite: Concurrent or prior registration in MCB 431 or consent of instructor.

MCB 533 Repro Physiology Lab Methods credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/533/)
Same as ANSC 533 and CB 533. See ANSC 533.

MCB 534 Advanced Microbial Metabolism credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MCB/534/)
Advanced primary literature-based discussion course on microbial metabolism. Graduate level companion course for MCB 424. Prerequisite: Concurrent or prior enrollment in MCB 424 or consent of instructor.

MCB 539 Advanced Cellular Microbiology credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MCB/539/)
Advanced primary literature-based discussion course on cellular microbiology and underlying infectious diseases. Graduate level companion course for MCB 429. Prerequisite: Concurrent or prior enrollment in MCB 429 or consent of instructor.

MCB 540 Scientific Writing credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/540/)
Study of scientific communication, geared toward biologists. Topics include writing mechanics, grammar and sentence structure, abstracts for different audiences and purposes, grant writing, manuscript preparation, figure construction, oral presentations, and the grant-review process. Class consists of both lectures and time working in small groups to revise writing assignments. Assignments include weekly writing exercises, a full NIH-style grant proposal and grant reviews for a mock study section. 3 graduate hours. No professional credit.

MCB 542 Interdisciplinary Approaches to Neuroscience I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MCB/542/)
Same as NEUR 542 and PSYC 542. See NEUR 542.

MCB 543 Interdisciplinary Approaches to Neuroscience II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MCB/543/)
Same as NEUR 543 and PSYC 543. See NEUR 543.

MCB 545 Functional Genomics in Principle and Practice credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/545/)
Experimental and analytical foundations of functional genomics, tailored to experimental biologists who are using high-throughput sequencing technologies to analyze function in animal genomes. Lectures cover experimental methods and tools available for bioinformatics analysis; students will gain experience in the use of online or command-line bioinformatics tools through weekly assignments. Advanced knowledge in eukaryotic molecular genetics is needed but bioinformatics skills are not required. 3 graduate hours. No professional credit. Students must have access to a networked computer on which they can load software in order to complete required assignments for the course. Prerequisite: MCB 502 or equivalent or consent of instructor.

MCB 550 Biomolecular Physics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MCB/550/)
Same as BIOP 550 and PHYS 550. See PHYS 550.

MCB 553 Enzyme Reaction Mechanisms credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MCB/553/)
Same as CHEM 572. See CHEM 572.

MCB 555 Anlys Biochemical Literature credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MCB/555/)
Discussions of current research and literature. Required of all graduate students whose major is biochemistry. Same as BIOC 555. Prerequisite: Second year graduate standing in biochemistry or consent of instructor.

MCB 561 Mechanisms Viral Pathogenesis credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/561/)
Same as PATH 519. See PATH 519.

MCB 571 Bioinformatics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MCB/571/)
Same as ANSC 543, CHBE 571, and STAT 530. See CHBE 571.

MCB 580 Res Ethics & Responsibilities credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MCB/580/)
Lecture/discussion course focusing on research ethics and a variety of related issues that can influence success in graduate school in the biological sciences, including scientific integrity and compliance with regulations for laboratory research. Approved for letter and S/U grading. Prerequisite: Consent of instructor.

MCB 581 Laboratory Rotation I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/581/)
Laboratory research methods; familiarization of first-year graduate students with experimental methods used in molecular and cellular biology research. Required of all first-year students entering MCB. Meets first five weeks of each term. Approved for S/U grading only. Prerequisite: First-year graduate status and consent of MCB graduate programs; concurrent registration in MCB 582.

MCB 582 Laboratory Rotation II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/582/)
Laboratory research methods; familiarization of first-year graduate students with experimental methods used in molecular and cellular biology research. Required of all first-year students entering MCB. Meets second five weeks of each term. Approved for S/U grading only. Prerequisite: First-year graduate status and consent of MCB graduate programs; concurrent registration in MCB 581.

MCB 583 Laboratory Rotation III credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MCB/583/)
Laboratory research methods; familiarization of first-year graduate students with experimental methods used in molecular and cellular biology research. Required of all first-year students entering MCB. Meets third five weeks of each term. Approved for S/U grading only. Prerequisite: First-year graduate status and consent of MCB graduate programs; concurrent registration in MCB 581 and MCB 582.

MCB 585 Current Topics in Microbiology credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MCB/585/)
Discussions, reviews, and appraisal of special topics in microbiology and molecular biology; seminar or lecture. Topics vary. 1 graduate hour. No professional credit. Approved for S/U grading only. May be repeated to a maximum of 2 hours. Prerequisite: Consent of instructor.

MCB 586 Concepts/Topics Immunology credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MCB/586/)
Same as PATH 518. See PATH 518.

MCB 595 MCB Graduate Seminar credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MCB/595/)
Advanced seminars on current topics of interest in molecular and cellular biology. Approved for S/U grading only. May be repeated in separate terms to a maximum of 4 hours. Prerequisite: Consent of instructor.

MIP - MOLECULR & INTEGRATIVE PHYSIOLOGY

MIP Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/MIP/)

Courses

MIP 590 Individual Topics credit: 1 to 16 Hours. (https://courses.illinois.edu/schedule/terms/MIP/590/)
For graduate students wishing to study individual problems or topics not assigned in other courses. Approved for S/U grading only. May be repeated. Prerequisite: Approval of department.

MIP 595 Seminars in Physiology credit: 0 to 1 Hours. (https://courses.illinois.edu/schedule/terms/MIP/595/)
Advanced seminars on current topics of interest in physiology. Approved for S/U grading only. May be repeated to a maximum of 8 hours. Prerequisite: Consent of instructor.

MIP 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/MIP/599/)
Research may be conducted under supervision of the thesis advisor in the following areas: (a) cellular and molecular physiology; (b) comparative physiology; (c) mammalian physiology; (d) human physiology; (e) endocrinology; (f) neurophysiology; (g) radiobiology; and (h) environmental and stress physiology. Approved for S/U grading only. May be repeated.

MUSE - MUSEUM STUDIES

MUSE Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/MUSE/)

Courses

MUSE 200 Introduction to Museums credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUSE/200/)
A broad introduction to the museum world, focusing on what a museum is, what differentiates various types of museums, and how museums function. Examines museums in terms of education, curation, exhibition, public relations, research, administration, ethical and legal obligations, funding and knowledge. Prerequisite: One year of college coursework.

MUSE 250 The World Through Museums credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUSE/250/)
Examination of contemporary museums around the world, evaluating their roles as social institutions and communicators of heritage in increasingly global contexts. The first half of the course develops a framework for museum literacy (how to read museums) that incorporates anthropological, globalization, media and critical theories. The second half of the course is a virtual tour and evaluates museums using this analytical skill set. Same as ANTH 250.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - Western

MUSE 330 Learning in Museums credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUSE/330/)
An applied course in the multiple responsibilities of professionals in the field of Museum Education. Examines how people, ideas and objects connect in museums; trends in interpretation and museum ethics; best practice and current learning theories; and exemplary programs involving highly varied audiences, community collaboration and advanced technology. Provides practical experience in program development, facilitation, documentation and assessment. Requires some in-museum work outside of regularly scheduled class hours. Includes field trips to local museums. Prerequisite: MUSE 200.

MUSE 389 Seminar in Museum Studies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUSE/389/)
Study of special themes, selected topics or current issues in museum studies for undergraduate students with backgrounds in museology. Course may be in seminar or lecture format. May be repeated in separate terms to a maximum of 6 hours. Prerequisite: MUSE 200 and ANTH 462.

MUSE 390 Museum Internship credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUSE/390/)
Supervised field experience in museums, both on and off-campus, designed to introduce students to professional practice. Builds on museum studies coursework, and provides opportunities for applying academic knowledge and analyzing personal development. Students work part-time (150 hours) in a program-approved museum under the guidance of an instructional team. Requires an internship contract before the term, regular reporting and documentation during the term, and compilation of a project portfolio at the end of the term. May be repeated in same and separate terms to a maximum of six hours. Prerequisite: Three courses (nine hours) within the undergraduate minor in Museum Studies. Requires approval of the Museum Studies program advisor.

MUSE 420 Collections Management credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSE/420/)
An applied course in the preservation, documentation, and maintenance of the physical integrity of museum collections. Examines agents of deterioration and how to mitigate damage to collections; the chemical and physical properties of inorganic, organic, composite and textile materials; collections packing, shipping and storage methods; and collections hazards, safety and emergency planning. Provides practical experience and encourages skills development in collections management. Requires some in-museum work outside of regularly scheduled class hours. 3 undergraduate hours. 4 graduate hours. Prerequisite: MUSE 200 or MUSE 500.

MUSE 440 Museum Registration credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSE/440/)
An applied course in the management and care of museum collections through registration and records. Examines legal and ethical issues of collections stewardship, and current professional practices and standards. Provides practical experience and encourages skills development in museum registration. Requires some in-museum work outside of regularly scheduled class hours. Includes a field trip to a local museum. 3 undergraduate hours. 4 graduate hours. Prerequisite: MUSE 200 or MUSE 500.

MUSE 500 Core Prob Museum Theory & Prac credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSE/500/)
A critical examination of both historical and current theoretical issues in museum practice. Addresses the development of museums within varied social, cultural and intellectual contexts, and the conceptualizations and criticisms of museums in terms of paradigmatic, institutional, symbolic and other theories. In addition to surveying the broad range of theoretical frameworks adopted in contemporary museum scholarship, students will examine and evaluate curatorial and institutional strategies for responding to the myriad external pressure (including multiple constituencies, standards and best practices) currently placed on museums. Prerequisite: Graduate standing.

MUSE 589 Special Topics Museum Studies credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSE/589/)
Intensive study of selected topics and problems of special interest in Museum Studies. May be repeated in separate terms to a maximum of 8 hours. Prerequisite: Consent of instructor.

MUSE 590 Museum Studies Capstone credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSE/590/)
Supervised individual study involving a museum-based internship, museum-related project or museum-related research paper and fulfilling the capstone requirement for the Graduate Minor in Museum Studies. 0 to 4 graduate hours. No professional credit. Approved for Letter and S/U grading. Prerequisite: Approval of the Museum Studies Program Coordinator.

MUS - MUSIC

MUS Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/MUS/)

Courses

MUS 090 Seminar in Music Education credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/MUS/090/)
Seminar for students preparing to enter student teaching. Students should enroll in the semester prior to student teaching. Approved for letter and S/U grading. Prerequisite: Music education majors or consent of instructor.

MUS 100 First-year Seminar for Music Majors credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/MUS/100/)
This half-semester course is intended for music majors and addresses the physical health and mental well-being concerns that may arise in pursuing a music degree. The selection of material covered in this course is meant to lay a foundation to form healthy habits, practices, and attitudes that a student can utilize over both their academic and professional careers. Approved for S/U grading only.

MUS 101 Music Theory and Practice I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/101/)
This is the first in a sequence of four courses in the undergraduate music theory core. Students develop competence and essential skills relating to music literacy, technology, and conceptualization through a project-oriented approach. Topics include reading music in a variety of formats, understanding hardware and software for music notation, composition and recording, and core principles of acoustics and psychoacoustics. . Credit is not given for both MUS 101 and MUS 103.

MUS 102 Music Theory and Practice II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/102/)
The second of four sequential courses in the undergraduate music theory core. Explores fundamental tonal theory, including terminology, notation, analysis of musical elements, procedures and forms. Specific skills learned include melodic analysis, species counterpoint, first and second level tonal analysis, part writing, phrase structure and analysis, composition, harmonization of given melodies, and keyboarding. Credit is not given for both MUS 102 and MUS 104. Prerequisite: MUS 101 or placement by examination.

MUS 103 Rudiments of Music Theory I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/103/)
Introduces non-music majors to basic terminology, technology, notation and concepts of music, with a co-emphasis on digital audio. Credit is not given for both MUS 103 and MUS 101.

MUS 104 Rudiments of Music Theory II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/104/)
Continuation of MUS 103. Includes study of modulation, chromatic harmony, form, and an introduction to twentieth-century composition and inter-disciplinary music techniques. Credit is not given for both MUS 104 and MUS 102. Prerequisite: MUS 103 or placement by examination; non-music majors only.

MUS 105 Computation and Music I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/105/)
Applies foundational concepts in computer science to the composition and analysis of symbolic music information. The course works with introductory computer science courses and MUS 102 to integrate key computer science techniques with music concepts. Run as a workshop presenting eight large programming projects in which students design and implement software systems that analyze and compose musical scores in different formats. Prerequisite: MUS 101, CS 124, and MATH 220; or consent of instructor. Concurrent enrollment in MUS 102, CS 128, and CS 222. Restricted to entering CS + Music students and Music Technology students with strong programming experience; or consent of instructor.

MUS 106 Beginning Composition credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/106/)
Class instruction in contemporary compositional practice at the beginning stages. May be repeated to a maximum of 6 hours. Prerequisite: Consent of instructor on the basis of a student portfolio of composition submitted to the composition-theory faculty and accepted after evaluation.

MUS 107 Musicianship I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/107/)
Beginning aural skills training in the areas of intervals, scales, chords, rhythm, melody, and harmony.

MUS 108 Musicianship II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/108/)
Continuation of aural skills training from MUS 107. Development of performance, notational, and listening skills in the areas of rhythm, melody, harmony, counterpoint, and formal aspects of musical structure; emphasizes tonal pitch structures. Prerequisite: MUS 107, or placement by examination.

MUS 110 Introd Art Mus: Intl Perspect credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/110/)
Surveys the history of European and American art music in an international context; examines major artistic styles, representative composers and works, and their relationship to pertinent non-western musical traditions and philosophies; reviews fundamental music concepts; strengthens aural analytical skills; familiarizes students with the music library, and research and writing techniques. Prerequisite: First year standing in music or consent of instructor.

MUS 120 English Diction credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUS/120/)
Phonetics applied to English song literature; individual clinical analysis and practice. To be taken with MUS 181. Prerequisite: Freshman standing in voice or consent of instructor.

MUS 121 Italian Diction credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUS/121/)
Phonetics applied to Italian song literature; class and individual clinical analysis and practice. To be taken with MUS 181. Prerequisite: Freshman standing in voice or consent of instructor.

MUS 122 German Diction credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUS/122/)
German pronunciation applied to German vocal literature; class and individual clinical analysis and practice. To be taken with MUS 181. Prerequisite: Sophomore standing in voice or consent of instructor.

MUS 123 French Diction credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUS/123/)
French pronunciation applied to French vocal literature; class and individual clinical analysis and practice. To be taken with MUS 181. Prerequisite: At least one semester of French or equivalent required, sophomore standing in voice, or consent of instructor.

MUS 125 English Diction and Dialects credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUS/125/)
English Diction and Dialects introduces students to the variety of sounds of spoken English throughout the world. Coursework will include study of recorded resources, IPA (International Phonetic Alphabet) transcription, and performance of monologues, scenes, and musical numbers in a variety of dialects. Transcription will consist of both written IPA and imitative listening and speaking. Coursework will consist of in-class presentations, quizzes, transcriptions, and assessments of video and audio resources. Prerequisite: Restricted to students majoring in Music, or by consent of instructor.

MUS 130 Music Then and Now credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/130/)
Provides non-music majors with basic listening skills, the ability to discuss music intelligently, and an acquaintance with many types of music. Prerequisite: For non-music majors only.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

MUS 132 Popular Music Studies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/132/)
Courses within this rubric provide an analytical and historical introduction to genres of popular music from the United States and around the world. Iterations of the course may focus on a specific genre, such as Rock, Reggae, or Afropop, or may deal with broader subjects, such as the continua of styles including R&B, Soul, Funk, and Hip Hop, or the pan-generic, international phenomenon of pop music globalization in the twentieth century.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - US Minority

MUS 133 Introduction to World Music credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/133/)
A survey of various musical traditions from different regions and peoples of the world.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Non-West

MUS 134 History of Musical Events credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/134/)
Focuses on seminal performances of musical works such as, but not limited to, premiere performances and/or recordings. Prerequisite: For non-music majors only.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

MUS 140 String Instrument Class credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/140/)
Class instruction to enable students to demonstrate proper technique and a characteristic sound on two bowed string instruments (violin or viola, and cello or double bass) in order to teach, via demonstration, beginning string students toward their maximum technical and musical development. May be repeated to a maximum of 4 hours. Prerequisite: For music education majors only, with two semesters required for music education string majors.

MUS 144 Supp WW Inst: Clarinet credit: .5 Hours. (https://courses.illinois.edu/schedule/terms/MUS/144/)
Class instruction in the fundamentals of playing and teaching the clarinet. Acquire knowledge on recommended instruments and equipment, maintenance procedures, and training materials. Prerequisite: Intended for woodwind majors in the BME instrumental concentration.

MUS 146 Supp WW Inst: Flute credit: .5 Hours. (https://courses.illinois.edu/schedule/terms/MUS/146/)
Class instruction in the fundamentals of playing and teaching the flute. Acquire knowledge on recommended instruments and equipment, maintenance procedures, and training materials. Prerequisite: Intended for music majors in the BME instrumental concentration.

MUS 147 Supp WW Inst: Oboe credit: .5 Hours. (https://courses.illinois.edu/schedule/terms/MUS/147/)
Class instruction in the fundamentals of playing and teaching the oboe. Acquire knowledge on recommended instruments and equipment, maintenance procedures, and training materials. Prerequisite: Oriented for music majors in the BME instrumental concentration.

MUS 148 Supp WW Inst: Saxophone credit: .5 Hours. (https://courses.illinois.edu/schedule/terms/MUS/148/)
Class instruction in the fundamentals of playing and teaching the saxophone. Acquire knowledge on recommended instruments and equipment, maintenance procedures, and training materials. Prerequisite: Intended for music majors in the BME instrumental concentration.

MUS 149 Supp WW Inst: Bassoon credit: .5 Hours. (https://courses.illinois.edu/schedule/terms/MUS/149/)
Class instruction in the fundamentals of playing and teaching the bassoon. Acquire knowledge on recommended instruments and equipment, maintenance procedures, and training materials. Prerequisite: Intended for music majors in the BME instrumental concentration.

MUS 151 Supp Brass Inst: Trumpet credit: .5 Hours. (https://courses.illinois.edu/schedule/terms/MUS/151/)
Class instruction in the fundamentals of playing and teaching the trumpet. Acquire knowledge on recommended instruments and equipment, maintenance procedures, and training materials. Prerequisite: Intended for brass majors in the BME instrumental concentration.

MUS 153 Supp Brass Inst: Horn credit: .5 Hours. (https://courses.illinois.edu/schedule/terms/MUS/153/)
Class instruction in the fundamentals of playing and teaching the horn. Acquire knowledge on recommended instruments and equipment, maintenance procedures, and training materials. Prerequisite: Intended for music majors in the BME instrumental concentration.

MUS 154 Supp Brass Inst: Trombone credit: .5 Hours. (https://courses.illinois.edu/schedule/terms/MUS/154/)
Class instruction in the fundamentals of playing and teaching the trombone. Acquire knowledge on recommended instruments and equipment, maintenance procedures, and training materials. Prerequisite: Intended for music majors in the BME instrumental concentration.

MUS 155 Supp Brass Inst: Euph/Tuba credit: .5 Hours. (https://courses.illinois.edu/schedule/terms/MUS/155/)
Class instruction in the fundamentals of playing and teaching the euphonium and tuba. Acquire knowledge on recommended instruments and equipment, maintenance procedures, and training materials. Prerequisite: Intended for music majors in the BME instrumental concentration.

MUS 158 Supp Percussion Instruments credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/158/)
Class instruction in the fundamentals of playing and teaching percussion instruments. Acquire knowledge on recommended instruments and equipment, maintenance procedures, and training materials. Prerequisite: Intended for music majors in the BME instrumental concentration.

MUS 160 Jazz Piano Improvisation I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/160/)
Study of jazz theory, harmony, and improvisational techniques at the piano; includes experience in solo and ensemble situations, and a historical survey of jazz development from about 1910. Prerequisite: Completion of MUS 174 or equivalent; MUS 202 and MUS 208 or equivalent; consent of instructor.

MUS 161 Jazz Piano Improvisation II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/161/)
Continuation of MUS 160. Study of jazz theory, harmony, and improvisational techniques at the piano; includes experience in solo and ensemble situations, and a historical survey of jazz development from about 1910. Prerequisite: MUS 160 or consent of instructor.

MUS 163 Jazz Keyboard Studies I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/163/)
Prepares the student (through class participation) to perform one jazz standard on a functional level. Includes basic technique, chord voicing, comping, and lead sheet realization with functional fluency in all keys. Furnishes the student with class instruction on piano, focusing on jazz and improvisational idioms. An in-depth study of overall instrument technique, eminent styles, and other performance practices relevant to jazz piano and improvisation. Prerequisite: MUS 172 and MUS 173, or consent of the instructor.

MUS 164 Jazz Keyboard Studies II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/164/)
Continuation of materials presented in MUS 163, focusing on improvisational idioms of jazz piano. Prepares the student (through class participation) to perform three jazz standards on a functional level. Emphasizes the blues form, minor II-V-I chord progressions with both hands, and introduces all major modes. Includes technique, chord voicing concepts, comping, and lead sheet realization with mid-level fluency in all keys. A continuing in-depth study of overall instrument technique, eminent styles, and other performance practices relevant to jazz piano and improvisation. Prerequisite: MUS 163, or placement exam, or consent of the instructor.

MUS 166 Class Jazz Improvisation I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/166/)
Examines the dynamics of group improvisation at a fundamental level. Techniques of individual melodic development, group melodic development, and group contouring will be discussed and practiced. Requires preparation of group improvisations using the blues, a 32-bar song form, and a modal form, as well as class presentations and group demonstrations of basic group improvisational techniques.

MUS 167 Class Jazz Improvisation II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/167/)
Continues to examine the dynamics of group improvisation as presented in MUS 166. Discussion and practical application of techniques of individual melodic development, group melodic development, and group contouring. Requires preparation of group improvisations using blues, 32-bar song form, and free group improvising forms, as well as class presentations and group demonstrations of more advanced improvisational techniques. Prerequisite: MUS 166.

MUS 169 Unit One Sem Instruct in Music credit: 0 to 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/169/)
Experimental seminar courses to introduce non-music majors to contemporary ideas in music. Approved for letter and S/U grading. May be repeated to a maximum of 4 hours. Prerequisite: For non-music majors only.

MUS 170 Grp Instr Pno NonMus Maj I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/170/)
Beginning piano for non-music majors. Includes fundamentals of reading, technique, and creative activities; study and performance of simple solo and ensemble repertoire.

MUS 171 Grp Instr Pno NonMus Maj II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/171/)
Continuation of basic skills presented in MUS 170. Elementary piano for non-music majors. Includes reading, technique, creative activities; simple solo and ensemble repertoire. Prerequisite: MUS 170 or equivalent.

MUS 172 Grp Instr Pno for Mus Major I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/172/)
Group instruction in beginning piano for music majors whose principal performing medium is voice, or an orchestral or band instrument. Study of simple piano literature, development of skills in technique, sight reading, harmonization, transposition, improvisation, and analysis. This is the first of two courses that addresses the keyboard competency policy for non-piano majors.

MUS 173 Grp Instr Pno for Mus Maj II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/173/)
Continuation of skills introduced in MUS 172. Group instruction in elementary piano for music majors whose principal performing medium is voice, or an orchestral or band instrument. Sight-reading, harmonization, transposition, and improvisation. Easy solos from the main historical periods with appropriate technical development; introduction to piano ensemble literature. This is the second of two courses that addresses the keyboard competency policy for non-piano majors. Prerequisite: MUS 101 and MUS 107; MUS 172 or equivalent; or consent of instructor.

MUS 174 Grp Instr Pno for Mus Maj III credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/174/)
Continuation of skills introduced in MUS 173. Group instruction in intermediate piano for music majors whose principal performing medium is voice, or an orchestral or band instrument. Study of intermediate level solos and ensemble compositions, harmonization with chromatic chords, sight reading, transposition of four-voice works, improvisation, and learning of patriotic songs. Prerequisite: MUS 102 and MUS 108; MUS 173 or equivalent; or consent of instructor.

MUS 175 Grp Instr Pno for Mus Maj IV credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/175/)
Continuation of skills introduced in MUS 174. Group instruction in moderately advanced piano for music majors whose principal performing medium is voice, or an orchestral or band instrument. Emphasis on solos, ensemble compositions, technical development, and more advanced work in sight reading, harmonization, improvisation, transposition, and aural skills. Prerequisite: MUS 201 and MUS 207; MUS 174 or equivalent; or consent of instructor.

MUS 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/MUS/199/)
May be repeated to a maximum of 12 hours.

MUS 201 Music Theory and Practice III credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/201/)
Continuation of MUS 102. Gradually increased emphasis on contrapuntal techniques, dissonance in tonal music, and musical form. Prerequisite: MUS 102 and MUS 108, or placement by examination.

MUS 202 Music Theory and Practice IV credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/202/)
Continuation of MUS 201. Study of twentieth century compositional methods. Prerequisite: MUS 201 and MUS 207, or placement by examination.

MUS 205 Computation and Music II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/205/)
A follow-up course to Computation and Music I that introduces students to programming music applications with special emphasis on issues related to real-time audio system design. The class will begin by introducing students to the fundamentals of real-time audio synthesis using a graphical audio language such as Max/MSP, and then turn to hands-on design of real-time audio systems using an industry standard language such as C++. The course content reinforces materials presented in CS 128 and CS 222, including GUI frameworks, prototyping, user interface design, code refactoring and debugging. Prerequisite: CS 124, CS 128, CS 222, MUS 101, and MUS 102; or consent of instructor. Restricted to CS + Music students and Music Technology students with strong programming experience; or consent of instructor.

MUS 206 Intermediate Composition credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/206/)
Class instruction in contemporary compositional practice at the secondary stages. May be repeated to a maximum of 6 hours. Prerequisite: MUS 106 and consent of composition-theory faculty.

MUS 207 Musicianship III credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/207/)
Continuation of MUS 108. Emphasis on extensions of tonality by means of changing tonal centers and altered chords. Prerequisite: MUS 108, or placement by examination.

MUS 208 Musicianship IV credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUS/208/)
Continuation of MUS 207. Emphasis on atonal pitch structures and complex rhythmic organization. Prerequisite: MUS 207, or placement by examination.

MUS 209 Music, Sound, Technology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/209/)
This course examines the role modern digital technology plays in musical performance, composition, listening, and analysis. The course is divided into three large subject areas each lasting approximately five weeks: (1) sound, sound fields, and digital recording, (2) digital technology in composition and performance, and (3) psychoacoutics and digitized music analysis. Within each subject area, students are first introduced to relevant acoustic and musical principles, then learn about their implementation in the digital domain, and lastly gain practical experience with the subject matter through hands-on projects involving the capture, creation, editing and analysis of musical sound using standard hardware and computer applications. Prerequisite: Restricted to Music Technology students, or by consent of instructor.

MUS 222 Singing in Musical Theatre credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUS/222/)
This is a highly participatory class appropriate for all levels of singing experience and ability, and includes a final cabaret-style performance at the end of the semester to showcase in-class learning. Methods of instruction include vocal exercises, group somatic and vocal work, song memorization, and in-class performances. May be repeated in separate terms up to 4 hours. Prerequisite: Instructor approval required.

MUS 240 Orientation Mus Tchg Lrng K-HS credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUS/240/)
Provides guided practice in observing music teaching and learning in a variety of settings. Develops professional perspective and vocabulary for analyzing effective teaching, diverse learning styles, and patterns of music instruction in a variety of contexts. Includes early field experience hours. Must complete criminal background check prior to observing in schools. Prerequisite: Music education majors accepted into Teacher Certification Track.

MUS 242 Elements of Conducting credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/242/)
Fundamental elements of conducting, score analysis and preparation, transcription and transposition for choral and instrumental ensembles. Focused on development of conducting skills appropriate for use in public school teaching. A special section is offered for music majors not majoring in music education. Prerequisite: Music majors or consent of instructor.

MUS 243 Introductory Music Ed Tech credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/243/)
Overview and exploration of the ways that technology benefits music education. Opportunities for practical development of skills, work, and play with a variety of software and hardware, and group projects that tie multiple technologies together in larger curricular units. Recent research readings. Consideration of the appropriateness for technology with special learners, as well as in ensemble and early childhood settings. Prerequisite: MUS 240 or consent of instructor.

MUS 244 Social Foundations of Music Ed credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/244/)
Explores the social and cultural contexts of music teaching and learning from multiple perspectives. Examines contemporary and historical American music education philosophy, practice, and policy as well as music education's place within broader systems of education. Special emphasis will be placed on issues of cultural diversity and social justice and problematizing dominant narratives and potential assumptions relevant to music education. Employs scholarship within and beyond music education concerned with critical theories, history, philosophy, and sociology. Prerequisite: MUS 240 or consent of instructor.
This course satisfies the General Education Criteria for:
Advanced Composition

MUS 265 Opera credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUS/265/)
Preparation and public performance of grand or light opera. Includes only singing and acting (students desiring experience in costuming, stage management, scenery, publicity, etc., should apply to the University Theatre Department, which cooperates in the opera productions). May be repeated. Prerequisite: Consent of instructor.

MUS 299 Thesis/Adv UG Honors in Music credit: 1 or 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/299/)
Special individual research projects. Required of seniors in the history of music and music theory curricula; open also to advanced undergraduates, including James Scholars, who have achieved university or college honors and who desire to do research in specialized areas of music, including performance. May be repeated to a maximum of 4 hours. Counts for advanced hours in LAS. Prerequisite: Senior standing in the history of music or music theory curricula, or consent of instructor.

MUS 305 Computation and Music III credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/305/)
Explores designing and building music composition software. The course covers topics such as implementing musical event and container classes, functional tools for manipulating symbolic music information, score file input and output, and scheduling compositional generators to create musical output. A variety of different algorithmic techniques for computing compositions will be also explored, including mapping and transformation, musical pattern generation, Markov chains, cellular automata, chaotic systems, microtonality, and spectralism. Example course outcomes include the ability to work with midi data; import, export, and modify score files, sending data in realtime to external apps, and defining data structures to represent common musical concepts such as notes, rhythms, pitches, envelopes, patterns, etc. Prerequisite: MUS 105, MUS 205, CS 124, CS 128, CS 222; or consent of instructor. Restricted to CS+Music students and Music Technology students with strong programming experience; or consent of instructor.

MUS 313 The History of Music I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/313/)
Survey of music and its development in Western civilization to about 1750. Emphasis on an acquaintance with representative musical works and style, and on understanding musical concepts in the light of their historical and general cultural context. Prerequisite: MUS 110 or consent of instructor.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

MUS 314 The History of Music II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/314/)
Survey of the development of music as an art in Western civilization from about 1750 to the present. Emphasizes an acquaintance with formal and stylistic problems through the study of representative works and on understanding specific musical concepts in the light of their historical and general cultural context. Prerequisite: MUS 313 or consent of instructor.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

MUS 317 Intro to Piano Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/317/)
Overview of representative works for the piano, from Scarlatti to the present. Prerequisite: MUS 314.

MUS 318 Introduction to Piano Literature II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/318/)
Provides an overview of the piano repertoire, with representative works from late 19th century to the present. The content of the course will include assigned readings, listening, and in-class lecture/discussions of musical and technical challenges of the works discussed. Prerequisite: MUS 317; or consent of instructor.

MUS 320 Pre-Student Tchng Experience credit: 1 or 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/320/)
Early Field Experiences in music teacher education. Includes supervised practicum work in observation, co-teaching, and individual teaching in local public schools. Twenty-seven (27) clock hours of EFE required for each hour of credit. May be repeated to a maximum of 4 hours, but only 2 hours may be applied toward the degree. Prerequisite: Music education majors or consent of instructor.

MUS 326 Practicum in Piano Teaching credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/326/)
Coordinates lesson planning for teaching pre-college piano pupils with extensive teaching experience; gives close examination to beginning and intermediate teaching literature.

MUS 330 Advanced Choral Conducting I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/330/)
Laboratory/practicum course for review and development of choral conducting skills and their integration into the student's full complement of teaching skills and knowledge. Score analysis and preparation lead to the application of teaching and rehearsal skills. Prerequisite: Music education majors; MUS 242; concurrent registration in MUS 348 is required.

MUS 331 Advanced Choral Conducting II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/331/)
Practicum course emphasizing teaching and rehearsal techniques, score preparation, and interpretation. Focuses on the integration of aural, vocal, keyboard, and conducting skills for the choral teacher/conductor. Prerequisite: MUS 330; music education majors, or consent of instructor.

MUS 332 Advanced Wind Band Conducting and Rehearsal Strategies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/332/)
Develops skills in rehearsal techniques and aural skills. Application of teaching strategies and learning theory. Refinement of fundamental concepts of gesture; development of advanced conducting skills and score reading skills; development of score analysis techniques. Prerequisite: MUS 242; instrumental music education majors, or consent of instructor.

MUS 333 Cond/Teach Strings-Grp Setting credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/333/)
Survey of concert and training literature for school orchestras; refinement of fundamental concepts of gesture; development of advanced skills in conducting, score reading, and score analysis. Prerequisite: MUS 242; music education majors, or consent of instructor.

MUS 335 Elem and Mid Sch Instrum Music credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/335/)
Examines pedagogical and organizational techniques for teaching elementary and middle school instrumental music. Must be taken concurrently with MUS 320 WP or MUS 320 S, an Early Field Experience. Prerequisite: May only be taken one or two semesters prior to student teaching; music education majors, or consent of instructor.

MUS 336 Service Learning in Music Education credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/336/)
Service Learning and participatory action research in music education. Students facilitate music learning in cooperation with community partners in Champaign-Urbana, Illinois and surrounding communities. Collaborative planning, learning through inquiry, engaged scholarship, and democratic teaching practices. Student teams develop or work on ongoing projects with community teachers, musicians, or organizations. May be repeated in separate terms.

MUS 339 Princpls and Technqs in Mus Ed credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/339/)
Overview of music education in K-12 settings, emphasizing philosophy and history of music education, jazz education, methodologies commonly utilized in school curricula, music in special education, and classroom/rehearsal management. Five weeks are devoted to content exploring basic statistical techniques and procedures. Prerequisite: Senior standing in music education, or consent of instructor, plus 80 hours of early field experiences in the teaching of music; completion of the Quantitative Reasoning I requirement.
This course satisfies the General Education Criteria for:
Quantitative Reasoning II

MUS 342 Music in Childhood credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/342/)
Provides a model of comprehensive musicianship in general music K-5. Considers musical and conceptual development of learners at various ages. Includes lesson planning and assessment strategies for classroom music instruction including listening, performing, and composing experiences. Prerequisite: MUS 240 or consent of instructor.

MUS 343 Music in Adolescence credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/343/)
Detailed consideration of the general music program in both middle school and high school. Emphasis on adolescent characteristics and alternative methods of instruction. Prerequisite: MUS 240 or consent of instructor.

MUS 344 Instrumental Methods for Secondary Ensembles credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/344/)
Surveys repertoire for secondary wind and string ensembles; develops administrative skills for organizing a school music program; increases skills in rehearsal techniques and addresses current issues in music education. Prerequisite: MUS 240, MUS 350; or approval of instructor.

MUS 345 Mus Methods in Early Childhood credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/345/)
Approaches for teaching music to children ages 2 through 8 in preschool and early elementary school settings. Focuses on understanding the role of music in early childhood, developing musical concepts, and organizing appropriate learning experiences.

MUS 346 Choral Methods for Secondary Ensembles credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/346/)
Lecture/discussion methods course that addresses curriculum development, organization/administration, repertoire, vocal pedagogy and the changing voice, diction, and additional topics typical of secondary school choral music program. Prerequisite: MUS 240, MUS 350; or consent of instructor.

MUS 348 Choral Literature credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUS/348/)
Exploration of choral literature appropriate for middle and high school music programs. Students carry out lesson plans through peer teaching/rehearsal sequences, culminating in public performance. May be repeated to a maximum of 2 hours. Prerequisite: MUS 242. Restricted to Music Education majors, or consent of instructor.

MUS 350 Music Teaching in Ensemble Settings credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/MUS/350/)
Emphasizing the collaborative nature of teaching and learning, this team-taught, comprehensive course engages students in teaching music through school ensembles of all kinds. Topics include comprehensive musicianship, creativity and composition, instructional planning, management structures and routines, and inclusive practices in music education. Prerequisite: MUS 240 and MUS 342 or MUS 343; or consent of instructor.

MUS 352 Tchng Strings in Grp Settings credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/352/)
Organize and teach sequential string playing technique to students in a group setting to develop their aural skills and left hand and right hand technique; refresh and improve the string performance skills gained in MUS 140; survey materials for string classes; develop awareness of personal teaching delivery skills. Offered only in spring semesters. Prerequisite: Music Education major, completion of MUS 320S, or consent of instructor.

MUS 360 Jazz Improv:Theory and Prac I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/360/)
Fundamentals of jazz improvisation, with an emphasis on aural recognition of jazz chord voicings, harmonic progressions, and scales. Includes interactive software related to jazz improvisation ear-training. Application of melodic, harmonic, and rhythmic materials with regard to improvisation. Prerequisite: MUS 102 and MUS 108; MUS 167; or placement by exam with consent of instructor.

MUS 361 Jazz Improv:Theory and Prac II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/361/)
Continuation of MUS 360. Exploration of advanced harmonic procedures with an emphasis on aural recognition of advanced forms of jazz harmonic structures, scales, chord qualities, and chord progressions. Additional emphasis on scales, chord/scale relationships, and standard jazz harmonic forms such as blues, standard jazz tunes, and modal tunes. Prerequisite: MUS 360, or placement by exam with consent of instructor.

MUS 362 Jazz Arranging I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/362/)
Fundamentals of jazz arranging with an introduction to techniques such as schematic design, score layout, analysis, voicing, section writing, and orchestration. Emphasis on arranging for rhythm section, along with part layout and forms, voicing techniques, and basic harmonic concepts. Three major written projects are required. Prerequisite: MUS 166, or placement by exam/portfolio with consent of instructor.

MUS 363 Jazz Arranging II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/363/)
Advanced melodic, harmonic, and rhythmic arranging techniques as applied to jazz instrumentation. Emphasis on practice in analysis, voicing and orchestration techniques such as 4-way closed position double lead, 4-way closed-position drop-2 double lead, 4-way closed position drop-2, and 4-and 5-way closed position. Three major written projects are required. Prerequisite: MUS 362, or placement by exam/portfolio with consent of instructor.

MUS 364 Jazz Composition I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/364/)
Examines the basic elements of jazz composition from melodic, harmonic, rhythmic, and tone color perspectives focusing on distinctive styles of jazz. Promotes a better understanding of various jazz compositional styles, jazz composers, creative elements and abilities, melody writing, harmonic systems, rhythmic compositional devices, and jazz reharmonization techniques. Prerequisite: MUS 363.

MUS 365 Jazz Composition II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/365/)
Examines advanced elements of jazz composition such as melody construction, harmonic devices, and rhythmic devices used in modern jazz compositions as a continuation and expansion of materials presented in MUS 364. Melodic and harmonic contouring, asymmetrical forms, advanced chromatic-modal construction, and creative practices will be discussed and practiced through written assignments and projects. Prerequisite: MUS 364, or consent of instructor upon approval of a portfolio of jazz compositions.

MUS 368 Jazz Improvisation Styles I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/368/)
Survey of improvisational/jazz artists. Students write and present four papers over the course of the semester, accompanied by four transcriptions of four major improvisational/jazz artists representing four distinct improvisational/jazz styles. All presentations will be done in class. Prerequisite: Consent of instructor.

MUS 369 Jazz Improvisation Styles II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/369/)
A continuation of the survey of improvisational/jazz artists at an advanced level. Students write and present four papers and associated recording transcriptions of four advanced improvisational/jazz artists representing four distinct and advanced improvisational/jazz styles. All presentations will be done in class. Prerequisite: MUS 368 or consent of instructor.

MUS 400 Counterpoint and Fugue credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/400/)
Study of contrapuntal writing, including fugue, with emphasis on the works of J.S. Bach. Includes analysis of contrapuntal writing. 3 undergraduate hours. 3 graduate hours. Prerequisite: MUS 202 and MUS 208, or consent of instructor.

MUS 404 Contemp Compos Techniques credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/404/)
Studies in specialized areas of composition for advanced undergraduates and graduates majoring in composition-theory. May be elected by others with consent of instructor. 2 undergraduate hours. 2 graduate hours. May be repeated. Prerequisite: MUS 106, MUS 202 and MUS 208, or consent of instructor.

MUS 405 Analytical Systems 20thC Mus credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/405/)
Study of various analytical techniques developed for music written in the twentieth century based on compositional procedures other than those derived from the common practice period. 3 undergraduate hours. 3 graduate hours. Prerequisite: MUS 202 and MUS 208, or consent of instructor.

MUS 406 Advanced Composition credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/406/)
Individual instruction in contemporary musical practice. Students submit scores of their compositions to the composition faculty in order to obtain consent to register; consent is granted on the basis of the quality of the music the student has composed and the level of skill demonstrated in the work submitted. 3 undergraduate hours. 3 graduate hours. May be repeated to a maximum of 12 hours. Prerequisite: For undergraduates, MUS 206 and consent of composition faculty; for graduate students, consent of composition faculty.

MUS 407 Elect Music Techniques I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/407/)
Introduces electroacoustic music, including historical background, music literature, techniques of notation and realization, sound synthesis, analog and digital recording, mixing and processing, and compositional application in the areas of musique concrete, electronic music, and Musical Instrument Digital Interface (MIDI) technology as applied to electroacoustic concert art music. Weekly lab times assigned. 3 undergraduate hours. 3 graduate hours. Prerequisite: Junior standing in music, or consent of instructor.

MUS 408 Analysis of Musical Form credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/408/)
Extensive study of the formal structure of representative musical compositions from various historical periods: (a) Renaissance and Baroque; (b) Viennese classical; (c) nineteenth century; (d) first half of twentieth century; and (e) since World War II. 3 undergraduate hours. 3 graduate hours. May be repeated to a maximum of 9 hours. Prerequisite: MUS 202 and MUS 208.

MUS 409 Elec Music Techniques II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/409/)
Intermediate level study of Musical Instrument Digital Interface (MIDI) technology, sound design, digital audio engineering techniques, multi-track digital editing and audio processing in music composition, and the study of compositional, technical, and performance considerations as applied to electroacoustic concert art music. Weekly lab times are assigned. 2 undergraduate hours. 2 graduate hours. Prerequisite: MUS 407 or placement by examination.

MUS 410 Period Studies in Musicology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/410/)
Intensive study of the music of a specific historical period. 3 undergraduate hours. 3 graduate hours. May be repeated to a maximum of 12 hours. Prerequisite: MUS 313 and MUS 314, junior standing in music or consent of instructor.

MUS 411 Genre Studies in Musicology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/411/)
Examination of one or more aspects of musical genre defined by composer(s), historical era, region, performance issues, philosophy, etc. Can include the study of the relationship between genre and performance, genre and pedagogy, genre and the creative process, genre and reception, etc. 3 undergraduate hours. 3 graduate hours. May be repeated to a maximum of 12 hours if topic varies. Prerequisite: MUS 313 and MUS 314; junior standing; or consent of instructor.

MUS 412 Composer Studies in Musicology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/412/)
Intensive study of the music of a specific composer or group of composers, and the practice of music authorship. 3 undergraduate hours. 3 graduate hours. May be repeated to a maximum of 6 hours if topic varies. Prerequisite: MUS 313 and MUS 314, junior standing in music or consent of instructor.

MUS 413 Music and Performance credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/413/)
Examination of one or more aspects of musical performance defined by historical era, region, genre, philosophy, etc. Can include the study of the relationship between performance, improvisation and creative process; performance and publication; performance practices of a specific genre, period, or community; etc. 3 undergraduate hours. 3 graduate hours. May be repeated to a maximum of 12 hours if topic varies. Prerequisite: MUS 313 and MUS 314, junior standing; or consent of instructor.

MUS 414 Music and Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/414/)
Examination of the social context, function and meaning of music/music-making in one or more communities, from one or more areas of the world, in one or more time periods. May address music in relation to such social issues as gender and sexualities, ethnicity, politics, etc. 3 undergraduate hours. 3 graduate hours. May be repeated to a maximum of 6 hours if topic varies. Prerequisite: MUS 313 and MUS 314, and junior standing in music; or consent of instructor.

MUS 415 Music and Media credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/415/)
Intensive study of sound culture, media, and technologies, whether historical or contemporary. 3 undergraduate hours. 3 graduate hours. May be repeated to a maximum of 12 hours if topic varies. Prerequisite: MUS 313 and MUS 314; junior standing; or consent of instructor.

MUS 416 Anthropology of Music credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/416/)
Introduction to the anthropological study of music, including the role of music in the world's societies and non-Western musical systems and cultures. Same as ANTH 416. 3 undergraduate hours. 3 graduate hours. Prerequisite: ANTH 103 or consent of instructor.

MUS 418 Regional Studies in Musicology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/418/)
Seminar devoted to intensive study in the music of specific peoples, states, or geographic regions from around the world. 3 undergraduate hours. No graduate credit. May be repeated to a maximum of 12 undergraduate hours if topic varies. Prerequisite: MUS 313 and MUS 314; junior standing; or consent of instructor.

MUS 419 Sr Seminar in Musicology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/419/)
Intensive capstone seminar for musicology majors directed at graduate school preparation, senior thesis or project development, professional portfolio design, and the cultivation of scholarly writing skills. Introduces advanced research methods and analytical paradigms. Addresses special topics or issues tailored to student interests and faculty expertise, as well as contemporary developments in the discipline or current musical events, from diverse perspectives. 3 undergraduate hours. No graduate credit. Prerequisite: For senior musicology majors (BA or BM) with senior standing, or consent of instructor.

MUS 421 The Music of America credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/421/)
Study of chamber, choral, and orchestral music written by American composers from about 1850 to the present; jazz and its offshoots; folk and popular music; and experimental music in America. 3 undergraduate hours. 3 graduate hours. May be repeated to a maximum of 6 hours. Prerequisite: Senior standing in music or consent of instructor.

MUS 422 Musical Theatre Repertoire credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/422/)
Musical Theatre Repertoire is a high-contact class, conducted in a studio setting. Methods of instruction include vocal exercises, studying and singing Musical Theatre repertoire, song memorization, studying and evaluating performances, and utilizing both class and individual evaluations. Vocal health and wellness are stressed as students become familiar with styles of singing in both classical and contemporary Musical Theatre. 2 undergraduate hours. 2 graduate hours. May be repeated in separate terms to a maximum of 8 undergraduate hours or 4 graduate hours. Prerequisite: Students must have two years of applied voice lessons (MUS 181) in order to register for this course. For Music majors, or by consent of instructor.

MUS 423 Intro to Piano Technology credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/423/)
Introduction to the mechanism and operation of the modern piano, including the historical development of keyboard instruments. Introduction to tuning and regulation, theory, and practice. No previous experience tuning or regulating pianos is necessary. 2 undergraduate hours. 2 graduate hours.

MUS 424 Musical Informatics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/424/)
A 21st century approach to music theory: fundamental elements of music illustrated through logical and mathematical concepts, unencumbered by stylistic considerations. Defines the internal structure of sounds and presents a few general methods of organizing them into complex compositions. Intended for musicians having limited familiarity with mathematics, as well as scientifically inclined students with little musical background. 3 undergraduate hours. 3 graduate hours. Prerequisite: Consent of instructor.

MUS 426 Orchestration credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/426/)
A thorough study of writing for all of the orchestral instruments in combinations ranging from solo to varying sizes of chamber ensembles and full orchestra. Includes analysis of musical examples and composing short works for various instrumental ensembles. 3 undergraduate hours. 3 graduate hours. Prerequisite: MUS 202 and MUS 208.

MUS 430 Applied Music Pedagogy credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/430/)
Survey of techniques, practices, and materials; presentation of group and individual instruction; an approach to teaching problems, tone production, musical styles, and interpretation for various age levels; actual teaching experience under faculty supervision. Required of performance majors in voice. 2 undergraduate hours. 2 graduate hours. May be repeated to a maximum of 4 hours. Prerequisite: Senior standing in music or consent of instructor.

MUS 431 Piano Pedagogy I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/431/)
Objectives, techniques, literature, and materials for teaching piano to children from about ages five through ten (elementary level); observation of lessons and supervised student teaching experience. 2 undergraduate hours. 2 graduate hours. Required of piano performance majors. Prerequisite: Senior standing in music or music education, or consent of instructor.

MUS 432 Piano Pedagogy II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/432/)
Objectives, techniques, literature, and materials for teaching the young pianist from about ages 11 through 18 (middle school to pre-college level); teaching the adult beginner; observation of lessons and supervised student teaching experience. 2 undergraduate hours. 2 graduate hours. Required of piano performance majors. Prerequisite: Senior standing in music or music education, or consent of instructor.

MUS 433 Music Interdisciplinary Curriculum credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/433/)
This course focuses on the principles and processes of an interdisciplinary curriculum, with primary emphasis on music's relationship to other areas of study. The organizing framework for the course is grounded on the premise that music influences, and in turn is influenced by, complementary realms of human experience. The purpose is to enable music educators and other interested persons to create sound educative experiences in music built upon strong relationships among persons, ideas, artistic practices, and disciplines. 2 undergraduate hours. 2 or 4 graduate hours. Prerequisite: MUS 240, MUS 342, and MUS 343; or grad standing; or consent of instructor.

MUS 434 Assessment and Evaluation in Music Education credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/434/)
Overview of assessment and evaluation techniques in music education, emphasizing the design of performance assessments, how to collect quality data in the music classroom, and how to use data to improve instruction. Five weeks devoted to context-exploring basic statistical techniques, including how to interpret data. 3 undergraduate hours. 4 graduate hours. Prerequisite: MUS 240, MUS 342, MUS 343; or grad standing; or consent of instructor.

MUS 435 Jazz Aural Skills I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/435/)
Jazz Aural Skills I is the first of two courses designed to equip students for the rigorous demands of a professional jazz musician. The course is designed to strengthen the student's ability to recognize chord progressions, scales, chord alterations, and common forms in order to react and integrate them into solo improvisation and group playing. Students learn how to strengthen their own relative pitch recognition through singing/and or playing their instrument(s), including piano. 2 undergraduate hours. 2 graduate hours. Prerequisite: MUS 107, 108, 172 and 173, or by consent of instructor. This course is open to jazz majors, music majors, and interested students.

MUS 436 Jazz Aural Skills II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/436/)
Jazz Aural Skills II is a continuation of ear training for the jazz musician and composer. The ability to hear all parts of a tune - chord changes, rhythmic patterns, and the harmonic implications of the chord extensions is considered a fundamental essential skill of the professional jazz and commercial musician. 2 undergraduate hours. 2 graduate hours. Prerequisite: MUS 107, 108, 17, 173 and 435, or by consent of instructor.

MUS 437 Popular Music Pedagogy credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/437/)
Explores various vernacular, popular, and folk musical traditions. Experiences will focus on oral/aural creation and performance as well as responding to and connecting with relevant sociocultural issues and contexts. Special emphasis will include the potential application and inclusion of these musical traditions within school music settings. 2 undergraduate hours. 2 or 4 graduate hours. Prerequisite: MUS 240 and MUS 343; or grad standing; or consent of instructor.

MUS 438 Designing Musical Experiences credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/438/)
Students develop their musicianship through reflective engagement with a variety of approaches to non-performance oriented music learning. Equal emphasis is placed on various kinds of music (literature and repertoire) and the ways in which teachers can structure experiences for students. Students will plan and lead experiences, sing and perform on a variety of instruments, and review recent research and scholarship in the field. 2 undergraduate hours. 2 graduate hours. Prerequisite: MUS 240.

MUS 439 Differentiating Music Instruction credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/439/)
Strategies for adapting and modifying music instruction for students with disabilities in general, choral, and instrumental music classes. 3 undergraduate hours. 3 graduate hours. Prerequisite: MUS 240, MUS 342 or MUS 343; or grad standing; or consent of instructor.

MUS 440 Marching Band Procedures credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/440/)
Detailed consideration of principles and procedures for preparing a marching band to participate in parades, ceremonials, and shows for sports events. 2 undergraduate hours. 2 graduate hours. Prerequisite: Junior standing in instrumental music education.

MUS 441 Contemp Issues in Inst Mus Ed credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/441/)
Research-based investigation of concepts and principles of school band programs including repertoire and curriculum, score study and teaching strategies, and leadership and advocacy. 2 undergraduate hours. 2 graduate hours. Prerequisite: Completion of student teaching, graduate standing in music education, or consent of instructor.

MUS 442 Band Arranging credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/442/)
Development of basic scoring and arranging skills for various small instrumental ensembles and marching band. 2 undergraduate hours. 2 graduate hours. Prerequisite: MUS 202 and MUS 208 or equivalent.

MUS 443 Orchestral Repertory credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUS/443/)
Laboratory class designed for brass, woodwind, and percussion performance majors who wish to become more familiar with orchestral literature and a variety of interpretational orchestral techniques. Emphasis on individual and sectional parts of orchestral masterworks. 1 undergraduate hour. 1 graduate hour. May be repeated to a maximum of 4 undergraduate hours and 4 graduate hours. A maximum of 6 hours of credit is cumulative within either the BM or MM degree, or a combination of the two. Prerequisite: Consent of instructor in consultation with the appropriate studio teacher.

MUS 444 Healthy Music Practices credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/444/)
This course is intended for the promotion of healthy musical and lifestyle habits and choices, as well as enhancement as a performer and teacher through knowledge of all aspects of their musical selves - physical, psychological, and spiritual. The course will focus on general self-care but will also cover the four target areas identified by the Health Promotion in Schools of Music Conference as crucial for musicians: musculoskeletal issues, hearing conservation, voice care, and psychological issues. 2 undergraduate hours. 2 graduate hours. Prerequisite: Music students, or instructor approval.

MUS 446 Songwriting credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/446/)
Develops and refines music composition techniques and self-expression in popular, vernacular, and folk music genres. Students will write, record, and perform original songs for class, provide constructive feedback for their peers, reflect personally on their experiences through journaling, and will engage with readings and recordings relevant to class activities. Students should be comfortable singing and creating/performing on an accompanying instrument (e.g. guitar, piano, self-composed digital backing tracks). 2 undergraduate hours. 2 graduate hours.

MUS 447 Advanced Music Ed Technology credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/447/)
A deepening of ideas and skills presented in MUS 243. Provides advanced exploration and construction of digital learning environments, as well as exploring the computer as a musical instrument. Students will work alone and in teams to create curricular materials grounded by historical, philosophical, and research in technology and education. 2 or 4 undergraduate hours. 2 or 4 graduate hours. Prerequisite: MUS 240, MUS 243; or grad standing; or consent of instructor.

MUS 448 Computer Music credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/448/)
Introduction to the multiple ways computers are used in music, with an emphasis on digital sounds synthesis and composition. Elements of acoustics, psychoacoustics, and programming are introduced in order to allow students to use and modify the existing software DISSCO/Sound Maker developed at UIUC. 3 undergraduate hours. 3 graduate hours. Prerequisite: Consent of instructor.

MUS 449 Teaching Young Singers credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/449/)
Provides music education students with techniques for implementing developmentally appropriate music-learning experiences with an emphasis on teaching young singers. Includes theoretical and research literature in the field of vocal development and early childhood music education. Learning goals of the course focus on strategies for supporting and remediating vocal development, integrating singing into general music curricula, identifying and selecting song literature for young singers that encompasses a wide range of genres and styles with attention to children's musical interests, assessing vocal development and growth, and selecting and programing choral literature for early elementary-aged singers. Early field experiences and peer teaching are included in the course work. 2 undergraduate hours. 2 graduate hours. Prerequisite: MUS 240, MUS 342, and MUS 343; or grad standing; or consent of instructor.

MUS 451 Basso Continuo credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/451/)
Introduction to figured bass realization. Techniques of accompanying singers and instrumentalists from a figured bass. 2 undergraduate hours. 2 graduate hours. May be repeated. Prerequisite: Advanced standing in music as a piano, organ, harpsichord, or accompanying major, or consent of instructor.

MUS 452 Special Topics in Harpsichord credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/452/)
Practical and theoretical studies in historical tuning and temperament; early fingerings, harpsichord tutors (treatises), styles of figured bass improvisation, harpsichord literature, and other topics related to harpsichord performance. 2 undergraduate hours. 2 graduate hours. May be repeated to a maximum of 4 hours. Prerequisite: Consent of instructor.

MUS 453 Special Topics in Organ credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/453/)
Development of practical keyboard skills related primarily to the work of the church organist: transposition, score-reading, harmonization, modulation, hymn-playing, and solo and anthem accompaniment. 2 undergraduate hours. 2 graduate hours. May be repeated to a maximum of 4 hours. Prerequisite: Consent of instructor.

MUS 454 Advanced Keyboard Skills I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/454/)
Comprehensive keyboard musicianship course for advanced pianists emphasizing the development of the following skills: sight reading, harmonization, transposition, improvisation, playing by ear, and vocal and instrumental score reading. Ensemble piano music is performed. This course addresses the keyboard competency policy for undergraduate piano performance majors. 2 undergraduate hours. 2 graduate hours. Prerequisite: MUS 180 (12 hours completed) or MUS 175; and MUS 202 and MUS 208 or equivalent; and consent of instructor.

MUS 455 Advanced Keyboard Skills II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/455/)
Continuation of the topics introduced in MUS 454. 2 undergraduate hours. 2 graduate hours. Prerequisite: MUS 180 (12 hours completed) or MUS 175; MUS 202 and MUS 208 or equivalent; MUS 454 or equivalent; and consent of instructor.

MUS 456 Adv Jazz Piano Improvisation credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/456/)
Study of solo jazz piano improvisation on an advanced level. Includes practical experience in traditional, modern, and abstract solo performance, as well as theoretical, stylistic, and historical background. 2 undergraduate hours. 2 graduate hours. May be repeated to a maximum of 4 hours. Prerequisite: MUS 161 or equivalent.

MUS 457 Organ History and Design credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/457/)
Survey of the important national and historical styles of organ building and their relation to musical composition, performance practice, and modern organ design. Includes visits to regional organ installations chosen for their pertinent design features. 2 undergraduate hours. 2 graduate hours. Prerequisite: Consent of instructor.

MUS 459 Professional Internship credit: 0 to 12 Hours. (https://courses.illinois.edu/schedule/terms/MUS/459/)
Professional work with an approved musical organization that is external to the School of Music, in an area related to the student's academic program; exposure to and participation in professional music-related activities. Full documentation and approval of internship activities required. The default credit will always be 0 credits unless a student, with the faculty advisor's support, petitions the appropriate academic committee (UG or Grad) with a detailed proposal outlining the academic nature, content, and scope of the internship. 0 to 12 undergraduate hours. 0 to 12 graduate hours. Approved for S/U grading only. May be repeated in separate terms to a maximum of 4 hours if topics vary.

MUS 462 Jazz Listening Seminar I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/462/)
Examines the fundamental aural elements of improvisation in a jazz idiom. A chronological survey of jazz artists presented via recordings. Topics will vary with the introduction of each new artist or group. 2 undergraduate hours. 2 graduate hours. Prerequisite: Jazz majors or consent of instructor.

MUS 463 Jazz Listening Seminar II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/463/)
A continuation in greater depth of material presented in MUS 462. Further examines the aural elements of improvisation in a jazz idiom. A chronological survey of jazz artists presented via recordings. Topics will vary with the introduction of each new artist or group. 2 undergraduate hours. 2 graduate hours. Prerequisite: Jazz majors or consent of instructor.

MUS 464 Jazz History I credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/464/)
Presents jazz music history chronologically while providing historical background information drawn from other disciplines to illuminate the many ways that jazz has influenced, and been influenced by, American and global societies. Explores the many ways that jazz has encountered other art forms. Unpacks the many issues deeply associated with jazz music's history -- issues of race, class, mass media, gender, critical reception, etc. 3 undergraduate hours. 4 graduate hours. Prerequisite: Prior musical knowledge and training preferred but not required. Consent of instructor.

MUS 465 Jazz History II credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/465/)
A continuation of the materials presented in MUS 464. Allows the students to look both forward and backward to explore jazz music's unfolding in the twentieth century, beginning roughly in 1945 and continuing to the present. Looks at music and its creators using recorded music, film transcription, theory, and various other analytical and media techniques. 3 undergraduate hours. 4 graduate hours. Prerequisite: Prior musical knowledge and training preferred but not required. Consent of instructor.

MUS 469 Lyric Theatre Production credit: 2 or 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/469/)
Studies the problems of the lyric stage. Investigation of and practice with casting methods, program selection, production procedures, stage direction, coaching methods, and opera dramatics. 3 undergraduate hours. 2 graduate hours. May be repeated up to a maximum of 6 undergraduate hours or 4 graduate hours. Prerequisite: Consent of instructor.

MUS 470 Opera Production II credit: 2 or 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/470/)
Continuation of topics introduced in MUS 469. 3 undergraduate hours. 2 graduate hours. May be repeated to a maximum of 6 undergraduate hours or 4 graduate hours. Prerequisite: MUS 469.

MUS 471 Composer-Chor Workshop credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/471/)
Same as DANC 464. See DANC 464.

MUS 472 Senior Project Showcase credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUS/472/)
Senior Project Showcase will be a sequenced, two semester course, culminating in a final performance(s) in the spring semester. Students will use class time for individual and team writing during the fall semester, presenting their work for faculty approval at the end of the first semester. Students will meet weekly in large and small groups, as well as frequent individual sessions with their advisors, receiving and providing feedback, working on staging, choreography and arrangements, and, later, assisting in the production design as well. Improvisation will play a central role in the development of concept and specific songs from character driven work. 1 undergraduate hour. No graduate credit. May be repeated to a maximum of 2 hours in separate terms. Prerequisite: MUS 422 and four semesters of MUSC 468 (A). Restricted to BMA in Lyric Theatre majors only.

MUS 474 Vocal Repertoire I credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUS/474/)
Study of the standard solo literature including solo excerpts from larger works, i.e., cantata, oratorio, and opera. Supplements the student's knowledge of the literature in his/her major field. 1 undergraduate hour. 1 graduate hour. Prerequisite: Junior standing in voice, or consent of instructor and concurrent registration in MUS 481.

MUS 475 Vocal Repertoire II credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUS/475/)
Continuation of the study of the standard solo literature including solo excerpts from larger works, i.e., cantata, oratorio, and opera. Supplements the student's knowledge of the literature in his/her major field. 1 undergraduate hour. 1 graduate hour. Prerequisite: Junior standing in voice, or consent of instructor and concurrent registration in MUS 481.

MUS 499 Proseminar in Music credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/499/)
Special preparation in specialized fields of musicology, composition-theory, performance, and music education. 0 to 4 undergraduate hours. 0 to 4 graduate hours. Approved for Letter and S/U grading. May be repeated to a maximum of 16 hours. Prerequisite: Senior or graduate standing in music or music education; consent of instructor.

MUS 500 Artist Diploma Recital credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUS/500/)
Recital presented in partial fulfillment of requirements for the Artist Diploma. Approved for S/U grading only. May be repeated in the same term to a maximum of 2 hours. May be repeated in separate terms to a maximum of 4 hours. Prerequisite: Admission to the Artist Diploma program on the basis of an audition.

MUS 501 Grad Music History Review credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/501/)
Review of Western music history both before 1750 (MUS 501 section A) and after 1750 (MUS 501 section B). Refreshes knowledge and understanding of representative examples of repertoire as well as the historical context in which music was written. May be repeated up to 8 hours in separate terms.

MUS 502 Graduate Theory Review credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/MUS/502/)
Review of concepts from undergraduate music theory, including materials from the common practice period (50xA) and the twentieth century (50xB). Concepts studied include compositional materials and basic form and analysis. 3 graduate hours. No professional credit. May be repeated. Credit is not given towards graduate degrees. Prerequisite: Restricted to graduate standing in music.

MUS 504 Grad. Jazz Improv. I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/504/)
Practical application of mid- to upper level melodic, harmonic, and rhythmic principles used in jazz improvisation. Practice in the use of jazz chord qualities, upper extensions, and upper altered extensions used in jazz. Descriptions of mid-level improvisational sequences, modal improvising, symmetric/synthetic scale usage, symmetric chord usage, and approach-note/enclosure techniques. 4 graduate hours. No professional credit. Prerequisite: Graduate standing in Jazz Performance or consent of instructor. For Graduate Jazz Performance majors only.

MUS 505 Individ Topics in Music Theory credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/505/)
Studies in specialized areas of analysis, theoretical systems, and aesthetics for composition and theory majors and cognates. May be repeated to a maximum of 12 hours. Prerequisite: Graduate standing in music and consent of instructor.

MUS 506 Graduate Level Composition credit: 2 to 6 Hours. (https://courses.illinois.edu/schedule/terms/MUS/506/)
Advanced instruction in contemporary compositional practice. May be repeated to a maximum of 16 hours.

MUS 507 Sem in Music Comp and Theory credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/507/)
Intensive study of selected topics in the fields of music composition and theory. May be repeated. Prerequisite: Graduate standing in music composition-theory, or consent of instructor.

MUS 508 Grad. Jazz Improv. II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/508/)
The advanced application and examination of improvisational methods, device, and techniques. Study of advanced chord/scale relationships, modal harmonic concepts, harmonic analysis, patterns, linear/vertical approaches to improvising, and various jazz song forms including: advanced blues forms, asymmetrical standards, free improvisational forms, and advanced modal forms. 4 graduate hours. No professional credit. Prerequisite: MUS 504 or consent of instructor. Graduate Jazz Performance majors only.

MUS 509 Graduate Seminar in Band Conducting, History, and Literature credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/509/)
This seminar will explore current topics facing the contemporary wind band conductor. Subject matter will include but not be limited to the exploration of new literature, works for chamber winds, and an historical survey of cornerstone repertoire. There will also be a conducting component, using a chamber ensemble. 2 graduate hours. No professional credit. May be repeated to a maximum of 8 hours in separate terms, if topics vary. Prerequisite: Graduate Band Conducting Majors and Admitted Cognate Program Members Only, or with Instructor permission.

MUS 510 History of Music Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/510/)
The development of theoretical concepts from antiquity through the Renaissance; a study of selected theoretical treatises written before 1550. May be repeated to a maximum of 8 hours. Prerequisite: Graduate standing in musicology or composition-theory, or consent of instructor.

MUS 511 Fdns/Methods of Musicology I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/511/)
Introduction to the field for graduate students in musicology. Includes a study of bibliographic resources and techniques; on-line and CD ROM resources; database creation and management; basic historical method; evidence and argumentation in historical research; critical reading and logical analysis; and the nature and taxonomy of musical sources. Students begin a project on the state of research on a particular subject of their choice, which is to be completed in MUS 512. Prerequisite: Graduate standing in musicology or consent of instructor.

MUS 512 Fdns/Methods of Musicology II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/512/)
Continues materials introduced in MUS 511. Focuses on the major resources, intellectual history, theories and methodologies of ethnomusicology. Students pursue a state-of-research project on a topic relevant to their interests, selected in consultation with the instructor. 4 graduate hours. No professional credit. Prerequisite: MUS 511 or consent of instructor.

MUS 513 Topics in Opera History credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/513/)
Intensive study of a period or school of opera composition or of a particular aspect of the history of opera. Wide reading in the social and intellectual climate of the period concerned; literary, dramatic, and musical analysis; and work with primary sources, whenever possible. 4 graduate hours. No professional credit. May be repeated to a maximum of 8 hours if topics vary. Prerequisite: MUS 528A (consult Class Schedule for specific section information), graduate standing in musicology, or consent of instructor.

MUS 514 Musicology and Pedagogy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/514/)
Seminar-style practicum in the teaching of undergraduate courses in Western and non-western music for musicology and non-musicology majors. Intensive review and discussion of pedagogical materials. Instruction in syllabus and lecture design, presentational and discussion styles, and use of multimedia and educational technology. Prerequisite: Graduate musicology majors or consent of instructor.

MUS 515 Topics in Vocal Music credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/515/)
Intensive or comparative study of specific repertoires of vocal music, of particular genres or styles of vocal composition or performance practice, and/or of particular vocal artists. 4 graduate hours. No professional credit. May be repeated to a maximum of 8 hours. Prerequisite: MUS 528A, graduate standing in musicology, or consent of instructor. For graduate students in Music.

MUS 516 Fieldwork and Ethnography credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/MUS/516/**)**
Prepares students for the various phases of preparing for and doing ethnomusicological fieldwork and ethnographic analysis and writing. Beginning with the project design and grand-writing stages, participants study and practice fieldwork techniques such as participant observations, interviewing, writing and analyzing field notes, and audio and video recording. The politics and ethics of fieldwork and ethnographic writing are considered through readings and discussion. Finally, a variety of approaches to ethnographic writing are considered through the study of finished musical ethnographies. Prerequisite: MUS 512 or consent of instructor.

MUS 517 Topics in Instrumental Music credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/MUS/517/**)**
Intensive or comparative study of specific repertoires of instrumental music, or of particular genres or styles of instrumental composition and performance practice, and/or of particular instrumentalists. Includes broad reading in the social and intellectual climate of the musical practices at issue; pertinent analytical approaches or paradigms; and work with relevant source materials. 4 graduate hours. No professional credit. May be repeated to a maximum of 8 hours. Prerequisite: MUS 528A (consult Class Schedule for specific section information), or graduate standing in musicology, or consent of instructor.

MUS 518 Regional Studies in Musicology credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/MUS/518/**)**
Seminar devoted to intensive study in the music of specific peoples, states, or geographic regions from around the world. 4 graduate hours. No professional credit. May be repeated to a maximum of 16 graduate hours. Prerequisite: MUS 528 A (for DMA or MM performance or composition students); or consent of instructor.

MUS 519 Analytical Methods: Musicology credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/MUS/519/**)**
Practical, hands-on experience with and exposure to the transcription, analysis, theoretical constructs, and/or notation of music from any of the world's repertories examined within a musicological framework and from both a synchronic and diachronic perspective. A series of case studies posing an array of technical problems encourage students to think critically about the place of theory and analysis in the history of musicology and their own work. May be repeated, as topics vary, in the same term to a maximum of 8 hours and in separate terms to a maximum of 12 hours. Students repeating should consult with the instructor before enrolling. Prerequisite: MUS 511 and MUS 512; or consent of instructor. Graduate students in music will be considered if they passed MUS 528A (consult Class Schedule for specific section information).

MUS 520 Soc Theory in Ethnomusicology credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/MUS/520/**)**
History of theoretical ideas and paradigms that have influenced ethnomusicology from the late 19th century through the early 21st century. Helps students to sharpen their own theoretical tools for conducting ethnomusicological research, teaching, and analysis of existing literature. Participants will study theoretical approaches from anthropology, folkloristics, sociology, semiotics, linguistics, communications, and ethnomusicology that have been influential in ethnomusicology. Participants will write a series of short papers to develop their theoretical thinking, writing, and argumentation. Prerequisite: MUS 512, or consent of instructor. Graduate students in music will be considered if they passed MUS 528A (consult Class Schedule for specific section information).

MUS 521 Hist Studies in 20thC Music credit: 2 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/MUS/521/**)**
Seminar in contemporary music, with emphasis on the historical foundations of current trends in musical composition. May be repeated to a maximum of 8 hours. Prerequisite: MUS 528A (consult Class Schedule for specific section information), or graduate standing in musicology, or consent of instructor.

MUS 522 Special Topics Seminar credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/MUS/522/**)**
Intensive study of special topics in musicology, whether historical, ethnomusicological, or interdisciplinary in approach; seminar format. 4 graduate hours. No professional credit. May be repeated to a maximum of 8 hours. Prerequisite: MUS 528A or consent of instructor. For graduate students in Music; this course is intended for performance and composition majors, especially DMA students seeking advanced musicology credit.

MUS 523 Seminar in Musicology credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/MUS/523/**)**
Problems in historical and systematic musicology or ethnomusicology; discussions of special problems and reports on individual research. May be repeated to a maximum of 8 hours. Prerequisite: Graduate standing in musicology or consent of instructor. Graduate students in music will be considered if they passed MUS 528A (consult Class Schedule for specific section information).

MUS 524 Sem in Wrks of Select Composer credit: 2 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/MUS/524/**)**
Intensive historical and analytical study of the works of important composers; each term devoted to one composer. May be repeated to a maximum of 16. (Summer session, 2 or 4 graduate hours). Prerequisite: Graduate standing in musicology or consent of instructor. Graduate students in music will be considered if they passed MUS 528A (consult Class Schedule for specific section information).

MUS 525 Rdgs in Musicol and Mus Theory credit: 2 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/MUS/525/**)**
Individual guidance in intensive readings in the literature of musicology or music theory, selected in consultation with the instructor and in accordance with the needs and interests of the student. May be repeated. (Summer session, 2 graduate hours). Prerequisite: Graduate standing in musicology or music theory.

MUS 526 Baroque Performance Practice credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/MUS/526/**)**
Study of musical performance from ca. 1600-1750; discussion of musical instruments, ornamentation, basso continuo, etc., supplemented by demonstration performances using the University's collection of instruments. Prerequisite: Graduate standing in music; for undergraduates, consent of instructor.

MUS 527 Classical Performance Practice credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/MUS/527/**)**
Study of musical performance of the classical period, with an emphasis on the music of Haydn, Mozart, and early Beethoven; discussion of musical instruments, ornamentation, tempo, vibrato, etc., supplemented by demonstration performances using the University's collection of instruments. Prerequisite: Graduate standing in music; for undergraduates, consent of instructor.

MUS 528 Res & Bibliography in Music credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/528/)
Introduction to basic research skills appropriate to graduate study in music. Topics include accessing library resources and online databases; citation formats and plagiarism issues; critical reading and writing; and critical editions of music. For DMA students additional topics include skills for planning and writing a large research paper; study strategies and resources; and professional skills. All DMA students will complete a draft of their proposal for a final DMA project by the conclusion of this class. Required of all incoming graduate students in the MM (2 hours of credit), except those majoring in musicology, and in the DMA (4 hours of credit). Prerequisite: If required, all remedial coursework in ESL and/or music history must be satisfied prior to enrollment.

MUS 529 Transformative Music Education credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/529/)
Music educators in all settings operate in a crosscurrent of social, musical, educational, and person values. In order to improve our professional practice and transform the profession, we need to examine society's expectations of schools, education, music and the arts as well as our own. In this course, students will learn how sociology can be used to identify and clarify these connections.

MUS 530 Critical Readings in Mus Ed credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/530/)
Independent critical readings and reflections of topics not treated in regularly scheduled courses. Includes program of approved research that culminates in a written report and/or formal presentations. May be repeated to a maximum of 8 hours. Prerequisite: Graduate standing in music education.

MUS 531 Psychology of Music credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/531/)
The practice of making, creating, and experiencing music studied from a psychological perspective. Covers a range of psychological issues of interest to musicians and music educator, with the aim of challenging students to consider new ways of thinking about and participating in music as a result of having developed informed approaches to their own musical development and that of others. Prerequisite: Graduate standing in music education.

MUS 532 Curricular Perspectives on Music Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/532/)
Examines current issues and trends within music education from both a local and global perspective. Focuses on the status and role of the music curriculum in contemporary schools and includes a critical examination of a range of evidence-based principles and approaches that govern music teaching and learning in formal and informal settings. Prerequisite: Graduate standing in music education or consent of instructor.

MUS 533 Research in Music Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/533/)
Examines the sources of research literature in music education, provides an overview of traditional research methodologies, and introduces terminology and procedures utilized in qualitative and quantitative research. The purpose of the course is to enable graduate students to become intelligent consumers and interpreters of the music education research literature. 4 graduate hours. No professional credit. Prerequisite: Advanced undergraduate or graduate standing in music or music education, or consent of instructor.

MUS 534 Doctoral Research in Mus Ed credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/534/)
Considers music education research within a wider political and social context and addresses some of the dilemma and choices faced when designing and conducting research. Explores different approaches and considers theoretical and methodological issues relevant to the design and conduct of music education research. Students are expected to design a research project that will make a distinct contribution to knowledge and afford evidence of originality, either by the discovery of new evidence, or by the exercise of independent critical judgments. Prerequisite: MUS 533 or equivalent, or consent of instructor.

MUS 535 Philosophic Inquiry in Mus Ed credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/535/)
Consideration of the philosophical assumptions that have guided decisions regarding why, what, and how music is taught in schools. Assists students in placing their present values and beliefs about music learning in the context of scholarly ideas on this subject. Addresses questions such as: What is music? Why do people listen to, create, and perform music? What is music's value for individuals and society? Why teach music in school? How does music fit the large goals of schooling? How have answers to the foregoing changed over the past century? Prerequisite: Graduate standing in music or music education, or consent of instructor.

MUS 536 Soc-Cultur Inquiry Music Learn credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/536/)
Consideration of the implications of developmental and socio-contextual inquiry for enhancing music education practice, with an examination of the implications of contemporary theory for the development of more effective teaching and learning processes. Prerequisite: Graduate standing in music or music education, or consent of instructor.

MUS 538 The General Music Program credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/538/)
Concentration on contemporary practices and general music education. Overview of methodologies, historical approaches, and new trends. Additionally, students will explore and develop their own pedagogic content knowledge and general musicianship abilities (improvisation, composition, etc.) within the class setting. Prerequisite: Graduate standing in music education, or consent of instructor.

MUS 539 Music in Higher Education credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/539/)
Provides an orientation to the organization, teaching and administration of music in the college or university. Includes topics such as preparing for and securing a college/university faculty position, promotion and tenure, faculty ethics and evaluation, and personnel/personal relations. Prerequisite: Graduate standing in music or music education.

MUS 540 Graduate Wind Band Conducting credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/540/)
Examination of techniques of rehearsal, conducting, and preparation of wind band and chamber wind ensembles for concert performance. Emphasizes discussion, analysis, and preparation of selected scores for private and group lessons; as well as coaching/experience with live ensembles and select performance opportunities. May be repeated to a maximum of 16 hours. Prerequisite: MM wind band conducting students and/or consent of instructor.

MUS 541 Chor Prog in Secondary Schools credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/541/)
In-depth study of the methods, materials and literature for teaching choral music in the secondary schools. Emphasis on curriculum development, musical literacy, and advanced rehearsal techniques. Prerequisite: Graduate standing in music or music education.

MUS 542 Technology in Music Education credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/542/)
Critical exploration of technology in all aspects of music learning. Theoretical approaches, trends in software and hardware, and consideration of technologies as prosthetics of the mind are explored in a seminar format. Limited instruction in hardware and software are also included as needed. The higher amount of credit will require a major project outside of class in consultation with the instructor. Prerequisite: MUS 447; graduate standing, or consent of instructor.

MUS 543 Music Teacher Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/543/)
This course focuses on the issues, concepts, and processes for the development of preservice music teachers. Intended for prospective university teachers of undergraduate music education majors. Covers educational philosophy, curriculum design, methods of teaching and evaluation, and student teaching and observational experiences as they relate to undergraduate music teacher programs. 4 graduate hours. No professional hours. Prerequisite: PhD Students in Music Education, or as approved by instructor.

MUS 544 Doctoral Seminar in Music Education credit: 0 or 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/544/)
Weekly seminar involving special topic discussions on critical issues within the profession. Required each semester for all resident doctoral students in music education during their residency. 0 or 2 graduate hours. No professional credit. Prerequisite: Graduate standing in music education.

MUS 545 Topics in Music Education credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/545/)
In-depth study of a topic or issue within music education. May be repeated. Prerequisite: Graduate standing in music education.

MUS 546 Orchestral Literature I credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/546/)
Study of orchestral and symphonic literature from about 1700 to 1850. May be repeated up to 6 hours, Prerequisite: Graduate orchestral conducting majors only; consent of instructor.

MUS 547 Orchestral Literature II credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/547/)
Study of orchestral and symphonic literature from about 1850 to the present. May be repeated up to 6 hours. Prerequisite: Graduate orchestral conducting majors only; consent of instructor.

MUS 548 Advanced Jazz Harmony I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/548/)
A survey of advanced improvisational theory and its conception, use, and historical lineage. Examines synthetic, symmetric, and asymmetric scales and modes generated from each. Discussion and analysis of chord symbols and their functions in asymmetric song forms. In-class demonstration by students of linear and vertical approaches to improvising on uncommon chord functions. Prerequisite: MUS 361, or placement by exam with consent of instructor.

MUS 549 Advanced Jazz Harmony II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/549/)
Continuation of materials introduced in MUS 548. Surveys advanced improvisational theory and its conception, use, and historical lineage. Examines use of polychords, pentatonic scales, diminished scales, and the modes generated from each. Discussion and analysis of chord functions in all song forms. Students demonstrate in class a variety of linear and vertical approaches to improvising using harmonic major scales. Prerequisite: MUS 548, or placement by exam with consent of instructor.

MUS 550 Choral Literature I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/550/)
Survey of choral and vocal ensemble repertoire from the Middle Ages to about 1750. 2 graduate hours. No professional credit. Prerequisite: Graduate standing in music; consent of instructor.

MUS 551 Choral Literature II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/551/)
Survey of choral repertoire about 1750 to the present. Prerequisite: Graduate standing in music; consent of instructor.

MUS 553 Graduate Orchestral Conducting credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/553/)
Study of conducting techniques and problems related to standard orchestral literature. May be repeated to a maximum of 12 hours. Prerequisite: MUS 333 or equivalent, and consent of instructor.

MUS 555 Advanced Choral Conducting credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/555/)
Intensive laboratory approach to the development of advanced techniques necessary for working effectively with choral ensembles. 2 graduate hours. No professional credit. May be repeated in separate terms to a maximum of 8 hours. Prerequisite: MM choral conducting students or consent of instructor.

MUS 556 Advanced Choral Techniques II credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/556/)
Intensive survey of choral literature with laboratory organization for reading, conducting, and interpreting choral music of all periods, styles, and voice arrangements. Prerequisite: Graduate standing in choral music or consent of instructor.

MUS 557 Piano Literature credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/557/)
May be repeated to a maximum of 8 hours. Prerequisite: Graduate standing in music or consent of instructor.

MUS 558 Vocal Literature credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/558/)
Study of solo song in larger works and solo art song. May be repeated to a maximum of 8 hours. Prerequisite: Graduate standing in music or consent of instructor.

MUS 559 Organ Literature credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/559/)
Intensive study of organ literature from Bach to the present; includes the music itself, recordings, and collateral readings. May be repeated to a maximum of 8 hours. Prerequisite: Graduate standing in music or consent of instructor.

MUS 560 String Instrument Literature credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/560/)
May be repeated to a maximum of 8 hours. Prerequisite: Graduate standing in music or consent of instructor.

MUS 561 Wind Instrument Literature credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/561/)
Survey of solo and ensemble wind literature; includes analysis and performance (when possible) of the music itself, recordings, and collateral readings. May be repeated to a maximum of 8 hours. Prerequisite: Graduate standing in music or consent of instructor.

MUS 562 Percussion Instruments Lit credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/562/)
Survey and analysis of the field of solo and ensemble percussion literature; includes analysis and performance (when possible) of the music itself, recordings, and collateral readings. May be repeated to a maximum of 8 hours. Prerequisite: Graduate standing in music or consent of instructor.

MUS 563 Topics in Choral Repertoire credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/563/)
Critical and analytical study of vocal ensemble and choral music from the Middle Ages to the present. 2 graduate hours. No professional credit. May be repeated in separate terms to a maximum of 8 hours. Prerequisite: MM and DMA in choral conducting students, or consent of instructor.

MUS 564 Choral Conducting Project credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/564/)
Participation in a graduate choral conducting laboratory and preparation of a choral ensemble for public performance. Required during the final term in residence for candidates in the Master of Music in choral music curriculum. Prerequisite: Consent of instructor.

MUS 565 Doctoral Choral Conducting credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/565/)
Study of performance problems and musical analysis of choral music with techniques of preparation and rehearsal from the various style periods: Renaissance, Baroque, Classic-Romantic, and Contemporary. 2 graduate hours. No professional credit. May be repeated in separate terms to a maximum of 8 hours. Prerequisite: Admission into the Doctor of Musical Arts choral music program, or the equivalent background in other doctoral programs.

MUS 567 Adv Instrument: Chamber/Symph credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/567/)
Orchestration for chamber and symphony orchestras; works of Classical, Romantic, and Contemporary composers. Prerequisite: Undergraduate course in instrumentation.

MUS 569 Capstone Project Synthesis credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUS/569/)
Completion of Master of Music Education curriculum and inquiry capstone project in approved area(s) of study. MME students complete two capstone projects; MME with Licensure students complete one capstone project. 2 graduate hours. No professional credit. Prerequisite: MUS 532 and MUS 533.

MUS 570 Prac Pno Tchg Child and Teens credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/570/)
Student teaching of group piano and musicianship classes for elementary, middle school, and high school students; weekly seminar devoted to evaluation and improvement of teaching techniques. Prerequisite: Graduate standing in music or consent of instructor.

MUS 571 Practicum in Piano Tchg Adults credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/571/)
Student teaching of group piano for adults in the private studio, community college, and university; weekly seminar devoted to evaluation and improvement of teaching techniques. Prerequisite: Graduate standing in music or consent of instructor.

MUS 572 Doctoral Orchestral Conducting credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/572/)
Advanced study in orchestral conducting performance, pedagogy, score study/analysis, and rehearsal techniques. May be repeated to a maximum of 16 hours. Prerequisite: Admission into the doctoral concentration in orchestral conducting; consent of instructor.

MUS 573 Doctoral Wind Band Conducting credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/573/)
Advanced study in wind band conducting performance, pedagogy, score study/ analysis, and rehearsal techniques. May be repeated to a maximum of 16 hours. Prerequisite: Admission into the doctoral concentration in wind band conducting; for doctoral cognate students, consent of instructor.

MUS 574 Jazz Arranging III credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/574/)
Advanced arranging styles and orchestration techniques, with emphasis on brass section arranging, saxophone section arranging, and big band arranging. Orchestration techniques with emphasis on band planing (parallelism), 5-part spread, cluster voicings, and line-writing. Study of jazz related re-harmonization techniques with emphasis on tonicization, secondary dominants, and passing chord re-harmonization. Prerequisite: MUS 363, or placement by exam/portfolio with consent of instructor.

MUS 575 Jazz Arranging IV credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/MUS/575/)
Continued practice and examination of arranging applications for advanced re-harmonization techniques, including tonicization, secondary dominant re-harmonizations, and passing chord re-harmonizations. Score study of advanced voicing techniques, including 5-part spread, whole and half-step planing (parallelism), and modal line-writing. Advanced notation software is introduced and applied in the classroom. Includes discussion of practical application of jazz arranging in a modern music business context. Prerequisite: MUS 574, or placement by exam/portfolio with consent of instructor.

MUS 576 Doctoral Projects credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/MUS/576/)
Special projects for candidates for the Doctor of Musical Arts degree. Open only to students in the Doctor of Musical Arts program. Approved for S/U grading only. May be repeated. (Summer session, 0 to 8 graduate hours). Prerequisite: Consent of instructor.

MUS 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/MUS/599/)
Research in special projects. Approved for S/U grading only. May be repeated to a maximum of 16 hours. Prerequisite: Consent of instructor.

MUSC - MUSIC LESSONS AND ENSEMBLES

MUSC Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/MUSC/)

Courses

MUSC 101 Piano credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/101/)
Instruction in piano at the undergraduate level. Additional fees may apply. See Class Schedule. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Passing of a performance audition is required prior to the initial registration in any applied music course.

MUSC 102 Harpsichord credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/102/)
Instruction in harpsichord at the undergraduate level. Additional fees may apply. See Class Schedule. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Passing of a performance audition is required prior to the initial registration in any applied music course.

MUSC 103 Organ credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/103/)
Instruction in organ at the undergraduate level. Additional fees may apply. See Class Schedule. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Passing of a performance audition is required prior to the initial registration in any applied music course.

MUSC 105 Voice credit: 2 to 3 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/105/)
Instruction in voice at the undergraduate level. Additional fees may apply. See Class Schedule. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Passing of a performance audition is required prior to the initial registration in any applied music course.

MUSC 110 Violin credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/110/)
Instruction in violin at the undergraduate level. Music majors must register concurrently in an approved university orchestra. Additional fees may apply. See Class Schedule. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Passing of a performance audition is required prior to the initial registration in any applied music course.

MUSC 111 Viola credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/111/)
Instruction in viola at the undergraduate level. Additional fees may apply. See Class Schedule. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Passing of a performance audition is required prior to the initial registration in any applied music course. Music majors must register concurrently in an approved university orchestra.

MUSC 112 Cello credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/112/)
Instruction in cello at the undergraduate level. Additional fees may apply. See Class Schedule. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Passing of a performance audition is required prior to the initial registration in any applied music course. Music majors must register concurrently in an approved university orchestra.

MUSC 113 Double Bass credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/113/)
Instruction in double bass at the undergraduate level. Additional fees may apply. See Class Schedule. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Passing of a performance audition is required prior to the initial registration in any applied music course. Music majors must register concurrently in an approved university orchestra.

MUSC 114 Harp credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/114/)
Instruction in harp at the undergraduate level. Additional fees may apply. See Class Schedule. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Passing of a performance audition is required prior to the initial registration in any applied music course.

MUSC 115 Guitar credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/115/)
Instruction in guitar at the undergraduate level, predominantly classical. Additional fees may apply. See Class Schedule. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Passing of a performance audition is required prior to the initial registration in any applied music course.

MUSC 116 Electric Violin credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/116/)
Instruction in electric violin at the undergraduate level. Additional fees may apply. See Class Schedule. May be repeated. Prerequisite: Passing of a performance audition is required prior to the initial registration in any applied music course. Music majors must register concurrently in an approved ensemble.

MUSC 117 Electric Viola credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/117/)
Instruction in electric viola at the undergraduate level. Music majors must register concurrently in an approved ensemble. Additional fees may apply. See Class Schedule. May be repeated. Prerequisite: Passing of a performance audition is required prior to the initial registration in any applied music course.

MUSC 120 Flute credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/120/)
Instruction in flute at the undergraduate level. Additional fees may apply. See Class Schedule. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Passing of a performance audition is required prior to the initial registration in any applied music course.

MUSC 121 Oboe credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/121/)
Instruction in oboe at the undergraduate level. Additional fees may apply. See Class Schedule. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Passing of a performance audition is required prior to the initial registration in any applied music course.

MUSC 122 Bassoon credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/122/)
Instruction in bassoon at the undergraduate level. Additional fees may apply. See Class Schedule. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Passing of a performance audition is required prior to the initial registration in any applied music course.

MUSC 123 Clarinet credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/123/)
Instruction in clarinet at the undergraduate level. Additional fees may apply. See Class Schedule. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Passing of a performance audition is required prior to the initial registration in any applied music course.

MUSC 124 Saxophone credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/124/)
Instruction in saxophone at the undergraduate level. Additional fees may apply. See Class Schedule. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Passing of a performance audition is required prior to the initial registration in any applied music course.

MUSC 125 Trumpet credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/125/)
Instruction in trumpet at the undergraduate level. Additional fees may apply. See Class Schedule. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Passing of a performance audition is required prior to the initial registration in any applied music course.

MUSC 126 Horn credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/126/)
Instruction in horn at the undergraduate level. Additional fees may apply. See Class Schedule. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Passing of a performance audition is required prior to the initial registration in any applied music course.

MUSC 127 Trombone credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/127/)
Instruction in trombone at the undergraduate level. Additional fees may apply. See Class Schedule. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Passing of a performance audition is required prior to the initial registration in any applied music course.

MUSC 128 Euphonium credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/128/)
Instruction in euphonium at the undergraduate level. Additional fees may apply. See Class Schedule. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Passing of a performance audition is required prior to the initial registration in any applied music course.

MUSC 129 Tuba credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/129/)
Instruction in tuba at the undergraduate level. Additional fees may apply. See Class Schedule. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Passing of a performance audition is required prior to the initial registration in any applied music course.

MUSC 130 Percussion credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/130/)
Instruction in percussion at the undergraduate level. Additional fees may apply. See Class Schedule. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Passing of a performance audition is required prior to the initial registration in any applied music course.

MUSC 131 Jazz Voice credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/131/)
Instruction at the undergraduate level in jazz voice normally associated with the jazz idiom. Additional fees may apply. See Class Schedule. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Passing of a performance audition for the jazz faculty is required prior to the initial registration in any applied music course.

MUSC 132 Jazz Saxophone credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/132/)
Instruction at the undergraduate level in jazz saxophone normally associated with the jazz idiom. Additional fees may apply. See Class Schedule. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Passing of a performance audition for the jazz faculty is required prior to the initial registration in any applied music course.

MUSC 133 Jazz Trumpet credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/133/)
Instruction at the undergraduate level in jazz trumpet normally associated with the jazz idiom. Additional fees may apply. See Class Schedule. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Passing of a performance audition for the jazz faculty is required prior to the initial registration in any applied music course.

MUSC 134 Jazz Trombone credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/134/)
Instruction at the undergraduate level in jazz trombone normally associated with the jazz idiom. Additional fees may apply. See Class Schedule. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Passing of a performance audition for the jazz faculty is required prior to the initial registration in any applied music course.

MUSC 135 Jazz Piano credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/135/)
Instruction at the undergraduate level in jazz piano normally associated with the jazz idiom. Additional fees may apply. See Class Schedule. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Passing of a performance audition for the jazz faculty is required prior to the initial registration in any applied music course.

MUSC 136 Jazz Double Bass credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/136/)
Instruction at the undergraduate level in jazz double bass normally associated with the jazz idiom. Additional fees may apply. See Class Schedule. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Passing of a performance audition for the jazz faculty is required prior to the initial registration in any applied music course.

MUSC 137 Jazz Guitar credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/137/)
Instruction at the undergraduate level in jazz guitar normally associated with the jazz idiom. Additional fees may apply. See Class Schedule. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Passing of a performance audition for the jazz faculty is required prior to the initial registration in any applied music course.

MUSC 138 Jazz Percussion credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/138/)
Instruction at the undergraduate level in jazz percussion normally associated with the jazz idiom. Additional fees may apply. See Class Schedule. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Passing of a performance audition for the jazz faculty is required prior to the initial registration in any applied music course.

MUSC 139 Jazz Mallets credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/139/)
Instruction at the undergraduate level in jazz mallets normally associated with the jazz idiom. Additional fees may apply. See Class Schedule. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Passing of a performance audition for the jazz faculty is required prior to the initial registration in any applied music course.

MUSC 140 Jazz Woodwinds credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/140/)
Instruction at the undergraduate level in jazz woodwinds normally associated with the jazz idiom. Additional fees may apply. See Class Schedule. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Passing of a performance audition for the jazz faculty is required prior to the initial registration in any applied music course.

MUSC 141 Jazz Brass credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/141/)
Instruction at the undergraduate level in jazz brass normally associated with the jazz idiom. Additional fees may apply. See Class Schedule. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Passing of a performance audition for the jazz faculty is required prior to the initial registration in any applied music course.

MUSC 142 Jazz Strings credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/142/)
Instruction at the undergraduate level in jazz strings normally associated with the jazz idiom. Additional fees may apply. See Class Schedule. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Passing of a performance audition for the jazz faculty is required prior to the initial registration in any applied music course.

MUSC 401 Advanced Piano credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/401/)
Instruction in piano at the advanced undergraduate and graduate level. Additional fees may apply. See Class Schedule. 2 to 4 undergraduate hours. 2 to 4 graduate hours. May be repeated in separate semesters to a maximum of 16 hours. Prerequisite: Primarily for music majors, junior standing or above. Passing of an audition is required prior to initial registration in any applied music course as approved by the faculty of the appropriate applied music area. Not intended for graduate piano majors.

MUSC 402 Advanced Harpsichord credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/402/)
Instruction in harpsichord at the advanced undergraduate and graduate level. Additional fees may apply. See Class Schedule. 2 to 4 undergraduate hours. 2 to 4 graduate hours. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Primarily for music majors, junior standing or above. Passing of an audition is required prior to initial registration in any applied music course as approved by the faculty of the appropriate applied music area. Not intended for graduate harpsichord majors.

MUSC 403 Advanced Organ credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/403/)
Instruction in organ at the advanced undergraduate and graduate level. Additional fees may apply. See Class Schedule. 2 to 4 undergraduate hours. 2 to 4 graduate hours. May be repeated in separate semesters to a maximum of 16 hours. Prerequisite: Primarily for music majors, junior standing or above. Passing of an audition is required prior to initial registration in any applied music course as approved by the faculty of the appropriate applied music area. Not intended for graduate organ majors.

MUSC 404 Collaborative Piano credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/404/)
Principles of accompanying singers and instrumentalists. Practical experience in accompanying and facility in sight reading for keyboard performers. 2 or 4 undergraduate hours. 2 or 4 graduate hours. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Advanced undergraduate or graduate standing in music or music education, and consent of instructor.

MUSC 405 Advanced Voice credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/405/)
Instruction in voice at the advanced undergraduate and graduate level. Additional fees may apply. See Class Schedule. 2 or 3 undergraduate hours. 2 or 4 graduate hours. May be repeated to a maximum of 12 undergraduate or 16 graduate hours. Prerequisite: Primarily for music majors, junior standing and above. Passing of an audition is required prior to initial registration in any applied music course as approved by the faculty of the appropriate applied music area. Not intended for graduate voice majors.

MUSC 406 Lyric Theatre Voice credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/406/)
This is an individualized voice class setting where the student and teacher work exclusively with the technical, musical, and communicative aspects of Lyric Theatre repertoire in a weekly one-on-one setting. 2 undergraduate hours. No graduate credit. May be repeated to a maximum of 12 undergraduate hours. Prerequisite: Passing of a performance audition is required prior to the initial registration in any applied music course. Restricted to music majors; musical theatre minors; or by consent of instructor.

MUSC 407 Vocal Coaching credit: 1 to 2 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/407/)
Individualized instruction in musical expression, language, performance practice, recital, or other specialized repertoire for advanced vocal students by coaching and accompanying faculty. 1 to 2 undergraduate hours. No graduate credit. May be repeated in separate semesters for 4 hours, if topics vary, to a total maximum of 12 hours. Prerequisite: Permission of instructor.

MUSC 410 Advanced Violin credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/410/)
Instruction in violin at the advanced undergraduate and graduate level. Additional fees may apply. See Class Schedule. 2 or 3 undergraduate hours. 2 or 4 graduate hours. May be repeated in separate semesters to a maximum of 12 undergraduate or 16 graduate hours. Prerequisite: Music majors must register concurrently in an approved university orchestra. Primarily for music majors, junior standing or above. Passing of an audition is required prior to initial registration in any applied music course as approved by the faculty of the appropriate applied music area. Not intended for graduate violin majors.

MUSC 411 Advanced Viola credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/411/)
Instruction in viola at the advanced undergraduate and graduate level. Additional fees may apply. See Class Schedule. 2 or 3 undergraduate hours. 2 or 4 graduate hours. May be repeated in separate semesters to a maximum of 12 undergraduate or 16 graduate hours. Prerequisite: Music majors must register concurrently in an approved university orchestra. Primarily for music majors, junior standing or above. Passing of an audition is required prior to initial registration in any applied music course as approved by the faculty of the appropriate applied music area. Not intended for graduate viola majors.

MUSC 412 Advanced Cello credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/412/)
Instruction in cello at the advanced undergraduate and graduate level. Additional fees may apply. See Class Schedule. 2 or 3 undergraduate hours. 2 or 4 graduate hours. May be repeated to a maximum of 12 undergraduate or 16 graduate hours. Prerequisite: Music majors must register concurrently in an approved university orchestra. Primarily for music majors, junior standing or above. Passing of an audition is required prior to initial registration in any applied music course as approved by the faculty of the appropriate applied music area. Not intended for graduate cello majors.

MUSC 413 Advanced Double Bass credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/413/)
Instruction in double bass at the advanced undergraduate and graduate level. Additional fees may apply. See Class Schedule. 2 or 3 undergraduate hours. 2 or 4 graduate hours. May be repeated in separate semesters to a maximum of 12 undergraduate or 16 graduate hours. Prerequisite: Music majors must register concurrently in an approved university orchestra. Primarily for music majors, junior standing or above. Passing of an audition is required prior to initial registration in any applied music course as approved by the faculty of the appropriate applied music area. Not intended for graduate double bass majors.

MUSC 414 Advanced Harp credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/414/)
Instruction in harp at the advanced undergraduate and graduate level. Additional fees may apply. See Class Schedule. 2 to 4 undergraduate hours. 2 to 4 graduate hours. May be repeated in separate semesters to a maximum of 16 hours. Prerequisite: Primarily for music majors, junior standing or above. Passing of an audition is required prior to initial registration in any applied music course as approved by the faculty of the appropriate applied music area. Not intended for graduate harp majors.

MUSC 415 Advanced Guitar credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/415/)
Instruction in guitar at the advanced undergraduate and graduate levels, predominantly classical. Additional fees may apply. See Class Schedule. 2 to 4 undergraduate hours. 2 to 4 graduate hours. May be repeated in separate semesters to a maximum of 16 hours. Prerequisite: Primarily for music majors; junior standing or above. Passing of an audition is required prior to initial registration in any applied music course as approved by the faculty of the appropriate applied music area. Not intended for graduate guitar majors.

MUSC 416 Advanced Electric Violin credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/416/)
Instruction in violin at the advanced undergraduate and graduate level. Music majors must register concurrently in an approved ensemble. Additional fees may apply. See Class Schedule. 2 to 4 undergraduate hours. 2 to 4 graduate hours. May be repeated. Prerequisite: Passing of a performance audition is required prior to the initial registration in any applied music course. Not intended for graduate music majors.

MUSC 417 Advanced Electric Viola credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/417/)
Instruction in electric viola at the advanced undergraduate and graduate level. Music majors must register concurrently in an approved ensemble. Additional fees may apply. See Class Schedule. 2 to 4 undergraduate hours. 2 to 4 graduate hours. May be repeated. Prerequisite: Passing of a performance audition is required prior to the initial registration in any applied music course. Not intended for graduate music majors.

MUSC 420 Advanced Flute credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/420/)
Instruction in flute at the advanced undergraduate and graduate level. Additional fees may apply. See Class Schedule. 2 to 4 undergraduate hours. 2 to 4 graduate hours. May be repeated in separate semesters to a maximum of 16 hours. Prerequisite: Primarily for music majors, junior standing or above. Passing of an audition is required prior to initial registration in any applied music course as approved by the faculty of the appropriate applied music area. Not intended for graduate flute majors.

MUSC 421 Advanced Oboe credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/421/)
Instruction in oboe at the advanced undergraduate and graduate level. Additional fees may apply. See Class Schedule. 2 to 4 undergraduate hours. 2 to 4 graduate hours. May be repeated in separate semesters to a maximum of 16 hours. Prerequisite: Primarily for music majors, junior standing or above. Passing of an audition is required prior to initial registration in any applied music course as approved by the faculty of the appropriate applied music area. Not intended for graduate oboe majors.

MUSC 422 Advanced Bassoon credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/422/)
Instruction in bassoon at the advanced undergraduate and graduate level. Additional fees may apply. See Class Schedule. 2 to 4 undergraduate hours. 2 to 4 graduate hours. May be repeated in separate semesters to a maximum of 16 hours. Prerequisite: Primarily for music majors, junior standing or above. Passing of an audition is required prior to initial registration in any applied music course as approved by the faculty of the appropriate applied music area. Not intended for graduate bassoon majors.

MUSC 423 Advanced Clarinet credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/423/)
Instruction in clarinet at the advanced undergraduate and graduate level. Additional fees may apply. See Class Schedule. 2 to 4 undergraduate hours. 2 to 4 graduate hours. May be repeated in separate semesters to a maximum of 16 hours. Prerequisite: Primarily for music majors, junior standing or above. Passing of an audition is required prior to initial registration in any applied music course as approved by the faculty of the appropriate applied music area. Not intended for graduate clarinet majors.

MUSC 424 Advanced Saxophone credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/424/)
Instruction in saxophone at the advanced undergraduate and graduate level. Additional fees may apply. See Class Schedule. 2 to 4 undergraduate hours. 2 to 4 graduate hours. May be repeated in separate semesters to a maximum of 16 hours. Prerequisite: Primarily for music majors, junior standing or above. Passing of an audition is required prior to initial registration in any applied music course as approved by the faculty of the appropriate applied music area. Not intended for graduate saxophone majors.

MUSC 425 Advanced Trumpet credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/425/)
Instruction in cornet and trumpet at the advanced undergraduate and graduate level. Additional fees may apply. See Class Schedule. 2 to 4 undergraduate hours. 2 to 4 graduate hours. May be repeated to a maximum of 16 hours. Prerequisite: Primarily for music majors; junior standing. Passing of an audition is required prior to initial registration in any applied music course as approved by the faculty of the appropriate applied music division. Not intended for graduate trumpet majors.

MUSC 426 Advanced Horn credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/426/)
Instruction in French horn at the advanced undergraduate and graduate level. Additional fees may apply. See Class Schedule. 2 to 4 undergraduate hours. 2 to 4 graduate hours. May be repeated in separate semesters to a maximum of 16 hours. Prerequisite: Primarily for music majors, junior standing or above. Passing of an audition is required prior to initial registration in any applied music course as approved by the faculty of the appropriate applied music area. Not intended for graduate horn majors.

MUSC 427 Advanced Trombone credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/427/)
Instruction in trombone at the advanced undergraduate and graduate level. Additional fees may apply. See Class Schedule. 2 to 4 undergraduate hours. 2 to 4 graduate hours. May be repeated in separate semesters to a maximum of 16 hours. Prerequisite: Primarily for music majors, junior standing or above. Passing of an audition is required prior to initial registration in any applied music course as approved by the faculty of the appropriate applied music area. Not intended for graduate trombone majors.

MUSC 428 Advanced Euphonium credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/428/)
Instruction in euphonium at the advanced undergraduate and graduate level. Additional fees may apply. See Class Schedule. 2 to 4 undergraduate hours. 2 to 4 graduate hours. May be repeated in separate semesters to a maximum of 16 hours. Prerequisite: Primarily for music majors, junior standing or above. Passing of an audition is required prior to initial registration in any applied music course as approved by the faculty of the appropriate applied music area. Not intended for graduate euphonium majors.

MUSC 429 Advanced Tuba credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/429/)
Instruction in tuba at the advanced undergraduate and graduate level. Additional fees may apply. See Class Schedule. 2 to 4 undergraduate hours. 2 to 4 graduate hours. May be repeated in separate semesters to a maximum of 16 hours. Prerequisite: Primarily for music majors, junior standing or above. Passing of an audition is required prior to initial registration in any applied music course as approved by the faculty of the appropriate applied music area. Not intended for graduate tuba majors.

MUSC 430 Advanced Percussion credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/430/)
Instruction in percussion at the advanced undergraduate and graduate level. Additional fees may apply. See Class Schedule. 2 to 4 undergraduate hours. 2 to 4 graduate hours. May be repeated in separate semesters to a maximum of 16 hours. Prerequisite: Primarily for music majors, junior standing or above. Passing of an audition is required prior to initial registration in any applied music course as approved by the faculty of the appropriate applied music area. Not intended for graduate percussion majors.

MUSC 431 Advanced Jazz Voice credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/431/)
Instruction at the advanced undergraduate or graduate level in jazz voice normally associated with the jazz idiom. Additional fees may apply. See Class Schedule. 2 to 4 undergraduate hours. 2 to 4 graduate hours. May be repeated in separate terms to a maximum of 16 undergraduate hours or 20 graduate hours. Prerequisite: Primarily for music majors, junior standing or above. Passing of an audition is required prior to initial registration in any applied music course as approved by the faculty of the appropriate applied music area. Not intended for graduate jazz voice majors.

MUSC 432 Advanced Jazz Saxophone credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/432/)
Instruction at the advanced undergraduate or graduate level in jazz saxophone normally associated with the jazz idiom. Additional fees may apply. See Class Schedule. 2 to 4 undergraduate hours. 2 to 4 graduate hours. May be repeated in separate terms to a maximum of 16 undergraduate hours or 20 graduate hours. Prerequisite: Primarily for music majors, junior standing or above. Passing of an audition is required prior to initial registration in any applied music course as approved by the faculty of the appropriate applied music area. Not intended for graduate jazz saxophone majors.

MUSC 433 Advanced Jazz Trumpet credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/433/)
Instruction at the advanced undergraduate or graduate level in jazz trumpet normally associated with the jazz idiom. Additional fees may apply. See Class Schedule. 2 to 4 undergraduate hours. 2 to 4 graduate hours. May be repeated in separate terms to a maximum of 16 undergraduate hours or 20 graduate hours. Prerequisite: Primarily for music majors, junior standing or above. Passing of an audition is required prior to initial registration in any applied music course as approved by the faculty of the appropriate applied music area. Not intended for graduate jazz trumpet majors.

MUSC 434 Advanced Jazz Trombone credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/434/)
Instruction at the advanced undergraduate or graduate level in jazz trombone normally associated with the jazz idiom. Additional fees may apply. See Class Schedule. 2 to 4 undergraduate hours. 2 to 4 graduate hours. May be repeated in separate terms to a maximum of 16 undergraduate hours or 20 graduate hours. Prerequisite: Primarily for music majors, junior standing or above. Passing of an audition is required prior to initial registration in any applied music course as approved by the faculty of the appropriate applied music area. Not intended for graduate jazz trombone majors.

MUSC 435 Advanced Jazz Piano credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/435/)
Instruction at the advanced undergraduate or graduate level in jazz piano normally associated with the jazz idiom. Additional fees may apply. See Class Schedule. 2 to 4 undergraduate hours. 2 to 4 graduate hours. May be repeated in separate terms to a maximum of 16 undergraduate hours or 20 graduate hours. Prerequisite: Primarily for music majors, junior standing or above. Passing of an audition is required prior to initial registration in any applied music course as approved by the faculty of the appropriate applied music area. Not intended for graduate jazz piano majors.

MUSC 436 Advanced Jazz Double Bass credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/436/)
Instruction at the advanced undergraduate or graduate level in jazz double bass normally associated with the jazz idiom. Additional fees may apply. See Class Schedule. 2 to 4 undergraduate hours. 2 to 4 graduate hours. May be repeated in separate terms to a maximum of 16 undergraduate hours or 20 graduate hours. Prerequisite: Primarily for music majors, junior standing or above. Passing of an audition is required prior to initial registration in any applied music course as approved by the faculty of the appropriate applied music area. Not intended for graduate jazz double bass majors.

MUSC 437 Advanced Jazz Guitar credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/437/)
Instruction at the advanced undergraduate or graduate level in jazz guitar normally associated with the jazz idiom. Additional fees may apply. See Class Schedule. 2 to 4 undergraduate hours. 2 to 4 graduate hours. May be repeated in separate terms to a maximum of 16 undergraduate hours or 20 graduate hours. Prerequisite: Primarily for music majors, junior standing or above. Passing of an audition is required prior to initial registration in any applied music course as approved by the faculty of the appropriate applied music area. Not intended for graduate jazz guitar majors.

MUSC 438 Advanced Jazz Percussion credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/438/)
Instruction at the advanced undergraduate or graduate level in jazz percussion normally associated with the jazz idiom. Additional fees may apply. See Class Schedule. 2 to 4 undergraduate hours. 2 to 4 graduate hours. May be repeated in separate terms to a maximum of 16 undergraduate hours or 20 graduate hours. Prerequisite: Primarily for music majors, junior standing or above. Passing of an audition is required prior to initial registration in any applied music course as approved by the faculty of the appropriate applied music area. Not intended for graduate jazz percussion majors.

MUSC 439 Advanced Jazz Mallets credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/439/)
Instruction at the advanced undergraduate or graduate level in jazz mallets normally associated with the jazz idiom. Additional fees may apply. See Class Schedule. 2 to 4 undergraduate hours. 2 to 4 graduate hours. May be repeated in separate terms to a maximum of 16 undergraduate hours or 20 graduate hours. Prerequisite: Primarily for music majors, junior standing or above. Passing of an audition is required prior to initial registration in any applied music course as approved by the faculty of the appropriate applied music area. Not intended for graduate jazz mallets majors.

MUSC 440 Advanced Jazz Woodwinds credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/440/)
Instruction at the advanced undergraduate or graduate level in jazz woodwinds normally associated with the jazz idiom. Additional fees may apply. See Class Schedule. 2 to 4 undergraduate hours. 2 to 4 graduate hours. May be repeated in separate terms to a maximum of 16 undergraduate hours or 20 graduate hours. Prerequisite: Primarily for music majors, junior standing or above. Passing of an audition is required prior to initial registration in any applied music course as approved by the faculty of the appropriate applied music area. Not intended for graduate jazz woodwind majors.

MUSC 441 Advanced Jazz Brass credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/441/)
Instruction at the advanced undergraduate or graduate level in jazz voice normally associated with the jazz idiom. Additional fees may apply. See Class Schedule. 2 to 4 undergraduate hours. 2 to 4 graduate hours. May be repeated in separate terms to a maximum of 16 undergraduate hours or 20 graduate hours. Prerequisite: Primarily for music majors, junior standing or above. Passing of an audition is required prior to initial registration in any applied music course as approved by the faculty of the appropriate applied music area. Not intended for graduate jazz brass majors.

MUSC 442 Advanced Jazz Strings credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/442/)
Instruction at the advanced undergraduate or graduate level in jazz strings normally associated with the jazz idiom. Additional fees may apply. See Class Schedule. 2 to 4 undergraduate hours. 2 to 4 graduate hours. May be repeated in separate terms to a maximum of 16 undergraduate hours or 20 graduate hours. Prerequisite: Primarily for music majors, junior standing or above. Passing of an audition is required prior to initial registration in any applied music course as approved by the faculty of the appropriate applied music area. Not intended for graduate jazz strings majors.

MUSC 447 Collegium Musicum credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUSC/447/)
Performs medieval, renaissance, and baroque music; various small groups formed for the performance of sonatas and cantatas of Bach and Handel, wind serenades of Mozart, etc. Interested students may play on lute, harpsichord, and other instruments from the University's collection. 1 undergraduate hour. 1 graduate hour. May be repeated. Prerequisite: Audition and/or consent of instructor.

MUSC 448 Concerto Urbano Baroque Orchestra credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUSC/448/)
The Concerto Urbano Baroque ensemble is dedicated to the performance of early music on period instruments from the University of Illinois's instrument collection. Students explore historical playing and singing styles in repertoire from the late Renaissance, Baroque and early Classical periods. The ensemble also collaborates with the opera and dance departments in fully staged productions of Baroque operas. 1 undergraduate hour. 1 graduate hour. May be repeated. Prerequisite: Audition and/or consent of instructor.

MUSC 449 Ethnomusicology Performance Ensembles credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUSC/449/)
Instruction and experience in the performance of various non-Western and vernacular music traditions such as African mbira, Andean panpipes, North American string band, Gamelan Kebyar, European and South American traditional music, etc. Topics vary according to available instructors. 1 undergraduate hour. 1 graduate hour. May be repeated to a maximum of 3 hours in the same term if topics vary for a total of 16 undergraduate hours, 12 graduate hours in separate terms. Prerequisite: Consent of instructor.

MUSC 450 Chamber Music credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUSC/450/)
The study of music written for and performed by a small instrumental ensemble with one player per part. Students will be assigned to chamber groups that will be coached on a weekly basis by members of the faculty. At least one public performance per term may be required. 1 undergraduate hour. 1 graduate hour. May be repeated in the same semester up to 2 hours; in separate semesters to a maximum of 16 undergraduate hours and 12 graduate hours. Prerequisite: Music majors or consent of instructor.

MUSC 451 Piano Ensemble credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUSC/451/)
Piano Ensemble comprises the study of the piano duet and piano duo literature, in addition to other works written for multiple pianos. 1 undergraduate hour. No graduate credit. May be repeated in separate semesters to a maximum of 8 undergraduate hours and 6 graduate hours. Prerequisite: Consent of instructor.

MUSC 452 Guitar Ensemble credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUSC/452/)
The Guitar Ensemble is a chamber music group open to students who want to experience the practical essentials of music performance. The ensemble plays a wide array of styles and genres ranging from classical to jazz and rock arrangements, as well as several other forms of popular and commercial music. The guitar ensemble provides students with a unique opportunity to make music and connect with other students who share the same enthusiasm and passion for the guitar. 1 undergraduate hour. 1 graduate hour. May be repeated in separate semesters to a maximum of 12 undergraduate hours or 8 graduate hours. Prerequisite: Audition required and/or consent of instructor.

MUSC 453 Saxophone Ensemble credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUSC/453/)
Saxophone ensembles of all types performing a mixture of traditional and 20th-century music for soprano, alto, tenor, baritone, and bass saxophone. 1 undergraduate hour. 1 graduate hour. May be repeated to a maximum of 3 hours in the same term if topics vary for a total of 16 undergraduate hours, 12 graduate hours in separate terms. Prerequisite: Consent of instructor.

MUSC 454 Brass Ensemble credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUSC/454/)
The study of music written for and performed by brass ensembles with generally one player on each part. The repertoire includes original compositions as well as arrangements of music from different styles and genres written specifically for brass. Ensemble size is flexible, ranging from trios and quartets, to ensembles of 30 or more musicians. 1 undergraduate hour. 1 graduate hour. May be repeated in separate semesters to a maximum of 16 undergraduate hours or 12 graduate hours. Prerequisite: Audition required or consent of instructor.

MUSC 455 Percussion Ensemble credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUSC/455/)
The University of Illinois Percussion Ensemble specializes in the performance of contemporary and traditional repertoire for small and large ensembles. Percussion majors are automatically accepted into the Percussion Ensemble. 1 undergraduate hour. 1 graduate hour. May be repeated in separate semesters to a maximum of 8 undergraduate hours or 6 graduate hours. Prerequisite: Audition and/or consent of instructor.

MUSC 456 Steel Band credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUSC/456/)
The University of Illinois Steel Band performs music from the calypso, soca, jazz, and popular repertoire. Percussion majors are automatically accepted into the Steel Band. 1 undergraduate hour. 1 graduate hour. May be repeated in separate semesters to a maximum of 8 undergraduate hours or 6 graduate hours. Prerequisite: Audition and/or consent of instructor.

MUSC 457 Hip-Hop Collective credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUSC/457/)
Open to all UIUC instrumentalists, rappers, vocalists, DJs, emcees, beatboxers, writers, composers, arrangers, dancers, videographers, audio engineers, producers, graffiti artists, and all other students interested in studying and performing hip hop, trip hop, R&B, dubstep, drum & bass, trap, jazz rap, salsa hop, rap metal, chillwave, gospel hip hop, and related genres. 1 undergraduate hour. 1 graduate hour. May be repeated in separate semesters to a maximum of 8 undergraduate hours or 6 graduate hours. Prerequisite: Consent of instructor.

MUSC 458 Electric Strings Ensemble credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUSC/458/)
The aim of the University of Illinois Electric Strings Ensemble is to explore and expand upon the emerging art form of collaborative electric string playing. The performance environment of this ensemble has elements in common with classical chamber ensembles, rock bands, jazz combos and fiddle bands, with the added opportunities provided by the great variety of electric bowed instruments, effects and playing styles available. 1 undergraduate hour. 1 graduate hour. May be repeated in separate terms. Prerequisite: Audition required and/or consent of instructor.

MUSC 460 Chamber Singers credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUSC/460/)
A mixed-voice chorus for advanced singers that explores through study and performance a wide variety of choral music from various cultures, styles, and time periods. Open to all students who have been accepted by audition, with assignments made according to proficiency. Completion of course involves, in addition to the regular schedule of rehearsals, participation in public performances by the ensemble. 1 undergraduate hour. 1 graduate hour. May be repeated in separate terms. Prerequisite: Audition required and/or consent of instructor.

MUSC 461 Concert Choir credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUSC/461/)
A mixed-voice chorus for experienced singers that explores through study and performance a wide variety of choral music from various cultures, styles, and time periods. Open to all students who have been accepted by audition, with assignments made according to proficiency. Completion of course involves, in addition to the regular schedule of rehearsals, participation in public performances by the ensemble. 1 undergraduate hour. 1 graduate hour. May be repeated in separate terms. Prerequisite: Audition required and/or consent of instructor.

MUSC 462 University Chorus credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUSC/462/)
A mixed-voice chorus open to students from all majors and disciplines on campus. Explores through study and performance a wide variety of choral music from various cultures, styles, and time periods. Completion of course involves, in addition to the regular schedule of rehearsals, participation in public performances by the ensemble. 1 undergraduate hour. 1 graduate hour. May be repeated in separate terms. Prerequisite: Audition required and/or consent of instructor.

MUSC 463 Black Chorus credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUSC/463/)
A mixed-voice chorus of students from across campus performing the music of Black Americans, ranging from the Negro spiritual, anthems, and formal music, to traditional and contemporary gospel, jazz, and rhythm and blues. Open to all students with assignments made according to proficiency. Completion of course involves, in addition to the regular schedule of rehearsals, participation in public performances by the ensemble. 1 undergraduate hour. 1 graduate hour. May be repeated in separate terms. Prerequisite: Audition may required and/or consent of instructor.

MUSC 464 Women's Glee Club credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUSC/464/)
Practical experience in the rehearsal and public performance of choral music of various periods and styles. Open to all treble voices (soprano and alto) on campus who have been accepted by audition, with assignments made according to proficiency. Completion of course involves, in addition to the regular schedule of rehearsals, participation in public performances by the ensemble. 1 undergraduate hour. 1 graduate hour. May be repeated in separate terms. Prerequisite: Audition required and/or consent of instructor.

MUSC 465 Men's Glee Club credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUSC/465/)
Practical experience in the rehearsal and public performance of traditional music, innovative compositions, and songs of brotherhood of various periods and styles. Open to all tenor, baritone, and bass voices on campus who have been accepted by audition, with assignments made according to proficiency. Completion of course involves, in addition to the regular schedule of rehearsals, participation in public performances by the ensemble. 1 undergraduate hour. 1 graduate hour. May be repeated in separate terms. Prerequisite: Audition required and/or consent of instructor.

MUSC 466 Oratorio Society credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUSC/466/)
An advanced mixed-voice chorus open to students, faculty, and members of the community. Performance of oratorios and other major choral works in cooperation with the University Symphony Orchestra, Wind Symphony, or other select ensemble. Open to all who have been accepted by audition, with assignments made according to proficiency. Completion of course involves, in addition to the regular schedule of rehearsals, participation in public performances by the ensemble. 1 undergraduate hour. 1 graduate hour. May be repeated in separate terms. Prerequisite: Audition required and/or consent of instructor.

MUSC 467 Choral Ensemble credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUSC/467/)
Choral ensemble is open to students from all majors and disciplines on campus. Explores through study and performance a wide variety of choral music from various cultures, styles, and time periods. Completion of course involves, in addition to the regular schedule of rehearsals, participation in public performances by the ensemble. 1 undergraduate hour. 1 graduate hour. May be repeated in separate terms. Prerequisite: Audition required and/or consent of instructor.

MUSC 468 LTI Studio credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/468/)
Acquaints the student with a variety of opera, operetta, and musical theatre literature in contrasting styles and historical periods, culminating in a public performance of full sung theatre. Develops skills as both a solo and ensemble performer including, but not limited to, stage movement, mind-body awareness, diction, acting, and improvisational techniques. 2 undergraduate hours. 2 graduate hours. May be repeated in separate terms to a maximum of 12 undergraduate hours or 8 graduate hours. Prerequisite: Consent of instructor. Required for BMA majors; available to vocal performance majors and musical theatre minors; others by permission of instructor.

MUSC 469 LTI Main Stage credit: 1 to 2 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/469/)
Portrayal of a named role in a Main Stage Lyric Theatre Illinois production. Culminates in public performances of sung theatre, developing and demonstrating skills in singing, acting, and movement. Rigorous rehearsal schedule. 1 to 2 undergraduate hours. 1 to 2 graduate hours. May be repeated in separate terms. Prerequisite: Audition required and/or consent of instructor.

MUSC 470 LTI Opera Scenes credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/470/)
Advanced work in musical preparation and staging of operatic roles and scenes. Repertoire includes core repertoire especially chosen for the student, and workshops of emerging pieces with industry professionals. Culminates in a public performance. For graduate students in vocal performance and select upperclassmen in vocal performance or Lyric Theatre. Audition is required for repertoire assignment. 2 undergraduate hours. 2 graduate hours. May be repeated in separate terms to a maximum of 12 undergraduate hours or 8 graduate hours. Prerequisite: Audition required and/or consent of instructor.

MUSC 471 LTI Special Projects credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/471/)
Participation in a production outside of the Lyric Theatre Illinois Main Stage season, culminating in a public performance. Could include off-campus productions, workshops, or special engagement projects. 2 undergraduate hours. 2 graduate hours. May be repeated in separate terms to a maximum of 12 undergraduate hours or 8 graduate hours. Prerequisite: Audition required and/or consent of instructor.

MUSC 472 LTI Ensemble credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUSC/472/)
Participation as a singer or instrumentalist in the ensemble of a Lyric Theatre Illinois production. Open to all students who have been accepted by audition, with assignments made according to proficiency and instrumentation. Completion of course involves, in addition to the regular schedule of rehearsals, participation in public performance. 1 undergraduate hour. 1 graduate hour. May be repeated in separate terms, but limited in the same term to a maximum of 3 hours. Prerequisite: Audition required and/or consent of instructor.

MUSC 473 Illinois Modern Ensemble credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUSC/473/)
Advanced ensemble dedicated to the performance of contemporary and experimental music, from the masterworks of the 20th century to cutting-edge new compositions of today. Completion of course involves, in addition to the regular schedule of rehearsals, participation in public performances by the ensemble. 1 undergraduate hour. 1 graduate hour. May be repeated in separate terms. Prerequisite: Audition required and/or consent of instructor; consent of applied teacher.

MUSC 474 Improvisors Exchange Ensemble credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUSC/474/)
This performance ensemble investigates the field of music improvisation and is open to musicians of all genres who seek to explore omni-idiomatic improvisation, listening and performance strategies for the improviser, and engagement with visiting artists in the field. Open to all students on campus. Completion of course involves, in addition to the regular schedule of rehearsals, participation in public performances by the ensemble. 1 undergraduate hour. 1 graduate hour. May be repeated in separate terms. Prerequisite: Audition required and/or consent of instructor.

MUSC 475 Symphony Orchestra credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUSC/475/)
The Symphony Orchestra performs major literature from the 18th, 19th, 20th and 21st centuries. Student musicians include music majors, as well as exceptionally talented non-majors from across the University of Illinois campus. Open to all students who have been accepted by audition, with assignments made according to proficiency and instrumentation. Completion of course involves, in addition to the regular schedule of rehearsals, participation in public performances by the ensemble. 1 undergraduate hour. 1 graduate hour. May be repeated in separate terms. Prerequisite: Audition required and/or consent of instructor.

MUSC 476 Philharmonia Orchestra credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/MUSC/476/**)**
The Philharmonia Orchestra performs major literature from the 18th, 19th, 20th and 21st centuries. Student musicians include music majors, as well as talented non-majors from across the University of Illinois campus. Open to all students who have been accepted by audition, with assignments made according to proficiency and instrumentation. Completion of course involves, in addition to the regular schedule of rehearsals, participation in public performances by the ensemble. 1 undergraduate hour. 1 graduate hour. May be repeated in separate terms. Prerequisite: Audition required and/or consent of instructor.

MUSC 477 University Orchestra credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/MUSC/477/**)**
The University Orchestra performs major literature from the 18th, 19th, 20th and 21st centuries. Open to all students who have been accepted by audition, with assignments made according to proficiency and instrumentation. Completion of course involves, in addition to the regular schedule of rehearsals, participation in public performances by the ensemble. 1 undergraduate hour. 1 graduate hour. May be repeated in separate terms. Prerequisite: Audition required and/or consent of instructor.

MUSC 478 Illini Strings credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/MUSC/478/**)**
This string orchestra performs music from the classics to music written in the 21st century. Musicians in the orchestra are comprised of non-music majors from all across the University of Illinois campus. Open to all students who have been accepted by audition, with assignments made according to proficiency and instrumentation. Completion of course involves, in addition to the regular schedule of rehearsals, participation in public performances by the ensemble. 1 undergraduate hour. 1 graduate hour. May be repeated in separate terms. Prerequisite: Audition required and/or consent of instructor.

MUSC 480 Wind Symphony credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/MUSC/480/**)**
Maintains a complete large wind ensemble instrumentation for the study and performance of band/wind ensemble/chamber wind literature. Open to all students who have been accepted by audition, with assignments made according to proficiency and instrumentation. Completion of course involves, in addition to the regular schedule of rehearsals, participation in public performances by the ensemble. 1 undergraduate hour. 1 graduate hour. May be repeated in separate terms. Prerequisite: Audition required and/or consent of instructor.

MUSC 481 Wind Orchestra credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/MUSC/481/**)**
Maintains a large wind ensemble instrumentation for the study and performance of all types of band literature. Open to all students who have been accepted by audition, with assignments made according to proficiency and instrumentation. Completion of course involves, in addition to the regular schedule of rehearsals, participation in public performances by the ensemble. 1 undergraduate hour. 1 graduate hour. May be repeated in separate terms. Prerequisite: Audition required and/or consent of instructor.

MUSC 482 Hindsley Symphonic Band credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/MUSC/482/**)**
Maintains the instrumentation of a standard concert band. The literature studied and performed is of the highest caliber and technical difficulty. Open to all students who have been accepted by audition, with assignments made according to proficiency and instrumentation. Completion of course involves, in addition to the regular schedule of rehearsals, participation in public performances by the band. 1 undergraduate hour. 1 graduate hour. May be repeated in separate terms. Prerequisite: Audition required and/or consent of instructor.

MUSC 483 Harding Symphonic Band credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/MUSC/483/**)**
Maintains a complete symphonic band instrumentation for the study and performance of all types of band literature. Open to all students who have been accepted by audition, with assignments made according to proficiency and instrumentation. Completion of course involves, in addition to the regular schedule of rehearsals, participation in public performances by the band. 1 undergraduate hour. 1 graduate hour. May be repeated in separate terms. Prerequisite: Audition required and/or consent of instructor.

MUSC 484 Concert Band credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/MUSC/484/**)**
Maintains the instrumentation of a large concert band. Performs high quality band literature that is technically less difficult than that of the more advanced band ensembles. Open to all students who have been accepted by audition, with assignments made according to proficiency and instrumentation. Completion of course involves, in addition to the regular schedule of rehearsals, participation in public performances by the band. 1 undergraduate hour. 1 graduate hour. May be repeated in separate terms. Prerequisite: Audition required and/or consent of instructor.

MUSC 485 British Brass Band credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/MUSC/485/**)**
Maintains a complete British Brass Band instrumentation for the study and performance of all types and styles of brass band literature. Open to all students who have been accepted by audition, with assignments made according to proficiency and instrumentation. Completion of course involves, in addition to the regular schedule of rehearsals, participation in public performances by the band. 1 undergraduate hour. 1 graduate hour. May be repeated in separate terms. Prerequisite: Audition required and/or consent of instructor.

MUSC 486 Summer Band credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/MUSC/486/**)**
Maintains the instrumentation of the standard band for the study and performance of all types of band literature. Open to all students who have been accepted by audition, with assignments made according to proficiency and instrumentation. Completion of course involves, in addition to the regular schedule of rehearsals, participation in public performances by the band. 1 undergraduate hour. 1 graduate hour. May be repeated in separate terms. Prerequisite: Audition required and/or consent of instructor.

MUSC 487 Marching Illini credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/487/)
Prepares and performs music of the highest available quality in at least six shows per football season. Open to all students who have been accepted by audition, with assignments made according to proficiency and instrumentation. Completion of course involves, in addition to the regular schedule of rehearsals, participation in public performances by the band. 1 to 3 undergraduate hours. 1 to 3 graduate hours. May be repeated in separate terms. Prerequisite: Audition required and/or consent of instructor.

MUSC 488 Basketball Band credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUSC/488/)
Prepares and performs music of the highest available quality for men's and women's basketball games. Open to all students who have been accepted by audition, with assignments made according to proficiency and instrumentation. Completion of course involves, in addition to the regular schedule of rehearsals, participation in public performances by the band. 1 undergraduate hour. 1 graduate hour. May be repeated in separate terms. Prerequisite: Auditions for the basketball bands take place during the first week of classes in the fall semester. Open to all students who have been accepted by audition, with assignments made according to proficiency and instrumentation.

MUSC 489 Volleyball Band credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUSC/489/)
Prepares and performs music of the highest available quality for volleyball games. Open to all students who have been accepted by audition, with assignments made according to proficiency and instrumentation. Completion of course involves, in addition to the regular schedule of rehearsals, participation in public performances by the band. 1 undergraduate hour. 1 graduate hour. May be repeated in separate terms. Prerequisite: Auditions for the volleyball band take place during the first week of classes in the fall semester. Open to all students who have been accepted by audition, with assignments made according to proficiency and instrumentation.

MUSC 490 Concert Jazz Band credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUSC/490/)
Upper level jazz ensemble designed to acquaint proficient instrumentalists with jazz compositions, arrangements, and improvisational procedures, and to promote a high degree of stylistic and technical competence in performance. Open to all students who have been accepted by audition, with assignments made according to proficiency and instrumentation. Completion of course involves, in addition to the regular schedule of rehearsals, participation in public performances by the ensemble. 1 undergraduate hour. 1 graduate hour. May be repeated in separate terms. Prerequisite: Audition required and/or consent of instructor.

MUSC 491 Repertory Jazz Orchestra credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUSC/491/)
Upper level jazz ensemble designed to acquaint proficient instrumentalists with jazz compositions, arrangements, and improvisational procedures, and to promote a high degree of stylistic and technical competence in performance. Open to all students who have been accepted by audition, with assignments made according to proficiency and instrumentation. Completion of course involves, in addition to the regular schedule of rehearsals, participation in public performances by the ensemble. 1 undergraduate hour. 1 graduate hour. May be repeated in separate terms. Prerequisite: Audition required and/or consent of instructor.

MUSC 492 Jazz Ensemble credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUSC/492/)
This jazz ensemble course is designed to acquaint proficient instrumentalists with jazz compositions, arrangements, and improvisational procedures, and to promote a high degree of stylistic and technical competence in performance. Open to all students who have been accepted by audition, with assignments made according to proficiency and instrumentation. Completion of course involves, in addition to the regular schedule of rehearsals, participation in public performances by the ensemble. 1 undergraduate hour. 1 graduate hour. May be repeated in separate terms. Prerequisite: Audition required and/or consent of instructor.

MUSC 493 Latin Jazz Ensemble credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUSC/493/)
Upper level jazz ensemble designed to acquaint proficient instrumentalists with jazz compositions, arrangements, and improvisational procedures, and to promote a high degree of stylistic and technical competence in performance. Open to all students who have been accepted by audition, with assignments made according to proficiency and instrumentation. Completion of course involves, in addition to the regular schedule of rehearsals, participation in public performances by the ensemble. 1 undergraduate hour. 1 graduate hour. May be repeated in separate terms. Prerequisite: Audition required and/or consent of instructor.

MUSC 494 Jazz Saxophone Ensemble credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUSC/494/)
Ensemble designed to acquaint proficient instrumentalists with jazz compositions, arrangements, and improvisational procedures, and to promote a high degree of stylistic and technical competence in performance. Open to all students who have been accepted by audition, with assignments made according to proficiency and instrumentation. Completion of course involves, in addition to the regular schedule of rehearsals, participation in public performances by the ensemble. 1 undergraduate hour. 1 graduate hour. May be repeated in separate terms. Prerequisite: Audition required and/or consent of instructor.

MUSC 495 Jazz Trombone Ensemble credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUSC/495/)
Ensemble designed to acquaint proficient instrumentalists with jazz compositions, arrangements, and improvisational procedures, and to promote a high degree of stylistic and technical competence in performance. Open to all students who have been accepted by audition, with assignments made according to proficiency and instrumentation. Completion of course involves, in addition to the regular schedule of rehearsals, participation in public performances by the ensemble. 1 undergraduate hour. 1 graduate hour. May be repeated in separate terms. Prerequisite: Audition required and/or consent of instructor.

MUSC 496 Jazz Guitar Ensemble credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUSC/496/)
Ensemble designed to acquaint proficient instrumentalists with jazz compositions, arrangements, and improvisational procedures, and to promote a high degree of stylistic and technical competence in performance. Open to all students who have been accepted by audition, with assignments made according to proficiency and instrumentation. Completion of course involves, in addition to the regular schedule of rehearsals, participation in public performances by the ensemble. 1 undergraduate hour. 1 graduate hour. May be repeated in separate terms. Prerequisite: Audition required and/or consent of instructor.

MUSC 497 Jazz Vocal Ensemble credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUSC/497/)
Ensemble designed to acquaint proficient instrumentalists with jazz compositions, arrangements, and improvisational procedures, and to promote a high degree of stylistic and technical competence in performance. Open to all students who have been accepted by audition, with assignments made according to proficiency and instrumentation. Completion of course involves, in addition to the regular schedule of rehearsals, participation in public performances by the ensemble. 1 undergraduate hour. 1 graduate hour. May be repeated in separate terms. Prerequisite: Audition required and/or consent of instructor.

MUSC 498 Jazz Combo credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/MUSC/498/)
Ensembles of various sizes designed to acquaint proficient instrumentalists with jazz compositions, arrangements, and improvisational procedures, and to promote a high degree of stylistic and technical competence in performance. Open to all students who have been accepted by audition, with assignments made according to proficiency and instrumentation. Completion of course involves, in addition to the regular schedule of rehearsals, participation in public performances by the ensemble. 1 undergraduate hour. 1 graduate hour. May be repeated in separate terms. Prerequisite: Audition required and/or consent of instructor.

MUSC 501 Graduate Level Piano credit: 2 to 5 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/501/)
Study at the graduate level in piano; selected studies from the masterworks in piano literature. Graduate standing in music, or successful completion of a qualifying audition for the appropriate Keyboard faculty. 2 to 5 graduate hours. No professional credit. May be repeated to a maximum of 20 hours. Prerequisite: Graduate standing in music, or successful completion of a qualifying audition for the appropriate Keyboard faculty.

MUSC 502 Graduate Level Harpsichord credit: 2 to 5 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/502/)
Study at the graduate level in harpsichord; selected studies from the masterworks in harpsichord literature. Graduate standing in music, or successful completion of a qualifying audition for the appropriate Keyboard faculty. 2 to 5 graduate hours. No professional credit. May be repeated to a maximum of 20 hours. Prerequisite: Graduate standing in music, or successful completion of a qualifying audition for the appropriate Keyboard faculty.

MUSC 503 Graduate Level Organ credit: 2 to 5 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/503/)
Study at the graduate level in organ; selected studies from the masterworks in organ literature. Graduate standing in music, or successful completion of a qualifying audition for the appropriate Keyboard faculty. 2 to 5 graduate hours. No professional credit. May be repeated to a maximum of 20 hours. Prerequisite: Graduate standing in music, or successful completion of a qualifying audition for the appropriate Keyboard faculty.

MUSC 504 Graduate Level Collaborative Piano credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/504/)
Principles of accompanying singers and instrumentalists, practical experience in accompanying, and facility in sight reading for keyboard performers. 2 to 4 graduate hours. No professional credit. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Graduate standing in music or consent of instructor.

MUSC 505 Graduate Level Voice credit: 2 to 5 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/505/)
Study at the graduate level in voice; selected studies from the masterworks in vocal literature. Graduate standing in music, or successful completion of a qualifying audition for the Voice faculty. 2 to 5 graduate hours. No professional credit. May be repeated to a maximum of 20 hours. Prerequisite: Graduate standing in music, or successful completion of a qualifying audition for the Voice faculty.

MUSC 506 Graduate Level Lyric Theatre Voice credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/506/)
This is an individualized voice class setting where the student and teacher work exclusively with the technical, musical, and communicative aspects of Lyric Theatre repertoire in a weekly one-on-one setting. 2 graduate hours. No professional credit. May be repeated to a maximum of 12 hours. Prerequisite: Passing of a performance audition is required prior to the initial registration in any applied music course. Restricted to music majors at the graduate level or by consent of instructor.

MUSC 507 Graduate Level Vocal Coaching credit: 1 to 2 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/507/)
Individualized instruction in musical expression, language, performance practice, recital, or other specialized repertoire for advanced vocal students by coaching and accompanying faculty. 1 to 2 graduate hours. No professional credit. May be repeated to a maximum of 20 hours. Prerequisite: Permission of instructor.

MUSC 510 Graduate Level Violin credit: 2 to 5 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/510/)
Study at the graduate level in violin; selected studies from the masterworks in violin literature. Graduate standing in music, or successful completion of a qualifying audition for the String faculty. 2 to 5 graduate hours. No professional credit. May be repeated to a maximum of 20 hours. Prerequisite: Graduate standing in music, or successful completion of a qualifying audition for the String faculty; concurrent registration in Symphony Orchestra for students in the Master of Music curriculum in strings.

MUSC 511 Graduate Level Viola credit: 2 to 5 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/511/)
Study at the graduate level in viola; selected studies from the masterworks in viola literature. Graduate standing in music, or successful completion of a qualifying audition for the String faculty. 2 to 5 graduate hours. No professional credit. May be repeated to a maximum of 20 hours. Prerequisite: Graduate standing in music, or successful completion of a qualifying audition for the String faculty; concurrent registration in Symphony Orchestra for students in the Master of Music curriculum in strings.

MUSC 512 Graduate Level Cello credit: 2 to 5 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/512/)
Study at the graduate level in cello; selected studies from the masterworks in cello literature. Graduate standing in music, or successful completion of a qualifying audition for the String faculty. 2 to 5 graduate hours. No professional credit. May be repeated to a maximum of 20 hours. Prerequisite: Graduate standing in music, or successful completion of a qualifying audition for the string faculty; concurrent registration in Symphony Orchestra for students in the Master of Music curriculum in strings.

MUSC 513 Graduate Level Double Bass credit: 2 to 5 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/513/)
Study at the graduate level in double bass; selected studies from the masterworks in double bass literature. Graduate standing in music, or successful completion of a qualifying audition for the String faculty. 2 to 5 graduate hours. No professional credit. May be repeated to a maximum of 20 hours. Prerequisite: Graduate standing in music, or successful completion of a qualifying audition for the String faculty; concurrent registration in Symphony Orchestra for students in the Master of Music curriculum in strings.

MUSC 514 Graduate Level Harp credit: 2 to 5 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/514/)
Study at the graduate level in harp; selected studies from the masterworks in harp literature. Graduate standing in music, or successful completion of a qualifying audition for the String faculty. 2 to 5 graduate hours. No professional credit. May be repeated to a maximum of 20 hours. Prerequisite: Graduate standing in music, or successful completion of a qualifying audition for the String faculty.

MUSC 515 Graduate Level Guitar credit: 2 to 5 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/515/)
Study at the graduate level in guitar; selected studies from the masterworks in guitar literature. Graduate standing in music, or successful completion of a qualifying audition for the String faculty. 2 to 5 graduate hours. No professional credit. May be repeated in separate semesters to a maximum of 20 hours. Prerequisite: Graduate standing in music, or successful completion of a qualifying audition for the String faculty.

MUSC 516 Graduate Electric Violin credit: 2 to 5 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/516/)
Study at the graduate level in electric violin. Graduate standing in music, or successful completion of a qualifying audition for the String faculty. 2 to 5 graduate hours. No professional credit. May be repeated. Prerequisite: Graduate standing in music, or successful completion of a qualifying audition for the String faculty. Concurrent registration in an approved string ensemble for MM and DMA students (two years).

MUSC 517 Graduate Electric Viola credit: 2 to 5 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/517/)
Study at the graduate level in electric viola. Graduate standing in music, or successful completion of a qualifying audition for the String faculty. 2 to 5 graduate hours. No professional credit. May be repeated. Prerequisite: Graduate standing in music, or successful completion of a qualifying audition for the String faculty. Concurrent registration in an approved string ensemble for MM and DMA students (two years).

MUSC 520 Graduate Level Flute credit: 2 to 5 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/520/)
Study at the graduate level in flute; selected studies from the masterworks in flute literature. Graduate standing in music, or successful completion of a qualifying audition for the appropriate applied music faculty. 2 to 5 graduate hours. No professional credit. May be repeated to a maximum of 20 hours. Prerequisite: Graduate standing in music, or successful completion of a qualifying audition for the appropriate applied music faculty.

MUSC 521 Graduate Level Oboe credit: 2 to 5 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/521/)
Study at the graduate level in oboe; selected studies from the masterworks in oboe literature. Graduate standing in music, or successful completion of a qualifying audition for the appropriate applied music faculty. 2 to 5 graduate hours. No professional credit. May be repeated to a maximum of 20 hours. Prerequisite: Graduate standing in music, or successful completion of a qualifying audition for the appropriate applied music faculty.

MUSC 522 Graduate Level Bassoon credit: 2 to 5 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/522/)
Study at the graduate level in bassoon; selected studies from the masterworks in bassoon literature. Graduate standing in music, or successful completion of a qualifying audition for the appropriate applied music faculty. 2 to 5 graduate hours. No professional credit. May be repeated to a maximum of 20 hours. Prerequisite: Graduate standing in music, or successful completion of a qualifying audition for the appropriate applied music faculty.

MUSC 523 Graduate Level Clarinet credit: 2 to 5 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/523/)
Study at the graduate level in clarinet; selected studies from the masterworks in clarinet literature. Graduate standing in music, or successful completion of a qualifying audition for the appropriate applied music faculty. 2 to 5 graduate hours. No professional credit. May be repeated to a maximum of 20 hours. Prerequisite: Graduate standing in music, or successful completion of a qualifying audition for the appropriate applied music faculty.

MUSC 524 Graduate Level Saxophone credit: 2 to 5 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/524/)
Study at the graduate level in saxophone; selected studies from the masterworks in saxophone literature. Graduate standing in music, or successful completion of a qualifying audition for the appropriate applied music faculty. 2 to 5 graduate hours. No professional credit. May be repeated to a maximum of 20 hours. Prerequisite: Graduate standing in music, or successful completion of a qualifying audition for the appropriate applied music faculty.

MUSC 525 Graduate Level Trumpet credit: 2 to 5 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/525/)
Study at the graduate level in trumpet; selected studies from the masterworks in trumpet literature. Graduate standing in music, or successful completion of a qualifying audition for the appropriate applied music faculty. 2 to 5 graduate hours. No professional credit. May be repeated to a maximum of 20 hours. Prerequisite: Graduate standing in music, or successful completion of a qualifying audition for the appropriate applied music faculty.

MUSC 526 Graduate Level Horn credit: 2 to 5 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/526/)
Study at the graduate level in horn; selected studies from the masterworks in horn literature. Graduate standing in music, or successful completion of a qualifying audition for the appropriate applied music faculty. 2 to 5 graduate hours. No professional credit. May be repeated to a maximum of 20 hours. Prerequisite: Graduate standing in music, or successful completion of a qualifying audition for the appropriate applied music faculty.

MUSC 527 Graduate Level Trombone credit: 2 to 5 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/527/)
Study at the graduate level in trombone; selected studies from the masterworks in trombone literature. Graduate standing in music, or successful completion of a qualifying audition for the appropriate applied music faculty. 2 to 5 graduate hours. No professional credit. May be repeated to a maximum of 20 hours. Prerequisite: Graduate standing in music, or successful completion of a qualifying audition for the appropriate applied music faculty.

MUSC 528 Graduate Level Euphonium credit: 2 to 5 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/528/)
Study at the graduate level in euphonium; selected studies from the masterworks in euphonium literature. Graduate standing in music, or successful completion of a qualifying audition for the appropriate applied music faculty. 2 to 5 graduate hours. No professional credit. May be repeated to a maximum of 20 hours. Prerequisite: Graduate standing in music, or successful completion of a qualifying audition for the appropriate applied music faculty.

MUSC 529 Graduate Level Tuba credit: 2 to 5 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/529/)
Study at the graduate level in tuba; selected studies from the masterworks in tuba literature. Graduate standing in music, or successful completion of a qualifying audition for the appropriate applied music faculty. 2 to 5 graduate hours. No professional credit. May be repeated to a maximum of 20 hours. Prerequisite: Graduate standing in music, or successful completion of a qualifying audition for the appropriate applied music faculty.

MUSC 530 Graduate Level Percussion credit: 2 to 5 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/530/)
Study at the graduate level in percussion; selected studies from the masterworks in percussion literature. Graduate standing in music, or successful completion of a qualifying audition for the appropriate applied music faculty. 2 to 5 graduate hours. No professional credit. May be repeated to a maximum of 20 hours. Prerequisite: Graduate standing in music, or successful completion of a qualifying audition for the percussion faculty.

MUSC 531 Graduate Jazz Voice credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/531/)
Instruction at the graduate level in jazz voice normally associated with the jazz idiom. 2 to 4 graduate hours. No professional credit. May be repeated in separate terms to a maximum of 20 graduate hours. Prerequisite: Graduate standing in music, or successful completion of a qualifying audition for the appropriate jazz faculty.

MUSC 532 Graduate Jazz Saxophone credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/532/)
Instruction at the graduate level in jazz saxophone normally associated with the jazz idiom. 2 to 4 graduate hours. No professional credit. May be repeated in separate terms to a maximum of 20 graduate hours. Prerequisite: Graduate standing in music, or successful completion of a qualifying audition for the appropriate applied jazz faculty.

MUSC 533 Graduate Jazz Trumpet credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/533/)
Instruction at the graduate level in jazz trumpet normally associated with the jazz idiom. 2 to 4 graduate hours. No professional credit. May be repeated in separate terms to a maximum of 20 graduate hours. Prerequisite: Graduate standing in music, or successful completion of a qualifying audition for the appropriate jazz faculty.

MUSC 534 Graduate Jazz Trombone credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/534/)
Instruction at the graduate level in jazz trombone normally associated with the jazz idiom. 2 to 4 graduate hours. No professional credit. May be repeated in separate terms to a maximum of 20 graduate hours. Prerequisite: Graduate standing in music, or successful completion of a qualifying audition for the appropriate jazz faculty.

MUSC 535 Graduate Jazz Piano credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/535/)
Instruction at the graduate level in jazz piano normally associated with the jazz idiom. 2 to 4 graduate hours. No professional credit. May be repeated in separate terms to a maximum of 20 graduate hours. Prerequisite: Graduate standing in music, or successful completion of a qualifying audition for the appropriate jazz faculty.

MUSC 536 Graduate Jazz Double Bass credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/536/)
Instruction at the graduate level in jazz double bass normally associated with the jazz idiom. 2 to 4 graduate hours. No professional credit. May be repeated in separate terms to a maximum of 20 graduate hours. Prerequisite: Graduate standing in music, or successful completion of a qualifying audition for the appropriate jazz faculty.

MUSC 537 Graduate Jazz Guitar credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/537/)
Instruction at the graduate level in jazz guitar normally associated with the jazz idiom. 2 to 4 graduate hours. No professional credit. May be repeated in separate terms to a maximum of 20 graduate hours. Prerequisite: Graduate standing in music, or successful completion of a qualifying audition for the appropriate jazz faculty.

MUSC 538 Graduate Jazz Percussion credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/538/)
Instruction at the graduate level in jazz percussion normally associated with the jazz idiom. 2 to 4 graduate hours. No professional credit. May be repeated in separate terms to a maximum of 20 graduate hours. Prerequisite: Graduate standing in music, or successful completion of a qualifying audition for the appropriate jazz faculty.

MUSC 539 Graduate Jazz Mallets credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/539/)
Instruction at the graduate level in jazz mallets normally associated with the jazz idiom. 2 to 4 graduate hours. No professional credit. May be repeated in separate terms to a maximum of 20 graduate hours. Prerequisite: Graduate standing in music, or successful completion of a qualifying audition for the appropriate jazz faculty.

MUSC 540 Graduate Jazz Woodwinds credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/540/)
Instruction at the graduate level in jazz woodwinds normally associated with the jazz idiom. 2 to 4 graduate hours. No professional credit. May be repeated in separate terms to a maximum of 20 graduate hours. Prerequisite: Graduate standing in music, or successful completion of a qualifying audition for the appropriate jazz faculty.

MUSC 541 Graduate Jazz Brass credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/MUSC/541/)
Instruction at the graduate level in jazz brass instruments normally associated with the jazz idiom. 2 to 4 graduate hours. No professional credit. May be repeated in separate terms to a maximum of 20 graduate hours. Prerequisite: Graduate standing in music, or successful completion of a qualifying audition for the appropriate jazz faculty.

MUSC 542 Graduate Jazz Strings credit: 2 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/MUSC/542/**)**
Instruction at the graduate level in jazz strings normally associated with the jazz idiom. 2 to 4 graduate hours. No professional credit. May be repeated in separate terms to a maximum of 20 graduate hours. Prerequisite: Graduate standing in music, or successful completion of a qualifying audition for the appropriate jazz faculty.

NRES - NATURAL RESOURCES & ENVIRON SC

NRES Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/NRES/)

Courses

NRES 100 Fundamentals of Env Sci credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/100/)
Introduction to environmental sciences and current environment issues. Topics include population growth, world food supplies, agriculture and the environment, biodiversity, fossil fuels and "green" energy issues, endangered and threatened species, water use, conservation and pollution, global warming, acid rain, ozone depletion, waste management and reduction, recycling, toxins and health, mineral resources, and environmental policies and regulations. Course addresses the complex relationships between the human race and the natural systems that contain our air, water, energy, and biotic and food resources. Credit is not given for both NRES 100 and NRES 102.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences

NRES 101 Wildlife Conservation in the 21st Century credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/101/)
An introduction to the conservation, diversity and ecology of animals. The diversity of fish, reptiles, amphibians, mammals, and birds both around the world and in Illinois will be explored. The course will have a strong conservation component where students are introduced to a variety of threats facing animals. The students will be introduced to how to manage sustainable wildlife populations. The students will be exposed to current issues in Illinois to illustrate how people and animals can co-occur and a broad overview of the management, restoration, and conservation techniques.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Life Sciences

NRES 102 Introduction to NRES credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/102/)
Introduction to natural resources (forests, fisheries, soils, aquatic systems) and environmental science. Emphasizes renewable natural resources, ecological concepts, energy use, biodiversity of species, biogeochemical cycles, and air, water, and soil pollution. Provides natural science basis for understanding contemporary environmental issues and natural resource management. Credit is not given for both NRES 100 and NRES 102.

NRES 103 The Great Lakes - Freshwater Wonder at Risk credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/103/)
Introduction to the ecology of freshwater systems, viewed through the lens of the Great Lakes and associated tributaries. The Great Lakes hold 20% of the world's freshwater and 95% of the freshwater in North America. They have sustained human and wildlife populations for at least 10,000 years. Now, the integrity of this unique and priceless resource is threatened as never before. This eight-week online course will enhance student understanding of the ecology of this imperiled system, as well as the historical events and policies that have led to the present crisis, and the men and women who have played key roles in this unfolding story.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Life Sciences

NRES 105 Climate Change Impacts on Ecological Systems credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/105/)
Examines the response of ecological systems to climate change by drawing on multiple lines of evidence from the past and present. Topics include species range shifts, timing of biological events, ecosystem function, and feedbacks. The implications for conservation, as well as approaches to mitigating and adapting to climate change, are also explored. Computer-based exercises are used to enhance quantitative reasoning skills and build climate and ecological literacy. Online only.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Life Sciences
Quantitative Reasoning II

NRES 108 Env Sc & Nat Resource Careers credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/NRES/108/)
Explores career options in the fields of Natural Resource Management and Environmental Sciences. Students will improve understanding of their career goals, expand their knowledge of careers available in these fields, improve their job searching skills, and develop a plan for pursuing a career. Approved for S/U grading only.

NRES 109 Global Environmental Issues credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/109/)
Discussion course that focuses on analyzing opposing points of view on contemporary environmental issues. Students engage in role-playing activities, debates, and other participatory activities to explore the ecological and social dimensions of the issues.

NRES 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/NRES/199/)
Experimental course on a special topic in natural resources and environmental sciences. Topic may not be repeated except in accordance with the Code. May be repeated in the same or subsequent terms. No more than 12 hours may be counted toward graduation.

NRES 201 Introductory Soils credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/201/)
The nature and properties of soil including origin, formation, and biological, chemical, and physical aspects. Prerequisite: Successful completion of MATH 115, MATH 234, or equivalent and CHEM 102 is required. CHEM 104 is recommended.

NRES 202 American Environmental History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/202/)
Same as ESE 202 and HIST 202. See HIST 202.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

NRES 210 Environmental Economics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/210/)
Same as ACE 210, ECON 210, ENVS 210, and UP 210. See ACE 210.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

NRES 219 Applied Ecology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/219/)
Explores how organisms interact with each other and with their environment. Emphasis is placed on how these interactions lead to positive and negative outcomes in a human-dominated world. Students will learn the fundamental principles of population, community, and ecosystem ecology, and they will apply these principles to understand how ecological systems respond to human management decisions, environmental policy, climate change, and other anthropogenic influences. The goal of this course is to provide students with an ecological toolkit that can inform their decisions in conservation, ecosystem management, restoration, policy, and stewardship.

NRES 220 Communicating Agriculture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/220/)
Same as AGCM 220 and ENVS 220. See AGCM 220.
This course satisfies the General Education Criteria for:
Advanced Composition

NRES 223 Watching the Environment credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/223/)
Same as MDIA 223. See MDIA 223.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

NRES 224 Social Justice and Environment credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/224/)
Over the last 25 years, Environmental Justice (EJ) has expanded from its earliest focus combating environmental racism in the US to an influential global phenomenon. What is EJ and how do we realize it in public policy? Students in this course will examine environmental issues through the lens of social justice and human inequality. We explore how EJ makes connections between environmental (pollution, biodiversity, food, climate) and social justice issues (race, ethnicity, gender, class) in order to inform public policy and mitigate environmental problems.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - US Minority

NRES 242 Nature and American Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/242/)
Same as LA 242 and RST 242. See RST 242.
This course satisfies the General Education Criteria for:
Cultural Studies - Western

NRES 270 Applied Entomology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/270/)
Same as CPSC 270 and IB 220. See CPSC 270.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Life Sciences

NRES 276 Introduction to Field Pedology credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/NRES/276/)
Laboratory and field course involving description, interpretation, and classification of soil profiles. Several day, overnight field trip required; fee required. Additional fees may apply. See Class Schedule. May be repeated to a maximum of 4 hours. Prerequisite: NRES 201.

NRES 285 Field Experience credit: 1 or 2 Hours. (https://courses.illinois.edu/schedule/terms/NRES/285/)
Field based course that exposes students to procedures and methods used in various resource settings in a hands-on manner. Includes weekly field trips to visit representative natural resource and environmental science settings with supporting laboratory exercises. Content of offerings vary by section, but all focus on resource management, environmental quality and assessment, and effects of consumption and use on the environment. Field trips required. Additional fees may apply. See Class Schedule. May be repeated in the same or subsequent semesters to a maximum of 6 hours. Prerequisite: NRES 201 and NRES 219.

NRES 287 Environment and Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/287/)
Examination of the relationship between environment and society and implications for ecological and human well-being. Social science perspective covered on topics such as environmental change, environmental decision-making, natural resource management, agricultural systems, and environmental risks, hazards, and disasters. Students will build critical thinking skills focused on contemporary problems in the interface between people and the physical environment. Same as ESE 287, GEOG 287, and PS 273. Prerequisite: NRES 102 and sophomore or higher standing. Introductory social science course recommended.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - Western

NRES 293 Professional Internship credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/293/)
Off-campus experience in a field directly pertaining to a subject matter in natural resources and environmental sciences. Approved for Letter and S/U grading. May be repeated in separate terms up to 4 hours. Credit is not given for more than a total of 12 hours of Independent Study (IND) courses applying to a degree in ACES. Prerequisite: Consent of academic advisor or Department Internship Coordinator.

NRES 294 Resident Internship credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/294/)
Supervised, on-campus, learning experience with faculty engaged in research. Approved for Letter and S/U grading. May be repeated in separate terms to a maximum of 4 hours. Credit is not given for more than a total of 12 hours of Independent Study (IND) courses applying to a degree in ACES. Prerequisite: Consent of academic advisor or Department Internship Coordinator.

NRES 295 Undergrad Research or Thesis credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/295/)
Individual research, special problems, thesis, development and/or design work under the supervision of an appropriate member of the faculty. May be repeated up to 4 hours in the same term to a maximum of 12 hours in separate terms. Credit is not given for more than a total of 12 hours of Independent Study (IND) courses applying to a degree in ACES. Prerequisite: Junior standing, cumulative GPA of 2.5 or above at the time the activity is arranged, and consent of instructor.

NRES 298 Undergraduate Seminar credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/298/)
Group discussion on a special topic in a field of study directly pertaining to subject matter in natural resources and environment sciences. May be repeated to a maximum of 12 hours. Prerequisite: Junior standing.

NRES 302 Dendrology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/302/)
Emphasizes nomenclature, classification, and the distinguishing morphological characteristics of the native and naturalized tree species of North America. Introduces disciplines related to the systematics of tree species, including: morphology, physiology, phenology, ecology, soil-site relationships, silviculture, geographic range and natural distribution, wood characteristics, economic uses, and natural history (including major diseases and insect pests). Incorporates tree and forest habitats that provide cover, breeding sites, and food for a variety of wildlife species. Serves as a basis for studies in natural resources management, environmental science, and for advanced studies of botany, genetics, and tree physiology. Field trips required. Additional fees may apply. See Class Schedule. Prerequisite: IB 103.

NRES 310 Natural Resource Economics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/310/)
Same as ACE 310 and ENVS 310. See ACE 310.

NRES 325 Natural Resource Policy Mgmt credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/325/)
Explores policy processes and institutions relating to allocation, utilization, and preservation of natural resources. Considers conceptual models of policy processes, and examines both historical examples and current issues. Prerequisite: ECON 102 or ACE 100.

NRES 330 Environmental Communications credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/330/)
Same as AGCM 330 and ENVS 330. See AGCM 330.

NRES 340 Environ Social Sci Res Meth credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/340/)
Introduction to social science research methods for addressing environmental issues. It provides basic information about social science concepts and methods (especially observation, surveys, focus groups, and interviews), helps students become informed users of social science research, and guides selection of appropriate social science tools to meet environmental challenges. A group focus on a local environmental issue offers a practical experience in which course content is applied within a specific community context. Field trips within the local community may be required. Additional fees may apply. See Class Schedule. Prerequisite: STAT 100 or equivalent.

NRES 348 Fish and Wildlife Ecology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/348/)
Application of ecological principles and modeling to management of fish and wildlife populations; significance of abiotic and biotic factors, including life-history parameters in population growth and management; and techniques and procedures for the development of management strategies for animal populations, emphasizing vertebrates. A course in statistics is highly recommended. Same as IB 348. Prerequisite: IB 203 or NRES 219.

NRES 351 Introduction to Environmental Chemistry credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/351/)
Introduces major inorganic and organic chemical pollutants, their sources and their fates in the atmosphere, hydrosphere and pedosphere. In particular, the course covers 1) translocation/distribution of chemicals in the environment, and 2) abiotic and biotic transformation of chemicals (e.g., photochemical reactions, hydrolysis, redox, adsorption and volatilization. Geared towards students in agricultural, natural, environmental and life science majors. Prerequisite: Successful completion of MATH 234 (or equivalent) and CHEM 104 is required. One semester of organic chemistry (CHEM 232 or CHEM 236) is recommended.

NRES 352 Plant Genetics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/352/)
Same as CPSC 352. See CPSC 352.

NRES 362 Ecology of Invasive Species credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/362/)
Focused on the ecology and management of biological invasions, with an emphasis on understanding the introduction, establishment, spread and impact stages of the invasion process. Students will identify the causes and impacts of biological invasions, as well as management strategies for preventing new invasions and mitigating impacts of established invaders in freshwater, marine, and terrestrial ecosystems. No special equipment will be required, and any optional, weekend field trips will occur on campus. Prerequisite: NRES 219 or similar introductory course in ecology.

NRES 368 Vertebrate Natural History credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/368/)
Same as IB 368. See IB 368.

NRES 370 Environmental Sustainability credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/370/)
Same as ENSU 300 and LA 370. See LA 370.

NRES 396 UG Honors Research or Thesis credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/396/)
Individual research, special problems, thesis, development and/or design work under the direction of the Honors advisor. May be repeated in the same or separate terms to a maximum of 12 hours. Credit is not given for more than 12 hours of special problems, research, thesis and/or individual studies may be counted toward degree. Prerequisite: This course is restricted to students who have junior or senior standing, admission to the ACES Honors Program, and consent of instructor.

NRES 401 Watershed Hydrology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/401/)
Precipitation, evapotranspiration, stream flow, and other aspects of the hydrologic cycle are studied in a watershed context. Measurement techniques, statistical analyses of hydrologic data, and simulation modeling are discussed. Case studies that quantify water movement in specific watersheds are used to integrate course topics. Same as GEOG 401. 3 undergraduate hours. 3 graduate hours. Prerequisite: CHEM 102, completion of the Quantitative Reasoning I requirement, and completion of the statistics requirement.

NRES 402 Ecohydrology and Water Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/402/)
Students will focus on understanding the processes of ecohydrology (e.g. physical hydrology, plant water use and stress response), the societal applications of ecohydrology (e.g. irrigation, drought monitoring, water sustainability for ecosystem), and the state-of-the-art methodology to study ecohydrology (e.g. satellite, numerical modeling). Students will gain background in broader applications of ecohydrology; early-stage graduate students will be able to adopt ecohydrology knowledge in their research. Additional fees may apply. See Class Schedule. 3 undergraduate hours. 3 graduate hours. Prerequisite: MATH 220 or 234.

NRES 403 Watersheds and Water Quality credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/403/)
Examines water quality in streams, rivers, lakes, and wetlands. The responses of watershed systems to pollution and other human impacts will be described in terms of their biological, geochemical, and physical processes. The technical analyses necessary to establish policies aimed at preserving or restoring these natural resources will be emphasized. 3 undergraduate hours. 3 graduate hours. Prerequisite: One of MATH 220, MATH 221, MATH 234.

NRES 406 Fluvial Geomorphology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/406/)
Same as GEOG 406 and GEOL 406. See GEOG 406.

NRES 407 Wildlife Population Ecology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/407/)
This course includes the application of principles of population biology to the analysis, management, and conservation of wildlife populations, models of population growth, spatio-temporal variation in abundances, estimation of demographic parameters and methods of decision-making. 4 undergraduate hours. 4 graduate hours. Prerequisite: NRES 348. One semester of calculus or statistics is recommended.

NRES 409 Fishery Ecol and Conservation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/409/)
Ecological and conservation concepts are applied to fisheries management practices. Will discuss current literature related to the interface between basic and applied aspects of fish populations, focusing on life history, conservation biology and genetics, growth and recruitment, competition, predation, trophic and community ecology, ecosystem management, and human dimensions. 4 undergraduate hours. 4 graduate hours. Prerequisite: NRES 348.

NRES 415 Native Plant ID and Floristics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/415/)
Focuses on gaining skills in identification of native vascular plants in the field and classroom. Methods of plot-based and plotless vegetation sampling methods will be introduced. Procedures and applications for botanical inventory and assessment will be covered. Field trips are required. Additional fees may apply. See Class Schedule. 4 undergraduate hours. 4 graduate hours. Credit is not given for NRES 415 if credit for CPSC 416 has been earned.

NRES 416 Forest Biology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/416/)
Interactions of biotic and abiotic components of forests as they relate to the health, structure and function of these ecosystems. The course is ecophysiological and organismic in approach, but includes biochemical concepts central to the understanding of forest biology. Lecture-discussion combined with assigned readings, field projects, and a paper. One Saturday field trip required. Additional fees may apply. See Class Schedule. 3 undergraduate hours. 3 graduate hours. Prerequisite: NRES 419 and NRES 302 or HORT 301.

NRES 418 Wetland Ecology & Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/418/)
Wetlands are important ecosystems that support high biodiversity and provide numerous benefits to society. This course provides a comprehensive examination of wetland science, management, and governance. Lectures, readings and class discussions will focus on the structure and processes of wetland ecosystems, wetland biota, wetland conservation and management, and U.S. and international wetland policies. Special emphasis will be placed on the application of wetland science to policy and restoration. Offered in alternate years. 3 undergraduate hours. 3 graduate hours. Prerequisite: NRES 201 and NRES 219, or consent of instructor.

NRES 419 Env and Plant Ecosystems credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/419/)
Relationships among environmental factors and plant processes and functions; impact of human activities on the environment and the structure and function of plant ecosystems. Examples will be drawn from a variety of managed and unmanaged plant ecosystems. Field trip required. Additional fees may apply. See Class Schedule. 3 undergraduate hours. 3 graduate hours. Prerequisite: NRES 219 or LA 450 or IB 103 and CHEM 104 or NRES 201.
This course satisfies the General Education Criteria for:
Advanced Composition

NRES 420 Restoration Ecology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/420/)
Historical development of ecological restoration, its philosophical foundation, multi-disciplinary borrowings from the natural, applied, and social sciences, and varied practical applications, with emphasis on the application of ecological principles. Case studies, field trips, and laboratory activities on restoration planning. Field trip required. Additional fees may apply. See Class Schedule. 4 undergraduate hours. 4 graduate hours. Prerequisite: NRES 219 or LA 450.

NRES 421 Quantitative Methods in NRES credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/421/)
Explores the fundamental principles, procedures, and practices that underlie the most common statistical and sampling methods used in natural resources and environmental sciences. This course covers hypothesis testing, regression, and analysis of variance. There is also a strong focus on sampling theory and experimental design. Computer labs utilize the open source R statistical computing environment. 3 undergraduate hours. 3 graduate hours. Prerequisite: One of MATH 220, MATH 221, MATH 234; completion of the statistics requirement.

NRES 422 Earth Systems Modeling credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/422/)
Same as ATMS 421, ESE 421, GEOG 421 and GEOL 481. See ATMS 421.

NRES 423 Politics of International Conservation and Development credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/423/)
Conserving the earth's rich biological heritage while enhancing the well-being of the poor stands as a critical global challenge. This course examines this complex issue using the lens of political science and allied fields. Readings, discussion, and written work will demonstrate how insights and approaches from these areas of scholarship can help understand and address the twin problems of biodiversity loss and human poverty in developing countries. Examples focus on forest and wildlife conservation and management. Same as GEOG 423. 3 undergraduate hours. 3 graduate hours. Prerequisite: One 200 or 300 level social science course or consent of instructor. Junior standing required.

NRES 424 US Environ, Justic & Policy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/424/)
In the course students will: (a) write about the roles that race, class, and other social differences play in shaping human-environment relationships, (b) understand the role of the Environmental Protection Agency in considering environmental justice in policy, and (3) identify ways that policies for ecological sustainability can be configured to improve the equity of environmental and natural resource decision-making. 4 undergraduate hours. 4 graduate hours. Prerequisite: Junior class standing.

NRES 425 Natural Resources Law & Policy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/425/)
Using the case study method and discussion problems, students in this course will study how laws in the U.S. regulate the use of natural resources, including public ownership and preservation of natural resources through other federal and state public lands. Also examines major federal environmental statues designed to protect natural resources, including the Clean Water Act, the Endangered Species Act, the National Environmental Policy Act, and federal acts related to forest, national parks, and wilderness protection. 3 undergraduate hours. 3 graduate hours. Prerequisite: Junior standing.

NRES 426 Renewable Energy Policy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/426/)
Considers how policies can be designed to optimize economic, environmental, and social solutions to transforming the world's unsustainable energy production, distribution, and consumption paradigm. Provides an up-front primer on climate change policy in the U.S., Europe, and internationally, which have become the primary driver of sustainability initiatives in the energy sector. Examines policies that define "renewability" within various energy sectors including fossil fuels (e.g., coal, natural gas, petroleum), biofuels, nuclear power, hydropower, wind, solar, geothermal, and wave energy. 3 undergraduate hours. 3 graduate hours. Prerequisite: Junior standing.

NRES 427 Modeling Natural Resources credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/427/)
Examines basic modeling concepts and methods. Modeling skills, model development, and natural resource issues and problems will be emphasized. Content areas include fisheries, forests, wildlife, economics, human dimensions, groundwater and surface water. 4 undergraduate hours. 4 graduate hours. Prerequisite: One of MATH 220, MATH 221, MATH 234.

NRES 428 Valuing Nature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/428/)
Building sustainable communities and ecosystems requires an understanding of how and why people make decisions about the environment. This course will explore how values, attitudes, and concepts of place relate to environmental behavior. Students will transfer theoretical knowledge of behavior change science and state-of-the art methodologies to resource management challenges, focusing particular attention on the human dimensions of fisheries management and conservation in parks and protected areas. 3 undergraduate hours. 3 graduate hours. Prerequisite: NRES 287.

NRES 429 Aquatic Ecosystem Conservation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/429/)
Application of the principles of aquatic ecology to a broad range of conservation issues. The structure and function of aquatic systems are discussed from an ecosystem perspective, including the major threats and disturbances to aquatic ecosystems. 3 undergraduate hours. 3 graduate hours. Prerequisite: CHEM 102 and PHYS 101 or PHYS 140, and MATH 220 or MATH 221 or MATH 234, and IB 203 or NRES 219.

NRES 430 Comm in Env Social Movements credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/430/)
Same as AGCM 430 and ENVS 430. See AGCM 430.

NRES 431 Plants and Global Change credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/431/)
Same as CPSC 431 and IB 440. See CPSC 431.

NRES 438 Soil Nutrient Cycling credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/438/)
The ecology of decomposition and plant nutrient acquisition in terrestrial soils will be addressed using applied ecology concepts. Discussion will focus on the scientific literature addressing biological, physical, and chemical controls over nutrient availability in soils. Writing assignments will teach students to summarize scientific literature. Students will learn about analytical and quantitative methods used in this field of study and gain the interpretive and communication skills needed to assess and/or carry out applied research in plant and soil science arenas. Same as CPSC 438. 3 undergraduate hours. 3 graduate hours. Offered in alternate years. Prerequisite: IB 203 or NRES 219, and NRES 201.

NRES 439 Env and Sustainable Dev credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/439/)
Comprehensive overview and synthesis of global environmental problems and their relationships to human activities, with a focus on ecological and natural resource elements. Concerns include unsound ethics and concepts of development and modernization, the lack of motivation or funding to implement available technical solutions, the promotion of alternative development ethics, and a review of opportunities to maintain or improve the well-being of people, other organisms, and the environment. Same as CPSC 439. 3 undergraduate hours. 3 graduate hours. Prerequisite: NRES 219 or ACE 210.

NRES 440 Applied Statistical Methods I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/440/)
Same as ABE 440, ANSC 440, CPSC 440, FSHN 440, and NUTR 440. See CPSC 440.

NRES 441 Biogeography credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/441/)
Same as ANTH 436, ESE 439, GEOG 436 and IB 439. See IB 439.

NRES 442 Mammalogy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/442/)
Same as IB 462. See IB 462.

NRES 445 Statistical Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/445/)
Same as ABE 445 and ANSC 445. See ANSC 445.

NRES 446 Sustainable Planning Seminar credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/446/)
Same as GEOG 446, LA 446, and UP 446. See LA 446.

NRES 452 Community Ecology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/452/)
Same as IB 453. See IB 453.

NRES 454 GIS in Natural Resource Mgmt credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/454/)
Geographic Information Systems (GIS) and remote sensing for natural resource management. Personal computers and GIS software are used to demonstrate the utility of these techniques for data acquisition, image processing, and map modeling. Exercises include problems relevant to the management of natural resources such as land cover mapping, monitoring, suitability and productivity assessment, landscape pattern analysis, land use change analysis, spatial modeling, and decision making. 4 undergraduate hours. 4 graduate hours.

NRES 455 Adv GIS for Nat Res Planning credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/NRES/455/)
Examines the application of Geographic Information Systems (GIS) to natural resource planning and decision making. Integrates principles of decision making in various contexts: public and private, single and multiple criteria, and various forms of management constraints. Management alternatives are then incorporated into a GIS system for further review and analysis. Course combines GIS software with computer-based optimization and quantitative decision making models. 2 undergraduate hours. 2 graduate hours. Offered in alternate years. Prerequisite: GEOG 479 or NRES 454.

NRES 456 Integrative Ecosystem Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/456/)
Examines ecological and human dimensions of ecosystem management, with a strong emphasis on national and international case studies. Capstone course for seniors in the NRES major. Additional fees may apply. See Class Schedule. 3 undergraduate hours. 3 graduate hours. Prerequisite: Senior standing; NRES 219 and NRES 287.

NRES 460 Aerial Photo Analysis credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/460/)
Same as GEOG 460. See GEOG 460.

NRES 461 Ornithology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/461/)
Same as IB 461. See IB 461.

NRES 462 Ecosystem Ecology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/462/)
Same as ESE 452 and IB 452. See IB 452.

NRES 463 Ichthyology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/463/)
Same as IB 463. See IB 463.

NRES 464 Herpetology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/464/)
Same as IB 464. See IB 464.

NRES 465 Landscape Ecology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/465/)
Introduction to the theory, methods, and application of landscape ecology, with an emphasis on characterizing heterogeneity and examining its consequences for ecological processes across a variety of spatial and temporal scales. Special attention will be given to the role of natural and human disturbances in shaping spatial patterns. Laboratory exercises are computer-based and focus on concepts and tools in landscape ecology. 3 undergraduate hours. 3 graduate hours. Prerequisite: NRES 219 or equivalent, NRES 454 or equivalent.

NRES 471 Pedology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/471/)
The science of soil genesis, classification, and morphology. Includes factors of soil formation, properties and methods used in distinguishing soils, interpretation of soil profiles and soil stratigraphy, causes of soil variability, and the impact of soil properties upon soil management, land-use decisions, and the environment. 3 undergraduate hours. 3 graduate hours. Prerequisite: NRES 201.

NRES 472 Environmental Psychology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/472/)
Theory and research in environmental psychology. Topics include environmental perception, cognition, experience, values and emotion, perceived environmental quality, environmental hazards and risk perception, and conservation attitudes and behavior. Same as PSYC 472. 4 undergraduate hours. 4 graduate hours. Prerequisite: Jr. standing: PSYC 100 or PSYC 103.

NRES 473 Soil Testing Practicum credit: 2 or 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/473/)
Chemical procedures useful in assessing soil/plant relationships for field crops. Topics include agronomic principles, field sampling, performance of soil tests, interpretation of analytical results, and formulation of nutrient management programs. 2 or 3 undergraduate hours. 2 or 3 graduate hours. Field trip required. Additional laboratory work and consent of instructor required for 3 hours. Prerequisite: NRES 201.

NRES 474 Soil and Water Conservation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/474/)
Application of principles of soil conservation and management to the solution of land-use problems; influence of soil characteristics on erosion control, cropping intensity, water management, and land-use planning. Includes a field trip. Additional fees may apply. See Class Schedule. 3 undergraduate hours. 3 graduate hours. Prerequisite: NRES 201.

NRES 475 Environmental Microbiology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/475/)
Introduction to the diversity of microbial populations and their important role in environmental processes in air, water, soils, and sediments. Microbial community ecology and interactions with plants and animals will also be discussed. Students will learn how microbial activities sustain natural ecosystems and contribute to environmental quality, and also how these functions are harnessed to support managed and artificial systems. Molecular biology techniques for investigating microbial communities and their activities will also be discussed. 3 undergraduate hours. 3 graduate hours. Prerequisite: NRES 201 and CHEM 104.

NRES 477 Introduction to Remote Sensing credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/477/)
Same as GEOG 477. See GEOG 477.

NRES 485 Stream Ecosystem Management credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/485/)
This course relates the structure and function of streams and rivers to challenges and opportunities in their conservation, management, and restoration using a combination of readings, discussions, and field trips to study sites. Students will develop an integrative understanding of stream and river ecosystem management from the site to watershed scale on issues spanning from nutrient pollution, to the natural flow regime, to the design and implementation of freshwater protected areas. No special equipment will be required. Three required field trips will occur on or near campus. Additional fees may apply. See Class Schedule. 4 undergraduate hours. 4 graduate hours. Prerequisite: NRES 219 or similar introductory course in ecology.

NRES 487 Soil Chemistry credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/487/)
Emphasizes inorganic reactions involved in soil development and plant nutrition in soils; topics include colloid systems, properties of water, ion exchange equilibria, plant nutrient forms, and methods of analyses. 3 undergraduate hours. 3 graduate hours. Prerequisite: NRES 201 and CHEM 104.

NRES 488 Soil Fertility and Fertilizers credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/488/)
Provides a broad-based understanding of the basic principles of soil fertility and their application. Coverage includes the occurrence, cycling, and plant availability of the essential mineral nutrients in soils; fertilizer sources, soil reactions, and efficiency; evaluating fertilizer and lime needs; methods of fertilizer application; and the economics of fertilization. Same as CPSC 488. 3 undergraduate hours. 3 graduate hours. Prerequisite: NRES 201.

NRES 489 Physics of Plant Environments credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/489/)
The physics of transport processes in the soil and aerial environment of plants; exchanges of energy and gases in crop canopies, and the retention and flow of water, gases, solutes, and heat in soils. 4 undergraduate hours. 4 graduate hours. Prerequisite: PHYS 101 or PHYS 140; one of MATH 220, MATH 221, MATH 234; NRES 201.

NRES 490 Surface Water System Chemistry credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/490/)
Examines the interaction of chemical and biological processes that govern the chemistry of streams, lakes, and wetlands, and the response of aquatic organisms to pollution. Chemical equilibrium and kinetic principles are used to analyze the behavior of surface water systems through the use of models. Topics include modeling of field studies in environmental inorganic chemistry and biogeochemistry. The laboratory section will be devoted to instruction in the use of computer models and to their practical application. 4 undergraduate hours. 4 graduate hours. Credit not given for both NRES 490 and CEE 443. Prerequisite: CHEM 104; one of MATH 220, MATH 221, MATH 234.

NRES 499 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/499/)
Experimental course on a special topic in natural resources and environmental sciences. Additional fees may apply. See Class Schedule. 1 to 4 undergraduate hours. 1 to 4 graduate hours. Approved for Letter and S/U grading. May be repeated in the same or separate terms to a maximum of 12 hours as topics vary.

NRES 500 Graduate Seminar credit: 0 to 1 Hours. (https://courses.illinois.edu/schedule/terms/NRES/500/)
Exposure to current research and specialized topics in natural resources and environmental sciences through attending/viewing and responding to the NRES seminar series. 0 to 1 graduate hours. No professional credit. Approved for S/U grading only. May be repeated.

NRES 501 Special Problems credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/501/)
Individual studies or investigations in selected branches of horticulture, natural resources, and environmental sciences. Approved for letter and S/U grading. May be repeated. No more than 8 hours may be counted toward an MS degree.

NRES 502 Research Methods in NRES credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/502/)
Theory and practice of research methods in natural resources, ecology, and environmental sciences. Provides an overview of experimental design and sampling techniques, and includes discussions of discipline-specific statistical methods. Prerequisite: One upper division course is recommended.

NRES 503 Capstone Research Project credit: 1 to 8 Hours. (https://courses.illinois.edu/schedule/terms/NRES/503/)
A supervised individual investigative study in selected areas of natural resources and environmental sciences relevant to the student's career preparation. Open only to NRES graduate students. A capstone paper and successful completion of an oral exam is required to earn credit for this course and also serves as the final requirement to complete the non-thesis master's program. 1 to 8 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated in separate terms to a maximum of 8 hours. Credit is not given for both NRES 503 and NRES 505 or NRES 507. Prerequisite: Consent of the Academic and Research Advisors.

NRES 504 Critical Issues Recreation Mgt credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/504/)
Same as RST 502. See RST 502.

NRES 505 Capstone Internship Experience credit: 1 to 8 Hours. (https://courses.illinois.edu/schedule/terms/NRES/505/)
A formalized learning experience in an appropriate supervised internship related to the student's career preparation in natural resources and environmental sciences. Open only to NRES graduate students. A capstone paper and successful completion of an oral exam is required to earn credit for this course and also serves as the final requirement to complete the non-thesis master's program. 1 to 8 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated in separate terms to a maximum of 8 hours. Credit is not given for both NRES 505 and either NRES 503 or NRES 507. Prerequisite: Consent of Academic Advisor.

NRES 507 Capstone Group Research Project credit: 1 to 8 Hours. (https://courses.illinois.edu/schedule/terms/NRES/507/)
A supervised collaborative learning experience in which students work together to design, conduct, and present professional interdisciplinary research related to the students' career preparation in natural resources and environmental sciences. Group project may involve collaboration with outside clients, which include industry, government, and non-governmental organizations. Only open to NRES graduate students pursuing a non-thesis M.S. A capstone paper and successful completion of an oral exam is required of each student to earn credit for this course and also serves as the final requirement to complete the non-thesis master's program. 1 to 8 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated in separate terms to a maximum of 8 hours. Credit is not given for both NRES 507 and either NRES 503 or NRES 505. Prerequisite: Consent of the Academic and Research Advisors.

NRES 508 Community & Natural Resources credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/508/)
Advanced discussion and analysis of theoretical and empirical approaches to the intersection of social and ecological processes at the human community level emphasizing change, conflict, management, and decision-making. Each student will complete a project applying community-related theory to a particular natural resource or environmental problem. Prerequisite: Upper-level undergraduate course or graduate course in social science related to natural resources or environmental issues in NRES, Geography, Human and Community Development, Political Science, Psychology, Recreation Sport and Tourism, Sociology, or related field.

NRES 510 Adv Natural Resource Economics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/510/)
Same as ACE 510, ECON 548, and ENVS 510. See ACE 510.

NRES 511 Principles of Applied Ecology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/511/)
Provides a thorough foundation of fundamental ecological principles that govern the distribution and abundance of organisms with extra attention to applied ecology as it pertains to current-day ecological problems. The approach will include lectures, discussions, hands-on evaluation and interpretation of data and experimental design presented in case studies, and design and implementation of an independent research project. Prerequisite: At least one undergraduate or graduate course in biology or ecology.

NRES 512 Discussions in NRES credit: 1 to 2 Hours. (https://courses.illinois.edu/schedule/terms/NRES/512/)
Discussion of recent developments and current literature in natural resources and environmental sciences, with a term-long emphasis on a particular aspect of the subject matter. Approved for Letter and S/U grading. May be repeated to a maximum of 4 hours.

NRES 516 Ecosystem Biogeochemistry credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/516/)
Biological, geological, and chemical processes of forest, agricultural, freshwater and marine ecosystems. The effects of pollutants and global change on each ecosystem are addressed along with the biogeochemical interactions among ecosystems. Each student completes a detailed biogeochemical study for a particular ecosystem. A 400-level course in two or more of the following areas are recommended: soil science, aquatic science, ecology, and hydrology. Same as IB 516.

NRES 522 Terrestrial Remote Sensing Applications credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NRES/522/)
This is an advanced course applying satellite remote sensing (RS) to terrestrial environmental issues. Students will gain a deep understanding of the physical mechanisms of remote sensing technology as well as the scientific contexts of how to best utilize remote sensing technology to address questions in natural resources, hydrology, and environmental monitoring. The course is intended for graduate students. The course does not require prior knowledge of remote sensing, but proficiency in one of the following programming languages is strongly recommended - Matlab, Python, or R. 3 graduate hours. No professional credit. Prerequisite: The course does not require prior knowledge of remote sensing, but students need to satisfy the following prerequisites: proficiency in one of the following programming languages- Matlab, Python, or R.

NRES 565 Spatial Ecological Modeling credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/NRES/565/)
Computer-based, spatially explicit models are useful for simulating the long-term dynamics and stability of complex ecological systems and can provide a basis for the development of tools for management support and policy advice. This course will build on landscape ecology principles and GIS skills to develop and analyze spatial ecological models. Emphasis will be on building and applying individual- and agent-based models to understand and predict how systems respond to environmental change. 2 graduate hours. No professional credit. Prerequisite: NRES 454, NRES 465, or equivalent. Graduate students only.

NRES 572 Chemistry of Soil Fertility credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/572/)
The chemistry of essential plant nutrients in soils, and their quantitative relationships to plant growth. Offered in alternate years. Prerequisite: NRES 201 and CHEM 222.

NRES 580 Solute Transport in Soils credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/580/)
Theoretical and practical aspects of modeling the fate and transport of chemicals through unsaturated soil. Topics include spatial variability (scaling theories, geostatistics), fate and coupled transport processes (adsorption, degradation, preferential flow, dispersion, advection, diffusion, volatility), and associated modeling (parameter estimation; screening, regulatory, and research models, including CDE, stochastic-convective, stream-tube, particle tracking, kinematic wave, stochastic continuum) using analytical and numerical methods. Offered in alternate years. Prerequisite: NRES 489 and MATH 342 or MATH 345.

NRES 586 Soil Organic Matter credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/586/)
Explores soil organic matter as one of the most important and integrative characteristics of terrestrial ecosystems. Topics include the nature and origin of humic and non-humic substances in soils and sediments, their critical environmental functions (chemical reactivity and role in nutrient cycling), and the primary methods (elemental analysis, spectroscopy, isotopic methods, and C and N models) used to characterize organic matter and its dynamics. Offered in alternate years. Prerequisite: CHEM 232.

NRES 592 Sustainable Urban Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/592/)
Same as CEE 592 and UP 576. See CEE 592.

NRES 593 Statistical Methods in Ecology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NRES/593/)
Focuses on statistical methods used to analyze ecological data. Includes application of general and generalized linear models including use of several probability distributions such as normal, binomial, Poisson, and negative binomial. Course also focuses on mixed models and approaches for imposing structure onto the variance-covariance matrix to account for non-independence or heterogeneous variance. Emphasis throughout is on evaluating and presenting results using both traditional (p-value) and information-theoretic (AIC) approaches. 4 graduate hours. No professional credit. Prerequisite: At least one course in ecology, including basic concepts of population and community ecology, and at least one course in statistics, including basic concepts of sampling, hypothesis testing, and techniques such as t-tests, linear regression, and ANOVA (e.g., CPSC/NRES 440 or equivalent). Graduate standing or permission of instructor required.

NRES 594 NRES Professional Orientation credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/NRES/594/)
The philosophy and components of graduate education with development of the principles useful in teaching, research, and extension in horticulture, natural resources and environmental sciences. Students will be required to develop and submit a proposal describing planned research for their M.S. or Ph.D. thesis. Approved for S/U grading only.

NRES 595 Advanced Quantitative Techniques for Ecology and Conservation credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/NRES/595/**)**
This course is designed to provide the tools necessary to estimate population parameters in a rigorous and robust manner. Students will learn about the tools researchers and managers use to address questions in population ecology and conservation. The course covers five major topics in the estimation and management of wildlife populations: 1) Neutral models, 2) Presence/absence, 3) Abundance estimation, 4) Survival estimation, and 5) Bayesian Methodology. Emphasis is placed on the applied nature of these tools, including model building, selection, and inference. 4 graduate hours. No professional credit. Prerequisite: Successful completion of NRES 593 is recommended, or some prior familiarity with statistical data analysis is helpful.

NRES 598 Experimental Graduate Courses credit: 1 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/NRES/598/**)**
Experimental course on a special topic in natural resources and environmental sciences. May be repeated to a maximum of 12 hours.

NRES 599 Thesis Research credit: 0 to 12 Hours. **(**https://courses.illinois.edu/schedule/terms/NRES/599/**)**
Research conducted in various phases of horticulture, natural resources, and environmental sciences leading to a thesis in natural resources and environmental sciences. Approved for S/U grading only. May be repeated.

NS - NAVAL SCIENCE

NS Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/NS/)

Courses

NS 100 Leadership Laboratory credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/NS/100/)
Noncredit course designed to give the Naval ROTC student, through practical application, a better grasp of the naval science subjects taught in the classroom and a working knowledge of close order drill. Approved for S/U grading only. May be repeated.

NS 101 Introduction to Naval Science credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/NS/101/)
Naval organization and management practices examined within the context of the naval service, command and control, organization for logistics, service and support, functions and services of major components of the Navy and Marine Corps, and shipboard organization with emphasis on management and leadership functions. Prerequisite: Consent of instructor. No prerequisite for non-NROTC students.

NS 102 Sea Power and Maritime Affairs credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/NS/102/)
Investigates the characteristics of sea power and their impact on the affairs of our nation; discusses those characteristics with historical and modern applications to the United States and other world powers. Prerequisite: No prerequisite for non-NROTC students.

NS 120 Intro to US Armed Forces credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NS/120/)
Same as AFAS 120 and MILS 120. See MILS 120.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil

NS 204 Navigation/Naval Operations I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NS/204/)
Introduces the basic concepts of marine navigation, international and inland rules for vessels at sea and the use of maneuvering boards in safe ship maneuvering. Explores principles of navigation and methods used to aid in navigation. Provides a solid foundation of the fundamentals of marine navigation and its importance to the United States Navy. Prerequisite: Consent of instructor.

NS 303 Leadership and Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NS/303/)
Leadership and Management is a study of organizational behavior and management with an emphasis on situational leadership. Students will explore a variety of leadership and management topics including the classical theories of management, motivation, and communication to help prepare students for leadership challenges in any environment and any industry. Prerequisite: No prerequisite for non-NROTC students.

NS 305 Introduction to Naval Engineering credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NS/305/)
Fundamentals of ship compartmentalization, propulsion systems, engine theory and turbine theory, and naval warship control. Examines elements of ship design, damage control, and ship stability. Thermodynamic processes and their application to conventional and nuclear power generation. Energy storage systems such as hydraulics and compressed air systems. Electrical theory and distribution applications. Applications and case studies of engineering documentation, maintenance, and material management. Prerequisite: Consent of instructor.

NS 306 Naval Weapons Systems credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NS/306/)
Introduction to concepts and properties of electronic, physical, electromagnetic and mechanical systems and the underlying principles for operation of shipboard and aircraft weapons systems. Course emphasizes types of weapons and fire control systems, capabilities and limitations, theory of target acquisition, identification and tracking, trajectory and ballistics principles, and basic theory of radar and sonar Prerequisite: Consent of instructor.

NS 307 Navigation/Naval Operations II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NS/307/)
Explores numerous aspects related to the efficient and professional manner of U.S. Navy ship operations. Teaches the fundamentals of the U.S. Navy systems of communications used on sea-going vessels and Naval Warfare, Command and Control, and Joint Operations. Discusses the many issues relating to ship handling and Naval Officer responsibilities. Prerequisite: NS 204 Prerequisite: NS 204 or consent of instructor.

NS 308 Leadership and Ethics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NS/308/)
Leadership and Ethics prepares future leaders by exploring and applying a diverse range of leadership and ethical tools to enhance objective, sound, and timely decision-making in the most challenging environments. This course emphasizes the importance of leadership that adheres to the highest standards of character and integrity. It is a "Leadership Seminar" where fundamentals and applications of leadership and ethics will be discussed. The primary purpose of this course is to help you develop your personal leadership philosophy and style based on a solid ethical foundation. Prerequisite: NS 303 for NROTC students only. No prerequisite for non-NROTC students.

NS 321 Evolution of Warfare credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NS/321/)
Open to all students on campus, not just ROTC students. The course provides the student with a basic overview of Marine Corps history combined with its mission within the Department of Defense. To that end, three general topics are discussed: (1) Leadership and Ethics, (2) Seapower and Naval History, and (3) Technical Foundations of Naval Warfare. This course is well suited for anyone interested in learning more about what makes the Marine Corps so effective as a warfighting organization as well as students seeking to develop their leadership skills.

NS 323 Maneuver Warfare Fundamentals credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NS/323/)
Open to all students on campus, not just ROTC students.Throughout the course we will discuss modern tactical principles, current military developments, and other aspects of warfare along with their interactions with and influences on maneuver warfare doctrine. There is a specific focus on the United States Marine Corps as the premier maneuver warfighting organization. Additionally, study will include historical influences on tactical, operational, and strategic levels of maneuver warfare practices in the current and future operating environments. This course is well suited for anyone interested in learning more about what makes the Marine Corps so effective as a warfighting organization as well as students seeking to develop their leadership skills. Prerequisite: Advanced undergraduate standing or consent of instructor.

NE - NEURAL ENGINEERING

NE Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/NE/)

Courses

NE 100 Introduction to Neural Engineering credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/NE/100/)
A broad introduction to the fundamental principles and ever-advancing technologies at the interface of neuroscience, bioengineering and computer science. We will explore how neural engineering tools are used to measure, modulate and image the nervous system in the context of neurological function, dysfunction and injury. The course is divided into four sections: 1) Neuroanatomy and neurophysiology; 2) Technologies for monitoring neural activity in vivo (whole brain, from human to small animals) and in vitro (from dissociated cells to slices), EEG fMRI, MEAs, patch clamp electrophysiology recordings; 3) Devices for replacing and restoring neuronal function: implantable electrodes, brain computer interface, deep brain stimulation, and prosthetics; 4) Imaging and computational approaches. The course will cover information processing from the level of single cells, neural circuits and networks to systems and, ultimately, behavior. Prerequisite: Restricted to Neural Engineering majors.

NE 330 Neuroscience for Engineers credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NE/330/)
Provides an introduction to the fields of Neuroscience and Neural Engineering. Content includes a systems-level overview of the central nervous system, its blood supply, and its structural and functional features, and its connection to the peripheral nervous system. The course focuses on the mechanisms by which cells create, transmit, integrate, and perceive signals to enable memory, speech, language, pain, consciousness, and mood. Neuroscience fundamentals are taught from the perspective of engineering principles that guide the development and implementation of neural technologies and enable a quantitative understanding of function through modeling. Neural engineering applications include robotics, brain and spinal cord stimulation, non-invasive brain machine interfaces, and virtual reality gamification. Neuroimaging techniques and their application for brain science, as well as the novel tools and devices used to diagnose, monitor and improve neurological function will also be discussed. Upon completion of this course, students will have an understanding of technological developments in neural engineering and a foundational understanding of neurobiology and the pathological mechanisms underlying prevalent disorders of the nervous system. Prerequisite: NE 100, MCB 252. Restricted to Neural Engineering majors.

NE 402 Neural Engineering Senior Design credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NE/402/)
This capstone course in neural engineering design is the culmination of the NE curriculum. It features market research, the development of a working prototype device or process, along with entrepreneurship in the neural engineering field. The course takes students through the identification of a problem, prototyping solutions, testing, and solution analysis for real world problems focusing on end-user value and benefit. Students will use principles of design, engineering analysis, and customer discovery. This course emphasizes effective teamwork and technical communication, intellectual property, quality, human factors, FDA regulation, professionalism, and ethics. The overall goal of the course is to prepare the students for careers in Neural engineering. 4 undergraduate hours. No graduate credit. Prerequisite: NE 410/ECE 410, NE 420/ECE 421, NE 422. Concurrent enrollment or previous credit in both NE 412 and NE 432 is required.

NE 410 Neural Circuits and Systems credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/NE/410/)
Same as ECE 410. See ECE 410.

NE 412 Neural Data Analysis credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NE/412/)
Modern technologies for recording brain activity hold the potential to enable a range of applications in neurology, neurobiology, and neuroscience in general. However, those recording technologies generate data at such scale and complexity that rigorous data analysis approaches for automatic information retrieval are required to fully leverage their potential. This course will introduce students to multiple neural data modalities (e.g., EEG and fMRI) and illustrate through examples, how modern data analysis techniques such as machine learning can be used to automatically extract meaningful information from those data. We will cover basics of neural data acquisition, preprocessing methods, data representation, dimensionality reduction, clustering, supervised learning, unsupervised learning, and some select advanced analytic concepts. This course will put equal emphasis on the understanding of analytical methods as well as practical hands-on experience, and equip the students with the essential skills to analyze neural data using advanced data analysis techniques such as machine learning. This course is designed for junior/senior undergraduate students with no or very limited prior experience in data science. Although prior exposure to the Python programming language is preferred, it is not required. 3 undergraduate hours. No graduate credit. Prerequisite: BIOE 210, BIOE 310, or instructor consent.

NE 420 Neural Interface Engineering credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/NE/420/)
Same as ECE 421. See ECE 421.

NE 422 Introduction to Neuroimaging credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/NE/422/)
Basic physics and physiology associated with imaging approaches that are unlocking the secrets of organization and function in both health and disease in the human brain at both the microscale and the macroscale. From cellular structure to metabolic signals to electrical signaling, this course will cover fundamental neuroimaging techniques and provide access to representative data sets to help the student understand the types of neuroscience questions that can be answered by the technologies. From the microscale, including multiphoton microscopy, neural circuit reconstruction, and brain clearing techniques to macroscale electrophysiology, hemodynamics, and molecular imaging approaches. Students will process data from these modalities using MATLAB or other specialized analysis software. 3 undergraduate hours. 4 graduate hours. Prerequisite: BIOE 210, BIOE 310, NE 330.

NE 430 Neural Cell and Tissue Engineering credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NE/430/)
This course will expose students to engineered technologies and strategies currently used to control the behavior of cells in the nervous system, with a special emphasis placed on their applications in regenerative medicine and gene therapy. This course will first introduce students to the pathogenic mechanisms underlying many neurodegenerative and neurodevelopmental diseases, with a focus toward identifying potential opportunities for therapeutic intervention. With this foundation in place, students will then be introduced to contemporary strategies for directing the differentiation of pluripotent stem cells to neural cells and tissues, with an emphasis on the role that biomaterials can play in the process. Applications of neural tissue engineering for disease modeling and drug discovery will also be discussed. The course will then introduce students to the genetic technologies that can be used to modulate and dissect the activity of cells in the nervous system, discussing in-depth the potential for these technologies to treat neurodegenerative and neurodevelopmental disorders by gene therapy. 3 undergraduate hours. No graduate credit. Prerequisite: NE 330 or instructor consent.

NE 431 Neural Cell & Tissue Engineering Lab credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NE/431/)
This laboratory course, which serves as a companion to Neural Cell and Tissue Engineering, will provide students with a hands-on understanding of many of the concepts and techniques central to this field. Students will take part in an immersive laboratory experience centered on the biomaterial-guided directed differentiation of neural stem cells from pluripotent stem cells and their transplantation into the nervous system of a rodent model for the goal creating a functional neural graft. Cell culture, nucleic acid extraction, qPCR and immunofluorescent imaging are among the laboratory techniques that students will become proficient in. Data quantitation, methods for statistical analysis and scientific writing are emphasized. 4 undergraduate hours. No graduate credit. Prerequisite: NE 330 or instructor consent. Concurrent enrollment or credit in NE 430 is required.

NEUR - NEUROSCIENCE

NEUR Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/NEUR/)

Courses

NEUR 302 Applied Neuroscience credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NEUR/302/)
Same as PSYC 302. See PSYC 302.

NEUR 313 Drugs, Brain and Behavior credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NEUR/313/)
Same as PSYC 313. See PSYC 313.

NEUR 314 Introduction to Neurobiology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NEUR/314/)
Same as MCB 314. See MCB 314.

NEUR 403 Memory and Amnesia credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/NEUR/403/)
Same as PSYC 403. See PSYC 403.

NEUR 405 Cognitive Neuroscience credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/NEUR/405/)
Same as PSYC 404. See PSYC 404.

NEUR 413 Advanced Neuropsychopharmacology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/NEUR/413/)
Same as PSYC 413. See PSYC 413.

NEUR 414 Brain, Learning, and Memory credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/NEUR/414/)
Same as PSYC 414. See PSYC 414.

NEUR 417 Neuroscience of Eating & Drinking credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/NEUR/417/)
Same as FSHN 417 and PSYC 417. See PSYC 417.

NEUR 419 Brain, Behavior & Info Process credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NEUR/419/)
Same as BIOP 419 and MCB 419. See MCB 419.

NEUR 421 Principles of Psychophysiology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/NEUR/421/)
Same as PSYC 421. See PSYC 421.

NEUR 432 Genes and Behavior credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NEUR/432/)
Same as ANTH 432, IB 432, and PSYC 432. See IB 432.

NEUR 433 Evolutionary Neuroscience credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/NEUR/433/)
Same as IB 436, PHIL 433 and PSYC 433. See PSYC 433.

NEUR 445 Cognitive Neuroscience Lab credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NEUR/445/)
Same as PSYC 445. See PSYC 445.

NEUR 450 Cognitive Psychophysiology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/NEUR/450/)
Same as PSYC 450. See PSYC 450.

NEUR 451 Neurobio of Aging credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/NEUR/451/)
Same as PSYC 451 and KIN 458. See PSYC 451.

NEUR 453 Cog Neuroscience of Vision credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/NEUR/453/)
Same as PSYC 453. See PSYC 453.

NEUR 461 Cell & Molecular Neuroscience credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NEUR/461/)
Same as MCB 461. See MCB 461.

NEUR 462 Integrative Neuroscience credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NEUR/462/)
Same as MCB 462. See MCB 462.

NEUR 500 Topics in Neuroscience credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/NEUR/500/)
Critical reading and discussion of current papers from the neuroscience literature, and discussion of other relevant topics such as ethics and career and professional skills development. Grading based on attendance and participation. Approved for letter and S/U grading. May be repeated to a maximum of 2 hours. Prerequisite: Enrollment in Neuroscience Ph.D. program or consent of instructor.

NEUR 510 Advances in Behavioral Neuroscience credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/NEUR/510/)
Same as PSYC 510. See PSYC 510.

NEUR 520 Advanced Topics in Neuroscience credit: 0 or 1 Hours. (https://courses.illinois.edu/schedule/terms/NEUR/520/)
Survey of current research in modern neuroscience. 0 or 1 graduate hours. No professional credit. Approved for S/U grading only. May be repeated.

NEUR 530 Special Topics in Neuroscience credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/NEUR/530/)
Discussion of current topics of interest in neuroscience; seminar or lecture format. 1 to 4 graduate hours. No professional credit. May be repeated up to 12 hours as topics vary. Prerequisite: Consent of instructor.

NEUR 542 Interdisciplinary Approaches to Neuroscience I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/NEUR/542/)
Introduction for graduate students to the breadth and inter-disciplinary nature of Neuroscience, and to the topic areas investigated broadly by faculty of the Neuroscience Program (NSP). The course emphasizes concepts and methods rather than facts, and includes discussions and career development lectures. Team taught by multiple NSP faculty, senior students and postdocs, the course covers topics on the evolution of the nervous system, and cognitive, behavioral and clinical neuroscience. Same as MCB 542 and PSYC 542. 2 graduate hours. No professional credit.

NEUR 543 Interdisciplinary Approaches to Neuroscience II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/NEUR/543/)
Introduction for graduate students to the breadth and inter-disciplinary nature of Neuroscience, and to the topic areas investigated broadly by faculty of the Neuroscience Program (NSP). The course emphasizes concepts and methods rather than facts, and includes discussions and career development lectures. Team taught by multiple NSP faculty, senior students and postdocs, the course covers topics in cellular, molecular, computational, behavioral and clinical neuroscience as well as neuroengineering. Same as MCB 543 and PSYC 543. 2 graduate hours. No professional credit. Prerequisite: NEUR 542 or consent of instructor.

NEUR 590 Indiv Topics Neuroscience credit: 1 to 16 Hours. **(**https://courses.illinois.edu/schedule/terms/NEUR/590/**)**
Individual topics of research supervised by Neuroscience faculty. Usually taken in one of the eight Neuroscience concentration areas: 1) neuroanatomy, 2) neurophysiology, 3) cognitive and behavioral neuroscience, 4) neurochemistry, neuropharmacology and neurotoxicology, 5) neuroendocrinology and neuroimmunology, 6) developmental genetic and molecular neuroscience, 7) clinical and biomedical neuroscience, 8) computational neuroscience. Typically taken by students before they choose their thesis topic. Approved for S/U grading only. May be repeated in the same or subsequent terms. Prerequisite: Consent of instructor.

NEUR 598 Proseminar in Psychology credit: 0 to 4 Hours. **(**https://courses.illinois.edu/schedule/terms/NEUR/598/**)**
Same as PSYC 598. See PSYC 598.

NEUR 599 Thesis Research credit: 0 to 16 Hours. **(**https://courses.illinois.edu/schedule/terms/NEUR/599/**)**
Research on the thesis topic and preparation of the thesis. Approved for S/U grading only. May be repeated in the same or subsequent terms. Prerequisite: Consent of instructor.

NPRE - NUCLEAR, PLASMA, RADIOLOGICAL ENGINEERING

NPRE Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/NPRE/)

Courses

NPRE 100 Orientation to NPRE credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/NPRE/100/)
Introduction to nuclear, plasma, and radiological engineering. Demonstrations and discussion of nuclear phenomena (reactor operation, plasma behavior, and others). Experiments on radioactive decay and radiation shielding with formal laboratory report and a student project.

NPRE 101 Introduction to Energy Sources credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/101/)
Explanation of energy technologies using an elementary approach presupposing no prior scientific or technical background. Coverage of all energy sources including fossil fueled, solar, hydro, and nuclear power. Integral demonstrations and a tour of the University's power plant. Discussion of energy related incidents with emphasis on environmental, economic, and social impact. Same as ENVS 101.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences
Quantitative Reasoning II

NPRE 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/199/)
May be repeated in separate terms to a maximum of 2 times.

NPRE 200 Mathematics for Nuclear, Plasma, and Radiological Engineering credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/200/)
Introduction to mathematics and computational aspects of nuclear, plasma, and radio logical engineering; eigenvalue/eigenvector problem for nuclear reactor criticality; analytic and numerical solution of radioactive decay chain; analytic and numerical solution for particle diffusion; probability and statistics for radioactive decay and system reliability. Prerequisite: MATH 231.

NPRE 201 Energy Systems credit: 2 or 3 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/201/)
Patterns of energy production and utilization and technical aspects of renewable energy resources, advanced fossil fuel systems, and advanced nuclear systems. Same as GLBL 201. Prerequisite: MATH 220 or MATH 221; one of PHYS 101, PHYS 211, CHEM 104, CHEM 204, ME 200.

NPRE 241 Intro to Radiation Protection credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/241/)
Elements of radiation protection and health physics, emphasizing practical applications. Prerequisite: MATH 220 or MATH 221; one of CHEM 102, IB 150, MCB 150, PHYS 211.

NPRE 247 Modeling Nuclear Energy System credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/247/)
Applications of elementary nuclear physics in nuclear engineering. Nuclear reactor materials and components. Steady-state and transient operation of nuclear reactors. Nuclear energy removal and conversion. Radiation shielding. Prerequisite: Credit for PHYS 211; credit or concurrent registration in CS 101 or 125; credit or concurrent registration in MATH 285.

NPRE 321 Introduction to Plasmas and Applications credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/321/)
Provides an introduction to plasma concepts. Basics covered will include what is a plasma and how a plasma is generated to the different types of plasmas and related underlying concepts such as the sheath, frequencies, drift velocities diagnostics and an introduction to nuclear fusion. There is a practicum component where students receive hands-on experience with plasmas in a laboratory setting with live demonstrations. Prerequisite: MATH 241 and PHYS 212.

NPRE 349 Introduction to NPRE Heat Transfer credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/349/)
Engineering principles in heat and mass transfer with emphasis on applications in NPRE will be covered. Specifically, the focus in this course will be on heat conduction, convection, radiation, and boiling. Prerequisite: MATH 285, ME 200.

NPRE 397 Independent Study credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/397/)
Individual investigations or studies of any phase of nuclear engineering selected by the student and approved by the department. May be repeated. Prerequisite: Consent of instructor.

NPRE 398 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/398/)
Subject offerings of new and developing areas of knowledge in nuclear, plasma, and radiological engineering intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. May be repeated in the same or separate terms if topics vary.

NPRE 402 Nuclear Power Engineering credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/402/)
Principles of utilization of fission energy in nuclear power engineering; includes such topics as fission processes and controlled chain reactions; nuclear reactor types, design principles, and operational characteristics; power reactor design criteria; radiation hazards and radioactive waste treatment; economics; other applications such as propulsion and research reactors. 3 undergraduate hours. 4 graduate hours. Credit is not given for both NPRE 402 and NPRE 247.

NPRE 412 Nuclear Power Econ & Fuel Mgmt credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/412/)
Quantitative analysis of the impact of the nuclear power industry; nuclear fuel cycle and capital costs for thermal and fast reactors; optimization of the use of nuclear fuels to provide the lowest energy costs and highest system performance; comparison between fossil fuel systems, fission systems, and controlled thermonuclear fusion systems. 3 undergraduate hours. 4 graduate hours. Prerequisite: NPRE 402 or NPRE 247. Junior standing is required.

NPRE 413 Nuclear Separations and Fuel Reprocessing credit: 2 or 3 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/413/)
Radionuclide separations are the basis for recycling of nuclear fuel. This class will cover the chemistry and engineering of nuclear separations as used in reprocessing. Students will learn the basics of f-element and fission product chemistry, mathematical algorithms of reprocessing schemes, past, current, and future reprocessing schemes, and the unit operations of reprocessing. After completing this class, the student will understand the chemical and engineering bases behind reprocessing schemes past and present. 2 or 3 undergraduate hours. 2 or 3 graduate hours. Prerequisite: Junior, Senior, or Graduate Standing.

NPRE 421 Plasma and Fusion Science credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/421/)
Physics of plasmas, including particle and fluid descriptions, waves, collisions, stability, and confinement, with applications to controlled thermonuclear fusion reactors, problems in fusion engineering, and astrophysics. 3 undergraduate hours. 3 graduate hours. Prerequisite: For engineering or physical science majors with junior standing.

NPRE 423 Plasma Laboratory credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/423/)
Experiments relating to plasma engineering and fusion energy. Topics in ultra-high vacuum technology rf and dc electric plasma probes, measurements of dc and pulsed magnetic fields, dynamics of a theta pinch, and laser interferometry to measure plasma density. 2 undergraduate hours. 2 graduate hours. Prerequisite: NPRE 421 and NPRE 451.

NPRE 429 Plasma Engineering credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/429/)
Basic principles and examples for adapting and applying the plasma state to solve a number of modern engineering problems. Plasma processing of materials for microelectronics and other uses, lighting, plasma displays, and other technologies. 3 undergraduate hours. 3 graduate hours. Prerequisite: ECE 329 or PHYS 435.

NPRE 430 Advanced Materials in Nuclear Engineering credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/430/)
Development of advanced materials concepts in light water reactor nuclear engineering systems. This includes foundational concepts such as radiation damage, corrosion, and the materials systems found in light water reactors. Advanced concepts include kinetic rate theory, evolution of irradiated microstructures, water chemistry control, stress corrosion cracking, radiation induced segregation, and other phenomenon associated with radiation damage are introduced. Advanced microanalytical analysis techniques will be presented, as will computational approaches applicable to the study of radiation damage in metals. Materials for use in advanced reactor concepts will be presented. 3 undergraduate hours. 3 graduate hours. Prerequisite: NPRE 330.

NPRE 431 Materials in Nuclear Engrg credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/431/)
Development of a materials engineering background in the context of nuclear systems and radiation applications; relation of structure of materials to their physical and mechanical properties; development of phase formation and reaction kinetics from basic thermodynamics principles; charged particle interactions with surfaces; transport concepts of neutral and charged particles in matter; materials performance in nuclear and radiation applications, including radiation damage and effects. 3 undergraduate hours. 3 graduate hours.

NPRE 432 Nuclear Engrg Materials Lab credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/432/)
Experiments relating to materials applications in nuclear engineering and energy systems. Examination of topics in room and elevated temperature mechanical properties of structural materials, corrosion, physical properties, radiation damage and effects, and materials selection in design. 2 undergraduate hours. 2 graduate hours. Prerequisite: Credit or concurrent registration in NPRE 431.

NPRE 435 Radiological Imaging credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/435/)
Physical, mathematical and experimental foundations of radiological imaging techniques, such as typical sources of ionizing radiation, the interactions of radiation with matter, image formation techniques, linear systems theory applied to radiological imaging, and the techniques for tomographic image reconstruction. Includes diagnostic radiological imaging modalities, such as X-ray computed tomography (CT), single photon computed emission tomography (SPECT), positron emission tomography (PET), as well as modern X-ray imaging techniques, such as phase contrast imaging and diffraction-enhanced X-ray imaging. Provides a solid foundation for understanding of modern radiological imaging techniques, and in-depth discussions on the strengths and limitations of various modalities in application to medical, physical, security and environmental imaging. 3 undergraduate hours. 3 graduate hours. Prerequisite: NPRE 446.

NPRE 441 Radiation Protection credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/441/)
Sources of nuclear radiation; ionization and energy deposition in matter with an emphasis on biological systems; principles of dosimetry; determination of exposure and limits for internal and external emitters; basic shielding calculations. 4 undergraduate hours. 4 graduate hours. Prerequisite: NPRE 446.

NPRE 442 Radioactive Waste Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/442/)
Radiation and radiological concepts and measurement, the fuel cycle and waste classification, Part 61, state and federal regulations and regulatory agencies, radiochemistry and the environmental fate of radionuclides, uranium-related wastes, low-level wastes, high-level wastes, used fuel reprocessing, private fuel storage, waste package stability, risk assessment, geologic repositories, transporting radioactive wastes, decommissioning wastes, transmutation, an international perspective on radioactive waste management, and the global nuclear energy partnership. 3 undergraduate hours. 3 graduate hours. Prerequisite: MATH 231; PHYS 102 or PHYS 212.

NPRE 444 Nuclear Analytical Methods Lab credit: 2 or 3 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/444/)
Experiments relating to nuclear analytical methods and techniques. Emphasis on neutron activation analysis, energy dispersive x-ray fluorescence and particle spectroscopy. Use of radiation for medical and materials imaging. 2 or 3 undergraduate hours. 2 or 3 graduate hours. Credit of 2 hours is given if NPRE 451 or equivalent has been taken. Prerequisite: CHEM 102 and NPRE 446.

NPRE 445 Interaction of Radiation with Matter credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/445/)
The classical and quantum theories of the interaction of radiation with matter are the core components of nuclear science and engineering. In this course, we provide a quantitative introduction to introductory quantum mechanics, fundamentals of atomic and nuclear physics, and interaction of radiation (charged particles, photons, and neutrons) with matter. 4 undergraduate hours. 4 graduate hours. Prerequisite: NPRE 200, MATH 285, PHYS 212.

NPRE 446 Radiation Interact w/Matter I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/446/)
Experimental and theoretical foundations of interaction of neutrons, photons, and charged particles with matter. Emphasis on topics that underlie the following applications: radiation detection, biological effects and radiation dosimetry, radiation damage and nuclear materials, neutron activation analysis, and fission and fusion energy systems. Classical theory of charged particle cross sections. Introductory quantum mechanics. Exact and numerical solutions of the Schroedinger equation. Quantum theory of cross sections. Photon interactions with atomic electrons and nuclei. Radioactive-series decay. Computer assignments illustrate fundamental concepts. 3 undergraduate hours. 3 graduate hours. Credit is not given to NPRE majors for graduate hours. Prerequisite: MATH 285 and ME 200.

NPRE 447 Radiation Interact w/Matter II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/447/)
Continuation of NPRE 446. Quantum theory of ionization of matter by charged particles. Nuclear models and structure. Alpha decay, fission and fusion reactions. Beta and gamma decay. Nuclear reactions. Radiation damage effects. Special topics. Computer assignments to illustrate fundamental concepts. 3 undergraduate hours. 3 graduate hours. Prerequisite: NPRE 446.

NPRE 448 Nuclear Syst Engrg & Design credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/448/)
Engineering principles underling nuclear systems designed with emphasis on nuclear power reactors. Materials for nuclear systems. Energy generation and removal in single- and two-phase flows. Reactor and component control systems and nuclear fuel reloading patterns. 4 undergraduate hours. 4 graduate hours. Prerequisite: MATH 285, ME 200, and NPRE 455.

NPRE 449 Nuclear Systems Engineering and Design credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/449/)
Engineering principles underlying nuclear power plant components and systems will be covered. Specifically, focus in this course will be on energy generation, heat conduction, single- and two-phase flows, and on energy removal in single- and two-phase flows. Equal emphasis will be placed on component and system level treatment, as well as on both the underlying theory and its applications to practical design and maintenance problems encountered in the field of nuclear engineering. 3 undergraduate hours. 3 graduate hours. Prerequisite: NPRE 349, NPRE 455.

NPRE 451 NPRE Laboratory credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/451/)
Radiation detection and instrumentation; radiation dosimetry and shielding; basic measurements in nuclear engineering; engineering applications; micro computer data acquisition and experimental control. 3 undergraduate hours. 3 graduate hours. Prerequisite: NPRE 446.

NPRE 452 Advanced Radiological Science Lab credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/452/)
Advanced laboratory course on current radiation detection methods that exploit modern physics concepts and are applied in radiological science research. 2 undergraduate hours. 4 graduate hours. Prerequisite: NPRE 451.

NPRE 455 Neutron Diffusion & Transport credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/455/)
Neutron migration, neutron slowing down and thermalization; neutron continuity equation, multigroup diffusion theory, homogeneous and heterogeneous medium, thermal and fast assemblies; numerical methods for multigroup diffusion equations; reactor dynamics perturbation theory; reactivity coefficients; introductory transport theory. 4 undergraduate hours. 4 graduate hours. Prerequisite: NPRE 247.

NPRE 457 Safety Anlys Nucl Reactor Syst credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/457/)
Basic safety philosophy in nuclear reactor systems; brief review of nuclear reactor systems; regulatory processes; siting considerations; safety problems related to reactor dynamics; evaluation of postulated accidents; risks associated with nuclear fuel cycle; methods of systems safety analysis. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: NPRE 402 or NPRE 247.

NPRE 458 Design in NPRE credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/458/)
Design in nuclear, plasma, and radiological engineering systems; basic principles of definition, organization, constraints, modeling and optimization of system design; case studies; class design projects applying these basic principles. 4 undergraduate hours. 4 graduate hours. Prerequisite: NPRE 448.

NPRE 461 Probabilistic Risk Assessment credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/461/)
Multidisciplinary theories and techniques of risk, safety, and reliability of complex systems and state-of-the-art Probabilistic Risk Assessment (PRA), which provides input for risk-informed decision-making for design, operation, and regulatory oversight in diverse high-consequence industries such as nuclear power, aviation, space, chemical processes, oil and gas, and healthcare. Topics include: Systematic Risk Scenario Modeling, Consequence Analysis, Bayesian Updating, Bayesian Belief Network, Binary Decision Diagram, Uncertainty Propagation, Hardware Reliability, Human Error Modeling, Failure Causal Modeling, Maintenance and Repair Modeling, Risk Importance Ranking, and Data Analytics. PRA and Reliability Engineering software codes will be utilized for assignments. 3 undergraduate hours. 4 graduate hours. Prerequisite: Junior, Senior or Graduate Standing in any Engineering Department.

NPRE 470 Fuel Cells & Hydrogen Sources credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/470/)
The role of hydrogen as a global energy form, hydrogen production by nuclear, fossil and renewable energy sources; hydrogen handling, safety; transportation and storage methods including high-pressure, cryogenic, metal hydrides and chemical hydrides; basic science and technology of fuel cells, including electrochemical processes; fuel cell thermodynamics; low- and high-temperature fuel cells; applications including portable electronics, automotive vehicles, distributed and back-up power, and space power. 3 undergraduate hours. 3 graduate hours. Prerequisite: CHEM 102, MATH 285, and PHYS 212.

NPRE 475 Wind Power Systems credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/475/)
Overview of wind energy systems; historical development, safety aspect, environmental considerations, wind properties and measurement, site selection, and wind turbine design; transmission systems considerations; mechanical, electrical, control aerodynamic and environmental engineering of modern wind turbines; fatigue failure; annual power production; economics and environmental aspects and accident prevention and mitigation; computational fluid dynamics (CFD) analysis of wind flow and blade interactions; energy storage options; hydrogen production; electrical power transmission issues; licensing issues; alternative wind energy systems; design project involving a wind farm or the construction of a specific type of wind turbine based on a wind park site visit. 3 undergraduate hours. 4 graduate hours. Prerequisite: CS 101, MATH 241; one of CHBE 421, ECE 110, ECE 205, ME 310, TAM 335.

NPRE 480 Energy and Security credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/480/)
Security and supplies of energy, mineral resources, and water. Evolution of the importance of various fuels in conflicts (including coal, oil, uranium, and natural gas) starting with the Franco-Prussian Wars. Theories of international conflict and examination of the role of individual leaders versus institutional factors in the precipitation and outcome of pivotal wars. Econometric analyses relevant to past and projected future energy use. Same as GLBL 480 and PS 480. 3 undergraduate hours. 3 graduate hours. Prerequisite: Composition I and Quantitative Reasoning I.

NPRE 481 Writing on Technol & Security credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/481/)
Development of writing skills in standard computer, desktop publishing, and electronic publishing formats. On themes such as, global and regional security environments, arms control, nuclear energy, and climate change. For graduate credit, writing projects include documentation of computational work using software appropriate for typesetting of mathematical formulas. Same as GLBL 481. 3 undergraduate hours. 3 or 4 graduate hours. 4 graduate hours with consent of instructor.
This course satisfies the General Education Criteria for:
Advanced Composition

NPRE 483 Seminar on Security credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/NPRE/483/)
Preparation of reports on a set of introductory lectures and student choices from various on-campus seminar series relevant to technology of domestic and international security and the regional and international contexts that influence the nature of security problems. Same as GLBL 483. 1 undergraduate hour. 1 graduate hour. May be repeated in separate terms to a maximum of 2 hours. Prerequisite: Composition I.

NPRE 498 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/498/)
Subject offerings of new and developing areas of knowledge in nuclear, plasma, and radiological engineering intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated in the same or separate terms if topics vary.

NPRE 501 Fundamentals of Nuclear Engrg credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/501/)
Background for advanced work in nuclear engineering; problems in materials, heat transfer, and fluid flow; special emphasis on basic ideas and the mathematical similarity of problems in heat transfer, fluid flow, and neutron diffusion. Lecture-problem format. Prerequisite: NPRE 247; credit or concurrent registration in NPRE 446.

NPRE 511 Nuclear Reactor Heat Transfer credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/511/)
Selected topics in nuclear reactor heat transfer: thermal analysis of fuel elements under steady and transient operation; convective energy transport from reactor cores; two-phase flow and boiling in reactor cores; liquid metal coolant systems. Prerequisite: NPRE 501.

NPRE 521 Interact of Radiation w/Matter credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/521/)
Topics in the interaction of radiation with matter of interest to the nuclear engineering field: the kinematics, kinetics, and cross sections involved in the interaction of charged particles, electromagnetic radiation, and neutrons. Prerequisite: NPRE 446.

NPRE 522 Controlled Fusion Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/522/)
Development of plasma models for fusion analysis; treatment of plasma heating and confinement with applications to current experiments; energy balances; energy extraction. Prerequisite: NPRE 421.

NPRE 523 Plasma Waves credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/523/)
The course covers the fundamentals of plasma waves and plasma heating, including an overview of the techniques and the technologies used in thermonuclear fusion reactors for heating and current drive. The first part of the semester covers the linear theory of plasma waves, including: the cold plasma tensor, cold dispersion relation, normal modes, frequency plots, Clemmow-Mullaly-Allis diagram, acoustic modes, kinetic theory of plasma waves, hot tensor, Bernstein modes, electrostatic damping, cyclotron modes. The course then offers an introduction to non-linearities, with major emphasis on the quasi-linear theory as a natural extension from the kinetic theory of plasma waves. The final portion of the course provides a qualitative and quantitative description of the major techniques used to deliver energy and momentum to a plasma (heating and current drive), namely ion cyclotron heating, electron cyclotron, lower hybrid, electron Bernstein, and neutral beam injection. Examples of heating technologies are provided for both thermonuclear and industrial applications. The course comprises simple analytical and computational homework assignments. 4 graduate hours. No professional credit. Prerequisite: ECE 329 or PHYS 435; NPRE 421.

NPRE 526 Plasma-Material Interactions credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/526/)
The course will introduce the student to fundamental concepts in plasma-materials interactions (PMI) and extend these concepts into practical methods for PMI. The course connects the concepts of surface science to irradiation-driven modification used in plasma nanosynthesis of advanced materials and PMI phenomena encountered in extreme environments (e.g. nuclear fusion, star and planetary formation, among others). The course is designed to lay the foundation of mastering selected techniques and methods for PMI. The organization of this course will: 1) prepare the student with the fundamentals aspects of plasma-surface interaction and surface science, 2) apply these fundamental concepts and expand into PMI of nanosynthesis and extreme plasma-based environments and 3) master methods and characterization techniques used in plasma-material interactions including: techniques for in-situ analysis and simulated plasma experiments. 4 graduate hours. No professional credit. Prerequisite: NPRE 429 or equivalent.

NPRE 527 Plasma Technology of Gaseous Electronics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/527/)
This course will help students to develop an advanced theoretical understanding of Low-Temperature Plasma (LTP) processing systems, with an emphasis on system design. Whereas prerequisite coursework focused on developing a framework for the analysis of LTP systems, in this course students will build upon that foundation to develop more advanced theoretical models for LTP dynamics, including electron collisions, plasma transport, sheath dynamics, and plasma and surface chemistry. Students will be able to apply this advanced LTP theory for the design of systems for etching, advanced deposition, and others important in modern materials processing applications. Same as ECE 523. 4 graduate hours. No professional credit. Prerequisite: ECE 452 or PHYS 485 or NPRE 429.

NPRE 529 Interact of Rad w/Matter II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/529/)
Continuation of NPRE 521. Multiple events and computational methods of the interaction of radiation (heavy and light charged particles, electromagnetic wave, photons, and neutral particles) with matter. Same as CSE 529. Prerequisite: NPRE 521 or MSE 500.

NPRE 531 Nuclear Materials credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/531/)
Metallurgical principles applied to materials problems in nuclear engineering; topics in production of uranium, corrosion, radiation damage, fuel element fabrication, and fuel reprocessing. 4 graduate hours. No professional credit. Prerequisite: NPRE 430.

NPRE 554 Independent Lab Investigations credit: 1 to 8 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/554/)
Individual experimental investigation in areas of nuclear, plasma, and radiological engineering. May be repeated. Prerequisite: Consent of instructor.

NPRE 555 Reactor Theory I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/555/)
Advanced development of neutron transport theory; neutron slowing-down and resonance absorption; approximations to the transport equation; direct numerical methods and other techniques of approximation theory applied to the neutron transport equation; advanced topics. Prerequisite: NPRE 455 (waived for Physics majors).

NPRE 556 Reactor Theory II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/556/)
Advanced treatment of the theory of slow-neutron scattering, neutron thermalization, Doppler broadening, fuel depletion and fuel loadings, properties of neutron migration operators, and mathematical neutron transport theory; interpretation of related experiments; advanced topics. Prerequisite: NPRE 521 and NPRE 555 (waived for Physics majors).

NPRE 558 Advanced Design in NPRE credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/558/)
Classroom exercise in the conceptual design of a nuclear engineering system involving a synthesis of previous learning in the field of nuclear engineering and related disciplines. The design includes all necessary ingredients for the system, such as core, thermal-hydraulics, shielding, material selection, and control. Prerequisite: NPRE 448 and NPRE 501.

NPRE 560 Reactor Kinetics and Dynamics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/560/)
Diffusion and transport neutron balances with delayed neutrons; formal development of the point reactor kinetics equations; analytic and numerical solutions of the point reactor kinetics equations; space-dependent, multigroup reactor kinetics; reactivity measurements; reactor noise analysis; advanced topics. Prerequisite: NPRE 555.

NPRE 561 Advanced Risk Analysis for Technological Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/561/)
This course covers advanced modeling techniques for Probabilistic Risk Assessment (PRA), which provides input for risk-informed decision-making in design, operation, and regulatory oversight of complex technological systems such as nuclear power, space, chemical processes, oil and gas. Main topics: risk scenario modeling, common cause failure analysis, Bayesian updating, uncertainty analysis, Bayesian Belief Network, simulation-based PRA, probabilistic physics of failure, human reliability analysis, and expert elicitation & aggregation. PRA and Bayesian analysis software codes are utilized for assignments. 4 graduate hours. No professional credit. Prerequisite: NPRE 461 or NPRE 457 or GE 411 or CEE 491.

NPRE 595 Student Research Seminar credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/NPRE/595/)
Seminar on current research and development activities in NPRE related fields, presented by students. 1 graduate hour. No professional credit. Approved for Letter and S/U grading. May be repeated in separate terms up to 2 hours.

NPRE 596 Seminar in Nuclear Sci & Engrg credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/NPRE/596/)
Lectures and discussions on current work in research and development in nuclear engineering and related fields by staff, advanced students, and visiting lecturers. Approved for S/U grading only. May be repeated.

NPRE 597 Independent Study credit: 1 to 8 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/597/)
Individual study in areas of nuclear engineering and closely related fields not covered by regular course offerings. The work is carried out under the supervision of a member of the faculty. May be repeated. Prerequisite: Consent of instructor.

NPRE 598 Special Topics credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/598/)
Subject offerings of new and developing areas of knowledge in nuclear, plasma, and radiological engineering intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. May be repeated in the same or separate terms if topics vary.

NPRE 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/NPRE/599/)
Approved for S/U grading only. May be repeated.

NUTR - NUTRITIONAL SCIENCES

NUTR Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/NUTR/)

Courses

NUTR 420 Nutritional Aspects of Disease credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NUTR/420/)
Same as FSHN 420. See FSHN 420.

NUTR 422 Companion Animal Nutrition credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NUTR/422/)
Same as ANSC 422. See ANSC 422.

NUTR 424 Pet Food & Feed Manufacturing credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NUTR/424/)
Same as ANSC 424. See ANSC 424.

NUTR 426 Biochemical Nutrition I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NUTR/426/)
Same as FSHN 426. See FSHN 426.

NUTR 427 Biochemical Nutrition II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NUTR/427/)
Same as FSHN 427. See FSHN 427.

NUTR 428 Community Nutrition credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NUTR/428/)
Same as FSHN 428. See FSHN 428.

NUTR 440 Applied Statistical Methods I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NUTR/440/)
Same as ABE 440, ANSC 440, CPSC 440, FSHN 440, and NRES 440. See CPSC 440.

NUTR 500 Nutritional Sciences Seminar credit: 0 or 1 Hours. (https://courses.illinois.edu/schedule/terms/NUTR/500/)
Discussions of current problems in nutritional sciences. Approved for S/U grading only. May be repeated. Required of all graduate students in the nutritional sciences program.

NUTR 510 Topics in Nutrition Research credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/NUTR/510/)
Current topics in nutritional sciences research. Same as ANSC 525 and FSHN 510. 1 to 3 graduate hours. No professional credit. May be repeated in the same term to a maximum of 3 hours and in separate terms to a maximum of 9 hours. Prerequisite: Advanced Biochemistry.

NUTR 511 Regulation of Metabolism credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NUTR/511/)
Biochemical and molecular regulatory mechanisms of macronutrient metabolism under various physiological conditions in mammalian species, including humans. Same as ANSC 521 and FSHN 511. 4 graduate hours. No professional credit. Prerequisite: MCB 450, MCB 244, MCB 246 and FSHN 426/ANSC 520 (or equivalent courses in biochemistry, physiology and nutrition). Second year graduate standing or above, or consent of instructor.

NUTR 520 Protein and Energy Nutrition credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NUTR/520/)
Same as ANSC 520. See ANSC 520.

NUTR 521 Molecular Basis of Metabolic Syndrome and Weight Management credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/NUTR/521/)
Same as FSHN 521. See FSHN 521.

NUTR 522 Function and Metabolism of Essential Fatty Acids and Cholesterol credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/NUTR/522/)
Same as FSHN 522. See FSHN 522.

NUTR 523 Techniques in Animal Nutrition credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NUTR/523/)
Same as ANSC 523. See ANSC 523.

NUTR 524 Nonruminant Nutrition Concepts credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/NUTR/524/)
Same as ANSC 524. See ANSC 524.

NUTR 526 Adv Companion Animal Nutrition credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NUTR/526/)
Same as ANSC 526. See ANSC 526.

NUTR 527 Advanced Vitamins and Minerals: Regulations of Metabolism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NUTR/527/)
Same as FSHN 527. See FSHN 527.

NUTR 530 Childhood Obesity I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NUTR/530/)
Introduction of scientific evidence underlying the multifactorial causes and consequences of childhood obesity in the U.S. and worldwide. Examination of existing theories from transdisciplinary perspectives will be stressed. Same as CHLH 530, FSHN 530, HDFS 551, KIN 530, SOCW 570. Approved for letter and S/U grading.

NUTR 531 Childhood Obesity II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/NUTR/531/)
The current public health recommendations for the prevention of childhood obesity will be presented and the evidence for efficacy of existing interventions will be thoroughly examined. At the end of the semester, students will work in teams to synthesize the best practices and propose how they can be integrated into an intervention within a transdisciplinary context. Same as CHLH 531, FSHN 531, HDFS 552, KIN 531, SOCW 571. Approved for both letter and S/U grading. Prerequisite: NUTR 530.

NUTR 550 Grantsmanship and Ethics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NUTR/550/)
Design and implementation of experimental protocols in nutrition. Examines the scientific, regulatory, and ethical context for conducting research in nutrition. The focus of the course will be the writing and evaluation of a simulated peer-reviewed grant proposal. Same as FSHN 550. 3 graduate hours. No professional credit. Prerequisite: Advanced nutritional biochemistry and statistics.

NUTR 561 Advanced Clinical Nutrition credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/NUTR/561/)
Basic pathophysiological changes associated with major organ system failure and appropriate nutritional support and treatment. Provides medical orientation needed for participating in medical nutritional rounds. Same as FSHN 520. 2 graduate hours. No professional credit. May be repeated in the same term up to 4 hours and separate terms up to 8 hours. Prerequisite: Upper division course in physiology and a course in clinical nutrition.

NUTR 580 Ethics in Research, IRB and IACUC credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/NUTR/580/)
Same as FSHN 580. See FSHN 580.

NUTR 590 Disciplinary Seminar credit: 0 to 2 Hours. (https://courses.illinois.edu/schedule/terms/NUTR/590/)
Discussions of current research, literature and careers pertaining to disciplinary specializations within the Division of Nutritional Sciences. 0 to 2 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated in the same or different terms, to a maximum of 2 hours for Masters students and 4 hours for PhD students.

NUTR 591 Animal Sciences Seminar credit: 0 to 2 Hours. (https://courses.illinois.edu/schedule/terms/NUTR/591/)
Same as ANSC 590. See ANSC 590.

NUTR 593 Individual Topics in Nutrition credit: 1 or 2 Hours. (https://courses.illinois.edu/schedule/terms/NUTR/593/)
For students majoring in nutritional sciences who wish to undertake individual studies of a nonthesis nature in problems or topics not covered in other courses; may be taken under the direction of any member of the nutritional sciences faculty, with the exception of the student's own thesis adviser. 1 or 2 graduate hours. No professional credit. May be repeated within the same or different terms to a maximum of 2 hours per degree program. Prerequisite: Consent of instructor.

NUTR 599 Thesis Research credit: 0 to 12 Hours. (https://courses.illinois.edu/schedule/terms/NUTR/599/)
Approved for S/U grading only. May be repeated.

LEAD - ORGANIZATIONAL & COMMUNITY LEADERSHIP

LEAD Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/LEAD/)

Courses

LEAD 140 Harnessing Your Interpersonal Intelligence credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/LEAD/140/)
Students will expand their capacity for communication, collaboration and team leadership to navigate the complexities of the university and beyond. In this course, students will learn communication strategies to work with others and practice self-awareness, self-management, and interpersonal communication skills in a supportive setting to reach their personal potential as emerging leaders. Prerequisite: Freshman, Sophomore, or Junior Standing Required.

LEAD 170 Leading Student Organizations credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/LEAD/170/)
Students will develop their capacity for leadership in university and volunteer organizations. In this course, students will learn about organizational structures, elements of effective organizations, strategies for leading other people, and applications beyond formal student organizations. Prerequisite: Freshman, Sophomore, or Junior Standing Required. Not for Agricultural Leadership Education majors or Leadership Studies minors (for non-majors and non-minors).

LEAD 230 Leadership Communications credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LEAD/230/)
Application of communication skills used in the dissemination of information by public or organizational leaders in contemporary times. Founded on empirical leadership studies and through use of experiential learning activities, presentations, projects, and examinations, students will consider how identity and the setting impact what they write, say, and do when communicating a message.
This course satisfies the General Education Criteria for:
Advanced Composition
Social Beh Sci - Soc Sci

LEAD 260 Foundations of Leadership credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LEAD/260/)
Study of leadership theories and their application to the development of leadership skills. Students develop a personal philosophy of leadership, prepare a development plan for enhancing leadership skills, and begin a portfolio to record their leadership growth. Explores topics concerning diversity, ethics, and leadership/follower roles.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

LEAD 310 Prof Dev in Leadership Ed credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/LEAD/310/)
Provides agricultural leadership education students with non-formal professional experiences prior to enrollment in the student internship. A minimum of 32 hours of observation and participatory experiences with professionals in extension/outreach, business and industry, political and/or communications/human resources are required for satisfactory completion of this class.

LEAD 320 Training Needs Assessment credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LEAD/320/)
Students in this course will be equipped to analyze an employee and/or organization's performance to determine the training needs for a business or organization. Helps learners determine whether or not training is the solution to a job performance problem. Credit is not given for LEAD 320 if credit for AGED 280 or LEAD 280 has been given.

LEAD 321 Training and Development credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LEAD/321/)
Students will learn to assess, design, develop, implement, and evaluate a training program in agricultural and non-agricultural industries. Topics will emphasize the theory of training and development, methods of assessing training needs and learning styles, design of effective training, presentation skills, and program evaluation. Different types of training programs will be examined, including orientation, skills training, team building, management development, and diversity training. Students will create and present a training program for an actual client utilizing the training design process. Credit is not given for LEAD 321 if credit for AGED 300 or LEAD 300 has been given. N/A Prerequisite: AGED 280/LEAD 280/LEAD 320.

LEAD 340 Leadership Ethics & Society: Addressing Contemporary Challenges credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LEAD/340/)
Leadership is a relational process which engages social actors in an exchange of power, influence, and will. This exchange is not always equal—however—raising important questions such as: Why do some leaders misuse their power? What are the consequences of destructive leadership? Why are some groups afforded more power and privilege in U.S society than others? Is it okay for a small group of powerful people to make decisions that affect everyone else?
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

LEAD 360 Advanced Leadership Studies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LEAD/360/)
Examines current and emerging leadership theories and their practical application in real-world settings. Continues exploration of advanced leadership theories begun in AGED 260, and includes opportunities for self-assessment and person leadership development. Same as AGED 360. Prerequisite: AGED 260.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

LEAD 380 Leadership in Groups and Teams credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/LEAD/380/)
Theory and practice of group and team leadership, including leadership assessment, group dynamics, group process, goal-setting, conflict management and resolution, leadership skill development, and case study analyses. Students engage in group activities throughout the semester. Prerequisite: LEAD 260 and completion of the General Education Composition I requirement.

LEAD 440 Interpersonal Intelligence for Professional Success credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/LEAD/440/**)**
Students will learn theoretical elements and practical strategies to solve problems, negotiate, and navigate complex situations as an effective leader. This course is designed for students interested in developing their capacity for collaboration and team leadership by addressing the unique challenges facing professionals in business and academic research teams. Whether landing a professional internship, preparing for graduate school, or professional employment, students will develop the essential interpersonal intelligence skills to influence others. 2 undergraduate hours. 2 graduate hours. Prerequisite: Graduate Student or Senior Standing Required.

LEAD 460 Critical Approaches to Leadership Practice credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/LEAD/460/**)**
This advanced undergraduate and graduate course reviews the significant leadership theories and models covered in earlier courses and applies critical social theory to deconstruct common concepts of effective leaders and leadership, as well as how these concepts might be more productively reconstructed. Students will gain a deeper appreciation and understanding of the challenges and rewards of leadership in contemporary society. 3 undergraduate hours. 3 graduate hours. Approved for Letter and S/U grading. Prerequisite: LEAD 260; LEAD 380. For ALEC majors, Leadership Studies minors and Graduate students.

LEAD 470 Leading Professional Organizations and Communities credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/LEAD/470/**)**
Students will develop their capacity for leadership in their current and future professional positions in business and academic research teams, as well as within their broader community. This course's activities are designed to help students understand organizational structures, effective organizations, leading other people, and application of systems thinking beyond formal organizations to communities and society. Same as AGED 470. 2 undergraduate hours. 2 graduate hours. Prerequisite: Graduate Student or Senior Standing Required. Not intended for Agricultural Leadership Education majors or Leadership Studies minors (for non-majors and non-minors).

LEAD 480 Collaborative Leadership credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/LEAD/480/**)**
Leadership operates within the context of community. The course will teach the research, theory, and practice of building effective community collaborations to deal with complex societal issues. A collaborative framework will be delivered by which students apply their knowledge of person, organizational, and community leadership to real-world problems. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: LEAD 260 or equivalent.

LEAD 560 Developmental Leadership and Supervision in Professional Organizations credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/LEAD/560/**)**
Same as AGED 560. See AGED 560.

PATH - PATHOBIOLOGY

PATH Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/PATH/)

Courses

PATH 190 Discovery Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/PATH/190/)
May be repeated.

PATH 290 Undergraduate Research credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/PATH/290/)
Laboratory and/or field studies selected in consultation with a faculty mentor. May be repeated to a maximum of 10 hours. Prerequisite: Consent of instructor.

PATH 394 Pathobiology credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/PATH/394/)
To be used to designate a trial or experimental course for five or more students. It is designed to be an undergraduate course. A course can be taught under this designation two times within a two-year period and cannot be renewed as PATH 394 course. May be repeated to a maximum of 8 hours if topics vary. Prerequisite: Consent of instructor.

PATH 410 Comparative Immunobiology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PATH/410/)
Same as ANSC 450 and MCB 442. See ANSC 450.

PATH 433 Virology & Viral Pathogenesis credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PATH/433/)
Emphasizes basic principles of virus structure and replication, virus-cell interactions and virus-host interactions that underlie the molecular biology, pathogenesis, and transmission of viral disease. Same as MCB 433. 3 undergraduate hours. 3 graduate hours. Prerequisite: MCB 300 or MCB 354, or consent of instructor.

PATH 439 Health Applications of GIS credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PATH/439/)
Students use spatial technologies and data to address issues of health. Topics include disease outbreak surveillance and response, environmental factors such as climate and socio-economic context, and the medical and other data needed to spatial analysis of health information. Application-based learning and class lectures are complemented by readings, guest lectures and class discussions. Geographic information system and global positioning system use is covered with examples drawn from public and veterinary health. Same as GEOG 439 and CHLH 439. 3 undergraduate hours. 3 graduate hours. Approved for letter and S/U grading. Prerequisite: An introductory statistics course such as ACE 261, CHLH 244, ECON 202, GEOG 280 or equivalent.

PATH 460 Biology of Emerging Infect Dis credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PATH/460/)
Discusses the biology of emerging and re-emerging infectious disease pathogens; examples of various bacterial, parasitic, and viral pathogens are presented to characterize the diverse mechanisms and factors that enable these agents to emerge; possible corrective and/or preventative approaches are explored. No undergraduate credit. 3 graduate hours. Prerequisite: VM 607 or PATH 433; or consent of instructor.].

PATH 474 Principles of Epidemiology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PATH/474/)
Same as CHLH 474 and ENVS 474. See CHLH 474.

PATH 494 Pathobiology credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/PATH/494/)
To be used to designate a trial or experimental course for five or more students. A course can be taught under this designation two times within a two-year period and cannot be renewed as a PATH 494 course. 1 to 4 undergraduate hours. 1 to 4 graduate hours. Approved for letter and S/U grading. May be repeated to a maximum of 8 hours if topics vary. Prerequisite: Consent of instructor.

PATH 511 Seminar in Prod/Pop Medicine credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/PATH/511/)
Discussion of selected topics and journal articles related to production and population medicine, i.e. health and disease control/prevention decisions that are based on improving productivity, profitability, and maintaining populations of animals. Requires presentation of a formal seminar to receive a letter grade. Same as VCM 511. 1 graduate hour. 1 professional hour. Approved for letter and S/U grading. May be repeated to a maximum of 4 hours. Prerequisite: Graduate standing in CVM; VM 608 or equivalent epidemiology course (requires third year standing in the professional curriculum) and consent of instructors; for graduate students outside CVM, consent of instructors required.

PATH 513 Biomed Grant Proposal Writing credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/PATH/513/)
The objective of this course is to develop skills in grant seeking and proposal writing. Topics include identification of funding sources, writing style, setting a timeline for proposal preparation, the components of a grant application, research compliance, scientific integrity, the review process, and strategies for dealing with critiques and proposal resubmission. Due to the nature of this course, enrollment will be limited. Prerequisite: Consent of instructor.

PATH 514 Molec Mech Bact Pathogenesis credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/PATH/514/)
Introduction of current research literature on host-microbe interactions. The molecular basis for disease arising from these interactions will be stressed. 2 graduate hours. 2 professional hours. Prerequisite: One or more 400- or 500-level courses in microbiology, immunology, or biochemistry, and consent of instructor.

PATH 515 Mechanisms Microbial Infection credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PATH/515/)
Newer concepts of host-microorganism relations; emphasis on the dynamics and pathogenic mechanisms of microorganisms, immune responses and defense factors of the host, and pathogenesis of specific infections. Lectures, discussions, laboratory, and special problems. Prerequisite: MCB 426 or VM 605, or equivalent; consent of instructor.

PATH 516 Epidemiology Infectious Dis credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PATH/516/)
Ecology of infection and disease; spread of disease and modes of transmission; methods of control; socioeconomic consideration; selected diseases: malaria, Lyme disease, anaplasmosis, schistosomiasis, salmonellosis, pseudorabies, AIDS. Student presentations. Prerequisite: Epidemiology class (VM 608 or equivalent), or consent of instructor.

PATH 517 Principle/Method Epidemiology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PATH/517/)
Course covers principles of theoretical and applied epidemiology, with examples from veterinary and human medicine. The aim of the course is to integrate epidemiologic concepts and quantitative methodology in order to evaluate disease risk and treatment options at the individual and population levels. Topics include causal inference, epidemiologic study design, evaluation of bias, outbreak investigation, and special areas within epidemiology. Same as CHLH 517. Prerequisite: Graduate student standing or consent of instructor.

PATH 518 Concepts/Topics Immunology credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/PATH/518/)
Study of newer concepts and theories in the field of immunology, with major emphasis on critical review of the primary literature. Topics include: Innate immunity, MTTC, immune regulation, tolerance, autoimmunity, antibodies, and immunopathogenesis of infectious diseases. Lectures and discussion. Same as MCB 586. Prerequisite: Consent of instructor; MCB 408 recommended.

PATH 519 Mechanisms Viral Pathogenesis credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PATH/519/)
Lecture-discussion on topics of molecular mechanisms of viral pathogenesis. Mechanisms of infection, virulence, viral spread, interaction with the immune system, persistence and other host-parasite interactions are covered using modern literature and in depth exploration of several animal virus systems. Same as MCB 561. Prerequisite: PATH 433 or VM 607 or consent of instructor.

PATH 520 Applied Epidemiology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PATH/520/)
Same as CHLH 578. See CHLH 578.

PATH 521 Biophysics of Viruses credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/PATH/521/)
This is an interdisciplinary graduate course. The course includes lectures and discussions of advanced topics in physical virology. The course integrates fundamentals in molecular virology with the latest accounts of relevant biophysics. Critical reviews of primary research literature, experimental approaches and design, and data interpretation are emphasized. 2 graduate hours. No professional credit. Prerequisite: Graduate standing.

PATH 524 Biostatistics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PATH/524/)
Application of statistical methods to epidemiology, clinical and diagnostic medicine, and laboratory biomedical experiments. Topics include descriptive statistics and graphics, reliability, sample size estimation, contingency table analysis, analysis of group differences, survival analysis, correlation and linear regression. Emphasizes use of computerized statistical software in biomedical data analysis. 4 graduate hours. 4 professional hours. Credit is not given for both PATH 524 and either CPSC 440 or EPSY 480.

PATH 525 Statistics in Epidemiology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PATH/525/)
Same as CHLH 527 and ENVS 527. See CHLH 527.

PATH 527 Parasitology/Epidemiology Sem credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/PATH/527/)
Discussion of selected historic and current literature related to parasitology. May be repeated to a maximum of 2 hours. Prerequisite: Credit or concurrent registration in VM 607.

PATH 528 Multivariate Biostatistics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PATH/528/)
The application of multivariate data analysis to biology, agriculture, and medicine. Includes principal components and factor analysis, multivariate analysis of variance, discriminate analysis, cluster analysis, and multidimensional scaling. Specific applications include clinical diagnosis, nutritional and physiological profile analysis, ecological niche analysis, and patterns of genetic relatedness using molecular genotyping. Computer exercises using standard statistical software are used throughout. Students will also have individual projects and report their analysis in class presentations. Same as IB 508. Prerequisite: A course in multiple linear regression (PATH 591 or equivalent).

PATH 541 Diseases Hemato & Lymph Tissue credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PATH/541/)
Course covers the benign reactive and neoplastic diseases of the bone marrow and lymphoid systems. A comparative approach will be taken with diseases considered from both human and animal aspects utilizing current information on causation, genetic, phenotypic, and morphologic characteristics. Prerequisite: Graduate student standing or consent of instructor. Preference for enrollment will be given to candidates with DVM degrees or medical scholars.

PATH 542 Ocular Pathology credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/PATH/542/)
This course is aimed at veterinary pathology and ophthalmology residents. The course would also be open to interested UIUC medical students. The course involves examination and discussion of microscopic lesions of clinical veterinary ophthalmology cases through examination of clinical images, glass slides, and digital microscopic images. Students meet weekly concurrently with pathologists and ophthalmologists and either present current diagnostic cases, mystery cases, or lead a topic discussion related to ocular pathology. Same as VCM 542. 1 graduate hour. No professional credit. May be repeated in separate terms up to 9 hours, if topics vary. Prerequisite: Veterinary anatomic pathology residents or veterinary ophthalmology residents and interested UIUC medical students.

PATH 543 Necropsy for Non Path Majors credit: 1 or 2 Hours. (https://courses.illinois.edu/schedule/terms/PATH/543/)
Course is designed to provide advanced training in veterinary diagnostic pathology for graduate students with majors other than pathology. Teaching material is drawn from diagnostic cases submitted to the Diagnostic Laboratory. Course is adapted individually for each student's major (clinical residency, laboratory animal residency, or graduate research using animals and animal samples). May be repeated to a maximum of 4 hours. Prerequisite: Graduate Veterinarian or residency status; or consent of instructor. Course restricted to graduate students or residents not majoring in pathology.

PATH 544 Immunobiological Methods credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PATH/544/)
A number of immunobiological methods and current immunological techniques are introduced in the context of various research designs with reference to their significance, their evolution and historical value. Detailed description of protocols includes optimization of parameters and modifications of conditions to satisfy different research situations and trouble shooting. Students are required to perform the techniques, collect data, analyze results and keep records. Lab reports including documented critical assessment of the attained conclusions are required for each technique. Same as ANSC 554. Approved for letter and S/U grading. Prerequisite: VM 605 or MCB 408 or ANSC 450 and consent of instructor.

PATH 545 Vet Diagnostic Path 1 credit: 0 to 6 Hours. (https://courses.illinois.edu/schedule/terms/PATH/545/)
Instruction in diagnostic pathology for pathology majors. Instruction based on necropsy cases with emphasis on necropsy protocol; sample collection and submission; recognition, description, and interpretation of gross and microscopic lesions; and case diagnosis based on all test results. Approved for letter and S/U grading. May be repeated to a maximum of 10 hours. Prerequisite: Graduate veterinarian, graduate student with major in pathology, and consent of instructors.

PATH 546 Vet Diagnostic Path 2 credit: 0 to 6 Hours. (https://courses.illinois.edu/schedule/terms/PATH/546/)
Instruction in diagnostic pathology for pathology majors. Instruction based on necropsy cases with emphasis on recognition, description, and interpretation of gross and microscopic lesions; evaluation of results of other diagnostic assays; disease pathogenesis; and final case diagnosis and comments. Approved for letter and S/U grading. May be repeated to a maximum of 10 hours. Prerequisite: PATH 545 and consent of instructors.

PATH 547 Pathology Seminar credit: 0 to 1 Hours. (https://courses.illinois.edu/schedule/terms/PATH/547/)
Review and discussion of selected pathologic and clinico-pathologic material. Students are required to participate in weekly discussions and present at least one formal seminar per semester, on a topic approved by Pathology faculty. Approved for letter and S/U grading. May be repeated to a maximum of 6 hours. Prerequisite: Credit or concurrent registration in PATH 545, and consent of instructor.

PATH 548 Toxicologic Pathology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PATH/548/)
Examines the morphological and biochemical aspects of cellular reactions to injury in acute and chronic toxicities; effect of selected toxic agents on target organs in relation to functional and structural changes induced. Prerequisite: VM 605 or equivalent.

PATH 549 Gross Pathology credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/PATH/549/)
This course is aimed at veterinary students and anatomic pathology residents. This is an imaged-based course where interpretation of gross lesions will be taught for organ systems of a variety of different veterinary species. Veterinary students will receive weekly orientation to gross lesions by system with an image and discussion based format, and then will take mock ACVP boards-style gross exams followed by a group discussion of the exam. Pathology residents will take mock ACVP board-style gross exams. Veterinary students meet twice a week for an 8 week block and pathology residents meet once a week for the semester. 1 graduate hour. 1 professional hour. Approved for letter or S/U grading. May be repeated in separate terms for unlimited graduate or professional hours.

PATH 550 Concepts in Pathology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PATH/550/)
Lectures and related discussions of selected topics in experimental and theoretical aspects of general pathology. Emphasis on interdisciplinary approach to the mechanisms of disease. Prerequisite: DVM degree or MS in Biology; consent of instructor.

PATH 551 Interpretive Cytopathology credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/PATH/551/)
Discusses selected cytologic material. Emphasizes recognition, interpretation, oral presentation, and written description of cytology case materials. May be repeated to a maximum of 8 hours.

PATH 552 Diagnostic Cytology credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PATH/552/)
Instruction in diagnostic cytology for clinical pathology majors. The course is for clinical pathology graduate students to advance their training in cytology. This is an intensive course with one-on-one training with the instructor. Clinical cytology cases and blood smears are evaluated microscopically and then a thorough written description and interpretation of each case is performed and reviewed. May be repeated in separate terms to a maximum of 30 graduate hours. Note that a maximum of 8 credit hours will count towards a graduate degree. Prerequisite: DVM degree or equivalent, clinical pathology graduate student or consent of instructor.

PATH 555 Comparative Oncology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PATH/555/)
Comparative study of the nature of mammalian and avian neoplasms based on general and special methods of tumor identification and classification; lectures, demonstrations, and laboratory. Prerequisite: VM 605 and VM 608, or equivalent.

PATH 556 Exotic/Wild Animal Diag Path 1 credit: 1 or 2 Hours. (https://courses.illinois.edu/schedule/terms/PATH/556/)
Instruction in the performance of necropsy examinations on exotic and wild animals; emphasizes recognition, interpretation, oral presentations and written descriptions of gross and histologic lesions; emphasizes histologic features of lesions. For pathology majors only. May be repeated to a maximum of 10 hours. Prerequisite: VM 605 and VM 608; consent of instructor.

PATH 557 Exotic/Wild Animal Diag Path 2 credit: 0 to 2 Hours. (https://courses.illinois.edu/schedule/terms/PATH/557/)
Instruction in the use of supplemental diagnostic data in the areas of bacteriology, clinical pathology, immunology, parasitology, toxicology, and virology in arriving at differential and definitive diagnoses of wild and exotic animals. Pathogenesis of gross and histologic lesions and mechanisms of lesion development are emphasized. For pathology majors only. May be repeated to a maximum of 10 hours. Prerequisite: PATH 556 or equivalent or consent of instructor.

PATH 558 Exotic/Wild Animal Path Sem credit: 0 to 1 Hours. (https://courses.illinois.edu/schedule/terms/PATH/558/)
Discussion of selected pathologic and clinico-pathologic material pertaining to exotic and wild animals and presentation of a formal seminar. Approved for letter and S/U grading. May be repeated to a maximum of 6 hours. Prerequisite: Concurrent enrollment in PATH 556 or PATH 557 or consent of instructor.

PATH 559 Surgical Pathology credit: 0 to 2 Hours. (https://courses.illinois.edu/schedule/terms/PATH/559/)
Discussion and interpretation of disease processes of domestic animals; emphasizes interpretation of pathologic changes in tissue specimens obtained during surgical procedures; correlates structure, function, and prognosis. Approved for letter and S/U grading. May be repeated to a maximum of 10 hours. Prerequisite: PATH 545 and PATH 546, or equivalent; consent of instructor.

PATH 560 Spatial Epidemiology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PATH/560/)
Patterns of health and disease in place and time; application of geographic information systems; analysis of time-space relations; clusters and diffusion of disease; geographic epidemiology of selected infectious and noninfectious diseases. Same as GEOG 560. Prerequisite: CHLH 474 or equivalent, or VM 608 or PATH 517 or equivalent; PATH 524 or SOC 485 or equivalent.

PATH 561 Veterinary Clinical Chemistry credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/PATH/561/)
Course will focus on the clinical interpretation and physiologic principles behind conventional clinical biochemical testing, and introduce newer concepts and procedures. The course is directed primarily to graduate veterinarians intending to seek board certification from specialty colleges that require basic knowledge of veterinary clinical pathology of their candidates. Approved for letter and S/U grading. Prerequisite: Graduate Veterinarian or consent of instructor.

PATH 575 Vet Info Tech/Computer App credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/PATH/575/)
Veterinary applications of word processing, spreadsheet, database, statistical, and health management software packages and various methods of information access and retrieval will be complemented by lecture/discussion and computer laboratory sessions. Prerequisite: Two years of work experience as a veterinarian (post-graduate DVM) or consent of instructor; priority will be given to students enrolled in the Executive Veterinary Program.

PATH 576 Communication Vet Consultation credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/PATH/576/)
Utilization of communication as a tool in veterinary consultation and management. Skills will be developed in oral and written communication through assigned presentations, technical reports, newsletters, and business letters. Veterinary applications will be emphasized. Prerequisite: Two years of work experience as a veterinarian (post-graduate DVM) or consent of instructor; priority will be given to students enrolled in the Executive Veterinary Program.

PATH 577 Vet Leadership Organ Behavior credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/PATH/577/)
Leadership principles and organizational theory with practical application to veterinary management and consultation. Includes individual, interpersonal, and organizational influences focusing on current issues in the veterinary profession. Prerequisite: Two years of work experience as a veterinarian (post-graduate DVM) or consent of instructor; priority will be given to students enrolled in the Executive Veterinary Program.

PATH 578 Veterinary Business Management credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PATH/578/)
Instruction in and application of the principles of veterinary business management including economics, decision making, financial management, marketing, and legal issues. Emphasis on specific practice type (small animal, food animal, equine) depending on interest of students. Prerequisite: Two years of work experience as a veterinarian (post-graduate DVM) or consent of instructor; priority will be given to students enrolled in the Executive Veterinary Program.

PATH 579 Adv Concept Swine Health Med 1 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PATH/579/)
Instruction on the biostatistics involved in the effective analysis of swine production records, diagnostic tests, and clinical trials. Application of epidemiology principles in a swine production setting. Practical diagnostic, treatment, and preventive procedures for disease conditions related to swine production. Prerequisite: Two years of work experience as a veterinarian (post-graduate DVM) or consent of instructor; priority will be given to students enrolled in the Executive Veterinary Program.

PATH 580 Adv Concept Swine Health Med 2 credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PATH/580/)
Illustrate effective methods to monitor and analyze the effects environmental conditions have on swine health and productivity. Design and implementation of programs to ensure product quality and consumer safety. Swine nutrition and lean growth modeling for optimal use of rations and providing nutritional consultation to swine producers. Evaluation, development, and application of genetic programs for swine production. Prerequisite: Two years of work experience as a veterinarian (post-graduate DVM) or consent of instructor; priority will be given to students enrolled in the Executive Veterinary Program.

PATH 590 Seminar credit: 0 or 1 Hours. (https://courses.illinois.edu/schedule/terms/PATH/590/)
Required of all graduate students whose major is veterinary pathobiology. Approved for letter and S/U grading.

PATH 591 Design/Analysis Biomed Exper credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PATH/591/)
Principles of sampling, treatment assignment, and statistical analysis applied to biomedical experiments; major emphasis include sample size determination, dose-response functions, single and multifactor designs, randomized blocks and repeated measures, and analysis of covariance. Prerequisite: CPSC 440 or PATH 524, or consent of instructor.

PATH 592 Special Problems credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/PATH/592/)
Basic and applied study including orientation and research on pertinent initial and continuing problems in the student's area of interest. May be repeated to a maximum of 8 hours if topics vary. Prerequisite: Consent of instructor.

PATH 593 Econ of Food Animal Health credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PATH/593/)
Concepts and procedures for economically driven decision-making with special emphasis on veterinary medicine. Topics will include: partial budgeting, enterprise budgeting, break-even analysis, decision analysis, production economics, computer modeling and benefit-cost analysis. Published scientific literature will be reviewed to provide practical examples of economic decision-making in optimizing animal health management. 3 graduate hours. 3 professional hours. Prerequisite: Graduate Veterinarian; VM 608 or equivalent epidemiology course (requires third year standing in the professional curriculum); or consent of instructor.

PATH 594 Veterinary Pathobiology credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/PATH/594/)
Course is to be used to designate a trial or experimental course for five or more students, designed to be an elective in the CVM graduate curriculum. A course can be taught under this designation two times within a two year period and cannot be renewed as a PATH 594 course. May be repeated to a maximum of 8 hours if topics vary. Prerequisite: Prerequisites for each experimental course may vary and must be stated in a course outline prior to departmental approval.

PATH 596 Interdisciplinary Tox Sem credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/PATH/596/)
Same as ENVS 596 and CB 596. See CB 596.

PATH 598 Non-Thesis Research credit: 1 to 8 Hours. (https://courses.illinois.edu/schedule/terms/PATH/598/)
Independent research to fulfill requirement for non-thesis alternative in Master of Science program only. Approved for S/U grading only. May be repeated to a maximum of 8 hours if topics vary. Credit is not given for both PATH 598 and PATH 599. Prerequisite: Must be Graduate Veterinarian.

PATH 599 Thesis Research credit: 0 to 16 Hours. **(**https://courses.illinois.edu/schedule/terms/PATH/599/**)**
Approved for S/U grading only. May be repeated.

PATH 629 Emergency Preparedness and Response to Foreign Animal Diseases credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/PATH/629/**)**
This online elective course for graduate and DVM students focuses on disease emergency response that is complementary to other veterinary curriculum coursework. This course will study example foreign animal diseases (FADs) so that students understand disease transmission and epidemiology, how biosecurity can help prevent introduction and spread of diseases, and will use the Incident Command structure in emergency response scenarios. Students will contribute evaluative thinking for improvements in FADPReP (FAD Preparedness, Response, and Prevention). 2 graduate hours. 2 professional hours. Prerequisite: Restricted to students enrolled in the first three years of the DVM Professional curriculum or graduate students in epidemiology, public health, or biology-related discipline, or by permission of instructor.

PATH 636 Advanced Clinical Pathology credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/PATH/636/**)**
A case-based approach to clinical pathology. Students are required to critically evaluate clinical case data, turn in a written description of the case and be a discussion leader for at least one class period. students will be provided with basic history and signalment of cases and with laboratory data including CBC, clinical chemistry, urinalysis and occasionally additional data. Focuses on the dog and cat, however horse and food animal cases will be presented.

PATH 639 Veterinary Forensic Medicine credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/PATH/639/**)**
This course is aimed at veterinary students. This is a small group lecture and discussion based class where we will discuss forensic veterinary medicine. Topics to be discussed include blunt force trauma, projectile injuries, record keeping and forensic entomology. Students will meet twice a week for an 8 week block. 1 professional hour. Approved for S/U grading only.

PATH 642 Geographic Methods for Health credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/PATH/642/**)**
An introduction to geographic information system software and applications through lectures and exercises. Uses application-based learning to address topics related to spatial analysis and mapping for animal and public health. Exercises include making maps of disease occurrence and disease rates, using census data for population estimates, and creating maps that combine environmental factors with patterns of illness. 1 graduate hour. 1 professional hour. Approved for letter and S/U grading. Credit is not given for both PATH 642 and PATH 439.

PATH 644 Bioscientific Writing credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/PATH/644/**)**
Instruction in communicating research results to a scientific audience. Assignments focus on writing an abstract, constructing a poster presentation, and completing a short manuscript. Intended for veterinary students who have some previous experience in a research setting and access to experimental data that can be used as a basis of writing exercises. Prerequisite: Enrollment in the veterinary curriculum and consent of instructor.

PATH 645 Outbreak Investigation credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/PATH/645/**)**
Published cases of foodborne outbreaks and other outbreaks serve as the basic learning materials for the course. Details about particular diseases/illnesses, how outbreak investigation are conducted, how risk factors are identified in an outbreak, how these factors contribute to incidence of disease, and resolutions of outbreaks are examined. The course expands upon content in the core veterinary curriculum and allows student to hone and apply their epidemiology skills. This course is valuable for veterinary public practice and anyone interested in public health, food safety, and epidemiology. 1 graduate hour. 1 professional hour. May be repeated in separate terms up to 2 hours if topics vary. Prerequisite: DVM students: VM 608 or permission of instructor. Graduate students: None. Restricted to DVM or graduate students.

PATH 669 Veterinary Diagnostic Medicine credit: 1.5 to 3 Hours. **(**https://courses.illinois.edu/schedule/terms/PATH/669/**)**
For VM-4 professional students, a veterinary diagnostic medicine clerkship in the Veterinary Diagnostic Laboratory. 1.5 to 3 professional hours. Approved for S/U grading only. May be repeated in the same or separate terms to a maximum of 4.5 hours. Prerequisite: Fourth year standing or its equivalent in veterinary curriculum.

PATH 692 Special Problems credit: 1 to 3 Hours. **(**https://courses.illinois.edu/schedule/terms/PATH/692/**)**
Individual research on a special problem chosen in consultation with the instructor and department head. Approved for both letter and S/U grading. May be repeated to a maximum of 6 hours if topics vary. 1 to 3 graduate hours. 1 to 3 professional hours. Prerequisite: Registration in veterinary curriculum with grade-point average of 3.0 or above, or consent of instructor.

PATH 694 Veterinary Pathobiology credit: 1 to 3 Hours. **(**https://courses.illinois.edu/schedule/terms/PATH/694/**)**
To be used to designate a trial or experimental course for five or more students, designed to be an elective in the CVM professional curriculum. The course can be taught under this designation for two years or two offerings, whichever time is greater. Approved for letter and S/U grading. May be repeated to a maximum of 6 hours if topics vary. Prerequisite: Registration in the veterinary curriculum or consent of instructor.

PERS - PERSIAN

PERS Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/PERS/)

Courses

PERS 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/PERS/199/)
May be repeated.

PERS 201 Elementary Persian I credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/PERS/201/)
Introduction to Persian, including conversation with a native speaker under the direction of a linguist-instructor, and a minimum of formal grammar and writing.

PERS 202 Elementary Persian II credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/PERS/202/)
Continuation of PERS 201, with introduction of more advanced grammar and with emphasis on more fluency in speaking and reading. Prerequisite: PERS 201 or equivalent.

PERS 403 Intermediate Persian I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PERS/403/)
General review of the essentials of grammar, selected reading of materials emphasizing Iranian life and culture, compositions, and practice in speech. 4 undergraduate hours. 4 graduate hours. Prerequisite: PERS 202.

PERS 404 Intermediate Persian II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PERS/404/)
General review of the essentials of grammar, selected reading of materials emphasizing Iranian life and culture, compositions, and practice in speech. 4 undergraduate hours. 4 graduate hours. Prerequisite: PERS 403.

PERS 453 Advanced Persian I credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PERS/453/)
Students will develop the ability to read and understand paragraph level text, expand on their oral skills, continue to refine Persian writing skills and expand knowledge on Persian-speaking cultures. 3 undergraduate hours. 4 graduate hours. Prerequisite: PERS 403 and PERS 404; or consent of Persian Studies Program Director (determined after placement test taken by student).

PERS 454 Advanced Persian II credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PERS/454/)
Continuation of PERS 453. Students will become independent users of the language by studying more complex structures and contexts such as stories, news reports and movies. Students will also learn details of Persian grammar and apply them in written tasks. 3 undergraduate hours. 4 graduate hours. Prerequisite: PERS 453; or consent of Persian Studies Program Director (determined after placement test taken by student).

PHIL - PHILOSOPHY

PHIL Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/PHIL/)

Courses

PHIL 100 Intro to Philosophy-ACP credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/100/)
Consideration of some main problems of philosophy concerning, for example, knowledge, God, mind and body, and human freedom. Course is identical to PHIL 101 except for the additional writing component. Credit is not given for both PHIL 100 and PHIL 101. Prerequisite: Completion of campus Composition I general education requirement.
This course satisfies the General Education Criteria for:
Advanced Composition
Humanities - Hist Phil

PHIL 101 Introduction to Philosophy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/101/)
Consideration of some main problems of philosophy concerning, for example, knowledge, God, mind and body, and human freedom. Credit is not given for both PHIL 101 and PHIL 100.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil

PHIL 102 Logic and Reasoning credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/102/)
Practical study of logical reasoning; techniques for analyzing and criticizing arguments, with emphasis on assessing the logical coherence of what we read and write.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil

PHIL 103 Logic and Reasoning QR II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/103/)
Practical study of logical reasoning; techniques for analyzing and criticizing arguments, with emphasis on assessing the logical coherence of what we read and write. Credit is not given for both PHIL 103 and PHIL 102.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Quantitative Reasoning II

PHIL 104 Intro to Ethics-ACP credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/104/)
Some basic questions of ethics, discussed in the light of influential ethical theories and with reference to specific moral problems, such as: What makes an action morally right? Are moral standards absolute or relative? What is relation between personal morality and social morality, and between social morality and law? Course is identical to PHIL 105 except for the additional writing component. Credit is not given for both PHIL 104 and either PHIL 105 or PHIL 106. Prerequisite: Completion of campus Composition I general education requirement.
This course satisfies the General Education Criteria for:
Advanced Composition
Humanities - Hist Phil

PHIL 105 Introduction to Ethics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/105/)
Some basic questions of ethics, discussed in the light of influential ethical theories and with reference to specific moral problems, such as: what makes an action morally right? are moral standards absolute or relative? what is the relation between personal morality and social morality, and between social morality and law? Credit is not given for both PHIL 105 and either PHIL 104 or PHIL 106.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil

PHIL 106 Ethics and Social Policy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/106/)
Examination of the moral aspects of social problems, and a survey of ethical principles formulated to validate social policy. Credit is not given for both PHIL 106 and either PHIL 104 or PHIL 105.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

PHIL 107 Intro to Political Philosophy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/107/)
Introduction to core ideas in political and legal philosophy, for example, rights, equality, political obligations, legitimacy of states, nationalism, and oppression.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

PHIL 108 Religion & Society in West I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/108/)
Same as ANTH 108, JS 108, and REL 108. See REL 108.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

PHIL 109 Religion & Society in West II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/109/)
Same as ANTH 109 and REL 109. See REL 109.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

PHIL 110 World Religions credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/110/)
Same as REL 110. See REL 110.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

PHIL 198 Freshman Seminar credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/198/)
Investigation of selected fundamental topics of philosophical inquiry. See Schedule for current topics. Prerequisite: Freshman James Scholar.

PHIL 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/199/)
Approved for letter and S/U grading. May be repeated.

PHIL 201 Philosophy in Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/201/)
Consideration of the philosophical themes implicit in a variety of important literary works, both classical and modern; may include such authors as Sophocles, Shakespeare, Goethe, Dostoevsky, and Sartre.

PHIL 202 Symbolic Logic credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/202/)
Introduction to the techniques of formal logic, dealing primarily with truth-functional logic and quantification theory.
This course satisfies the General Education Criteria for:
Quantitative Reasoning I

PHIL 203 Ancient Philosophy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/203/)
Introduction to ancient philosophy, concentrating on Plato and Aristotle, dealing with such topics as metaphysics, ethics, and the theory of knowledge. Same as CLCV 203.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil

PHIL 206 Early Modern Philosophy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/206/)
The history of philosophy from Descartes to Kant, concentrating on such topics as metaphysics, ethics, and the theory of knowledge.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil

PHIL 210 Ethics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/210/)
Problems in ethical theory; the nature of right and wrong, justice, conscience, moral feelings, etc.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil

PHIL 214 Biomedical Ethics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/214/)
Philosophical study of selected moral and social problems concerning medicine and biology, such as euthanasia, abortion, allocation of scarce medical resources, health care and rights, and genetic engineering.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil

PHIL 222 Philosophical Foundations of Computer Science credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/222/)
Introduction to certain ideas and issues at the intersection of computer science and philosophy. Students will focus on foundational questions related to the birth of computer science as a discipline, philosophical issues regarding knowledge and reality that researchers face in the frontiers of contemporary computer science, and current ethical issues related to the uses of machines and computers in society.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil

PHIL 223 Minds & Machines credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/223/)
Introduction to certain ideas and issues at the intersection of computer science and philosophy. Students will focus on the nature of human minds and brains in light of what we know about machine “minds” and “hardware” (and vice versa), as well as on philosophical considerations of the societal effects and implications of the rise of intelligent machines.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil

PHIL 230 Philosophy of Religion Intro credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/230/)
Introduction to philosophical analysis of religious thought and experience. Same as REL 230.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil

PHIL 231 Religion and Philosophy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/231/)
Same as REL 231. See REL 231.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil

PHIL 250 Conceptions of Human Nature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/250/)
Comparative examination of important historical and contemporary conceptions of human nature.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil

PHIL 270 Philosophy of Science credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/270/)
Investigation of the nature of scientific knowledge by examining archetypal examples from physical science (e.g., Ptolemaic and Copernican astronomy); nature of scientific truth, validation of theories, nature of scientific theories, evolution of theories, experimental procedure, role of presuppositions, scientific revolutions, etc.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil

PHIL 307 Elmnts Semantics & Pragmatics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/307/)
Same as LING 307. See LING 307.

PHIL 316 Ethics and Engineering credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/316/)
Same as ECE 316. See ECE 316.
This course satisfies the General Education Criteria for:
Advanced Composition
Humanities - Hist Phil

PHIL 351 Thinking and Reasoning credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/351/)
Same as PSYC 351. See PSYC 351.

PHIL 380 Current Controversies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/380/)
Philosophical examination of positions taken on some issue of current concern, for example, human sexuality, death and dying, feminism, race, intelligence, war, sociobiology, and environmental ethics. See Class Schedule for current topics. May be repeated with approval.

PHIL 390 Individual Study credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/390/)
Readings in selected philosophical topics. Course may be taken by honors students in partial fulfillment of department honors requirements. May be repeated to a maximum of 6 hours in separate terms. Prerequisite: Open to juniors and seniors with a grade-point average of 3.0 only by prior arrangement with a member of the faculty and with consent of the department director of undergraduate studies or the chair.

PHIL 404 Medieval Philosophy credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/404/)
History of philosophy from St. Augustine to William of Ockham. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: PHIL 101 or PHIL 203.

PHIL 407 Logic and Linguistic Analysis credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/407/)
Same as LING 407. See LING 407.

PHIL 410 Classical Ancient Philosophers credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/410/)
Intensive study of one ancient philosopher or the intensive study of a major philosophical problem through the consideration of a number of ancient philosophers; chief emphasis on Plato and/or Aristotle. 3 undergraduate hours. 3 or 4 graduate hours. May be repeated with approval, if topics vary. Prerequisite: One course in philosophy, preferably PHIL 203.

PHIL 411 Nineteenth Century Philosophy credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/411/)
Examination of the thought of such major figures as Hegel, Marx, and Nietzsche. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: One course in philosophy.

PHIL 412 Classical Modern Philosophers credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/412/)
Intensive study of one classical modern philosopher or the intensive study of major philosophical problem through the consideration of a number of classical modern philosophers, e.g., Descartes, Leibniz, Locke, Hume, Kant, and Hegel. 3 undergraduate hours. 3 or 4 graduate hours. May be repeated with approval, if topics vary. Prerequisite: One course in philosophy, preferably PHIL 206.

PHIL 414 Major Recent Philosophers credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/414/)
Intensive study of one or two important philosophers of the present century, e.g., Wittgenstein, Dewey, Heidegger, or Quine. Topics vary; see Class Schedule. 3 undergraduate hours. 3 or 4 graduate hours. May be repeated with approval, if topics vary. Prerequisite: One course in philosophy.

PHIL 419 Space, Time, and Matter-ACP credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/419/)
Same as PHYS 419. See PHYS 419.
This course satisfies the General Education Criteria for:
Advanced Composition

PHIL 420 Space, Time, and Matter credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/420/)
Same as PHYS 420. See PHYS 420.

PHIL 421 Ethical Theories credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/421/)
Systematic study of selected classics in moral philosophy by such philosophers as Aristotle, Hume, Mill, Kant, and Nietzsche. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: One course in philosophy.

PHIL 422 Recent Developments in Ethics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/422/)
Intensive treatment of issues in contemporary ethical theory. 3 undergraduate hours. 3 or 4 graduate hours. May be repeated one time with approval. Prerequisite: One course in ethics.

PHIL 424 Philosophy of Religion credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/424/)
Considers central issues in the philosophy of religion, e.g., the justification of religious belief, the nature of God, religious experience, etc. Same as REL 424. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: One course in philosophy.

PHIL 425 Philosophy of Mind credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/425/)
Philosophical problems arising in connection with mental phenomena; the relation of mind and body; free will and determinism; our knowledge of other minds; and the self and personal identity. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: One course in philosophy.

PHIL 426 Metaphysics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/426/)
Investigation of various metaphysical issues concerning, for example, existence, particulars and universals, causation, laws of nature, time, personal identity, material objects, and modality. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: One course in philosophy.

PHIL 429 Value Theory credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/429/)
Study of the nature and status of values, and of variable topics in value theory, e.g., different types of values, and problems of truth, justifiability, objectivity and relativism with respect to them. 3 undergraduate hours. 3 or 4 graduate hours. May be repeated as topics vary to a maximum of 6 undergraduate hours, or 8 graduate hours. Prerequisite: Junior standing.

PHIL 430 Theory of Knowledge credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/430/)
Investigation of issues concerning, for example, the nature and possibility of knowledge; its forms and limits; its relation to belief, truth, and justification; and the nature of truth. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: One course in philosophy.

PHIL 433 Evolutionary Neuroscience credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/433/)
Same as IB 436, NEUR 433 and PSYC 433. See PSYC 433.

PHIL 435 Social Philosophy credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/435/)
Selected topics from the nature of social organization, nature and convention, utility, justice, equality, liberty, rights, and duties. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: One course in philosophy.

PHIL 436 Phil of Law and of the State credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/436/)
Examination of issues in the philosophy of law, such as the nature of law, law and morality, justice, liberty and authority, punishment, and legal responsibility. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: One course in philosophy.

PHIL 438 Philosophy of Language credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/438/)
Historical or comparative study of the philosophy of language. Same as LING 438. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: One course in philosophy.

PHIL 439 Philosophy of Mathematics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/439/)
Introduction to some of the main philosophical problems and contemporary viewpoints concerning mathematical concepts, mathematical methods, and the nature of mathematical truth. Same as MATH 439. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: One course in philosophy.

PHIL 441 Existential Philosophy credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/441/)
Study of a selection of the major writings of the more important existential philosophers, e.g., Kierkegaard, Nietzsche, Heidegger, Sartre, and de Beauvoir. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: One course in philosophy.

PHIL 443 Phenomenology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/443/)
Study of the development of phenomenology from Husserl to the present. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: One course in philosophy.

PHIL 453 Formal Logic and Philosophy credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/453/)
Techniques and results of symbolic logic, with special attention to topics of philosophical importance. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: PHIL 202 or consent of instructor.
This course satisfies the General Education Criteria for:
Quantitative Reasoning II

PHIL 454 Advanced Symbolic Logic credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/454/)
Completeness, compactness, and Lowenheim-Skolem theorems for first-order logic; incompleteness and undecidability of formal systems; and additional material on proof theory, model theory, or axiomatic set theory as time permits. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: PHIL 202 or consent of instructor.
This course satisfies the General Education Criteria for:
Quantitative Reasoning II

PHIL 458 Advances in Brain and Cognitive Science credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/458/)
Same as BCOG 458. See BCOG 458.

PHIL 471 Contemporary Phil of Science credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/471/)
Examines important developments and controversies in recent philosophy of science. 3 undergraduate hours. 4 graduate hours. Prerequisite: One course in philosophy.

PHIL 472 Kierkegaard and the Self credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/472/)
Same as CWL 472, REL 472, and SCAN 472. See SCAN 472.

PHIL 477 Philosophy of Psychology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/477/)
Psychology, broadly construed, is a cluster of disciplines devoted to the study of mind and behavior, including cognitive and developmental psychology, neuroscience, and artificial intelligence. Investigates the relationships that these disciplines bear to one another and of their overall potential to resolve age-old philosophical questions about the mind. Same as PSYC 477. 3 undergraduate hours. 4 graduate hours. Prerequisite: Two courses in philosophy or two courses in psychology or consent of instructor.

PHIL 492 Thesis credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/492/)
Special training in philosophical investigation. Course may be taken by students pursuing graduation with distinction in partial fulfillment of those requirements. 2 to 4 undergraduate hours. No graduate credit. May be repeated to a maximum of 4 undergraduate hours. Prerequisite: Open to seniors with a grade-point average of 3.5 in all philosophy courses only by prior arrangement with a member of the faculty and with consent of the department director of undergraduate studies or the chair.

PHIL 499 Capstone Seminar credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/499/)
Capstone course required for all philosophy majors. Students will explore in depth a specific topic either in the history of philosophy or in contemporary practical or theoretical philosophy and will write a substantial original essay appropriate for a senior thesis. Topics will differ by section and semester. 3 undergraduate hours. No graduate credit. Prerequisite: PHIL 202, PHIL 203, PHIL 206, PHIL 222, PHIL 223. For Philosophy Majors with Senior Standing Only.

PHIL 501 Seminar on the History of Philosophy credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/501/)
Study of selected major philosophers, movements, problems, or topics in the history of philosophy. 2 or 4 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated. Letter grading applies when offered for 4 hours of credit. For Stage 3 Philosophy PhD students this course is approved for S/U grading when offered for 2 hours of credit. Prerequisite: Consent of instructor for non-philosophy graduate students.

PHIL 507 Formal Semantics I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/507/)
Same as LING 507. See LING 507.

PHIL 511 Seminar Ethical Theory credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/511/)
Intensive study of problems in ethical theory. Approved for letter and S/U grading. May be repeated. Letter grading applies when offered for 4 hours of credit. For Stage 3 Philosophy PhD students this course is approved for S/U grading when offered for 2 hours of credit. Prerequisite: Consent of instructor for non-philosophy graduate students.

PHIL 512 Seminar Social Philosophy credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/512/)
Seminar designed to study special problems in social philosophy. See Schedule for current topics. Approved for letter and S/U grading. May be repeated. Letter grading applies when offered for 4 hours of credit. For Stage 3 Philosophy PhD students this course is approved for S/U grading when offered for 2 hours of credit. Prerequisite: Consent of instructor for non-philosophy graduate students.

PHIL 513 Seminar Philosophy of Logic credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/513/)
Selected topics in contemporary logical theory. Approved for letter and S/U grading. May be repeated. Letter grading applies when offered for 4 hours of credit. For Stage 3 Philosophy PhD students this course is approved for S/U grading when offered for 2 hours of credit. Prerequisite: Consent of instructor for non-philosophy graduate students.

PHIL 514 Seminar in Cognitive Science credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/514/)
Same as PSYC 514, ANTH 514, CS 549, EPSY 551, and LING 570. See PSYC 514.

PHIL 517 Seminar Philosophy of Science credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/517/)
Various problems arising from specific studies in philosophy pertaining to science and vice versa. To be offered with varying topics. Course Information :Approved for letter and S/U grading. May be repeated. Letter grading applies when offered for 4 hours of credit. For Stage 3 Philosophy PhD students this course is approved for S/U grading when offered for 2 hours of credit. Prerequisite: Consent of instructor for non-philosophy graduate students.

PHIL 521 Seminar Contemporary Problems credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/521/)
Intensive study of selected problems or topics in contemporary philosophy. Approved for letter and S/U grading. May be repeated. Letter grading applies when offered for 4 hours of credit. For Stage 3 Philosophy PhD students this course is approved for S/U grading when offered for 2 hours of credit. Prerequisite: Consent of instructor for non-philosophy graduate students.

PHIL 523 Seminar Theory of Knowledge credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/523/)
Selected topics and writings of major importance in the contemporary philosophy of knowledge. Approved for letter and S/U grading. May be repeated. Letter grading applies when offered for 4 hours of credit. For Stage 3 Philosophy PhD students this course is approved for S/U grading when offered for 2 hours of credit. Prerequisite: Consent of instructor for non-philosophy graduate students.

PHIL 525 Seminar Philosophy of Mind credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/525/)
Selected topics from major writings in the philosophy of mind. Approved for letter and S/U grading. May be repeated in the same or separate terms. Approved for letter grading when offered for 4 hours; approved for S/U grading when offered for 2 hours - only available for Stage 3 Philosophy PhD students. Prerequisite: Consent of instructor for non-philosophy graduate students.

PHIL 530 Dissertation Seminar credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/530/)
Ongoing dissertation seminar required for all students who have passed the prelim requirement. Approved for S/U grading only. May be repeated in separate terms to a maximum of 24 hours. Prerequisite: Restricted to students satisfying requirements for the Ph.D. degree.

PHIL 547 Formal Semantics II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/547/)
Same as LING 547. See LING 547.

PHIL 551 Pragmatics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/551/)
Same as LING 551. See LING 551.

PHIL 583 Individual Topics credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/583/)
Individual study and oral and written reports on topics not covered in other courses. Topics and plan of study must be approved by the candidate's adviser and by the staff member who directs the work. May be repeated. (Summer session, 2 to 8 hours).

PHIL 590 Directed Research credit: 0 to 12 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/590/)
Restricted to students satisfying requirements for the master's degree by writing a substantial essay. Approved for letter and S/U grading. May be repeated. Normally taken for 8 hours credit but may be taken for 12 hours credit with consent of department chair.

PHIL 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/PHIL/599/)
Approved for S/U grading only. May be repeated.

PHYS - PHYSICS

PHYS Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/PHYS/)

Courses

PHYS 100 Thinking About Physics credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/100/)
Conceptual and problem solving skills in preparation for PHYS 211: --analysis and mathematical descriptions of physical situations -- understanding the meaning of the solutions Prerequisite: Credit or concurrent registration in MATH 220 or MATH 221. 220168.

PHYS 101 College Physics: Mech & Heat credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/101/)
Newton's Laws, work and energy, rotational motion, fluids, thermodynamics, and waves. A noncalculus-based approach for majors in the life sciences, preprofessional health programs, agriculture, and veterinary medicine. Credit is not given for both PHYS 101 and either PHYS 211 or PHYS 213. Prerequisite: Trigonometry.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences
Quantitative Reasoning II

PHYS 102 College Physics: E&M & Modern credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/102/)
Electric forces and fields, electric potential, electric circuits, magnetic forces and fields, geometrical optics, relativity, and modern physics. A noncalculus-based approach for majors in the life sciences, preprofessional health programs, agriculture, and veterinary medicine. Credit is not given for both PHYS 102 and either PHYS 212 or PHYS 214. Prerequisite: PHYS 101.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences
Quantitative Reasoning II

PHYS 110 Physics Careers credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/110/)
Exploration of careers founded on physics undergraduate training. Introduction to the Physics Department, faculty, research and curricula. Outside speaker presentations. Approved for S/U grading only.

PHYS 123 Physics Made Easy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/123/)
Inquiry-based, nonmathematical, hands-on study of physics for elementary school teachers. Coverage of most of the National Science Education K-4 Content Standards. Additional fees may apply. See Class Schedule.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences

PHYS 140 How Things Work credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/140/)
Nonmathematical approach underscoring the generality and ubiquity of basic physical laws in understanding commonplace phenomena: musical instruments, photography, electric and electronic circuits, television, motors, engines, etc. Credit is not given to engineering majors.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences
Quantitative Reasoning II

PHYS 150 Physics of Societal Issues credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/150/)
Physics topics and applications relevant in the modern world: energy, quantum mechanics, electricity and magnetism, nuclear physics, waves, light, and outer space. Application to satellites, alternative energy, medical imaging, radiation, nuclear weapons, climate change, and electronics. Emphasis on analytical thinking and the applicability to modern societal issues.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences
Quantitative Reasoning II

PHYS 192 Science and Pseudoscience credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/PHYS/192/)
Extra-sensory perception, alien abduction, and psychic crime-solving from the standpoint of scientific inquiry and exploration; the scientific method, how science progresses, and the types of argumentative fallacies that pervade the pseudoscientific community; examples of good science and how the scientific method is self-correcting.

PHYS 193 Physics of Music credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/193/)
Physics of music and musical instruments; acoustical physics, propagation of sound waves, the biological physics of human hearing, and the acoustical physics associated with all types of musical instruments.

PHYS 194 Behavior of Complex Systems credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/PHYS/194/)
Exploration of systems with simple rules that nevertheless exhibit complex behavior. Lecture demonstrations on fractal growth, chaos, catastrophes, self-assembly, lightning, turbulence, explosions, and human rhythms. Simple computer models which exhibit regular, irregular, symmetric, and self-similar patterns and dynamics. Dynamics of isolated and coupled complex systems and mathematical tools for quantifying complex behavior.

PHYS 199 Undergraduate Open Seminar credit: 0 to 5 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/199/)
Approved for letter and S/U grading. May be repeated.

PHYS 211 University Physics: Mechanics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/211/)
Newton's Laws, work and energy, static properties and fluids, oscillations, transverse waves, systems of particles, and rotations. A calculus-based approach for majors in engineering, mathematics, physics and chemistry. Credit is not given for both PHYS 211 and PHYS 101. Prerequisite: Credit or concurrent registration in MATH 231.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences
Quantitative Reasoning II

PHYS 212 University Physics: Elec & Mag credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/212/)
Coulomb's Law, electric fields, Gauss' Law, electric potential, capacitance, circuits, magnetic forces and fields, Ampere's law, induction, electromagnetic waves, polarization, and geometrical optics. A calculus-based approach for majors in engineering, mathematics, physics, and chemistry. Credit is not given for both PHYS 212 and PHYS 102. Prerequisite: PHYS 211; credit or concurrent registration in MATH 241.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences
Quantitative Reasoning II

PHYS 213 Univ Physics: Thermal Physics credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/213/)
First and second laws of thermodynamics including kinetic theory of gases, heat capacity, heat engines, introduction to entropy and statistical mechanics, and introduction to application of free energy and Boltzmann factor. A calculus-based approach for majors in engineering, mathematics, physics and chemistry. Credit is not given for both PHYS 213 and PHYS 101. Prerequisite: PHYS 211; credit or concurrent registration in MATH 241.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences
Quantitative Reasoning II

PHYS 214 Univ Physics: Quantum Physics credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/214/)
Interference and diffraction, photons and matter waves, the Bohr atom, uncertainty principle, and wave mechanics. A calculus-based course for majors in engineering, mathematics, physics, and chemistry. Credit is not given for both PHYS 214 and PHYS 102. Prerequisite: PHYS 212.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Phys Sciences
Quantitative Reasoning II

PHYS 221 Enrichment Mechanics credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/PHYS/221/)
Supplement to PHYS 211 with a collaborative group learning approach to improving conceptual understanding and problem solving in introductory calculus-based mechanics. Prerequisite: PHYS 100; concurrent registration in PHYS 211.

PHYS 222 Enrichment E & M credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/PHYS/222/)
Supplement to PHYS 212 with a collaborative group learning approach to improving conceptual understanding and problem solving in introductory calculus-based electricity & magnetism. Prerequisite: PHYS 100; concurrent registration in PHYS 212.

PHYS 225 Relativity & Math Applications credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/225/)
Theory of Special Relativity, with applications to kinematics and dynamics. Key mathematical methods as they apply to aspects of electromagnetic theory and classical mechanics, including vector analysis, series expansions, matrices, Fourier analysis, partial differentiation, three-dimensional calculus, and simple differential equations. Prerequisite: Credit or concurrent registration in PHYS 212.

PHYS 246 Physics on the Silicon Prairie: An Introduction to Modern Computational Physics credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/246/)
You will become a fearless code warrior, exploring the behaviors of systems that are too complicated for analytic characterization. You will calculate the trajectory of a relativistic starship and confirm an insight of Ramanujan, the "Man Who Knew Infinity." You will generate diagrams of spacetime curvature near black holes and confirm that General Relativity causes the non-Newtonian behavior of Mercury's orbit. You will calculate Π using simulated grains of sand. There will be chaos, Monte Carlo simulations, and adaptive numerical integrations. Approved for Letter and S/U grading. Prerequisite: PHYS 211. Corequisites: MATH 231, PHYS 212, and PHYS 225. No prior programming experience is required. We welcome concurrent enrollment of high school students who meet the specified prerequisites.

PHYS 280 Nuclear Weapons & Arms Control credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/280/)
Nontechnical analysis of the physics of nuclear weapons, nuclear weapon effects, delivery systems, and defenses against nuclear attack; presentation of current issues; basis for making informed judgments about nuclear armaments and arms control. Same as GLBL 280.
This course satisfies the General Education Criteria for:
Advanced Composition

PHYS 298 Freshmen/Sophomore Special Topics in Physics credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/298/)
Topical offerings of technical interest, skills, and knowledge in physics, and its practice, intended to augment the existing curriculum at the introductory level. Approved for Letter and S/U grading. May be repeated in separate terms up to 12 credit hours if topics vary. Prerequisite: See Class Schedule or departmental course information for topics and prerequisites. For students with freshman or sophomore standing.

PHYS 325 Classical Mechanics I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/325/)
Kinematics and dynamics of classical systems, including a review of Newtonian kinematics and dynamics. Three dimensional motion, variable mass, and conservation laws; damped and periodically driven oscillations; gravitational potential of extended objects and motion in rotating frames of reference; Lagrangian and Hamiltonian mechanics. Prerequisite: PHYS 225; credit or concurrent registration in MATH 285 or MATH 286.

PHYS 326 Classical Mechanics II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/326/)
Continuation of PHYS 325. Central force motion, collisions and scattering, rotational motion, coupled oscillations, continuous media, and fluid dynamics. Prerequisite: PHYS 325.

PHYS 329 Atmospheric Dynamics I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/329/)
Same as ATMS 302. See ATMS 302.

PHYS 330 Atmospheric Dynamics II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/330/)
Same as ATMS 312. See ATMS 312.

PHYS 394 Pedagogy and Teaching Physics for Learning Assistants credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/394/)
Designed to support Learning Assistants (LAs) who are working as instructional aids in lab or discussion sections of the introductory physics courses. Students will study pedagogical strategies for instructor-student interaction and philosophies guiding lab design and/or discussion problem creation. Prerequisite: Instructor Approval Required. Lab LAs must have successfully completed PHYS 101, PHYS 102, PHYS 211, or PHYS 212. Discussion LAs must have successfully completed PHYS 100 and PHYS 211.

PHYS 398 Sophomore/Junior Special Topics in Physics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/398/)
Topical offerings of technical interest, skills, and knowledge in physics, and its practice, intended to augment the existing curriculum at the intermediate level. Approved for Letter and S/U grading. May be repeated in separate terms up to 12 hours if topics vary. Prerequisite: See Class Schedule or departmental course information for topics and prerequisites. For students with sophomore or junior standing.

PHYS 401 Classical Physics Lab credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/401/)
Experiments and techniques in classical mechanics and electromagnetism. Dynamics of electrical and mechanical oscillators in the linear domain. Fourier analysis of system response. Measurements of electrostatic fields, transmission lines, waves, and radiation. Electromagnetic phenomena in dielectrics, conductors, and magnetic materials. Instruction in data analysis and report writing. 3 undergraduate hours. 3 graduate hours. Prerequisite: PHYS 325; credit or concurrent enrollment in PHYS 435 or ECE 329.

PHYS 402 Light credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/402/)
Wave kinematics; geometrical optics: basic concepts, ray-tracing and matrix formalism, Gaussian imaging by thick lenses, stops, apertures, and intensity relations; interference; interference spectroscopy and coherence; diffraction: Fresnel-Kirchhoff formulation, Fraunhofer case, Fresnel case, and holography; polarized light. 4 undergraduate hours. 3 or 4 graduate hours. (3 hours without lab). Prerequisite: PHYS 214 and PHYS 435 or ECE 329.

PHYS 403 Modern Experimental Physics credit: 4 or 5 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/403/)
Techniques and experiments in the physics of atoms, atomic nuclei, molecules, the solid state, and other areas of modern physical research. 5 undergraduate hours. 4 graduate hours. Prerequisite: Credit or concurrent registration in PHYS 486.

PHYS 404 Electronic Circuits credit: 4 or 5 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/404/)
Physics of semiconductor devices; theory and application of discrete and integrated devices in linear circuits; use of operational amplifiers and feedback; regulation, oscillators, and modulation; emphasizes practical experience. 5 undergraduate hours. 4 graduate hours. Prerequisite: PHYS 325.

PHYS 406 Acoustical Physics of Music credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/406/)
Acoustical physics associated with music and musical instruments, propagation of sound waves in and from musical instruments, and the biological physics of human hearing. Investigation of topics via advanced laboratory and data acquisition techniques. 4 undergraduate hours. 4 graduate hours. Prerequisite: PHYS 213 and PHYS 214.

PHYS 419 Space, Time, and Matter-ACP credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/419/)
Identical to PHYS 420 except for the additional writing component including a final term paper. Same as PHIL 419. 3 undergraduate hours. 4 graduate hours. Credit is not given for both PHYS 419 and PHYS 420. Prerequisite: PHIL 101; PHYS 101 or PHYS 211.
This course satisfies the General Education Criteria for:
Advanced Composition

PHYS 420 Space, Time, and Matter credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/420/)
Philosophical examination of some fundamental concepts and theories of the physical world, such as time, matter, space, and geometry; interpretation of quantum theory. Same as PHIL 420. 2 undergraduate hours. 2 graduate hours. Credit is not given for both PHYS 420 and PHYS 419. Prerequisite: PHIL 101; PHYS 101 or PHYS 211.

PHYS 427 Thermal & Statistical Physics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/427/)
Equilibrium thermodynamics, statistical mechanics, and kinetic theory of gases. A unified treatment is used in that the principles of heat and thermodynamics are discussed along with statistical postulates and the microscopic approach of introductory quantum mechanics. 4 undergraduate hours. 4 graduate hours. Credit is not given for both PHYS 427 and any of ME 404, CHEM 444, MSE 500. Prerequisite: PHYS 213, PHYS 214, and PHYS 435 or ECE 329.

PHYS 435 Electromagnetic Fields I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/435/)
Static electric and magnetic fields, their interactions with electric charge and current, and their transformation properties; the effect of special relativity is incorporated. Macroscopic fields in material media are described. 3 undergraduate hours. 3 graduate hours. Prerequisite: MATH 285; credit for PHYS 325. Concurrent enrollment in MATH 415.

PHYS 436 Electromagnetic Fields II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/436/)
Time-dependent fields. Electromagnetic induction, Maxwell's equations, electromagnetic wave propagation in various media and structures, and electromagnetic radiation from charge and current distributions. Relativistic covariance of Maxwell's equations. Course Information:3 undergraduate hours. 3 graduate hours. Prerequisite: PHYS 435.

PHYS 460 Condensed Matter Physics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/460/)
Bonding and structure of crystals; energy bands in insulators, semiconductors, and metals; electrical conductivity; optical properties; lattice vibrations; elasticity; point defects; dislocations. 4 undergraduate hours. 4 graduate hours. Credit is not given for both PHYS 460 and MSE 304. Prerequisite: PHYS 435; PHYS 485 or PHYS 486.

PHYS 466 Atomic Scale Simulations credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/466/)
Same as CSE 485 and MSE 485. See MSE 485.

PHYS 470 Subatomic Physics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/470/)
The nature and properties of nuclei and elementary particles, symmetries, interactions, nuclear models, tools and techniques of experimental subatomic physics, and applications to power generation, astrophysics, chemistry, medicine, and biology. 4 undergraduate hours. 4 graduate hours. Prerequisite: PHYS 485 or PHYS 486.

PHYS 475 Introduction to Biophysics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/475/)
Major concepts of physics inherent to biological systems. Basics of biology, including protein and DNA structure and their organization into cells with a focus on single molecule biophysics. Major experimental techniques including x-ray diffraction, optical and magnetic traps, and fluorescence microscopy, including new super-resolution techniques. Applications to cytoplasmic and nuclear molecular motors, bacterial motion, nerves, and vision. 3 undergraduate hours. 4 graduate hours. Prerequisite: PHYS 213 and PHYS 214.

PHYS 485 Atomic Phys & Quantum Theory credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/485/)
Basic concepts of quantum theory which underlie modern theories of the properties of materials; elements of atomic and nuclear theory; kinetic theory and statistical mechanics; quantum theory and simple applications; atomic spectra and atomic structure; molecular structure and chemical binding. 3 undergraduate hours. 3 graduate hours. Credit is not given for both PHYS 485 and CHEM 442. Prerequisite: MATH 285 or MATH 286 and PHYS 214.

PHYS 486 Quantum Physics I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/486/)
Atomic phenomena integrated with an introduction to quantum theory; evidence for the atomic nature of matter and the properties of the Schrodinger equation, single particle solutions in one dimension, the hydrogen atom, perturbation theory, external fields, and atomic spectroscopy of outer electrons. 4 undergraduate hours. 4 graduate hours. Prerequisite: PHYS 214 and PHYS 435 or ECE 329.

PHYS 487 Quantum Physics II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/487/)
Continuation of PHYS 486. Identical particles, spectral hyperfine structure, magnetic properties of matter, atomic spectroscopy of inner electrons, high-energy photon effects, molecular binding and spectra, emission and absorption of light, and symmetry principles. 4 undergraduate hours. 4 graduate hours. Prerequisite: PHYS 486.

PHYS 495 Where the Arts Meets Physics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/495/)
Where Art Meets Physics is a project-based, cross-disciplinary course for students interested in both exposure to the frontiers of physics and experiences in the arts. Students will explore such physics topics while they actively participate in a broad range of artistic practices and expression. Students will explore the stunning creations that have emerged from synergies between the sciences and the arts. Identifying themes based on their exposure and interest, students will form interdisciplinary project teams. With collaboration and guidance from their instructors and across-campus experts, student projects will be taken from inception to completion. This process will include: Project design; independent study; team work; and dedicated assignments. The projects will be presented at a culminating event at the end of the semester. The event will be specific to each offering and may include activities such as physics-based museum exhibits and performance pieces. 3 undergraduate hours. No graduate credit. Prerequisite: Instructor Approval Required.

PHYS 496 Communicating in Physics—Writing Papers and Giving Talks credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/496/)
Examination of current research topics through extensive reading, writing, and oral-presentation activities. 3 undergraduate hours. No graduate credit.
This course satisfies the General Education Criteria for:
Advanced Composition

PHYS 497 Individual Study credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/497/)
Individual study at an advanced level in a subject not covered by course offerings. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated. Prerequisite: Consent of instructor.

PHYS 498 Special Topics in Physics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/498/)
Subject offerings of new and developing areas of knowledge in physics intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated in the same or separate terms if topics vary.

PHYS 499 Senior Thesis credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/499/)
Faculty-guided writing of a senior thesis involving independent research Oral presentations of research and outside journal articles, proposal writing and reviewing, poster presentation, preparation of graduate school applications, and discussion of physics frontiers with outside experts. 3 undergraduate hours. No graduate credit. Prerequisite: PHYS 496.

PHYS 503 Instrumentation Physics Applications of Machine Learning credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/503/)
Designed to give students a solid foundation in machine learning applications to physics, positioning itself at the intersection of machine learning and data-intensive science. This course will introduce students to the fundamentals of analysis and interpretation of scientific data, and applications of machine learning to problems common in laboratory science such as classification and regression. There will be two 75-minute classes each week, split into discussions of core principles and hands-on exercises involving coding and data. There will be a few projects throughout semester that will build on the course material and utilize open source software and open data in physics and related fields. The list of topics will evolve, according to the interests of the class and instructors. Material will be clustered into units of varying duration, as indicated below. The lists of suggested readings and references are advisory; a large amount of material of excellent quality is now available on the worldwide web, particularly on the sites of university courses addressing the topics of each unit. A distinguishing feature of this course is its sharp focus on endeavors in the data-rich physical sciences as the arenas in which modern machine learning techniques are taught. The course uses open scientific data, open source software from data science and physics-related fields, and publicly-available information as enabling elements. Research-inspired projects are an important part of the course and students will not only execute them but will play an active role in helping define and shape them. Example projects might include machine learning approaches to searches for new particles or interactions at high-energy colliders; methods of particle tracking and reconstruction; identification, classification and measurement of astrophysical phenomena; novel approaches to medical imaging and simulation using techniques from physics and machine learning; machine learning in quantum information science. Through these projects and the course material, students will learn how large datasets in physics are generated, curated, and analyzed, using machine learning as a tool to generate key insights in both experimental and theoretical science. 4 graduate hours. No professional credit. Prerequisite: CS 225; MATH 415 or equivalent. Restricted to students in the Engineering: Instrumentation and Applied Physics, MEng program.

PHYS 504 Statistical Physics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/504/)
Single-particle distribution functions; classical and quantum mechanical systems, Boltzmann equation, virial theorem, and equations of state for gases; formal theory: ensembles, identical particles, thermodynamics of simple systems, and distribution functions; nonequilibrium problems; conservation laws and hydrodynamic equations, sound waves, and transport coefficients; plasmas, normal Fermi fluid, superfluids, and systems with internal degrees of freedom. Prerequisite: PHYS 427 and PHYS 486.

PHYS 505 Classical Electromagnetism credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/505/)
Review of Maxwell's equations; relativistic formulation of the electromagnetic field and the motion of charged particles; plane and guided waves; retarded potentials; radiation from simple antennas; radiation from accelerated charged particles; scattering and further topics. Prerequisite: PHYS 436.

PHYS 508 Mathematical Physics I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/508/)
Core techniques of mathematical physics widely used in the physical sciences. Calculus of variations and its applications; partial differential equations of mathematical physics (including classification and boundary conditions); separation of variables, series solutions of ordinary differential equations and Sturm-Liouville eigenproblems; Legendre polynomials, spherical harmonics, Bessel functions and their applications; normal mode eigenproblems (including the wave and diffusion equations); inhomogeneous ordinary differential equations (including variation of parameters); inhomogeneous partial differential equations and Green functions; potential theory; integral equations (including Fredholm theory). Prerequisite: MATH 285.

PHYS 509 Mathematical Physics II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/509/)
Continuation of PHYS 508. Further core techniques of mathematical physics widely used in the physical sciences. Complex variables; group theory in classical and quantum systems; tensors in physics; differential forms and their applications in mechanics; electromagnetism. Prerequisite: PHYS 508.

PHYS 510 Nonlinear Dynamics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/510/)
Broad introduction to nonlinear dynamics of physical systems with varying degrees of complexity; survey of a variety of concepts associated with bifurcation phenomena, mappings, nonlinear oscillations, chaotic behavior, strange attractors, and solitons. Topics of current interest. Prerequisite: PHYS 326.

PHYS 513 Quantum Optics & Information credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/513/)
Experimental and theoretical fundamentals of quantum information, using nonclassical features of quantum physics (wave-particle duality, superposition, and entanglement) to surpass the information-processing capabilities of classical systems. Underlying fundamental quantum phenomena, including tests of nonlocality, quantum erasers, the quantum Zeno effect, squeezed light, multi-particle interference, state transformations of the Bloch sphere, and decoherence; quantum cryptography and teleportation; quantum information theory; quantum computation algorithms and techniques for error correction; experimental "qubit" systems. Prerequisite: Recommended: PHYS 580.

PHYS 514 Modern Atomic Physics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/514/)
Rigorous survey of modern atomic, molecular, and optical physics, including a functional approach to theory and an overview of experimental techniques. Atomic structure, including fine and hyperfine structure, multi-electron atoms, and relativistic effects; interaction of single atoms with dynamic and static electromagnetic fields, ultra-cold collisions between atoms; laser cooling, evaporative cooling, and magnetic trapping; Paul and Penning traps; quantum degenerate gases; atom interferometry. Prerequisite: PHYS 427, PHYS 436, and PHYS 487.

PHYS 515 General Relativity I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/515/)
Systematic introduction to Einstein's theory, with emphasis on modern coordinate-free methods of computation. Review of special relativity, modern differential geometry, foundations of general relativity, laws of physics in the presence of a gravitational field, linearized theory, and experimental tests of gravitation theories. Same as ASTR 515. Prerequisite: PHYS 436.

PHYS 516 General Relativity II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/516/)
Continuation of PHYS 515 with emphasis on applications to astrophysics and cosmology. Relativistic stars, gravitational collapse, black holes, gravitational waves, numerical relativity, and cosmology. Same as ASTR 516. Prerequisite: PHYS 515.

PHYS 523 Instrumentation and Applied Physics Project credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/523/)
In this two-semester course students will engage in the collaborative design and execution of a year-long Instrumentation and measurement-intensive technical project. Required activities will include a written project proposal of work to be undertaken, informal group-generated oral presentations on technical issues, periodic formal written progress reports, a final project oral presentation, and a final project paper. The set of projects might include investigations suggested by industry partners. There will be two class meetings per week, each of three hours duration. In addition to the project work, we will bring in local experts to discuss a number of relevant topics with the class; these are shown in the syllabus, below. Note that readings will consist primarily of technical materials and documentation by the producers of components used by individual projects. As a result, readings and external materials will vary from group to group. 4 graduate hours. No professional credit. May be repeated in separate terms to a total of 8 hours. Prerequisite: Students must enroll in consecutive fall and spring semesters to meet the requirements of the Concentration in Instrumentation and Applied Physics under the Master of Engineering in Engineering degree. Restricted to students in the Engineering: Instrumentation and Applied Physics, MEng program.

PHYS 524 Survey of Instrumentation and Laboratory Techniques credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/524/)
Introduce students to a broader spectrum of devices than they can be expected to encounter in their Physics 523 projects. The goal of the course is to familiarize students with some of the techniques available to them when defining and proposing a technical project in an unfamiliar domain. There will be two 50 minute classes each week, split into a discussion of basic principles and a simple hands-on laboratory exercise. The list of topics—which is not intended to be exhaustive—will evolve, according to the interests of the class and instructors. Material will be clustered into units of varying duration, as indicated below. The lists of suggested readings and references are advisory; a large amount of material of excellent quality is now available on the worldwide web, particularly on the sites of university courses addressing the topics of each unit. There are no formal prerequisites other than prior completion of a rigorous undergraduate major (or minor) in physics, astronomy, or a related field. 2 graduate hours. No professional credit. Prerequisite: Restricted to students in the Engineering: Instrumentation and Applied Physics, MEng program.

PHYS 525 Survey of Fundamental Device Physics credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/525/)
Introduces students to the underlying physical principles employed by various devices. As in Physics 524, we will introduce students to a broader spectrum of device principles than they will encounter in their Physics 523 projects. There will be two 50 minute classes each week, split into discussion and laboratory exercises. The list of topics—which is not intended to be exhaustive—will evolve, according to the interests of the class and instructors. Material will be clustered into units of varying duration, as indicated below. The lists of suggested readings and references are advisory; a large amount of material of excellent quality is now available on the worldwide web, particularly on the sites of university courses addressing the topics of each unit. There are no formal prerequisites other than prior completion of a rigorous undergraduate major (or minor) in physics, astronomy, or a related field. 2 graduate hours. No professional credit. Prerequisite: Engineering: Instrumentation and Applied Physics, MEng.

PHYS 540 Astrophysics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/540/)
Fundamental aspect of astrophysics and cosmology and new developments in these fields. Basic physical concepts and principles, the key observational evidence, and illustrative calculations. Relativistic cosmological models, inflation, Big-Bang nucleosynthesis, and the cosmic microwave background; formation and evolution of galaxy clusters, galaxies, and stars; formation, structure, and evolution of white dwarfs, neutron stars, and black holes; rotation- and accretion-powered pulsars, X-ray and y-ray stars, and gravitational radiation. Same as ASTR 540. Prerequisite: PHYS 435; PHYS 485 or PHYS 486.

PHYS 541 Physics of Compact Objects credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/541/)
Rigorous survey of the physical properties of black holes, white dwarfs, and neutron stars. Formation of compact objects. Equilibrium configurations, equations of state, stability criteria, and mass limits: the influence of rotation and magnetic fields. Pulsar phenomena. Black hole spacetimes. Hawking radiation. Mass flow in binary systems; spherical and disk accretion; high-temperature radiation processes; pulsar spin-up. Compact x-ray sources and x-ray bursts. Supermassive black holes in star clusters and dense galactic nuclei. Gravitational and neutrino radiation from supernova collapse and binary coalescence. Same as ASTR 541. Prerequisite: PHYS 436.

PHYS 542 Theoretical Stellar Physics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/542/)
Same as ASTR 504. See ASTR 504.

PHYS 550 Biomolecular Physics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/550/)
Physical concepts governing the structure and function of biological macromolecules; general properties, spatial structure, energy levels, dynamics and functions, and relation to other complex physical systems such as glasses; recent research in biomolecular physics; physical techniques and concepts from theoretical physics emphasized. Same as BIOP 550 and MCB 550. Prerequisite: CHEM 104; PHYS 485 or PHYS 487.

PHYS 552 Optical Spectroscopy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/552/)
Theoretical and experimental fundamentals of optical spectroscopy. Light-matter interaction (absorption of UV, visible, IR), emission spectroscopy (fluorescence, Raman and light scattering), theoretical backgrounds of molecular electronic and vibrational transitions, modern experimental techniques, and data analysis of the optical spectroscopy experiments. Laboratory exercises applying spectroscopy to a broad spectrum of disciplines, including biophysical examples. Prerequisite: PHYS 427 and PHYS 487.

PHYS 554 Nonequilibrium Stat Mechanics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/554/)
Mathematical description of classical and quantum stochastic systems, thoroughly addressing the tools and the mode of thinking of non-equilibrium statistical mechanics. Equilibrium statistical mechanics (review); Einstein and Smoluchowski diffusion equation; generalized moment expansion of correlation functions; noise-induced limit cycles; time series analysis; diffusion-controlled reactions; classical dynamics under the influence of stochastic forces; observables connected with Brownian transport, echoes, and hysteresis; spin-boson model. Examples from biological physics and theoretical condensed matter physics. Prerequisite: PHYS 504.

PHYS 560 Condensed Matter Physics I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/560/)
Crystalline perfection, free-electron gas, screening, plasma oscillations, and dielectric response; Bloch electrons, Brillouin zones, and band structure; semiconductors, intrinsic and extrinsic, with applications; phonons, elasticity, and anharmonicity; ferromagnetism and second-order phase transitions; superconductivity. Prerequisite: PHYS 427 and PHYS 580.

PHYS 561 Condensed Matter Physics II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/561/)
Hartree-Fock theory and electron-electron interactions; electron-phonon interactions; electron dynamics and transport; BCS theory of superconductivity; elastic properties; thermal properties due to anharmonicity; defects in solids. Prerequisite: PHYS 560 and PHYS 581.

PHYS 563 Phase Transitions credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/563/)
Phenomenology of phase transitions, scaling, critical behavior, and multi-criticality; Landau theory of phase transitions; renormalization group methods, including lattice models and epsilon-expansion; numerical methods; critical dynamics; selected additional topics. Prerequisite: PHYS 504.

PHYS 565 Theory of Semicond & Devices credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/565/)
Same as ECE 535. See ECE 535.

PHYS 569 Emergent States of Matter credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/569/)
Consequences of broken symmetry in condensed matter, the emergence of novel ground states, and the nature of the excitations that arise. Examination of specific systems such as superconductivity, superfluidity, Bose-Einstein condensates, the quantum Hall states, liquid crystals, biological systems and patterns in Rayleigh-Benard convection. Prerequisite: PHYS 504 and PHYS 580.

PHYS 570 Subatomic Physics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/570/)
Nuclear systematics, nucleon-nucleon interaction, shell model, and single-particle and collective excitations; hadron spectroscopy, hadronic quantum numbers, quark-parton model, and hadron dynamics; weak interactions. Prerequisite: PHYS 580; concurrent registration in PHYS 581.

PHYS 575 Particle Physics I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/575/)
Basic calculations in elementary particle theory. Quantum electrodynamics, quantum chromodynamics, and the Glashow-Weinberg-Salam theory of weak and electromagnetic interactions as applied to the phenomenology of particle decays and high energy reactions. 4 graduate hours. No professional credit. Prerequisite: Recommended: credit or concurrent registration in PHYS 582.

PHYS 576 Particle Physics II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/576/)
Continuation of PHYS 575. Current topics in particle theory. Typically three or four different subjects in depth which may change with each offering. Prerequisite: PHYS 575.

PHYS 580 Quantum Mechanics I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/580/)
Second course in quantum mechanics. Operators, state vectors, and the formal structure of quantum theory; operator treatments of simple systems; angular momentum and vector addition coefficients; stationary state perturbation theory; introduction to scattering theory for particles without spin, partial wave analysis, and Born approximation; examples taken from atomic, nuclear, and elementary particle physics. Prerequisite: PHYS 485 or PHYS 487.

PHYS 581 Quantum Mechanics II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/581/)
Spin and identical particles, simple many-particle systems and elements of second-quantization theory; time-dependent processes, radiative transitions, and quantization of the electromagnetic field; scattering of particles with spin; polarization; introduction to the Klein-Gordon and Dirac equations and properties of simple relativistic systems. Prerequisite: PHYS 580.

PHYS 582 General Field Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/582/)
Standard techniques of field theory as used by experimenters and theorists; relativistic quantum mechanics of a single particle; Lagrangian field theories, perturbation theory, and calculation of lowest-order processes; introduction to Feynman diagrams and higher order processes; examples taken from quantum electrodynamics, solid-state and elementary particle physics, and many-body theory. Prerequisite: PHYS 581.

PHYS 583 Advanced Field Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/583/)
Quantization and Feynman path integral; gauge theories and renormalization; renormalization group with applications to particle physics and critical phenomena; approximation methods and recent developments. Prerequisite: PHYS 582.

PHYS 596 Graduate Physics Orientation credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/PHYS/596/)
Introduction to research in the Department of Physics. Advice on choosing a field of research and finding a research advisor. Faculty-presented overviews of the major areas of research available in the Physics Department. General discussions on instructional topics as well as ethics in teaching and sciences.

PHYS 597 Individual Study credit: 1 to 16 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/597/)
Individual study in a subject not covered in course offerings may be arranged for credit by registration under this number. May be repeated. 2 to 16 hours for full term; 1 to 8 hours for half-term. Prerequisite: Consent of instructor.

PHYS 598 Special Topics in Physics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/598/)
Subject offerings of new and developing areas of knowledge in physics intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. May be repeated in the same or separate terms if topics vary.

PHYS 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/PHYS/599/)
Approved for S/U grading only. May be repeated.

PBIO - PLANT BIOLOGY

PBIO Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/PBIO/)

Courses

PBIO 599 Thesis Research credit: 0 to 16 Hours. **(**https://courses.illinois.edu/schedule/terms/PBIO/599/**)**
Individual work under supervision of members of the staff in their respective fields. Approved for S/U grading only. May be repeated.

PLPA - PLANT PATHOLOGY

PLPA Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/PLPA/)

Courses

PLPA 200 Plants, Pathogens, and People credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PLPA/200/)
Plant diseases and their impact on food supplies and human history are studied in lectures, demonstrations and discussions. Issues of food production and safety, pesticide use and human health, and the environment are considered. Includes the biology of pathogens that cause plant disease. Designed for non-science and science majors. Prerequisite: RHET 105 or equivalent.
This course satisfies the General Education Criteria for:
Advanced Composition
Nat Sci Tech - Life Sciences

PLPA 395 Undergrad Research or Thesis credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/PLPA/395/)
Independent research, special problems, thesis, development and/or design work under the supervision of an appropriate member of the faculty. May be repeated. Independent Study courses are limited to 12 hours total applying to a degree in ACES. Prerequisite: Cumulative GPA of 2.5 or above at the time the activity is arranged and consent of instructor.

PLPA 403 Advanced Plant Pathology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PLPA/403/)
Provides students with advanced knowledge of major plant pathogens, including fungi, oomycetes, bacteria, nematodes and viruses as well as major diseases they cause in plants. Lecture topics include taxonomy, etiology, pathogenesis, molecular biology, epidemiology and management. The underlying mechanisms associated with pathogenicity and the complex nature of plants and their pathogens will be presented. 3 undergraduate hours. 3 graduate hours. Prerequisite: CPSC 212 or consent of instructors, or graduate student status. Junior standing required.

PLPA 405 Plant Disease Diagnosis & Mgmt credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PLPA/405/)
Field and laboratory techniques in plant disease diagnosis and appraisal; identification of diseases of small grains, turf, corn, soybeans, forage crops, vegetables, fruit, forest and shade trees, and ornamentals, both on field trips and in laboratory exercises. Includes fundamentals of disease management. 3 undergraduate hours. 3 graduate hours. Prerequisite: CPSC 212 or equivalent.

PLPA 509 Mol Bio of Microbe-Plant Inter credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PLPA/509/)
Detailed analysis of the microbe-plant interaction at the molecular level. Covers commensal, symbiotic, and pathogenic interactions from viewpoint of both plant and microbe. Emphasizes microbial and plant genes involved in the interactions, their organization, regulation of expression and the nature and function of the encoded gene products. Same as MCB 511. 3 graduate hours. No professional credit. Offered in alternate years. Prerequisite: MCB 421 or CPSC 212 or equivalents.

POL - POLISH

POL Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/POL/)

Courses

POL 101 Elementary Polish I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/POL/101/)
Oral and written work on basic pronunciation, grammar, and vocabulary. For students with no prior work in Polish.

POL 102 Elementary Polish II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/POL/102/)
Continuation of POL 101 Prerequisite: POL 101.

POL 115 Intro to Polish Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/POL/115/)
Introduction to Polish culture and literature from a broad historical perspective. Drawing on novels and plays, film, the visual arts, and works of historical research, the course provides students with the basic concepts, methodologies and theories of literary and cultural interpretation, with an emphasis on modern Polish culture (1800-2010) within a broader European context. Same as REES 115.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

POL 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/POL/199/)
May be repeated.

POL 201 Second Yr Polish I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/POL/201/)
Grammar review, conversation practice, written exercises, and selected readings. Prerequisite: POL 102 or equivalent.

POL 202 Second Yr Polish II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/POL/202/)
Continuation of POL 201. Prerequisite: POL 201.

POL 245 Survey of Polish Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/POL/245/)
Critical survey, in translation, of Polish literature from the Middle Ages to the end of the nineteenth century; special attention given to the works in their cultural context. Same as CWL 245.

POL 301 Third-Year Polish I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/POL/301/)
Reading and discussion of representative prose and poetry works of Polish authors since 1863. All readings are in the original language; the course emphasis is in the development of language skills. Prerequisite: POL 202 or consent of instructor.

POL 302 Third-Year Polish II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/POL/302/)
Reading and discussion of representative prose and poetry works of Polish authors to 1863. All readings are in the original language; the course emphasis is in the development of language skills. Prerequisite: POL 301 or consent of instructor.

POL 401 Fourth-Year Polish I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/POL/401/)
Analysis of the sound system and grammar of the contemporary Polish language. 3 undergraduate hours. 3 graduate hours. Prerequisite: Knowledge of another Slavic language or consent of instructor.

POL 402 Fourth-Year Polish II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/POL/402/)
Reading and analysis of selected texts. 3 undergraduate hours. 3 graduate hours. Prerequisite: POL 401 or consent of instructor.

POL 446 Problems of Polish Literature credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/POL/446/)
Critical study, in translation, of modern Polish fiction, drama, poetry, and essay, from Young Poland to the "New Wave"; their contribution to literary styles and genres in Poland and abroad; special emphasis on Wyspianski, Witkiewicz, and Gombrowicz. Same as CWL 436. 3 undergraduate hours. 4 graduate hours.

PS - POLITICAL SCIENCE

PS Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/PS/)

Courses

PS 100 Intro to Political Science credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/100/)
Surveys the major concepts and approaches employed in the study of politics. Credit is not given for both PS 100 and PS 200.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

PS 101 Intro to US Gov & Pol credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/101/)
Examines the organization and development of national, state, and local governments in the U.S.; the federal system; the U.S. Constitutions; civil and political rights; the party system; and the nature, structure, powers, and procedures of national political institutions. This course may require limited participating as a subject in research.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

PS 125 Washington Experience credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/125/)
An examination of political Washington and policymaking. Through visits to think tanks, nonprofit organizations and agencies we will examine the policymaking world in Washington and get to know different participants in this process, what they do, and how they interact and work to affect policy and express their ideas. This course is a required component of the Illinois in Washington Program. Prerequisite: Acceptance to and enrollment in the Illinois in Washington Program.

PS 152 The New Middle East credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/152/)
Discussion of contemporary sociopolitical change and current events in the Middle East. We will explore the background to these events, the factors that are driving them, and the short-term and long-term implications for the region and the world. Course reflects diverse fields of study, including cultural studies, economics, education, history, law, linguistics, literature, media, religion, political science, and sociology. Same as SAME 152.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West
Social Beh Sci - Soc Sci

PS 170 Power, Politics, and Protest credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/170/)
Study of how political institutions and laws can be both the vehicle and target of social and political transformation. Situates ideas about freedom of speech, civil disobedience, and political protest in historical context, showing how the contemporary political landscape has come to be what it is. An entry level course, it provides students with the fundaments of civic literacy and ideas and analytic tools needed to understand and engage political life.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil

PS 180 IntroPolitics of Globalization credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/180/)
Introduction to the politics of globalization; identification of the principal actors, properties, and patterns of the politics of globalization that distinguish global politics from other forms of politics between and within groups, communities, states, and international organizations.

PS 191 Topics in Civic Leadership credit: 1 or 2 Hours. (https://courses.illinois.edu/schedule/terms/PS/191/)
Examines public and political life from the perspective of public and political leaders. Topics include professional development, career narratives, and/or development or selection of opportunities for civic or public service. May be repeated in separate terms if topics to vary to a maximum of 3 hours.

PS 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/PS/199/)
May be repeated.

PS 201 US Racial & Ethnic Politics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/201/)
Examines efforts by racial and ethnic communities to organize politically and by society to allocate resources based on race or ethnicity. Topical focus includes African Americans, Latinos, Asian Americans, Native Americans, and white ethnics. The primary goal of the course is to develop a more comprehensive understanding of racial and ethnic politics by identifying commonalities and differences among these groups and their relationship to the state. Same as AAS 201, AFRO 201, and LLS 201.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - US Minority

PS 202 Religion & Politics in the US credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/202/)
Examines how religion and politics influence each other in the United States, both historically and in contemporary society.

PS 214 American Indian Law & Politics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/214/)
Examines the role of American Indians and Indian law in the US political system. Beginning with the core concept of sovereignty, the course then looks at Indian political mobilizations, tribal political economy, tribal governance, relations between tribes and states and between tribes and the federal government, and laws governing religious freedom and environmental issues. Same as AIS 214.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - US Minority

PS 220 Intro to Public Policy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/220/)
Surveys the policy process including adoption, implementation, and evaluation. Topics may include reviews of substantive policy issues such as crime, energy, environment, poverty, foreign policy, civil liberties, or economic regulation. Prerequisite: PS 100 or PS 101, or consent of instructor.

PS 224 Politics of the National Parks credit: 2 or 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/224/)
Examines the politics of national parks in the United States, including creation of parks, local support or opposition to parks, and park policy as well as policy questions such as the value of wilderness ecosystem management, endangered species protection, and role of parks in national identity and remembrance of events such as the Civil War, the Indian wars, or the civil rights movement. Same as RST 224. Additional fees may apply. See Class Schedule. May be repeated in separate terms to a maximum of 10 hours.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

PS 225 Environmental Politics & Policy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/225/)
Examinations of the political, economic, ecological, and cultural trade-offs between the use and the preservation of the environment, with particular emphasis on the preservation of land and water resources in national parks, forests, and other reserved lands. Same as RST 225.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

PS 230 Intro to Pol Research credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/230/)
Surveys the principles that guide empirical research in political science; emphasizes definition of research problems, principles and practices of measurement, use of data as evidence, and data analysis. Prerequisite: PS 100 or PS 101, or consent of instructor.

PS 231 Strategic Models credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/231/)
Introduces strategic models of political behavior and their implications for our understanding of politics. Uses simple models, inspired by game theory, to examine fundamental political questions.

PS 240 Intro to Comp Politics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/240/)
Surveys the basic concepts and principles of political analysis from a comparative perspective.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

PS 241 Comp Politics in Dev Nations credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/241/)
Provides comparative and historical insights into the problems affecting the developing world by examining social, economic and political changes in Africa, Asia, and Latin America.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West
Social Beh Sci - Soc Sci

PS 242 Introduction to Modern Africa credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/242/)
Same as AFST 222, ANTH 222, and SOC 222. See AFST 222.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West

PS 243 Pan Africanism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/243/)
Same as AFRO 243 and AFST 243. See AFRO 243.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West

PS 270 Intro to Political Theory credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/270/)
Introduces the nature, structure, and purposes of political theory; examines major works on the problems of political order, obedience, justice, liberty, and representation to distinguish and clarify different theoretical approaches.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil

PS 272 Women and Politics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/272/)
Examines the political status and roles of women. Topics include women's political behavior; feminist and anti-feminist politics; and contemporary legislative and public policy issues, such as educational equity, equal rights legislation, and health care delivery for women. Same as GWS 272.

PS 273 Environment and Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/273/)
Same as ESE 287, GEOG 287 and NRES 287. See NRES 287.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - Western

PS 280 Intro to Intl Relations credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/280/)
Structure and processes of international relations, trends in international politics, and the future of the international system. Credit is not given for both PS 280 and PS 281.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

PS 281 Intro to Intl Relations-ACP credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/281/)
This course is identical to PS 280 except for the additional writing component that fulfills the campus' advanced composition requirement. Credit is not given for both PS 280 and PS 281. Prerequisite: Completion of campus Composition I general education requirement.
This course satisfies the General Education Criteria for:
Advanced Composition
Social Beh Sci - Soc Sci

PS 282 Governing Globalization credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/282/)
Examines the historical, socio-economic, political, and moral dimensions associated with the rise of a global society and its governance. Prerequisite: Completion of campus Composition I general education requirement; completion of one course in a social science or consent of instructor.
This course satisfies the General Education Criteria for:
Advanced Composition
Social Beh Sci - Soc Sci

PS 283 Intro to Intl Security credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/283/)
Surveys the major issues associated with arms control, disarmament and international security. Also examines the military, socio-economic, and political dimensions of weapons systems, military strategy, the ethics of modern warfare, nuclear proliferation, and regional security issues. Same as GLBL 283.

PS 291 Intro Internship Seminar credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/291/)
Students will think deeply about their internship experience and how their academic training connects to their professional work and career goals. Students who complete this course will be able to present themselves professionally, interact in professional environments, engage in professional and career-related discussions through networking, and write professional emails and memos. Prerequisite: This course is restricted to students participating in the Illinois in Washington Program.

PS 292 Undergraduate Research Practicum credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/292/)
Familiarize students with processes for producing, validating and analyzing political science data through experiential learning. Nature and topical focus of research projects vary. May be repeated up to 4 hours in separate terms. Prerequisite: Consent of faculty member supervising the practicum.

PS 299 Study Abroad credit: 0 to 18 Hours. (https://courses.illinois.edu/schedule/terms/PS/299/)
Lectures, seminars, and practical work in an approved study-abroad program in Political Science, appropriate to the student's course of study. Approved for Letter and S/U grading. May be repeated to a maximum of 34 hours per academic year. Prerequisite: Overall GPA 2.75, 3.00 grade point average in Political Science, admission to approved program.

PS 300 Special Topics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/300/)
Selected readings and research in political science. See Class Schedule for current topics. May be repeated to a maximum of 6 hours if topics vary. Prerequisite: Six hours of political science, or consent of instructor.

PS 301 The US Constitution I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/301/)
Analyzes issues related to judicial interpretation of the constitution; the separation of governmental powers; federalism; checks and balances among the three branches of the national government; and the jurisdiction of federal courts. Prerequisite: PS 101, six hours of Political Science credit, or consent of instructor.

PS 302 The US Constitution II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/302/)
Analyzes issues involved in free speech, freedom of religion, rights of the criminally accused, and government's responsibility to protect persons from discrimination based on race or sexual preference. Pays special attention to the role of law and judges. Prerequisite: PS 101, six hours of Political Science credit, or consent of instructor.

PS 303 The US Congress credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/303/)
Examines the legislative function in government; the structure and organization of Congress; legislative procedures; pressure groups and lobbying; the relation of legislature to other branches of government; and problems of legislative reorganization. Prerequisite: PS 101, six hours of Political Science credit, or consent of instructor.

PS 304 The US Presidency credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/304/)
Examines the multiple roles of the president; the determinants and growth of presidential influence; presidential decision making; the president's role in the formulation and implementation of public policy; and the president's multiple constituencies. Prerequisite: PS 101, six hours of Political Science credit, or consent of instructor.

PS 305 The US Supreme Court credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/305/)
Examines how the modern Supreme Court resolves major issues in American constitutional politics. Prerequisite: PS 101, six hours of Political Science credit, or consent of instructor; PS 301 or PS 302.

PS 306 Judicial Politics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/306/)
Introduction to the study of courts and judges as political institutions and actors. Focuses primarily on federal courts in the United States, but also covers courts in the American states. Addresses topics such as how judges are selected; who or what determines which cases are heard; the influence of ideology and the law on judges' decisions; the relationships that exist between the courts in the judiciary; the role of the president and the Senate in judicial decisions; and judges' decisions that run contrary to the public's wishes. Prerequisite: PS 101.

PS 307 Separation of Powers credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/307/)
Explores how the checks and balances built into the US Constitution affect the interactions between the Executive, Legislative, and Judicial branches. Addresses topics such as whether Congress is less productive during times of divided government; why some presidential nominees sail through confirmation, while others take years to be confirmed; and whether Supreme Court justices pay attention to the preferences of the President and Congress when deciding cases. Prerequisite: PS 101.

PS 309 State Gov in the US credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/309/)
Surveys the origins and evolution of state government in the United States. Topics include history, structure and dynamics of state governments, laws and the judiciary, state legislatures, political parties, organized interests, bureaucracies, demographic change and electoral patterns, and political conflicts, and coalitions. Prerequisite: PS 101, six hours of Political Science credit, or consent of instructor.

PS 310 Politics of Organizations credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/310/)
Introduction to the study of public organizations with a focus on formal political organizations including parties, legislatures, and bureaucracies. In-depth analysis of two of the main problems confronted by organizations: collective action problems and delegation problems. Students will acquire an understanding of these problems as well as different ways in which they can be addressed. A strong emphasis is also placed on developing the analytical skills necessary for informed analysis of political interactions involving formal organizations. Prerequisite: PS 101, six hours of Political Science credit, or consent of instructor.

PS 311 Political Parties in the US credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/311/)
Examines the organization and operation of the American party system; national, state, and local organizations and their interactions; the convention and primary systems; and campaign methods and finance. Prerequisite: PS 101, six hours of Political Science credit, or consent of instructor.

PS 312 Politics and the Media credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/312/)
Examines the processes of mass-mediated political communication in democratic societies. Special emphasis will be given to the role of news media in democratic theory, factors shaping the construction of news such as journalism routines, media economics, and the strategic management of news by political elites. Same as CMN 325 and MACS 322.

PS 313 Congress and Foreign Policy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/313/)
Examines cases of foreign-policy making over 100 years with a focus on the struggle between the legislative and executive branches, constitutional questions, explanations for changes in behavior, and the impact on democratic process. Prerequisite: PS 101, six hours of Political Science credit, or consent of instructor.

PS 314 Political Psychology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/314/)
Explores the psychological processes that underlie political attitudes and behaviors. Specifically, we will take theories from social, personality, cognitive, and evolutionary psychology and apply them to political phenomena. Topics will include how politics is affected by cognitive biases, emotions, persuasion, social influence, identity, prejudice and discrimination, personality, and evolution and genetics. We will also explore what we can learn about basic human psychology by studying politics carefully. Prerequisite: PS 101.

PS 315 African American Politics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/315/)
Examines the role of race in stimulating change in American political life; types of strategies employed in the civil rights struggle; how race affects electoral participation and the broader political and economic conditions of African Americans. Same as AFRO 315. Prerequisite: PS 101, six hours of Political Science credit, or consent of instructor.

PS 316 Latina/Latino Politics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/316/)
Examines the role of Latino electorates in shaping state and national politics. Reviews the histories of Latino national origin groups, examines public policy issues of concern to Latinos, successes and failures of Latino empowerment strategies, and the electoral impact of Latino votes. Focus will be primarily on Mexican Americans, Puerto Ricans, and Cuban Americans and an assessment of the degree to which their political agendas are likely to merge over the coming years. Same as LLS 316. Prerequisite: PS 101, six hours of Political Science credit, or consent of instructor.

PS 317 Asian American Politics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/317/)
Provides an overview of the role of Asian Americans in the American political system. Topics include: the international context of emigration, the history of different Asian groups in the U.S., demographic patterns, issues of identity, classification, and pan-ethnicity, voting behavior, minority representation, and public policy. Same as AAS 317. Prerequisite: PS 101, six hours of Political Science credit, or consent of instructor.

PS 318 Interests Grps & Soc Movements credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/318/)
Focuses on two important forces in American politics that provide ways for citizens to affect public policy: interests groups and social movements. Examination of organized interest groups, including their organization, growth, activity, and impact in American politics. Examines the formation and role of social movements. Prerequisite: PS 101, or six hours of Political Science credit, or consent of instructor.

PS 319 Campaigns and Elections credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/319/)
Examines the dynamics of United States congressional and presidential campaigns, including electoral rules, campaign organization and finance, candidate strategy, role of parties, interest groups, and the media, campaign effects, and proposals for reform. Prerequisite: PS 101 or six hours of Political Sciences credit.

PS 320 Public Opinion credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/320/)
Examines the nature of public opinion in contemporary American politics. Considers the extent to which public opinion is organized by ideology, values, party identification and other group-related identities. Will analyze both the sources and consequences of public opinion and the nature of public support for democracy and democratic institutions. Will investigate the relationship between public opinion and policymaking. Prerequisite: PS 101.

PS 321 Principles of Public Policy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/321/)
Examines different approaches to evaluating the performance of public sector organizations, including private sector accountability principles. Focuses on how to improve the performance of governmental agencies, as well as corporate social responsibility. Same as ACCY 321, ACE 321, and BADM 303. Prerequisite: PS 101, six hours of Political Science credit, or consent of instructor.

PS 322 Law and Public Policy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/322/)
Examines the nature of law, law makers, and law appliers; the determinants of law-making; and the societal impact of law. Prerequisite: PS 101, six hours of Political Science credit, or consent of instructor.

PS 323 Law and Representation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/323/)
Examines political and legal policies related to electoral representation including constitutional protections of voting rights and related topics such as a gerrymandering, vote counting, majority minority districts, and the Voting Rights Act. Prerequisite: PS 101 or six hours of Political Science or consent of instructor.

PS 328 Introduction to Biology and Politics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/328/)
Examines the biological processes that underlie political attitudes and behaviors. Specifically, we will take theories from behavioral and molecular genetics, psychophysiology, neuroscience, and evolutionary psychology and apply them to political attitudes and behaviors. Topics will include how evolutionary adaptations shape political life, how genes affect political traits, the effects of physiological differences on how people experience the political world, and what political insights can be drawn from studying differences in brain structures and functioning. Prerequisite: PS 101.

PS 329 Immigration & Citizenship credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/329/)
Examination of the conceptual issues associated with citizenship and immigration, considering current political debates from a variety of perspectives: empirical, historical, and normative. Focuses on the United States but will also examine the immigration and citizenship processes of other nations as well. Among topics considered: why people migrate; consequences of migration; efforts to integrate immigrants; public opinion, citizenship traditions and rationales; membership; belonging, and national identify; post national citizenship. Prerequisites: PS 101, 6 hours of Political Science credit, or consent of instructor.

PS 330 Intro to Political Behavior credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/330/)
Analyzes the relationship between political attitudes and public opinion formation. The course also discusses political participation, political tolerance, and attitudes toward political leaders. Prerequisite: POLS 101, six hours of Political Science credit, or consent of instructor.

PS 331 Intro to Electoral Behavior credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/331/)
Examines the social, psychological and institutional determinants of individual voting decisions. Prerequisite: POLS 101, six hours of Political Science credit, or consent of instructor.

PS 340 Politics in Intl Development credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/340/)
Examines the ways in which the wealthy countries of the world, international organizations and non-governmental organizations have tried to catalyze or facilitate economic and human development in the poorer countries of the world. Prerequisite: PS 240 or PS 241 or PS 281, or six hours of Political Science credit, or consent of instructor.

PS 341 Gov & Pol in Africa credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/341/)
Examines contemporary economic, social, and political processes in Africa, focusing on three basic explanatory themes: historical patterns of development; emerging patterns of class and interest; and leadership strategies. Same as AFRO 341. Prerequisite: PS 240 or PS 241, six hours of Political Science credit, or consent of instructor.

PS 343 Gov & Pol of China credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/343/)
Introduces the government and politics of modern China. Same as EALC 343. Prerequisite: PS 240 or PS 241, six hours of Political Science credit, or consent of instructor.

PS 344 Government and Politics of Japan credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/344/)
This course will examine a range of topics relevant to understanding the development of Japanese politics in the postwar era. A central theme of the course will be to understand the processes of continuity and change through various lenses, including but not limited to history, culture, and institutions. Same as EALC 344. Prerequisite: PS 240 or PS 241, six hours of Political Science credit, or consent of instructor.

PS 345 Gov & Pol of SE Asia credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/345/)
Provides a comparative analysis of the political development of the countries of Southeast Asia. Emphasis is placed on differing approaches to the governance and public policy formation, as well as economic, social, historical, and cultural influences on political development. Prerequisite: PS 240 or PS 241, six hours of Political Science credit, or consent of instructor.

PS 346 Gov & Pol of South Asia credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/346/)
Provides a comparative analysis of the political development of India, Pakistan, Sri Lanka, and other nations in South Asia. Emphasis is placed on the differing approaches to governance and public policy formation, as well as the economic, social, historical, geographical and cultural influences on political development. Same as ASST 346. Prerequisite: PS 240 or PS 241, six hours of Political Science credit, or consent of instructor.

PS 347 Gov & Pol of Middle East credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/347/)
Analyzes the transformation of Middle Eastern society from Morocco to Iran, as case studies in political modernization. The politics of the area are studied with special reference to causes and character of modernization, role of leadership, ideologies and institutions, methods and theories for analyzing political systems undergoing fundamental transformation, and implications for U. S. policy. Same as ASST 347. Prerequisite: PS 240 or PS 241, six hours of Political Science credit, or consent of instructor.

PS 348 Gov & Pol in Western Europe credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/348/)
Examines the major governmental systems of continental Europe; the evolution, structure, and functioning of the political institutions of France, Germany, Italy, Spain, Switzerland, and the Scandinavian countries. Prerequisite: PS 240 or PS 241, six hours of Political Science credit, or consent of instructor.

PS 351 Gov & Pol Post-Soviet States credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/351/)
Examines the evolution, structure, and functioning of post-Soviet governments. Prerequisite: PS 240 or PS 241, six hours of Political Science credit, or consent of instructor.

PS 352 Gov & Pol of East Europe credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/352/)
Examines the collapse of communism and efforts to develop capitalism and democracy. Special emphasis is given to national conflict and European integration. Prerequisite: PS 240 or PS 241, six hours of Political Science credit, or consent of instructor.

PS 353 Gov & Pol of Latin America credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/353/)
Examines the origin and development of Latin American political institutions. Prerequisite: PS 240 or PS 241, six hours of Political Science credit, or consent of instructor.

PS 355 Democratization credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/355/)
Examines the global process of democratization, with special attention to gains and failures in selected areas since 1974. Prerequisite: PS 240 or PS 241, six hours of Political Science credit, or consent of instructor.

PS 356 Comparative Political Economy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/356/)
Examines the effect of domestic political processes on economic performance, including monetary, fiscal, and trade policies. Topics include partisan influences on policy, interest group intermediation, political accountability for economic outcomes, and consequences of product and capital market internationalization. Same as GLBL 356. Prerequisite: PS 240 or PS 241, six hours of Political Science credit, or consent of instructor.

PS 357 Ethnic Conflict credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/357/)
Explores the bases of nationalist and ethnic identities across a variety of different national and cultural contexts, and how these are related to conflict at the intrastate and interstate levels. Consideration is given to the characteristics and patterns of ethnic conflict with special emphasis on how and when ethnic tensions become manifested in violent conflict. The course concludes with consideration and evaluations of various domestic and international approaches to conflict management and resolution. Same as GLBL 357. Prerequisite: PS 240 or PS 241, six hours of Political Science credit, or consent of instructor.
This course satisfies the General Education Criteria for:
Advanced Composition

PS 358 Comparative Political Behavior credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/358/)
Examines themes of political behavior such as political participation, electoral politics, political culture, and contentious politics from a cross-national perspective. Prerequisite: PS 240, or PS 241, or six hours of Political Science credit.

PS 370 Justice in the Law credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/370/)
Explores fundamental questions about the ideal of a just society. Introduces students to the close connection between theories of justice and legal reasoning used by courts. Court cases and topics include enforcing sexual morality, protecting free expression, religious liberty, regulating labor markets, guaranteeing the rule of law, ensuring equal opportunities through schools and elections, establishing group rights, and regulating reproductive rights.

PS 371 Classical Political Theory credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/371/)
Considers the major works of Greek and Roman political theory, stressing their relevance to modern political analysis and action. Prerequisite: PS 270, six hours of Political Science credit, or consent of instructor.

PS 372 Modern Political Theory credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/372/)
Provides critical analysis of political theories from the fifteenth century to the present. The discussions focus on topics such as the development of conceptions of human nature, the role of the state, justice, legitimacy, obligation, individual rights, equality, and mechanisms of maintenance and change. Prerequisite: PS 270, six hours of Political Science credit, or consent of instructor.

PS 373 Democratic Theory credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/373/)
Examines theories of the nature and conditions of democracy; compares and analyzes contemporary democratic institutions. Prerequisite: PS 270, six hours of Political Science credit, or consent of instructor.

PS 374 Future Politics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/374/)
Examines visions of the future drawn from science fiction literature as a way to engage with political and social theory and to cultivate the political imagination. Prerequisite: Six hours of political science credit or consent of instructor.

PS 375 Feminist Political Theory credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/375/)
Provides analysis of how insights from liberal, Marxist, and post-structural political theory traditions shape contemporary feminist political theory. Examines how different epistemological arguments shape political analysis and uses those insights to explore the political forces that make us into gendered and racialized people. Explores how different traditions of thinking in feminist political theory generate different accounts of justice and political transformation. Credit is not given for both PS 375 and GWS 350.

PS 376 American Political Theory credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/376/)
Surveys American political thought from colonial times to the present. Prerequisite: PS 270, six hours of Political Science credit, or consent of instructor.

PS 377 Topics Contemp Pol Theory credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/377/)
Examines specific topics and writers of contemporary political theory. Recent themes have included conceptions of power, rights, justice, and radical political thought. May be repeated to a maximum of 9 hours. Prerequisite: PS 270, six hours of Political Science credit, or consent of instructor.

PS 379 Intl Rel & Domestic Politics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/379/)
Examines conceptual linkages between international relations and domestic politics. Emphasizes theoretical explanations of and empirical evidence for these linkages. Prerequisite: PS 280 or PS 281, or six hours of Political Science credit, or consent of instructor.

PS 380 International Cooperation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/380/)
A study of cooperation among states. Cooperation dilemmas and their solutions, with focus on institutional arrangements that are aimed to facilitate cooperation among states. Prerequisite: PS 280 or PS 281, six hours of Political Science credit, or consent of instructor.

PS 382 Intl Political Economy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/382/)
Examines the interaction between international politics and economics; locates ideologies and practices in the context of international economic relations. Considers such topics as international trade, the global monetary order, multi-national corporations, economic aid relationships, and food and energy politics. Prerequisite: PS 280 or PS 283, six hours of Political Science credit, or consent of instructor.

PS 384 Politics of Globalization credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/384/)
Examines the basic concepts and politics associated with the emergence of the global society. This course evaluates divergent theoretical explanations for the emergence of global politics, as well as how and why the global society governs itself. It examines the strengths and shortcomings of the nation-state, markets, and democratization as responses to the imperatives of order, welfare, and legitimacy. Prerequisite: PS 280 or PS 283, six hours of Political Science credit, or consent of instructor.

PS 385 Politics of the European Union credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/385/)
Considers the history of the European Union and its current functions and operations. Focuses on the ongoing process of political and cultural integration. Consists of sections in Illinois and abroad, interacting extensively via the worldwide web. Same as EURO 385, FR 385, and GER 385. Prerequisite: PS 240 or PS 241, six hours of Political Science credit, or consent of instructor; cross-listings require language training appropriate for enrollment in the respective overseas programs.

PS 386 International Law credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/386/)
Analyzes the concepts and bases of public international law. Topics include sources and subjects of international law, as well as issues of jurisdiction, territory, law of the sea, and use of military force. Prerequisite: PS 280 or PS 283, six hours of Political Science credit, or consent of instructor.

PS 387 National Security Policy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/387/)
Examines principal theories of international security and evaluates their capacity to explain the security behavior of states and other key international actors. Prerequisite: PS 280 or PS 283, six hours of Political Science credit, or consent of instructor.

PS 389 International Communications credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/389/)
Same as MACS 389. See MACS 389.

PS 390 American Foreign Policy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/390/)
Considers the major foreign policy decisions currently confronting the United States government: analyzes their background, principal issues, and alternative actions, as well as the policy formulation process. Prerequisite: PS 280 or PS 283, six hours of Political Science credit, or consent of instructor.

PS 391 Soviet & Post-Sov Foreign Pol credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/391/)
Surveys Soviet and Post-Soviet foreign policy from 1917 to the present, with emphasis upon the forces shaping this policy; special attention to the interplay of ideology and national interest in policy formulation. Prerequisite: PS 280 or PS 283, six hours of Political Science credit, or consent of instructor.

PS 392 Intl Organizations&Regionalism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/392/)
Examines regionalism and regional international organizations and their consequences for multilateralisim cooperation, and conflict. Prerequisite: PS 280.

PS 393 Diplomatic Studies Practicum credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/393/)
Practical introduction to the study of international organizations, consisting of three parts: academic modules in Urbana-Champaign; guest lectures and site visits in Vienna, Austria, and field trips TBA; and a final research paper based on fieldwork in Vienna, extending into late June. Enrollment requires prior admission to the Vienna Diplomatic Program.

PS 394 Crisis Diplomacy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/394/)
A comparative study of foreign policy decision-making and diplomacy among the major states from 1816-1948 with a focus on crisis bargaining, management, and escalation. Foreign relations of Britain, France, Germany, Russia, Italy, Japan, and the United States are covered in light of international relations theories. Emphasis is placed on how domestic political struggles, like those between hard liners and accommodationists, and external factors, like alliances and international norms, affect decision-making. Comparisons are made between those crises that are peacefully settled and those that escalate to war and/or get out of control. Prerequisite: PS 280, PS 281, PS 283, or consent of instructor.

PS 395 International Organization credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/395/)
Examines the development of basic principles underlying world organization; also considers the principles, structure, methods, and operation of international governmental institutions. Gives special attention to the United Nations and related agencies and to their evolution from the League of Nations system. Prerequisite: PS 280 or PS 281 or PS 283, six hours of Political Science credit, or consent of instructor.

PS 396 International Conflict credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/396/)
Examines the conditions that promote war and peace between states. General topics covered are: historical patterns in warfare; causes of war, including arms races and power distributions; outcomes of war; and approaches to peace. Prerequisite: PS 280 or PS 281 or PS 283, six hours of Political Science credit, or consent of instructor.

PS 397 Authoritarian Regimes credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/397/)
Examines the various aspects of the politics in authoritarian regimes: their emergence and breakdown, the policy choices and institutions typically adopted, leadership change, and the theories that explain them. Historical case studies and statistical data will be used to examine real-world cases. Prerequisite: PS 240 or PS 241; or six hours of Political Sciences credit; or consent of instructor.

PS 398 Strategic Interntl Relations credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/398/)
Examination of basic concepts and tools for analyzing foreign policy and understanding international politics and economy. Simple game-theoretic models will be used to explore the logic and the mechanisms behind key policy issues in international economy, cooperation, security, and institutions. Prerequisite: PS 280 or PS 281; or six hours of Political Sciences credit; or consent of instructor.

PS 399 Politics of International Treaties credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/399/)
Treaties are agreements between sovereign states governed by international law. This course examines why countries commit to treaties and why they comply with them. It will provide advanced undergraduate students with the opportunity to read a range of scholarly works on international agreements and to conduct their own research on related topics. Prerequisite: PS 280.

PS 408 Islam & Politics in Mid. East credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/408/)
Same as REL 408 and SAME 408. See REL 408.

PS 411 Campaigning to Win credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/411/)
Same as CMN 424. See CMN 424.

PS 413 Sex, Power and Politics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/413/)
Same as GWS 478. See GWS 478.

PS 415 Europe and the Mediterranean credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/415/)
Same as EURO 415 and ITAL 415. See EURO 415.

PS 418 Language & Minorities in Europe credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/418/)
Same as EURO 418, FR 418, GER 418, ITAL 418, LING 418, SLAV 418, and SPAN 418. See FR 418.

PS 456 Democracy and Identity credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/456/)
A normative and empirical examination of the special issues surrounding the development and maintenance of democracy in plural societies. Analyzes the impact of racial, ethnic and religious diversity on citizenship, civil rights, political institutions and public policy, as well as on democratic stability more generally, in established and newly emergent democracies. 3 undergraduate hours. 4 graduate hours. Prerequisite: Consent of instructor.

PS 457 Dem Gov in a Global Setting credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/457/)
Examination of the basic concepts and politics associated with the emergence of a global society. Students evaluate competing explanations for the emergence of this new politics and how and why the global society governs itself. It examines the strengths and weaknesses of the nation-state, markets, and democratization as responses, respectively, to the imperatives or order, welfare, and legitimacy in the governance of world's peoples and states. 3 undergraduate hours. 4 graduate hours. Prerequisite: Consent of instructor.

PS 480 Energy and Security credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/480/)
Same as GLBL 480 and NPRE 480. See NPRE 480.

PS 490 Individual Study credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/490/)
Special topics not treated in regularly scheduled courses; designed primarily for juniors and seniors. 1 to 4 undergraduate hours. No graduate credit. May be repeated. Prerequisite: Evidence of adequate preparation for such study; consent of faculty member supervising the work; and approval of the department head.

PS 491 Internship credit: 0 to 6 Hours. (https://courses.illinois.edu/schedule/terms/PS/491/)
Students follow a program of study and research related to an approved internship under the direction of the internship director and/or a faculty sponsor. Consult departmental undergraduate advisor or internship director. 0 to 6 undergraduate hours. No graduate credit. Approved for Letter and S/U grading. May be repeated to a maximum of 12 undergraduate hours. Prerequisite: 45 credit hours completed, one year in residence at an institution of higher learning, minimum 2.5 grade point average, coursework related to the internship, and acceptance to the internship director or undergraduate director and by faculty sponsor. Students enrolled in internship courses may not register for more than 18 hours total for all courses during the semester of the internship course.

PS 492 UG Research Assistance credit: 0 to 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/492/)
Assist departmental faculty in on-going research. Topics and nature of assistance vary. Capstone paper required. 0 to 3 undergraduate hours. No graduate credit. May be repeated in separate terms to a maximum of 6 hours. Credit is not given for more than nine hours toward completion of the political science major from any combination of PS 490, PS 491, and/or PS 492. Prerequisite: Evidence of adequate preparation for such study; consent of faculty member supervising the work; and approval of the department head.

PS 494 Junior Honors Seminar credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/494/)
Research, reading, and discussion in selected topics and works in literature of political science. A major research project is required in preparation for PS 495. 3 undergraduate hours. No graduate credit. May be repeated in separate terms to a maximum of 6 hours if topics vary. Credit is not given for non-honors courses and honors seminar on the same topic. Prerequisite: Admission to Political Science Honors Program or consent of department.

PS 495 Senior Honors Seminar credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PS/495/)
Provides an advanced overview of methodological issues in political science especially identification of research questions and design of research strategies in political science appropriate for a senior thesis. Requires completion of a substantial research proposal. 3 undergraduate hours. No graduate credit. Credit is not given for more than six hours towards any combination of PS 495 and PS 496. Neither PS 495 nor PS 496 counts towards the 30 hours required for completion of the political science major. Prerequisite: Admissions to Political Science Honors Program or consent of instructor.

PS 496 Senior Honors Thesis credit: 2 to 6 Hours. (https://courses.illinois.edu/schedule/terms/PS/496/)
2 to 6 undergraduate hours. No graduate credit. May be repeated to a maximum of 6 hours. Prerequisite: Written consent of instructor of department approval; open only to seniors whose major is political science and who have a general University grade point of 3.0.

PS 501 Democratic Political Inst I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/501/)
Involves intensive analysis of major institutions and processes of democratic politics (national, state. local); research on selected topics in American government.

PS 502 Democratic Political Inst II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/502/)
Discusses contemporary theories about the impact of democratic institutions on politics and policy.

PS 503 US Congress credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/503/)
Traces the development of Congress as an institution with special attention to the role of norms; considers intra-institutional aspects of Congress including committee decision-making, floor voting, and leadership; examines congressional relationships with other actors including the presidency and Supreme Court, interest groups, and constituents.

PS 506 Pol Parties and Elections credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/506/)
Examines the role of political parties and elections in the political process; traces the evolution of American parties as a political institution, assesses their impact upon the policy-making processes, and considers macro-level influences upon the electoral process.

PS 507 Collect Action & Interest Grps credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/507/)
Provides a broad analysis of collective action, interest groups, and politics; examines the meaning of political interests and the forms they take; reviews various approaches to the study of interest groups; analyzes the formation and operation of interest groups; examines innovation and change in interest group politics and research.

PS 511 Proseminar Pol Behavior I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/511/)
Introduces interdisciplinary approaches to the analysis of political behavior; formation of opinions, interests, roles, and beliefs.

PS 512 Proseminar Pol Behavior II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/512/)
Continuation of PS 511. Prerequisite: PS 511.

PS 514 Founds of Organizational Behav credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/514/)
Same as BADM 510, PSYC 553, and SOC 575. See BADM 510.

PS 517 Civic Leadership Practicum I credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/517/)
The practicum seminar is the capstone experience of the BA/MA Civic Leadership Program and serves as the principal bridge between the academic and multi-faceted practicum components of the program. The Fellows will engage in an in-depth exploration of a predetermined policy issue (health care, international trade, welfare reform, citizen engagement, for example). The practicum seminar members will, over two semesters, prepare a background paper and report with options and recommendations, which the seminar members will be expected to make a part of the public debate and policymaking process. Prerequisite: Graduate standing in the Civic Leadership Program.

PS 518 Civic Leadership Practicum II credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/518/)
Continuation of PS 517. Prerequisite: Graduate standing in the Civic Leadership Program.

PS 519 Topics in American Politics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/519/)
Selected research topics designed for graduate study in American Politics. May be repeated to a maximum of 12 hours.

PS 521 Phil Bases of Pol Inquiry credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/521/)
Reviews the scope and subject matter of political science; methodological issues in political science and major conceptions of methodology as embodied in the current literature.

PS 522 Research Design and Techniques credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/522/)
Provides an overview of research techniques for answering questions of concern in political science; indicates the range of available tools; discusses problems in concept formation; and presents current methods of concept measurement. Prerequisite: PS 521 or consent of instructor.

PS 523 The Comparative Method credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/523/)
Reviews strategies for systematic research based on small number of cases. Emphasis on problems of conceptualization, measurement, and analysis.

PS 524 Methods in Intl Rel credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/524/)
Deals with major research methodologies in contemporary international relations; includes case studies, aggregate data, content analysis, survey research, gaming and simulations, and causal modeling; presumes knowledge of basic international relations theory. Prerequisite: PS 580.

PS 525 Formal Theory I: Game Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/525/)
Introduction to game theory and its applications to the study of politics. Study of the central ideas and techniques of game theory.

PS 526 Formal Theory II: Applications credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/526/)
Survey of major topics in formal political theory and the application of key game-theoretic methods to the study of politics. Prerequisite: PS 525 or consent of instructor.

PS 528 Models of Decision and Choice credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/528/)
Same as ACCY 595 and PSYC 534. See PSYC 534.

PS 530 Quant Pol Analysis I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/530/)
Introduction to data analysis and inferential statistics, including data collection, analysis and interpretation, sampling, and measures of statistical association and significance. Also introduces statistical software.

PS 531 Quant Pol Analysis II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/531/)
Second class in inferential statistics, emphasizing the linear model and assumptions behind linear models. Prerequisite: PS 530 or consent of instructor.

PS 532 Quant Pol Analysis III credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/532/)
Select topics in inferential statistics, including models for limited dependent variables. Topics vary by semester and may include spatial econometrics, bootstrap models, ecological inference, and causal inference. Prerequisite: PS 531 or consent of instructor.

PS 534 Modeling Heterogeneity credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/534/)
Same as PSYC 548. See PSYC 548.

PS 540 Proseminar Comp Politics I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/540/)
Surveys the major works, theories, and approaches that define the field of comparative politics. The substantive focus of the course is on advanced industrial countries.

PS 541 Proseminar Comp Politics II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/541/)
Surveys the major works, theories, and approaches that define the field of comparative politics. The substantive focus of the course is on developing countries. Prerequisite: Completion of PS 540 is recommended.

PS 543 Global Democratization credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/543/)
Examines the roles of domestic and international factors, modes of transition, institutional choices and economic reforms in the transition from authoritarian rule. Comparisons are made of cases in Southern and Eastern Europe, Latin America, East Asia, the former Soviet Union, and others. Prerequisite: Completion of PS 540 or PS 541 is recommended.

PS 546 Comparative Political Behavior credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/546/)
Examines the political behaviors and opinions of common citizens in dissimilar national contexts, focusing on the theoretical literature and empirical research on topics such as political participation, political culture and contention politics from a cross-national perspective. Prerequisite: PS 540 or PS 541.

PS 548 Political Economy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/548/)
Same as ECON 572. See ECON 572.

PS 549 Topics in Comparative Politics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/549/)
Selected research topics designed for graduate study in Comparative Politics. May be repeated to a maximum of 12 hours.

PS 571 History of Pol Theories I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/571/)
Reading, analysis and discussion of the leading political thinkers from the Greeks to the middle of the seventeenth century.

PS 572 History of Pol Theories II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/572/)
Reading, analysis and discussion of the leading political thinkers from the middle of the seventeenth century to the present.

PS 579 Topics in Pol Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/579/)
Reading, analysis, and discussion of selected topics of political theory. May be repeated to a maximum of 8 hours. Prerequisite: Consent of instructor.

PS 580 Proseminar Intl Rel I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/580/)
Examines major theories and approaches to the study of international relations.

PS 581 International War credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/581/)
Focuses on the conditions that influence war and peace between nation-states. Considers various factors at different levels of analysis (individual, national, dyadic, and systematic) in an attempt to understand why nations go to war. Readings will consist of current research in this topic area-without ignoring "classical" works. Prerequisite: PS 580.

PS 582 Intl Political Economy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/582/)
Comprehensive introduction to major traditions in contemporary thought on the political structure and workings of the global economy. Presumes background knowledge pertaining to the workings of the international economy and its institutions as well as familiarity with the assumptions and approaches of classical I. P. E. thought and International Relations theory. Prerequisite: PS 580.

PS 583 International Organizations credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/583/)
Examines the development and operations of international organizations with special emphasis on United Nations and related agencies. Focuses on activities in security, economic, and social issue area. Prerequisite: PS 580.

PS 584 International Cooperation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/584/)
Major theoretical perspectives and controversies in the literature of international cooperation and international institutions. Although broad spectrums of issues are covered, the focus is on basic logical questions, lines of reasoning, and analytical frameworks. Prerequisite: PS 580.

PS 585 Conflict Management credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/585/)
Examines the conditions that influence the processes and outcomes of conflict management between nation-states. Assesses various approaches used in conflict management research with a special emphasis on the relationship between conflict management and theories of IR. Assumes some background knowledge regarding empirical studies of war. Prerequisite: PS 580.

PS 586 Prosem Intl Relations II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/586/)
Part two of a two course sequence examining major theories and approaches to the study of international relations. Prerequisite: PS 580.

PS 587 Research Seminar in IR credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/587/)
Advanced seminar in international relations, providing graduate students with original research experience. Students design and execute a research program, resulting in a major paper suitable for conference presentation and/or publication. The seminar will rotate among specific research topics in the area of international conflict, international law and organization, and international political economy respectively. May be repeated in separate terms to a maximum of 12 hours. Prerequisite: PS 580.

PS 589 Topics in Intl Rel credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PS/589/)
Selected topics designed for graduate study in international relations. May be repeated under different instructors to a maximum of 12 hours. Prerequisite: PS 580 or PS 524, or consent of instructor.

PS 590 Research in Selected Topics credit: 2 to 12 Hours. (https://courses.illinois.edu/schedule/terms/PS/590/)
Research in selected topics by arrangement with the instructor.

PS 596 Evaluating New Research credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/PS/596/)
Accompanies the Politics Workshop, which brings in speakers from outside the department to present their research. The goal is to expose graduate students to the practice of engaging critically with research presentations from all fields of political science. Students will learn "best practices" in providing feedback about ongoing research projects. They will have the opportunity to utilize these skills both in class discussions and as discussants for the speakers in the Workshop 2 graduate hours. No professional credit. Approved for S/U grading only. May be repeated for up to 4 graduate hours in separate semesters. Prerequisite: Graduate standing in political science required.

PS 597 Preparing Future Faculty credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/PS/597/)
Provides graduate students an insight on the responsibilities and expectations of academic faculty. Core responsibilities - research, teaching and service - required of faculty is discussed, along with important resources and strategies to aid students in obtaining a faculty appointment and plotting a successful career path. Approved for S/U grading only. May be repeated in separate terms.

PS 598 Dissertation Design Seminar credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/PS/598/)
Addresses the basic steps involved in the development of a dissertation proposal; aims to facilitate the completion of the dissertation proposal for students who have passed the qualifying examinations. Approved for S/U grading only. Prerequisite: Successful completion of required qualifying examinations.

PS 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/PS/599/)
Approved for S/U grading only. May be repeated.

PORT - PORTUGUESE

PORT Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/PORT/)

Courses

PORT 150 Writing Brazilians into the U.S. credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PORT/150/)
Explores ethnic and race relations, gendered and sexualized asymmetries, and class inequities for Brazilians in the US through an interdisciplinary approach grounded in anthropology, cultural studies, and ethnic studies. Students will learn how Brazilian identity in the US is not uniform or static, but rather historically contingent, plural, and contested, and how migrants and their descendants shape "minority" as well as "majority" categories in the US.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - US Minority

PORT 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/PORT/199/)
Approved for letter and S/U grading. May be repeated.

PORT 400 Intensive Beginning Portuguese credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PORT/400/)
Accelerated language learning course designed for beginners, equivalent to two semesters. Early emphasis on production skills; comprehension-based skills will be introduced in rapid succession. Course designed for speakers and non-speakers of Romance languages. Some focus on those linguistics structures specific to Portuguese which differ significantly from equivalents in other Romance languages. 4 undergraduate hours. 4 graduate hours.

PORT 401 Intensive Intermediate Portuguese credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PORT/401/)
Continued development of reading, writing and conversational skills. Completion of this course fulfills the third-semester level of Portuguese language instruction. Followed by PORT 402 or PORT 403, this course fulfills the fourth-semester level of Portuguese language instruction. 4 undergraduate hours. 4 graduate hours. Prerequisite: PORT 400 (formerly 201) or consent of instructor.

PORT 402 Advanced Grammar credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PORT/402/)
The study of the structure of modern Portuguese in both its phonological and syntactic aspects for the student who already has a functional command of the language, with emphasis on developing ability to analyze and interpret grammatical structures. 3 undergraduate hours. 3 graduate hours. Prerequisite: PORT 401 (formerly 202) or consent of instructor.

PORT 403 Readings in Portuguese credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PORT/403/)
Readings and discussion in Portuguese of a variety of texts by leading Luso-Brazilian writers covering various genres and themes. Designed to emphasize reading skills and discussion, rather than literary criticism. 3 undergraduate hours. 4 graduate hours. May be repeated if topics vary. Prerequisite: PORT 401 (formerly 202) or equivalent.

PORT 404 Studies in Luso-Brazilian Culture credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PORT/404/)
Affords a broad understanding of Luso-Brazilian civilization and culture. May be offered in English (no prerequisites) or Portuguese (see prerequisite statement). See section description for details on the language of instruction each semester. 3 undergraduate hours. 4 graduate hours. May be repeated if topics vary. Prerequisite: If taught in Portuguese: PORT 403 (former 320) or equivalent or consent of instructor.

PORT 406 Brazilian Film credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PORT/406/)
Study of the evolution of Brazilian cinema through selected films to explore the nature and development of contemporary Brazilian aesthetics. May be offered in English (non prerequisites) or Portuguese (see prerequisite statement). See section description for details on the language of instruction each semester. 3 undergraduate hours. 4 graduate hours. Prerequisite: If taught in Portuguese: PORT 402 (former 200) or 403 (former 320) or equivalent.

PORT 410 Topics in Brazilian Literature credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PORT/410/)
May be offered in English (no prerequisites) or Portuguese (see prerequisite statement). See section description for details on the language of instruction each semester. 3 undergraduate hours. 4 graduate hours. May be repeated to a maximum of 6 Undergraduate hours or 8 Graduate hours in separate terms if topics vary. Prerequisite: If taught in Portuguese: PORT 402 (former 200) or 403 (former 320) or equivalent.

PORT 435 Introduction to Romance Linguistics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PORT/435/)
Same as FR 462, ITAL 435, LING 462, RMLG 435, and SPAN 435. See SPAN 435.

PORT 460 Principles of Language Testing credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PORT/460/)
Same as EIL 460, EPSY 487, FR 460, GER 460, ITAL 460, and SPAN 460. See EIL 460.

PORT 489 Theoretical Foundations of SLA credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PORT/489/)
Same as FR 481, GER 489, ITAL 489, LING 489 and SPAN 489. See LING 489.

PORT 559 Sem Romance Ling credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PORT/559/)
Same as FR 559, ITAL 559, LING 559, RMLG 559, and SPAN 557. See SPAN 557.

PORT 571 Proseminar For Lang Tchg credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PORT/571/)
Same as SPAN 571. See SPAN 571.

PORT 572 Theory and Literary Criticism credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PORT/572/)
Same as SPAN 572. See SPAN 572.

PORT 580 Classroom Language Acquisition credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PORT/580/)
Same as EIL 580, FR 580, GER 580, ITAL 580, and SPAN 580. See SPAN 580.

PORT 584 Theories in Second Language Acquisition credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PORT/584/)
Same as CI 584, EALC 584, EPSY 563, FR 584, GER 584, ITAL 584, LING 584, and SPAN 584. See SPAN 584.

PORT 588 Sem Second Lang Learn credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PORT/588/)
Same as EALC 588, FR 588, GER 588, ITAL 588, LING 588, and SPAN 588. See SPAN 588.

PORT 595 Special Topics Port & Braz Lit credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/PORT/595/)
Independent study/research under the direction of a faculty member. May or may not fulfill requirements for a particular degree program in Spanish, Italian and Portuguese. Consult graduate advisor. May be repeated in same or subsequent terms to a maximum of 8 hours.

PORT 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/PORT/599/)
Approved for S/U grading only. May be repeated.

PSM - PROFESSIONAL SCIENCE MASTER

PSM Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/PSM/)

Courses

PSM 501 PSM Industry Seminar I credit: 0 to 1 Hours. **(**https://courses.illinois.edu/schedule/terms/PSM/501/**)**
Engagement with students across science disciplines to address current developments in the science professions. Management and leadership challenges in science and issues facing science professionals in the workplace are addressed. Learning occurs through lecture and discussion with industry leaders. Taken in the first semester of the Professional Science Master's (PSM) cohort. Approved for letter and S/U grading; S/U grading only if taken for 0 hours credit; letter grade only if taken for 1 hour credit.

PSM 502 PSM Industry Seminar II credit: 0 to 1 Hours. **(**https://courses.illinois.edu/schedule/terms/PSM/502/**)**
Taken in the second semester of the PSM cohort, builds on the experience of the first semester industry seminar. Learning occurs through guest lectures by and discussions with industry leaders. Project management is explores. Engagement with students across science disciplines to address current developments in the science professions. Practical issues facing science professionals in the workplace are addressed. Approved for letter and S/U grading; S/U grading only if taken for 0 hours credit; letter grade only if taken for 1 hour credit. Prerequisite: PSM 501.

PSM 503 PSM Industry Seminar III credit: 0 to 1 Hours. **(**https://courses.illinois.edu/schedule/terms/PSM/503/**)**
Taken in the final semester of the PSM cohort, focuses on the shared experiences of the summer internship and on career development. Students present and critique, individual and in teams, the value and lessons learned from the internship. Discussions and exercises center on long-term career development and lifelong learning and commitment to science. Approved for letter and S/U grading; S/U grading only if taken for 0 hours credit; letter grade only if taken for 1 hour credit. Prerequisite: PSM 502.

PSM 520 Special Topics-Sci & Business credit: 0 to 3 Hours. **(**https://courses.illinois.edu/schedule/terms/PSM/520/**)**
Special, emerging, or advanced topics in science and business. Topics will vary by offering. May be used to pilot course offerings before adding them to the PSM curriculum. Open to Illinois Professional Science Master's (PSM) students only. Approved for letter and S/U grading. May be repeated in the same term up to 6 hours or separate terms up to 9 hours; this is contingent on program approval and other requirements.

PSM 555 PSM Internship credit: 0 to 1 Hours. **(**https://courses.illinois.edu/schedule/terms/PSM/555/**)**
Practical learning experience in which business knowledge and skills are applied to science problems and opportunities. In consultation with program coordinators, students find internship companies and positions that match their individual career objectives and meet the learning goals of the program. Learning objectives, deliverables, and performance evaluation are determined for each student by the program coordinator. Completed in the summer after the first year of study. Open to Illinois Professional Sciences Master's (PSM) students only. Internationals holding student visas must have prior authorization from International Student and Scholar Services. Approved for letter and S/U grading. May be repeated in separate terms.

PSYC - PSYCHOLOGY

PSYC Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/PSYC/)

Courses

PSYC 100 Intro Psych credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/100/)
Study of human behavior with special reference to perception, learning, memory, thinking, emotional life, and individual differences in intelligence, aptitude, and personality; emphasis on the scientific nature of psychological investigations; and discussion of research methods and the relation of their results to daily life and everyday problems. Lectures, discussions, and six hours of participation as a subject in psychological experiments. Credit is not given for both PSYC 100 and either PSYC 103 or PSYC 105.
This course satisfies the General Education Criteria for:
Social Beh Sci - Beh Sci

PSYC 102 Psych Orientation credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/102/)
Lectures designed to acquaint the psychology major with the various specializations available in the field, career exploration procedures, and a wide range of opportunities of special interest to psychology students. Recommended for freshmen in psychology. Approved for S/U grading only.

PSYC 103 Intro Experimental Psych credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/103/)
Surveys the field of psychology with an emphasis on experimental approaches to understanding the mind and human behavior; addresses perception, learning, memory, thinking, motivation, emotions, personality, development, intelligence, and other topics in psychology. Credit is not given for both PSYC 103 and either PSYC 100 or PSYC 105. Lectures with discussion, debates, and laboratory experiments in weekly sections.
This course satisfies the General Education Criteria for:
Social Beh Sci - Beh Sci

PSYC 144 Stereotypes, Prejudice & Discrimination credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/144/)
Course in Inequality & Cultural Understanding provides an interdisciplinary introduction to questions related to societal inequality. Each section emphasizes experiential learning through, for example, field trips or hands-on, community-based research projects. Prerequisite: This course is intended for first and second year students.
This course satisfies the General Education Criteria for:
Social Beh Sci - Beh Sci
Cultural Studies - US Minority

PSYC 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/199/)
Approved for letter and S/U grading. May be repeated.

PSYC 201 Intro to Social Psych credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/201/)
Systematic study of social factors in individual and group behavior; attention to social perception, motivation, and learning; attitudes, norms, and social influence processes; the development and dynamics of groups; and the effects of social and cultural factors on the individual. Prerequisite: PSYC 100 or PSYC 103.
This course satisfies the General Education Criteria for:
Social Beh Sci - Beh Sci

PSYC 204 Intro to Brain and Cognition credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/204/)
Introduction to the interdisciplinary field of cognitive neuroscience, which is concerned with how the cognitive systems supporting a broad range of capacities including memory, attention, and social and emotional processing, arise from the functioning of specific brain modules and brain mechanisms. Emphasizes how functional brain imaging and other cognitive neuroscience methods can be brought to bear on answering these questions. Prerequisite: PSYC 100 or PSYC 103 or PSYC 105.

PSYC 207 Psychology of Prejudice and Discrimination credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/207/)
Examines the psychological causes and social consequences of prejudice and discrimination in society. Learn about the current state of prejudice and discrimination in the U.S., empirical methods for studying prejudice and discrimination, and psychological interventions for reducing prejudice and discrimination. Topics include stereotyping, cognitive biases, group conflict, ideology, implicit associations, subtle and benevolent forms of prejudice, and microaggressions.
This course satisfies the General Education Criteria for:
Social Beh Sci - Beh Sci

PSYC 210 Behavioral Neuroscience credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/210/)
Survey of current knowledge and speculation regarding the brain's role in perception, motivation, sexual behavior, thinking, memory, and learning, based upon human clinical data and research in animal models. Prerequisite: PSYC 100, PSYC 103, or consent of instructor.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Life Sciences

PSYC 216 Child Psych credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/216/)
Study of the psychological development of the child. Credit is not given for both PSYC 216 and EPSY 236. Prerequisite: PSYC 100 or PSYC 103.

PSYC 220 Images of Mind credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/220/)
Introduction to neuroimaging and cognitive neuroscience, with a particular emphasis on critically evaluating neuroscience in the media. In addition to surveying reports in the popular press and their corresponding science articles, covers basic neuroanatomy, neuroimaging techniques, and a range of topics from cognitive neuroscience. Prerequisite: PSYC 100, PSYC 103, PSYC 105 or consent of instructor.

PSYC 224 Cognitive Psych credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/224/)
Introduction to the psychological study of human information processing and memory; acquisition, retrieval, and forgetting; and general knowledge, concepts, reasoning, and related issues in cognition. Prerequisite: PSYC 100 or PSYC 103.

PSYC 225 Language, Mind, and Brain credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/225/)
Same as LING 225. See LING 225.
This course satisfies the General Education Criteria for:
Social Beh Sci - Beh Sci

PSYC 230 Perception & Sensory Processes credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/230/)
Survey of the experimental psychology of sensory and perceptual processes and behavior; emphasis on the contribution of behavior science to understanding subjective experience of the physical and social environment.
This course satisfies the General Education Criteria for:
Social Beh Sci - Beh Sci

PSYC 235 Intro to Statistics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/235/)
Development of skill and understanding in the application of statistical methods to problems in psychological research; topics include descriptive statistics, probability theory and distributions, point and interval estimation, and hypothesis testing. Credit is not given for both PSYC 235 and any of STAT 100, ECON 202, EPSY 480, PSYC 301, SOC 485. Prerequisite: PSYC 100 or PSYC 103; college algebra or equivalent; or consent of academic advisor.
This course satisfies the General Education Criteria for:
Quantitative Reasoning I

PSYC 236 Madness and Modern Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/236/)
Same as HIST 236. See HIST 236.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

PSYC 238 Psychopathology and Problems in Living credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/238/)
Conceptions and facts about disordered behavior, including psychoses, neuroses, and other patterns of psychological disturbance. Prerequisite: PSYC 100 or PSYC 103.

PSYC 239 Community Psych credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/239/)
Redefines human and social problems and the implications for social programs and policies; reviews the historical antecedents, conceptual models, strategies and tactics of social and community programs; and employs examples from selected social systems (e.g., criminal justice, education, employment, and mental health). Prerequisite: PSYC 100 or PSYC 103.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

PSYC 245 Industrial Org Psych credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/245/)
Systematic study of the application of psychological methods and principles in business and industry; emphasis on personnel selection and factors influencing efficiency. Prerequisite: PSYC 100 or PSYC 103; credit or concurrent registration in a statistics course.

PSYC 248 Learning and Memory credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/248/)
Survey of basic phenomena in learning and memory emphasizing experimental data from animal and human research. Prerequisite: PSYC 100 or PSYC 103.

PSYC 250 Psych of Personality credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/250/)
Study of personality from various points of view: biological, experimental, social, and humanistic; surveys theory and empirical research in the study of personality. Prerequisite: PSYC 100 or PSYC 103.

PSYC 265 Power, Status, and Influence credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/265/)
Explores how individuals experience power, status, and influence. The course will focus on the personality and social factors that lead people to attain an elevated rank in society. We will examine how social position shapes basic psychological processes including social perception, relationship strategies, emotion, and well-being across the life course. Multiple forms of power and status will be studied, including those based on peer respect, class, race, gender, and physical dominance.

PSYC 290 Research Experience in Psych credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/290/)
Supervised participation in research and scholarly activities, usually as an assistant to an investigator. Approved for S/U grading only. May be repeated to a maximum of 9 hours. Prerequisite: Ten hours of psychology or cognate area, or written consent of instructor.

PSYC 296 Introduction to Current Topics in Psychology credit: 0 to 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/296/)
Introductory treatment of current topics in the field of psychology. May be repeated up to 6 hours in the same semester, to a total of 9 hours in subsequent semesters. Prerequisite: PSYC 100 or consent of instructor.

PSYC 301 Psychological Statistics credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/301/)
Development of skill and understanding of statistical methods for problems in psychological research; topics include descriptive statistics, probability theory and distributions, point and interval estimation, and hypothesis testing. The class also involves a computer laboratory. Strongly recommended to students who plan to pursue graduate studies in Psychology. Credit is not given for both PSYC 301 and any of STAT 100, ECON 202, EPSY 480, PSYC 235, SOC 485.
This course satisfies the General Education Criteria for:
Quantitative Reasoning I

PSYC 302 Applied Neuroscience credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/302/)
Examines topics in neuroscience highly relevant to our daily lives, especially as it pertains to mental health. Topics include neurobiology related to anxiety, depression, addiction, exercise, learning, memory, and personality characteristics. Special attention will be paid to race, sex, and socioeconomic differences and their influence on both genetic risk and environmental stress. The class will emphasize critical thinking and conceptualization and will frequently include open discussions. Same as NEUR 302. Prerequisite: PSYC 100 or equivalent.

PSYC 306 Psychology of Morality credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/306/)
Presents an overview and analysis of historical and current theory and research on moral psychology. Explores development of morality, moral reasoning and decision-making, rational and biased inputs to moral judgments, moral emotions, moral impression formation and person perception. Emphasis is on the social psychology of morality, but other perspectives such as developmental, cognitive, political, and individual differences will be explored. Prerequisite: PSYC 100 or equivalent.

PSYC 308 Psychology of Religion and Spirituality credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/308/)
Examines major topics in the psychology of religion and spirituality to promote reflection on how religion shapes attitudes, behavior, and contemporary U.S. society. Through the lens of psychology, we explore questions such as: Why are some people religious and spiritual? How do we study religion and spirituality from a psychological perspective? What do religion and spirituality look like across the lifespan? Does religion shape prejudice, morality, violence, or altruism? What is the role of religion in promoting health? Overall, we will examine these and other questions to promote greater understanding regarding the role of religion and spirituality in the lives of individuals and larger society. Same as REL 308. Prerequisite: PSYC 100 or equivalent.

PSYC 311 Behavioral Neuroscience Lab credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/311/)
Introduction to the research techniques used in behavioral neuroscience: includes behavioral analysis of drug effects, anatomy of the brain, hormones and behavior, neural circuits and related topics. Students will have direct experience working with laboratory rats to understand their importance in the advancement of our knowledge about how the brain functions. Prerequisite: Credit or concurrent registration in PSYC 210, or consent of instructor.

PSYC 312 Psychology of Race & Ethnicity credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/312/)
Exploration of the theoretical, empirical, and experiential writings concerning the issues of race and ethnicity as they relate to human behavior from the perspective of the individual in various social contexts. Same as AFRO 312. Prerequisite: PSYC 100.

PSYC 313 Drugs, Brain and Behavior credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/313/)
Drugs are ubiquitous in our society, whether used for medicinal or recreational purposes. We may be led to believe that chemical substances can be the cure for all that ails us, or the source of our demise. In this course, we cut through the noise by introducing key concepts critical for understanding how drugs can impact behavior: where drugs come from, how they get into the brain, what they do once they are there, and how drug action can lead to complex behavioral responses. Same as NEUR 313. Prerequisite: PSYC 210 or the consent of the instructor.

PSYC 314 Introduction to Aging credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/314/)
Same as CHLH 314, HDFS 314, RST 314, and REHB 314. See CHLH 314.

PSYC 318 Psych of the Infant credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/318/)
Early infant behavior, emphasizing critical evaluation of the various research techniques; prenatal and perinatal influences, ontogeny of psychological processes, environmental determinants, and infant assessment. Prerequisite: PSYC 216.

PSYC 320 The Teenage Years credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/320/)
An introduction to development during the teenage years (12-18). The course will cover research on biological, cognitive, social, and emotional development. Topics will include pubertal development and its social consequences, changing relationships with parents, identity development, the increasingly important role of peers, school adjustment, the emergence of psychopathologies, and high risk behaviors such as substance use. The course will focus on normative development in the U.S., but it will also cover cross-cultural development. Prerequisite: PSYC 100 and PSYC 216.

PSYC 321 Human Memory credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/321/)
Advanced treatment of human memory. Examines basic theory and methodology; types of memory; semantic, episodic, procedural, memory for language, places, and events; knowledge and memory; autobiographical memory; exceptional memory; mnemonics. Prerequisite: Six hours in psychology at or above the 200 level, such as PSYC 224 or PSYC 248.

PSYC 322 Introduction to Intellectual Disability credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/322/)
Same as REHB 322 and SPED 322. See SPED 322.
This course satisfies the General Education Criteria for:
Social Beh Sci - Beh Sci

PSYC 324 Developmental Psychopathology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/324/)
Overview of major theories and research in the field of developmental psychopathology. An emphasis will be placed on understanding how psychopathology is conceptualized from a developmental perspective. Topics will involve issues related to etiology, assessment, classification/diagnosis, and intervention. A range of psychological problems in childhood and adolescence will be discussed to illustrate the central themes. Prerequisite: PSYC 100 and either PSYC 216 or PSYC 238, or consent of instructor.

PSYC 326 Development and Relationships credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/326/)
Advanced overview of theory and research on interpersonal relationships across the life course and their implications for emotion, cognition, and behavior. Particular emphasis is placed on close relationships, i.e., romantic partners, family members, and mentors. Same as EPSY 330. Prerequisite: PSYC 216.

PSYC 327 Psychology of Human Sexuality credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/327/)
Presents a broad overview of psychological research, theory, and perspectives regarding human sexuality. Among other topics, the course covers historical and modern psychological perspectives on sexuality, development of sexuality, sexual anatomy and physiology, contraception and abortion, attraction, sexual coercion, polyamory, sexual "dysfunction," STIs, variations in sexual expression, sex work and pornography. Having an open mind and respectful attitude toward all forms of human sexuality are unofficial but necessary course prerequisites. Prerequisite: PSYC 100 or equivalent.

PSYC 328 Psychology of Gender credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/328/)
Discusses the similarities and differences between males and females across the lifespan, looking at possible biological and social explanations. Some of the topics covered include how children learn gender roles, similarities and differences across cognitive and social abilities, mental and physical health, and gender in different settings, including at work, at school, and at home. The course will also focus on agents of socialization, including the media, peers, and family. Prerequisite: PSYC 100 or equivalent.

PSYC 329 Animal Behavior credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/329/)
Same as ANSC 366, ANTH 342, and IB 329. See IB 329.

PSYC 331 Cognitive Psych Lab credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/331/)
Examination of the methods used to study human thought processes, including attention, memory, decision-making, language and concepts. Students will learn to design, carry out, and report research in cognitive psychology. Prerequisite: PSYC 224 or PSYC 248; PSYC 235.

PSYC 332 Social Psych Methods Lab credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/332/)
Lecture and laboratory in the methods and techniques of social psychology research in laboratory settings. Prerequisite: PSYC 201; PSYC 235 or equivalent.

PSYC 333 Social Psych in Society Lab credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/333/)
Methods and techniques of social psychological research in natural settings. Students formulate and carry out research problems using procedures appropriate for research in natural settings. Prerequisite: PSYC 201; PSYC 235 or SOC 280.

PSYC 334 Perception Lab credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/334/)
Examination of the research methods used to study human visual and spatial processes, including visual illusion, attention, imagery, navigation and spatial memory. Students will learn to design, carry out, and report psychological research. Prerequisite: PSYC 230 and statistics (PSYC 235 or equivalent).

PSYC 336 Topics in Clin/Comm Psych credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/336/)
Survey and critical review of subdisciplines in clinical/community psychology; concepts, methods, and assessments, intervention strategies and tactics. Subdisciplines addressed will vary. See Class Schedule for current titles. May be repeated with approval to a maximum of 6 undergraduate hours in same term, or to a maximum of 9 undergraduate hours in subsequent terms. Prerequisite: PSYC 238 or PSYC 239 or both depending on topic.

PSYC 340 Community Projects credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/340/)
Principles of psychology applied to service problems in the community; students serve as nonprofessional mental health workers in supervised experiences in schools, hospitals, and other nontraditional settings. May be repeated in the same or subsequent terms to a maximum of 8 undergraduate hours. Prerequisite: PSYC 100; junior or senior standing; and consent of instructor. Individual sections may require additional courses and prerequisites - consult the instructor.

PSYC 341 Advanced Community Projects credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/341/)
Advanced discussion and practicum on principles of psychology which may supplement mental health and other human services in a community. Students serve as nonprofessional mental health workers in supervised experiences in school hospitals and other nontraditional settings. May be repeated in the same or subsequent terms to a maximum of 8 undergraduate hours. Prerequisite: PSYC 340 and consent of instructor.

PSYC 350 Personality Lab credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/350/)
Study of personality emphasizing active participation in designing, conducting, analyzing, and presenting of research; lectures concern the practical aspects of research methodology and the philosophy of personality research; and laboratory involves conducting original research in small groups. Prerequisite: PSYC 235 or equivalent; and PSYC 250 or consent of instructor; completion of campus Composition I general education requirement.

PSYC 351 Thinking and Reasoning credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/351/)
An overview of historical and contemporary research on thinking, reasoning, and problem-solving. Topics will include normative systems of logic, defeasible/non-monotonic reasoning, psychological models of reasoning, heuristic problem-solving, insight and creativity, Bayesian decision-making, decision-making biases, and fast-and-frugal heuristics. Same as PHIL 351. Prerequisite: Either PSYC 100 and PSYC 224, or PHIL 101 and PHIL 102, or consent of instructor.

PSYC 352 Attitude Theory and Change credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/352/)
Comprehensive analysis of theories of attitude acquisition, organization, and change; emphasis on attitude change through communication and effects of persuasive communication on public opinion. Same as MACS 352. Prerequisite: PSYC 201 or equivalent.

PSYC 353 Social Cognition credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/353/)
Analysis of theory and research on problems related to the manner in which persons judge themselves and others on the basis of information received; topics include impression formation integration, determinants of interpersonal attractions, and attribution processes. Prerequisite: PSYC 201 and PSYC 235, or consent of instructor.

PSYC 355 The Attentive Mind credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/355/)
In this class, we will study basic mechanisms of attention, how researchers investigate attention, and how these basic concepts are used in design, legal, and engineering applications. We will also cover a wide range of attention-related topics, including multi-tasking, mind-wandering, mindfulness, neuropsychological disorders of attention (such as spatial neglect), and ADHD. This is an active learning course involving weekly group activities and discussions.

PSYC 358 Human Factors credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/358/)
Same as IE 340. See IE 340.

PSYC 361 The Psychology of Aging credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/361/)
Survey of changes in behavioral function in later adulthood, with emphasis on methodologies for studying aging, cognitive function, personality, social psychology, and psychopathology. Prerequisite: PSYC 100; Recommended: PSYC 216 or PSYC 224.

PSYC 363 Developmental Child Psych Lab credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/363/)
Provides students with a background in developmental research methodology, such as observational techniques used with children. Students will gain experience collecting data and learn how to write research papers. Prerequisite: PSYC 216 and PSYC 235, or equivalent.

PSYC 365 Stress, Trauma and Resilience credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/365/)
Provides an overview of traumatic stress, with a particular emphasis on the biological and social factors that shape human responses to trauma. Students will become familiar with the definition and range of potentially traumatic events in various social contexts (e.g. military vs. civilian), as well as the genetic and environmental features that influence vulnerability vs. resilience to trauma. Prerequisite: PSYC 100 or equivalent.

PSYC 373 Culture & Psychology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/373/)
Centers on cross-cultural study of substantive areas such as personality, motivation, socialization, interpersonal behavior, psychological environments, cognition and cognitive development, ethnocentrism and stereotypes, and visual perception; emphasis on methodological limitations and contributions of cross-cultural study; and discussion of current problems and research. Same as ANTH 373. Prerequisite: Six hours of psychology or anthropology, or consent of instructor.

PSYC 379 Clinical/Abnormal Psych Lab credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/379/)
Introduction to research methods used in clinical psychology covering research concerned with psychopathology. Students will learn concepts and key terms; read and discuss research reports; and obtain first-hand experience designing, carrying out, and reporting on their own research. Students in the class will be the participants for all student-developed research. Prerequisite: PSYC 238.

PSYC 383 Adv Prac in Mental Hlth I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/383/)
Supervised practicum experiences in a community agency.

PSYC 385 Adv Prac in Mental Hlth II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/385/)
Supervised practicum experiences in a community agency.

PSYC 396 Intermediate Current Topics in Psychology credit: 0 to 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/396/)
Intermediate treatment of current topics in the field of psychology. May be repeated to a maximum of 6 hours in a semester, to a maximum of 12 hours in subsequent semesters. Prerequisite: PSYC 100 or consent of instructor; particular sections may have additional 200-level prerequisites.

PSYC 398 Junior Honors Seminar credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/398/)
Seminar on experimental methods and contemporary psychological research. Prerequisite: Junior standing and admission to departmental honors program.

PSYC 402 Intro Clin Neuropsych credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/402/)
Fundamental concepts of clinical neuropsychology will be introduced, and students will learn the neuropsychological measures that are typically employed in assessment. The course will take a developmental perspective, and readings will address assessment issues in children and adolescents as well as adults. The course will be conducted as a lecture/seminar, with a focus on class participation. Actual testing data will be distributed to the class, and discussion will focus on interpretation and case conceptualization. Students will also be required to learn about and administer tests. 4 undergraduate hours. 4 graduate hours. Prerequisite: PSYC 210 and PSYC 238 or consent of instructor.

PSYC 403 Memory and Amnesia credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/403/)
Examination of the nature of amnesia and what it teaches us about the organization of normal human memory. Coverage will include studies of amnesia and other circumscribed memory impairments in human patients, taken from the scientific literature, which will be compared to the descriptions of amnesia in movies, literature, and the media. Same as NEUR 403. 3 undergraduate hours. 4 graduate hours. Prerequisite: PSYC 210 and/or PSYC 224, or consent of instructor.

PSYC 404 Cognitive Neuroscience credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/404/)
Examination of research concerned with identifying and characterizing the cognitive systems supporting such capacities as memory, attention, and visual processing, and with understanding how such cognitive activities arise from the functioning of specific brain modules and brain mechanisms. Same as NEUR 405. 3 undergraduate hours. 4 graduate hours. Prerequisite: PSYC 210 and/or PSYC 224, or consent of instructor.

PSYC 408 Human Behavior Genetics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/408/)
Human behavior is the result of many factors, including the independent and interactive effects of biological and social influences. The goals of this course are to understand how the basic principles of genetics can be used in the study of behavior in humans; evaluate the extent to which psychological characteristics are affected by genes; and consider the implications of genetic knowledge in psychology. Students will learn to evaluate evidence for and against genetic influences and gain an appreciation of the interrelationships of biological and social causes of behavior. 3 undergraduate hours. 4 graduate hours. Prerequisite: PSYC 100 or equivalent.

PSYC 410 Hate Crimes credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/410/)
Same as AFRO 410. See AFRO 410.

PSYC 413 Advanced Neuropsychopharmacology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/413/)
Up-to-date coverage of research and theory on the mechanisms of action of psychoactive drugs and how their characteristic behavioral effects arise from drug-receptor interactions in multiple brain circuits. The focus is on drugs used in the treatment of psychopathologies such as mood disorders, schizophrenia and attention deficit disorder, as well as on recreationally used drugs that can lead to substance use disorders. Students will read and review current neuroscience literature. Same as NEUR 413. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: PSYC 313 or consent of instructor.

PSYC 414 Brain, Learning, and Memory credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/414/)
Conveys a knowledge of current research on the physiological bases of learning and memory; considers a wide range of topics from molecular (e.g., cellular morphological and functional plasticity) to relatively molar (e.g., effects of clinical and experimental brain damage on learning and memory processes). Same as NEUR 414. 3 undergraduate hours. 4 graduate hours. Prerequisite: PSYC 210, MCB 150, or consent of instructor.

PSYC 416 African American Psychology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/416/)
Same as AFRO 411. See AFRO 411.

PSYC 417 Neuroscience of Eating & Drinking credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/417/)
Eating and drinking are critical to survival. Despite complex and redundant mechanisms, aberrant ingestive behaviors occur and can result in extreme body weights. This course is designed to critically probe and review the current understanding of neural and behavioral mechanisms of eating and drinking. Students will learn how eating and drinking are closely related to physical and mental health, and how to apply this knowledge to live a healthier life. Same as FSHN 417 and NEUR 417. 3 undergraduate hours. 4 graduate hours. Prerequisite: PSYC 100 or equivalent.

PSYC 420 Theories of Psychotherapy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/420/)
Same as EPSY 420. See EPSY 420.

PSYC 421 Principles of Psychophysiology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/421/)
Theoretical and practical aspects of human psychophysiology; measurement techniques and the application of psychophysiological principles to problems in developmental, clinical, social, and experimental psychology. Same as NEUR 421. 3 undergraduate hours. 4 graduate hours. Prerequisite: PSYC 235, six hours of psychology, and an introductory course in physiology.

PSYC 423 Language Acquisition credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/423/)
Survey of theory and research on the acquisition of language, concentrating on the acquisition of a first language by the young child. Same as LING 423 and MACS 423. 3 undergraduate hours. 4 graduate hours. Prerequisite: Six hours of psychology or linguistics above the 100-level, or consent of instructor.

PSYC 425 Psych of Language credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/425/)
Survey of theory and research in the psychology of language; topics include relation of linguistics and psychology, language development, and influence of language on perception, memory, and thought. 3 undergraduate hours. 4 graduate hours. Credit is not given for both PSYC 425 and LING 425. Prerequisite: Six hours of psychology or consent of instructor.

PSYC 427 Language and the Brain credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/427/)
Same as LING 427 and SHS 427. See SHS 427.

PSYC 432 Genes and Behavior credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/432/)
Same as ANTH 432, IB 432 and NEUR 432. See IB 432.

PSYC 433 Evolutionary Neuroscience credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/433/)
Current methods, tools, and progress in evolutionary biology and quantitative genetics of brain and behavior of vertebrates. Same as IB 436, NEUR 433, and PHIL 433. 3 undergraduate hours. 4 graduate hours. Prerequisite: IB 150 or PSYC 210.

PSYC 437 Advanced Psychology Lab credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/437/)
An advanced laboratory course in different areas of psychology. Detailed descriptions are provided under the individual sections. 4 undergraduate hours. No graduate credit. May be repeated in separate semesters to a maximum of 8 undergraduate hours. Prerequisite: PSYC 100, additional courses and prerequisites may be required depending on the lab.

PSYC 443 Psychophysiology in Ex & Sport credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/443/)
Same as KIN 443. See KIN 443.

PSYC 445 Cognitive Neuroscience Lab credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/445/)
Study of the basic principles underlying scanning of the brain using functional Magnetic Resonance Imaging (fMRI). The lectures introduce how to use an MRI scanner, the basic biophysics that makes functional imaging possible, experimental design for fMRI, and basic data analysis. During the labs, students will get hands on experience analyzing fMRI data. Same as NEUR 445. 4 undergraduate hours. 4 graduate hours. Prerequisite: One of the following: PSYC 204, PSYC 210, PSYC 220, or consent of the instructor. PSYC 235 or equivalent is recommended.

PSYC 447 Psych of Sport Performance credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/447/)
Same as KIN 447. See KIN 447.

PSYC 450 Cognitive Psychophysiology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/450/)
Survey of the theory and practice of using recordings of brain electrical activity to study normal and abnormal perception, attention, decision-making, memory, response preparation, and language. Same as NEUR 450. 3 undergraduate hours. 4 graduate hours. Prerequisite: PSYC 224 or equivalent; PSYC 210 recommended.

PSYC 451 Neurobio of Aging credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/451/)
Study of the neurobiological consequences of aging with an emphasis on brain changes at the cellular and systems level, using animal models of healthy and pathological aging. Same as KIN 458 and NEUR 451. 3 undergraduate hours. 4 graduate hours. Prerequisite: PSYC 210 or related courses or consent of instructor.

PSYC 453 Cog Neuroscience of Vision credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/453/)
Overview of the neuroscience of the visual system, the eye and subcortical structures, with a focus on the visual cortex and higher-level vision (e.g. attention and object perception). Same as NEUR 453. 3 undergraduate hours. 4 graduate hours. Prerequisite: PSYC 210, PSYC 220, PSYC 224, PSYC 230 or consent of instructor.

PSYC 455 Organizational Psych credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/455/)
Social psychological research and theory applied to industrial problems; emphasis on interaction and communication theory, role theory, leadership theory, motivational and perceptual theory, and group structure theory as an aid in understanding and analyzing industrial problems. 3 undergraduate hours. 2 to 4 graduate hours. Prerequisite: PSYC 201 or PSYC 245.

PSYC 456 Human Performance and Cognition in Context credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/456/)
Same as EPSY 456 and IE 445. See EPSY 456.

PSYC 462 How Children Think credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/462/)
Examines the development of children's thinking from birth through the preschool and elementary school years. Addresses questions such as the following: What do babies know about the world? What can they perceive, and how do their perceptual abilities develop? How do children come to understand other people's actions and mental states? How do they think about biological categories (such as animals and plants) and social categories (such as boys and girls)? When and how do children learn what numbers mean? How is children's development influenced by culture? 3 undergraduate hours. 4 graduate hours. Prerequisite: PSYC 216.

PSYC 465 Personality and Soc Dev credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/465/)
Major theories of personality and social development, with attention to processes of social learning, individual differences in personality development, and outcomes of social development; applications to school, home, and other field settings. Same as EPSY 405. 3 undergraduate hours. 4 graduate hours. Prerequisite: PSYC 216 or EPSY 236 or equivalent.

PSYC 468 Psych and Law credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/468/)
Examines relationship of the administrative, civil, and criminal justice systems to educational and mental health institutions; individual rights, social issues, and psychological well being. 3 undergraduate hours. 2 to 4 graduate hours. Prerequisite: Six hours of social science.

PSYC 472 Environmental Psychology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/472/)
Same as NRES 472. See NRES 472.

PSYC 475 Personnel Psych credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/475/)
Introduces problems and research relevant to personnel issues in organizations. Topics include: individual differences; selection of personnel; test theory; performance appraisal; equal employment opportunity legislation, regulation, and litigation; assessing bias in selection. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: PSYC 235 or equivalent, and either PSYC 245 or BADM 313.

PSYC 477 Philosophy of Psychology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/477/)
Same as PHIL 477. See PHIL 477.

PSYC 489 Neural Network Modeling Lab credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/489/)
Introduction to neural network modeling, the principles of neural computation, learning algorithms and the evaluation of neural networks as models of human perception and cognition. 3 undergraduate hours. 4 graduate hours. Prerequisite: College algebra or equivalent; computer programming experience, or consent of instructor.

PSYC 490 Measurement & Test Develop Lab credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/490/)
The measurement of human behavior in psychological studies; the construction and use of psychological tests; introduction to tests of intelligence, achievement, personality, and interest; and practice in test construction, administration, and validation. Lectures and laboratory. 4 undergraduate hours. 4 graduate hours. Prerequisite: A knowledge of statistics equivalent to that from PSYC 235.

PSYC 492 Capstone Undergrad Research credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/492/)
Capstone experience for undergraduate students doing advanced research in any area of psychology. Provides in-depth background knowledge of their research, and teaches students to make effective oral and written presentations of their findings. In conjunction with PSYC 494, will facilitate the preparation of a Bachelor's thesis that can be submitted for the awarding of the departmental distinction at graduation. May be taken for two semesters with the first semester emphasizing a review of the literature and the second semester concentrating on the presentation of the results. 3 undergraduate hours. No graduate credit. May be repeated in separate terms to a maximum of 6 hours. Prerequisite: Senior standing in Psychology, consent of instructor, and students must arrange to do a research project with a faculty member.

PSYC 494 Advanced Research in Psych credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/494/)
Supervised independent investigation of special topics in psychology; requires a written report with a final copy submitted for departmental records. 1 to 4 undergraduate hours. No graduate credit. May be repeated to a maximum of 12 hours. Prerequisite: Ten hours of psychology or cognate area, or written consent of instructor.

PSYC 495 Internship Capstone Experience credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/495/)
This capstone seminar will connect students' summer internship experiences to their academic major in Psychology and to their career goals. Students will reflect, discuss and build on their internship experiences to help them identify the skills and abilities they have and need to be successful. They will participate in both individual assignments and team projects that will facilitate their ability to communicate in the many different careers available to students with a degree in psychology. 3 undergraduate hours. No graduate credit. Prerequisite: Completion of an internship during previous summer.

PSYC 496 Adv Current Topics in Psych credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/496/)
Advanced treatment of current topics in the field of psychology. 2 to 4 undergraduate hours. 2 to 4 graduate hours. May be repeated to a maximum of 9 hours. Prerequisite: PSYC 100 and junior standing, or consent of instructor; particular sections may have additional 200-level and/or 300-level prerequisites.

PSYC 498 Senior Honors Seminar credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/498/)
Continuation of PSYC 398, this course assists students in the Psychology Honors Program with the researching and writing of an undergraduate honors thesis, under supervision of a faculty member, on a problem of appropriate scope and character. 3 undergraduate hours. No graduate credit. Prerequisite: PSYC 398.
This course satisfies the General Education Criteria for:
Advanced Composition

PSYC 499 Senior Honors Seminar II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/499/)
The completion of writing of an undergraduate honors thesis, under supervision of a faculty member, on a problem of appropriate scope and character. Students also create posters describing their work for presentation at the Psychology Honors Poster Fair and the Campus Undergraduate Research Symposium. 3 undergraduate hours. No graduate credit. PSYC 398 and PSYC 499 are approved for General Education credit only as a sequence. All courses must be completed to receive Advanced Composition credit. Prerequisite: PSYC 498.
This course satisfies the General Education Criteria for:
Advanced Composition

PSYC 500 Professional Develop for Psych credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/500/)
Provides practical guidance to graduate students in psychology about a variety of professional issues, including topics such as publishing, speaking, writing, teaching, research ethics, mentoring, interviewing for jobs, and preparing for different career options. The course is discussion-based and provides a forum to address common questions and problems encountered by graduate students in psychology. 1 to 4 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated up to 8 credit hours if topics vary.

PSYC 501 Best Psych Research Practices credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/501/)
Explores topics concerning the best research practices used in the different areas of psychology. Examination of recent advances in research design, analysis, and reporting will hone methodological and statistical intuitions. Students will investigate the growing literature on problematic practices, consider proposed solutions, and construct and evaluate simulations to enhance their understanding of the best methodologies so they can contribute to a more open and reproducible psychological science. 2 to 4 graduate hours. No professional credit. May be repeated up to 8 graduate hours, if topics vary.

PSYC 503 Categories and Concepts credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/503/)
The psychology of human concepts, including concept learning, categorization, the structure of concepts in memory and conceptual development. Prerequisite: Graduate standing in psychology or consent of the instructor.

PSYC 504 Theories of Attention credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/504/)
Systematic study of the psychology of attention, including focused and divided attention, dual-task performance, attention and memory, attention and automatization, and skilled performance. The emphasis is primarily theoretical, focusing on current approaches and the historical developments that led to them. Prerequisite: Graduate standing in Psychology or consent of instructor.

PSYC 506 Statistical Methods I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/506/)
Techniques in applied statistics used in psychological research, including simple linear regression, partial and multiple correlation, and nonparametric methods; thorough review of statistical estimation and significance tests; emphasizes applied statistics and statistical computing. 4 graduate hours. No professional credit. Credit is not given for both PSYC 506 and SOC 586. Prerequisite: Graduate standing or consent of instructor.

PSYC 507 Statistical Methods II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/507/)
Continuation of PSYC 506. Experimental design, including Latin Squares, factorials, and nested designs; expected mean squares; analysis of covariance; emphasizes the general linear model. 4 graduate hours. No professional credit. Credit is not given for both PSYC 507 and SOC 587. Prerequisite: PSYC 506.

PSYC 509 Psych Scaling Multidimen Meth credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/509/)
Basic scaling theory; metric, non-metric, and individual differences multidimensional scaling models and methodology, emphasizing underlying assumptions and interpretation; and applications of scaling methods to measurement problems in social and personality psychology, perception, cognition, and sociology. Same as SOC 589. Prerequisite: PSYC 407, SOC 587, or equivalent course in quantitative methods.

PSYC 510 Advances in Behavioral Neuroscience credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/510/)
Deals with the relevance of behavioral neuroscience to the subdisciplines of psychology; topics include behavioral genetics, hormones and sexuality, eating and drinking, human memory models and the brain, biorhythms in normal and abnormal behavior, physiology of sensing and perceiving, selective attention, and others. Same as NEUR 510. 3 or 4 graduate hours. No professional credit. Consent of instructor is required for more than 3 hours of credit.

PSYC 514 Seminar in Cognitive Science credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/514/)
In-depth view of cognitive science: the study of mind and intelligence. Covers major areas of cognitive science including: anthropology, artificial intelligence, cognitive neuroscience, cognitive psychology, emotions, linguistics, and philosophy. Lectures focus on prominent questions and issues in each area highlighted by descriptions of current research. Also explores interconnections among these fields. Same as ANTH 514, CS 549, EPSY 551, LING 570, and PHIL 514. Prerequisite: Minimally second semester graduate standing in a cognitive science discipline including: anthropology, computer science, educational psychology, electrical engineering, linguistics, philosophy, psychology, or consent of instructor.

PSYC 515 Neurotoxicology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/515/)
Same as CB 514 and ENVS 514. See CB 514.

PSYC 516 Perception credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/516/)
Systematic study of methods and research findings in the field of human perception, together with an evaluation of theoretical interpretations. Prerequisite: Twelve hours of psychology.

PSYC 518 Exp Psych Human Learn credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/518/)
Data and theories of verbal learning; verbal mediators and their functions in learning and retention; transfer of training; short-term and long-term memory; and conceptualizations of the forgetting process. Prerequisite: Twelve hours of psychology or consent of instructor.

PSYC 521 Knowledge Representation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/521/)
Surveys theories and data about the representation of knowledge by human beings; examines images, concepts, semantic features, propositions, semantic nets, rules, parallel distributed, procedural, schemas, mental models, and theories. Prerequisite: Background in either cognitive psychology, linguistics, or artificial intelligence.

PSYC 523 Prob Solving and Cog Skill Acq credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/523/)
Selected topics in how people solve problems and learn cognitive skills. A broad range of empirical findings will be discussed, along with psychological and computational accounts. Prerequisite: Consent of instructor.

PSYC 524 Dev Psycholinguistics credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/524/)
Examination of empirical and theoretical literature on the acquisition of language; emphasis on universal patterns in the acquisition of a first language and on a consideration of explanations, both psychological and linguistic, for these patterns. Same as LING 524 and MDIA 524. Prerequisite: LING 425, PSYC 425 or PSYC 462, or consent of instructor.

PSYC 525 Psycholinguistics credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/525/)
Critical survey of psychological research on language and communication; emphasis on psychological processes that allow humans to produce and understand speech, writing, and gesture. Same as LING 525 and MDIA 525. Prerequisite: Consent of instructor.

PSYC 526 Adv Psycholinguistics credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/526/)
Overview of psychological research investigating the perceptual, cognitive, neuropsychological, and behavioral events that accompany speaking, reading, or listening to language. Examines adult language processing as well as the development of specific language skills and the nature of related language disorders. Same as EPSY 566. May be repeated in the same or separate terms to a maximum of 12 hours. Prerequisite: PSYC 525 or consent of instructor.

PSYC 529 Second Lang Acq & Bilingualism credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/529/)
Same as LING 529. See LING 529.

PSYC 530 Found of Ind Org Psych credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/530/)
Theoretical and empirical foundations of various content areas in industrial-organizational psychology; sample topics include employee selection and placement, training, human factors engineering, work motivation, employee attitudes, leadership, and organizational theory. Same as LER 530. Prerequisite: Twelve hours of psychology or consent of instructor.

PSYC 531 Psych Measurement in Indus credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/531/)
Application of psychometric methods and the finding of differential psychology to the selection, classification, and performance evaluation of industrial personnel. Prerequisite: PSYC 407 or equivalent.

PSYC 532 Intro to Clin-Comm Psych III credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/532/)
Part 3 of a 4 part sequence designed to provide clinical community graduate students with a broad overview of theories, approaches, and methods in clinical and community psychology. This set of courses includes coverage of all major domains in clinical-community psychology, including psychopathology/problems in living, clinical-community assessment, diagnosis, effective interventions and their evaluation, and prevention. These courses are also meant to engage graduate students in the process of critical inquiry in clinical-community psychology. Required of all entering graduate students in clinical-community psychology. Prerequisite: Consent of instructor required for all students not admitted to graduate program in clinical-community psychology.

PSYC 533 Intern in Ind Org Psych credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/533/)
Supervised practice in organizational practice and research, implementation of programs, evaluation, feedback of survey results, applied assessments, assistance in EAP programs, and development of personnel guidelines; emphasizes applications of principles and procedures. Offered in special interest of graduate students in I/O psychology program. Prerequisite: Graduate standing in Psychology, credit or concurrent registration in PSYC 530, and consent of instructor.

PSYC 534 Models of Decision and Choice credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/534/)
Survey of mathematical and other formal models of human judgment and decision processes. Emphasizes differences between normative and descriptive models. Same as ACCY 595 and PS 528. 4 graduate hours. No professional credit. Prerequisite: PSYC 407.

PSYC 535 Cultural Psychology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/535/)
Explores cultural influences on attitudes, cognition, and behavior. The focus is social psychological but the readings draw on work across several fields, both inside psychology and outside psychology. Subjects have included cultural influences on violence, analytic vs. holistic thinking styles, economic behavior, parenting and education, and the construction of self. Methodological issues in making cross-cultural comparisons will be discussed. 4 graduate hours. No professional credit.

PSYC 536 Dev Cultural Psychology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/536/)
Analysis of current developments, trends, and controversies in developmental cultural psychology, with an emphasis on how child development unfolds in dynamic cultural contexts; detailed examination of contexts that shape children's development within and across cultures, social addresses, and historical eras; foregrounds theories and methods that treat children as meaning makers who actively navigate and transform complex cultural realities.

PSYC 537 Development & Psychopathology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/537/)
Overview of major concepts, issues, and research in the field of developmental psychopathology, which is an interdisciplinary field influenced by psychology, medicine, neuroscience, and other disciplines. Explores youth psychopathology from a developmental perspective, focusing on the intersection between normative and atypical development. Introduces students to assessment and classification, key theories of etiology, and research design issues. Representative disorders will be discussed as examples of how these issues interface with specific types of youth psychopathology. Both pioneering and contemporary research in the field will be covered.

PSYC 538 Intro to Clin-Comm Psych I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/538/)
Part 1 of 4 part sequence designed to provide clinical-community graduate students with a broad overview of theories, approaches, and methods in clinical and community psychology. This set of courses includes coverage of all major domains in clinical-community psychology, including psychopathology/problems in living, clinical-community assessment, diagnosis, effective interventions and their evaluation, and prevention. These courses are also meant to engage graduate students in the process of critical inquiry in clinical-community psychology. Required of all entering graduate students in clinical-community psychology. Prerequisite: Consent of instructor required for all students not admitted to graduate program in clinical-community psychology.

PSYC 539 Intro to Clin-Comm Psych II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/539/)
Part 2 of a 4 part sequence designed to provide clinical-community graduate students with a broad overview of theories, approaches, and methods in clinical and community psychology. This set of courses includes coverage of all major domains in clinical-community psychology, including psychopathology/problems in living, clinical-community assessment, diagnosis, effective interventions and their evaluation, and prevention. These courses are also meant to engage graduate students in the process of critical inquiry in clinical-community psychology. Required of all entering graduate students in clinical-community psychology. Prerequisite: Consent of instructor required for all students not admitted to graduate program in clinical-community psychology.

PSYC 540 Social Development credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/540/)
Same as EPSY 530. See EPSY 530.

PSYC 541 Personality and Behav Dynamics credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/541/)
Theory and research in personality, emphasizing personality as individual differences among persons and personality as attributed to persons by others; explores the measurement, antecedents, and consequences of such differences and attributions. Prerequisite: Twelve hours of psychology.

PSYC 542 Interdisciplinary Approaches to Neuroscience I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/542/)
Same as MCB 542 and NEUR 542. See NEUR 542.

PSYC 543 Interdisciplinary Approaches to Neuroscience II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/543/)
Same as MCB 543 and NEUR 543. See NEUR 543.

PSYC 544 Developmental Cognitive Neuroscience credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/544/)
A survey of the contributions neuroscience is making or could potentially make toward understanding cognitive development. During the first part of the semester some class time will be dedicated to understanding how different neuroscience measures (e.g., fMRI, EEG, NIRS) are applied to developmental populations. In addition, each class will also focus on the application of neuroscience to a particular psychological topic of interest including language, literacy, mathematics, and social-cognitive development. 4 graduate hours. No professional credit. Prerequisite: Recommended, but not required: PSYC 569; PSYC 524.

PSYC 545 Intro to Clin-Comm Psych IV credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/545/)
Part 4 of a 4 part sequence designed to provide clinical-community graduate students with a broad overview of theories, approaches, and methods in clinical and community psychology. This set of courses includes coverage of al major domains in clinical-community psychology, including psychopathology/problems in living, clinical-community assessment, diagnosis, effective interventions and their evaluation, and prevention. These courses are also meant to engage graduate students in the process of critical inquiry in clinical-community psychology. Required of all entering graduate students in clinical-community psychology. Prerequisite: Consent of instructor required for all students not admitted to graduate program in clinical-community psychology.

PSYC 546 Intervention & Assessment credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/546/)
This two-semester course sequence covers research and methods of intervention, prevention, and assessment/diagnosis in clinical and community psychology. Includes scholarly readings and didactic discussions, as well as supervision of applied work in which the students engage. Instruction in ethical standards and professional development is provided. Emphasis is given to empirically-supported assessment, intervention, and supervision in clinical and community psychology. 2 to 4 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated up to 40 hours in separate semesters. Prerequisite: Credit or concurrent registration in PSYC 538, PSYC 539, PSYC 532, or PSYC 545, or consent of instructor.

PSYC 548 Modeling Heterogeneity credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/548/)
Conceptual, mathematical, and statistical framework to model heterogeneity of behavior. Students will learn to move beyond a psychology of averages and think of variability of behavior as a source of information for scientific inquiry rather than mere noise. This course provides a basic introduction to order-constrained inference methods. Student projects encourage applications to any area of the social and behavioral sciences or at their interface with other scientific disciplines. Students will learn to use open-source public-domain specialized software. Same as PS 534. 4 graduate hours. No professional credit. Prerequisite: PSYC 506 or equivalent, or permission of the instructor.

PSYC 550 Moral Psychology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/550/)
Intensive analysis of issues in the psychological study of morality. Among others topics, the course will cover development of moral judgment, classic and modern outlooks, major theories and recent advances, moral emotions, moral hypocrisy, morality and political ideology, morality and the law, morality and the environment, morality and religion, moral dilemmas, morality in consumer contexts, and the study of praise and blame. 4 graduate hours. No professional credit. Prerequisite: Graduate Students Only.

PSYC 551 Theory in Social Psychology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/551/)
Overview of the major theoretical perspectives in experimental social psychology, including theories of attitudes, motivation, emotion, interpersonal and intergroup relations, and the self. Prerequisite: Consent of instructor.

PSYC 552 Soc Psych Theory and Meth II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/552/)
Second of a two-course sequence for first-year graduate students in social psychology. Advanced theoretical and research approaches to a broad range of issues in social psychology; participation and seminar presentations by social psychology program faculty. Each student participates in seminar presentations and develops and conducts a research study in conjunction with one or more faculty members. Prerequisite: Consent of instructor.

PSYC 553 Founds of Organizational Behav credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/553/)
Same as BADM 510, PS 514, and SOC 575. See BADM 510.

PSYC 554 Classroom Learning credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/554/)
Same as EPSY 552. See EPSY 552.

PSYC 555 Detection and Discrimination credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/555/)
Reviews prominent theoretical approaches to understanding tasks that involve detection and discrimination. A major portion of the class will be devoted to signal-detection theory and to drift-diffusion theory. The goal of this class is to empower students to bring these well-validated and highly useful models to their own research. 4 graduate hours. No professional credit.

PSYC 558 Attitudes credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/558/)
Intensive analyses of recent developments in attitude theory and research; emphasis on the attitude-behavior relationship; and examination of theories of attitude and attitude change with respect to their utility in predicting and changing social behavior. Prerequisite: Consent of instructor.

PSYC 559 Small Groups credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/559/)
Intensive examination of current research and theory on structure, process, and performance of groups; critical examination of recent research and theoretical literature; and development of research designs for related issues in the field. Prerequisite: Consent of instructor.

PSYC 563 ResearchMethods:Clin/CommPsych credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/563/)
Examination of research methods and strategies in Clinical and Community Psychology and related fields; issues involved in casual inference from experimental and quasi-experimental designs; qualitative research methods. Prerequisite: PSYC 406.

PSYC 567 Personality Assessment credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/567/)
Methods and theory in the quantitative assessment of personality; review of research findings and trends. Same as EPSY 567. Prerequisite: PSYC 407 or equivalent.

PSYC 569 Cognitive Development credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/569/)
Intensive examination of current research on infant cognition. Topics include: object segregation, object permanence, physical reasoning, object individuation, number, and psychological reasoning. Prerequisite: Consent of instructor.

PSYC 570 Principles and Methods of Teaching Psychology credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/570/)
Designed for graduate students in psychology; areas considered include developing course objectives and content; developing and presenting teaching-learning situations; evaluating the attainment of course objectives; advising and counseling students; ethics in teaching; and research problems on the teaching of psychology. 0 to 4 graduate hours. No professional credit. Approved for S/U grading only. May be repeated in separate terms up to 12 hours. Prerequisite: Second-year graduate standing in psychology or consent of instructor.

PSYC 573 Clin/Comm: History & Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/573/)
One of a series of independent study courses to help Clinical/Community Psychology graduate students develop breadth of knowledge in the broader field of Psychology. Involves an overview of the history and systems of psychological thought and satisfies the breadth requirement in the area. Prerequisite: Before enrolling in this course, students must develop and maintain a portfolio of engagement with the breadth area of History and Systems demonstrating 45 hours effort. Students must first meet with the course instructor to present their portfolio. Instructor approval required. Clinical/Community Psychology graduate students only.

PSYC 574 Microskills & Prof Standards credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/574/)
This year-long course covers professional standards and ethics, which emphasizes applied skills for the practice of Clinical and Community Psychology. Students will learn basic skills in rapport-building, including initiating the first contact or session, reflective listening, and paying attention to affect, body language, and interpersonal process in session or interactions. Instruction in professional ethics, supervision, and consultation. Students may practice some of the learned skills by developing relationships with gatekeepers of local organizations and providing consultation and supervision or engaging in collaborations to improve the quality of life of community members. Approved for S/U grading only. May be repeated in separate terms to a maximum of 4 hours. Prerequisite: Clinical/Community Psychology graduate students only; or consent of instructor.

PSYC 575 Clinical/Community: Diversity credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/575/)
Addresses issues of human diversity in the research and applied work of Clinical/Community Psychologists. Diversity is broadly defined and includes attention to, for example: national origin, culture, race, ethnicity, social class, physical ability, cognitive ability, sexual orientation, gender identity, and privilege/oppression. Utilizes both the scholarly literature on diversity, and experiential exercises to develop knowledge and cultural competence. Approved for S/U grading only. May be repeated in separate terms to a maximum of 4 hours. Prerequisite: Clinical/Community Psychology graduate students only; or consent of instructor.

PSYC 576 Clinical/Community: Biological credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/576/)
One of a series of independent study courses to help Clinical/Community Psychology graduate students develop breadth of knowledge in the broader field of Psychology. Involves an overview of the research and theory in the major subdomains within the area of Biological Psychology and satisfies the breadth requirement in the area. Prerequisite:
Before enrolling in the course, students must develop and maintain a portfolio of engagement with the breadth area of Biological Psychology demonstrating 45 hours of effort. Students must first meet with the course instructor to present their portfolio. Instructor approval required.

PSYC 577 Clinical/Community:Cog/Affect credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/577/)
One of a series of independent study courses to help Clinical/Community Psychology graduate students develop breadth of knowledge in the broader field of Psychology. Involves an overview of the research and theory in the major subdomains within the area of Cognitive/Affective Psychology and satisfies the breadth requirement in the area. Prerequisite: Before enrolling in this course, students must develop and maintain a portfolio of engagement with the breadth area of Cognitive/Affective Psychology demonstrating 45 hours of effort. Students must first meet with the course instructor to present their portfolio. Instructor approval required.

PSYC 578 Clinical/Community:Development credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/578/)
One of a series of independent study courses to help Clinical/Community Psychology graduate students develop breadth of knowledge in the broader field of Psychology. Involves an overview of the research and theory in the major subdomains within the area of Developmental Psychology and satisfies the breadth requirement in the area. Prerequisite: Before enrolling in this course, students must develop and maintain a portfolio of engagement with the breadth area of Developmental Psychology demonstrating 45 hours of effort. Students must first meet with the course instructor to present their portfolio. Instructor approval required.

PSYC 579 Clinical/Community: Social credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/579/)
One of a series of independent study courses to help Clinical/Community Psychology graduate students develop breadth of knowledge in the broader field of Psychology. Involves an overview of the research and theory in the major subdomains within the area of Social Psychology and satisfies the breadth requirement in the area. Prerequisite: Before enrolling in this course, students must develop and maintain a portfolio of engagement with the breadth area of Social Psychology demonstrating 45 hours of effort. Students must first meet with the course instructor to present their portfolio. Instructor approval required.

PSYC 581 Applied Regression Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/581/)
Same as EPSY 581. See EPSY 581.

PSYC 587 Hierarchical Linear Models credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/587/)
Same as STAT 587 and EPSY 587. See EPSY 587.

PSYC 588 Covar Struct and Factor Models credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/588/)
Introduction to covariance structure models, linear structural equations, and factor analysis; identification and parameter estimation problems; assessing goodness-of-fit; use of up-to-date computer software implementing current estimation methods; applications to a wide variety of social and behavioral science modeling problems. Same as EPSY 588, SOC 588, and STAT 588. Prerequisite: PSYC 594, STAT 571, or SOC 587.

PSYC 589 Categorical Data Analysis in Educational Psychology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/589/)
Same as EPSY 589 and SOC 579. See EPSY 589.

PSYC 590 Individual Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/590/)
For graduate students who wish to conduct research on special problems not included in graduate theses. Approved for S/U grading only. Prerequisite: Consent of instructor.

PSYC 593 Seminar credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/593/)
Discussion of current topics in their historical setting, with special emphasis on research problems. 2 or 4 graduate hours. No professional credit. May be repeated if topics vary.

PSYC 594 Multivar Anlys in Psych and Ed credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/594/)
Examines the principal methods of descriptive and inferential statistics used in the analysis of multiple measurements, emphasizing linear transformations, multiple regression, principal components, multivariate analysis of variance, canonical correlation and variates, discriminant functions and variates, and conventional procedures of factor analysis; involves both theory and applications. Same as EPSY 584 and SOC 584. Prerequisite: PSYC 407 or EPSY 581 or EPSY 582 or consent of instructor.

PSYC 595 Theories of Measurement I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/595/)
Same as EPSY 585. See EPSY 585.

PSYC 596 Theories of Measurement II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/596/)
Same as EPSY 586. See EPSY 586.

PSYC 598 Proseminar in Psychology credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/598/)
Weekly presentation and discussions of current research by faculty, graduate students and visiting scholars. Sections of these proseminars are offered by each division in the Psychology Department. Requirements include attendance and participation in discussion. Same as NEUR 598. 0 to 4 graduate hours. Approved for S/U grading only. May be repeated.

PSYC 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/PSYC/599/)
Approved for S/U grading only. May be repeated.

QUEC - QUECHUA

QUEC Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/QUEC/)

Courses

QUEC 410 Beginning Quechua I credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/QUEC/410/**)**
Intensive course for beginner students of Quechua. Students will develop basic listening, speaking, reading and writing skills in Quechua. Emphasis on oral production and comprehension skills. 3 undergraduate hours. 4 graduate hours.

QUEC 411 Beginning Quechua II credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/QUEC/411/**)**
Continuation of intensive course for beginner level Quechua. Expansion on developing basic listening, speaking, reading and writing skills in Quechua. Emphasis on production and comprehension skills. 3 undergraduate hours. 4 graduate hours.

QUEC 420 Intermediate Quechua I credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/QUEC/420/**)**
Intensive course for intermediate-level Quechua. Emphasis on oral and written production and comprehension skills. 3 undergraduate hours. 4 graduate hours. Prerequisite: QUEC 411 or consent of instructor.

QUEC 421 Intermediate Quechua II credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/QUEC/421/**)**
Continuation of intensive course for intermediate-level Quechua. Emphasis on oral and written production and comprehension skills 3 undergraduate hours. 4 graduate hours. Prerequisite: QUEC 420 or consent of instructor.

RST - RECREATION, SPORT, AND TOURISM

RST Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/RST/)

Courses

RST 100 Recreation, Sport, and Tourism in Modern Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RST/100/)
This course examines central issues in defining leisure, recreation, sport, and tourism. Historical, philosophical, sociological, psychological, and economic approaches to understanding these areas, their behaviors and meanings, social contexts, and personal and social resources are examined. By the end of the semester, students should understand their history and evolution, as well as their impact on contemporary society.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

RST 101 Orientation to Recreation, Sport and Tourism credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/RST/101/)
Introduction to Recreation, Sport and Tourism which provides an overview of the RST curriculum, areas of study, and opportunities available for a career in the field.

RST 110 Service Delivery in RST credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/RST/110/)
Introduces students to the concepts, principles, and practices related to the provision of leisure services; description of the various fields of professional practices and basic elements of leisure service systems such as budgeting, planning, staffing, and characteristics of client populations.

RST 118 Illini Student-Athlete Transition Seminar credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RST/118/)
Designed to expose student-athletes to the unique challenges and opportunities they will face throughout their time as student athletes. The course will explore their personal, academic, and athletic experiences. Students will learn strategies and techniques to be academically successful, develop leadership skills, explore careers and college majors, and gain insights to assist in the transition to higher education and the University of Illinois. Prerequisite: Restricted to first year student athletes.

RST 120 Parks, Recreation, and Environments credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RST/120/)
This course focuses on the study of recreation behaviors in different environments—the great outdoors, cities, and specialized settings. In particular, students develop a deeper understanding of how these three different environments support or limit various recreation behaviors. The course employs a holistic definition of environment that includes physical settings, social norms, and policies, all of which impact recreation behaviors. To understand the complex relationships between environments and recreation, the course applies theories and methodologies developed in the field of environment and behavior—spanning psychology, sociology, urban planning, and landscape architecture. Throughout the course, students discuss how gender, race-ethnicity, and socio-economic status can contribute to shaping the relationships between environments and recreation behaviors.
This course satisfies the General Education Criteria for:
Social Beh Sci - Beh Sci

RST 130 Foundations of Sport Mgt credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RST/130/)
Examines career opportunities within the sport industry and provides knowledge relevant to the management, marketing, legal, and financial operations of sport organizations. Incorporates applications in a variety of sport entities including intercollegiate athletics, campus recreation, event and facility management, professional sport, management and marketing agencies, and international sport.

RST 140 Nature and Wilderness credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/RST/140/)
Origins of the nature and wilderness preservation movements; philosophy behind nature conservation and outdoor activities; role of parks, outdoor recreation, and nature-tourism in contemporary life.

RST 150 Foundations of Tourism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RST/150/)
Survey of travel and tourism with emphasis upon tourist behavior, motivations, preferences, decision-making, attractions, transportation services, facilities and information sources. Examines travel and tourism as an element of leisure service delivery from an interdisciplinary perspective.

RST 180 Professional Applications credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RST/180/)
This course examines elements of administration, programming, and facility planning and management to high profile recreation, sport, and tourism destinations. The course consists of 6 modules completed during the second 8 weeks and concludes with a 12-day domestic tour (offered in May/early June) of RST related destinations in Indiana, Ohio, New York, Massachusetts, and Pennsylvania. The course will provide students with a unique opportunity to engage with industry leaders at the destinations. The course allows students to explore, discuss, compare and contrast RST destinations, facilities, and professions and apply concepts from the classroom. Additional fees may apply. See Class Schedule.

RST 185 Professional Field Experiences credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/RST/185/)
Provides students with professional career exploration experiences that involve developing networking knowledge and skills while engaging with recreation, sport, and tourism industry alumni and professionals in their offices, agencies, and facilities. Students are exposed to best practices and current challenges in the industry, and are given opportunities to make connections for internships, mentorship, and career advancement. Additional fees may apply. See Class Schedule. Approved for S/U grading only. May be repeated in separate terms to a maximum 3 hours.

RST 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/RST/199/)
Covering various topics for undergraduates in Recreation, Sport & Tourism. Additional fees may apply. See Class Schedule. Approved for Letter and S/U grading. May be repeated, as topics vary.

RST 200 Leadership in Recreation, Sport and Tourism credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/RST/200/)
Leadership theories and practices as related to design and delivery of leisure programs. Processes of group development and interpersonal communication in leisure service organizations.

RST 205 Issues in Intercollegiate Athletics: The Big Ten Conference credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RST/205/)
For more than 120 years THE BIG TEN has set the standard for college sports. This course will take an historical review of the important decisions and policies conference leaders have made to shape and define the league. With insights and analyses from Big Ten executives, the course will critically examine factors and variables that led to the Rose Bowl partnership, conference expansion, the Big Ten Network, and bold initiatives in growing women's sports. Prerequisite: RST 130 recommended but not required.

RST 210 Management in Recreation, Sport and Tourism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RST/210/)
This course will introduce students to management issues in the field of recreation, sport, and tourism. Students will be encouraged to begin thinking like a manager and to develop skills related to using management techniques and theories to solve problems that arise in the RST industry. The course will address foundational concepts related to: 1) the RST industry (e.g., sectoral differences, organizational structures and types); 2) management of RST organizations (e.g., leadership, ethics, management theory); and 3) skills to effectively manage human, financial, and marketing resources. This course is intended to prepare students for more advanced courses related to management in RST.

RST 216 Technology in Recreation, Sport and Tourism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RST/216/)
An 8-week online class that will assist students in understanding technological advances in recreation, sport and tourism behavior and management through virtual reality (VR) demonstrations and class debates; discussing technology adoption rates in eastern and western cultures and contexts by examining global trends in technology innovations; and critiquing technology's impacts on personal lives, experiences, and worldviews.

RST 218 Entrepreneurship credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RST/218/)
In-depth study of the delivery of leisure services in the for-profit sector. Covers the scope and administrative functions of recreation enterprises, including an analysis of planning, controlling, and developing recreation enterprises.

RST 224 Politics of the National Parks credit: 2 or 3 Hours. (https://courses.illinois.edu/schedule/terms/RST/224/)
Same as PS 224. See PS 224.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

RST 225 Environmental Politics & Policy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RST/225/)
Same as PS 225. See PS 225.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

RST 230 Diversity in Recreation, Sport, and Tourism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RST/230/)
Course is designed to increase awareness and knowledge of the needs of members of ethnic and racial minorities, people of lower socio-economic status, women, older adults, people of alternative lifestyles, and people with disabilities when it comes to recreation, sport, and tourism services. It introduces students to concepts and factors that influence the delivery of recreation, sport, and tourism services to diverse populations. Same as HDFS 263 and KIN 230.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

RST 240 Financial Resource Management in Recreation, Sport and Tourism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RST/240/)
This course examines financial concepts in the RST industry across public, private, for-profit, and not-for-profit sectors. It covers revenue management, pricing strategies, grantsmanship, fundraising, sponsorship, budgeting, and ratio analysis. Prerequisite: RST 100 and RST 210.

RST 242 Nature and American Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RST/242/)
Designed to aid in students' understanding, appreciation, and critique of cultural meanings associated with American natural landscapes. To do so, traditional perspectives including colonial American, romantic, and science-based conservation are characterized, as well as revisionist themes aligned with gender, cultural pluralism, and societal meanings of parks and protected areas. Implications of diversity including gender and multicultural meanings toward nature are developed and provide the basis for assessing tenets of contemporary environmental policy and supporting concepts associated with community-based conservation. Same as LA 242 and NRES 242.
This course satisfies the General Education Criteria for:
Cultural Studies - Western

RST 255 Ethical Issues in Recreation, Sport and Tourism credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/RST/255/)
Explores ethical issues related to government, recreational sport, sport tourism and travel, journalism and media, education, coaching, and business. Students become familiar with concepts and principles of applied ethics and gain insight in to the complexity of ethical issues in recreation, sport and tourism.

RST 260 Disability in Recreation, Sport and Tourism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RST/260/)
This course explores issues affecting recreation, sport, tourism (RST) opportunities and access for people with physical, sensory, developmental, and cognitive disabilities. With the goal of increasing knowledge and skills necessary to enhance RST opportunities for people with disabilities, this course focuses on exploring disability characteristics and RST service provider strategies for reducing barriers to and providing accommodations for participation.

RST 265 Principles of Coaching Wheelchair Basketball credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/RST/265/)
This course focuses on the pedagogy, content, and expertise needed to teach and coach the sport of wheelchair basketball. The course will provide students with an understanding of the fundamental concepts of wheelchair basketball, the functional classification system as it relates to an athlete's ability, appropriate feedback for wheelchair basketball players of various levels, the concept of long-term athlete development, and the intricacies of developing a seasonal plan for a wheelchair basketball team. None Prerequisite: RST 260 - Disability in Recreation, Sport and Tourism is recommended, or consent of instructor.

RST 270 Sport and Sustainability credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RST/270/)
This course will analyze the impacts of sustainable activities on event and facility design, marketing strategies, and financial statements, and investigate the linkage between the environment and management in a sport context. Over 8 modules, students will identify theoretical perspectives and related empirical implications, develop specific program recommendations based on readings and dialogue, and apply concepts via online discussion, practical application, self-reflection, and program development exercises.

RST 280 Practicum in Recreation, Sport and Tourism credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/RST/280/)
The practicum course is a 1-credit course that requires students to complete a minimum of 100 hours over the term/semester with an agency that relates to the field of recreation, sport, and tourism. The course enhances the practicum experience by leading students through assignments that will assist them in reflecting on their learning/working experience. The Job Description must be approved and the Site Confirmation Form and Affiliation Agreement must be in place prior to the start of the practicum experience. Students should contact the practicum coordinator for specific instructions and recommendations 3-weeks prior to the start date. Approved for S/U grading only. May be repeated if topics vary to a maximum of 3 credit hours.

RST 300 Leisure Programming credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RST/300/)
Develops understanding of the process of leisure/recreation programming and the practical aspects of program design and delivery. Prerequisite: RST 100.

RST 301 Sport Brand Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RST/301/)
Provides an in-depth study of sport brand management. Students will learn how to build and manage brands pursuant to the development of brand equity and how to brand architecture strategies and manage brands over time and across geographic boundaries. Students will apply theories and models of branding to sport branding scenarios and making sound business decisions. Student will gain an understanding of the importance of branding and its impact on consumer behavior. Prerequisite: RST 325 (Marketing in Recreation, Sport and Tourism) or equivalent marketing course or consent of instructor.

RST 314 Introduction to Aging credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RST/314/)
Same as CHLH 314, HDFS 314, PSYC 314, and REHB 314. See CHLH 314.

RST 316 Human Development and Recreation, Sport and Tourism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RST/316/)
This course will examine the impacts of recreation, sport and tourism activities on human development throughout the lifespan. We will discuss how these activities can promote and/or hinder development across the lifespan as well as how development influences individuals' participation in these activities over time. Building on these concepts, we will discuss applications for creating programs, services, and facilities that are appropriate and satisfying for people in different life stages.

RST 317 Designing Parks and Recreation Experiences credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RST/317/)
Examines the roles of parks and recreation professionals in strategically creating optimal experiences for constituents. Parks and recreation professionals must consider the interplay between a range of factors including diverse individuals, communities, and the environment. This course will focus on how professionals create experiences that are meaningful and beneficial for individuals or groups, communities, and society. Students will explore historical and philosophical foundations of parks and recreation provision as well as the organizational structure and administrative approaches in the public, non-profit, and commercial sectors. Students will also learn strategies for designing optimal experiences in a variety of settings such as camps, aquatics, arts and culture programs, and health and fitness centers. Credit is not given for RST 217 and RST 317.

RST 325 Marketing in Recreation, Sport and Tourism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RST/325/)
Application of marketing concepts to the delivery of leisure services. Introduces consumer decision theory analysis. Provides an integrative study of the methods and models for developing and evaluating alternative marketing strategies.

RST 335 Leisure and Consumer Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RST/335/)
Examination of contemporary patterns and meanings of leisure in a consumer society. Understanding of the impact of consumption on expressions of identity, gender, social class, race and ethnicity.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - Western

RST 340 Facility Management in Recreation, Sport and Tourism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RST/340/)
Basic understanding of park operations, facility design, construction, and maintenance practices; staff allocations, job analysis, contract administration, organizational structures. Prerequisite: RST 100.

RST 346 Case Study: Endless Summer credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RST/346/)
Same as KIN 346 and MACS 346. See KIN 346.

RST 350 Tourism and Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RST/350/)
Studies the relationships that exist between tourists, hosts, their respective culture(s), and the cultural environments in which they interact. Studies tourism and its impacts across cultural boundaries, as well as concepts of cultural authenticity, modernity, image creation, social justice, diversity, and representation of social, racial and ethnic groups. Field trip required.

RST 354 Legal Aspects of Sport credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/RST/354/)
A study of legal principles and their impact on the sport industry; the course examines the application of different areas of law including tort, contract, constitutional, anti-trust, and intellectual property law to professional, amateur and recreational sport.

RST 360 Communication in Recreation, Sport & Tourism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RST/360/)
Problem-based service learning within recreation, sport and tourism (RST) is utilized to learn integrated marketing and communications (IMC) concepts and develop an IMC plan to solve organizational issues as they relate to RST. IMC concepts within the context of RST addressed in this course include audience analysis, assessing public opinion, message strategy (e.g., promotion, publicity), crisis communication, media relations, image & reputation management, corporate relations, sales, development & fundraising. Prerequisite: RST 210.

RST 365 Civic Engagement in Wellness credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RST/365/)
Same as AHS 365, CHLH 365, KIN 365, and SHS 370. See KIN 365.

RST 370 Research Methods & Analysis credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RST/370/)
Educates students in principles of research design, data collection, measurement, methods of statistical analysis, techniques in summarizing data, and the interpretation and application of research findings to the field of Leisure Studies.
This course satisfies the General Education Criteria for:
Quantitative Reasoning II

RST 390 Honors credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/RST/390/)
Same as CHLH 390 and KIN 390. See KIN 390.

RST 393 Special Problems credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/RST/393/)
Special projects in research and independent investigation in any phase of health, physical education, recreation, or related areas selected by the student. May be repeated to a maximum of 6 hours. Prerequisite: Junior or senior standing; grade-point average of 3.0; consent of academic advisor, instructor, and head of department.

RST 410 Strategic Thinking in Recreation, Sport and Tourism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RST/410/)
In this capstone course, students integrate previous knowledge including management, marketing, finance and budgeting, operations, and human resources into the development of management strategies for the recreation, sport and tourism industries. Students acquire in-depth knowledge and critical understanding of the various frameworks in which RST organizations operate (commercial, for-profit, not-for-profit, public) and the associated management processes that align with these frameworks including strategic management, industry and competitive analyses, competitive advantage, internal strategies, and issues pertaining to the social responsibility of RST organizations. 3 undergraduate hours. No graduate credit. Prerequisite: RST 210, RST 240, and RST 325, or consent of instructor.
This course satisfies the General Education Criteria for:
Advanced Composition

RST 429 Contemporary Issues in Recreation, Sport and Tourism credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/RST/429/)
Provides a capstone experience to encourage critical and creative thinking regarding knowledge students accrued from prior courses. The first eight weeks students will meet as a whole and focus on leisure concepts in general, and the second eight weeks students will focus on their specific concentration, (Sport Management, Tourism, or Community Recreation). 4 undergraduate hours. 4 graduate hours. Prerequisite: RST 120, or RST 130, or RST 150, and senior status.

RST 430 Sport & Development credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RST/430/)
This course will provide an overview of sport development and sport for development, and the linkages and intersections between the two concepts. Sport development is concerned with the creation and management of systems designed to optimize participation in sport, and the movement of athletes both vertically and horizontally through the sport system. Sport for development focuses on the use of sport to potentially achieve social change and development outcomes at the individual, community, and societal levels. Invariably, these concepts are linked, and one cannot exist without the other. Each module will take an integrative approach and examine sport development and sport for development concurrently, with focus on practical applications of all concepts. 3 undergraduate hours. No graduate credit. Prerequisite: RST 130 and RST 354 or consent of instructor.

RST 440 HR Management in RST credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RST/440/)
Concepts, principles, and objectives of supervision; the nature of the supervisory relationship; supervisory functions and processes; identification and application of methods and techniques; organizational and operational patterns of supervision in recreation and park settings. 3 undergraduate hours. No graduate credit.

RST 441 Community Planning and Engagement credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/RST/441/)
This project-based course will provide students with a practical opportunity to serve a community in Illinois. This course focuses on the planning process related to outdoor recreational use of lands in the public domain and seeks to develop a deeper understanding of how to inventory, analyze, and create a strategic vision for recreational services in communities. We will build on the students' knowledge from other RST courses (e.g. RST 210: Management in RST, RST 240: Financial Resource Management, and RST 325: Leisure Service Marketing) and incorporate literature reflective of current research and past trends in leisure, psychology, sociology, urban planning, and landscape architecture. Additional fees may apply. See Class Schedule. 3 undergraduate hours. 4 graduate hours. Graduate-level coursework: This course may be taken as a 4-credit graduate level course. Graduate students enrolled in this class will be expected to take on additional responsibilities and leadership roles including the development and analysis of an electronic survey that will be used to better understand the needs of the community. Prerequisite: Junior standing; or consent of instructor.

RST 450 Tourism Planning & Development credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RST/450/)
Tourism has become one of the world's largest business sectors, and consequently many industries rely on tourism to boost their businesses. Moreover, tourism is often an integral element in development policies and has been widely adopted as a catalyst of economic and community development. Students will examine and discuss current issues and future challenges regarding tourism development and destination management. In particular, students will be challenged to critically analyze the interdependence between tourism development and the economy, culture, society, the natural environment, globalization, new technology, and sustainability. In addition, students will be expected to understand and apply key principles of tourism planning and destination management to effectively address current issues and trends. 3 undergraduate hours. 3 graduate hours. Prerequisite: RST 150 or consent of instructor. Not intended for students with Freshman or Sophomore class standing.

RST 459 Heritage Management credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/RST/459/)
Same as ANTH 460 and LA 460. See ANTH 460.

RST 460 Event Management in Recreation, Sport and Tourism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RST/460/)
This course will analyze event management and draw from the social sciences, finance, the arts, and related professional fields to examine the experiences and attributed meanings of planned events. In addition, students will acquire an in-depth knowledge of the specialized field of event management and become familiar with management techniques and strategies required for successful planning, promotion, implementation and evaluation of events within recreation, sport and tourism contexts. 3 undergraduate hours. No graduate credit. Prerequisite: RST 210, RST 240, RST 325 or consent of instructor.

RST 465 Event Implementation and Evaluation in Recreation, Sport and Tourism credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/RST/465/**)**
This course is the second of a two course event capstone series. The first class (RST 460) examines the core basics from idea generation through initial planning stages. This course (RST 465) builds on material covered in the first course and includes an in-depth, thorough, and critical examination of the event experience including the roles of the event manager, event planning strategies, marketing and sponsorship concepts, legal aspects, staff management, budgeting, and evaluation. 3 undergraduate hours. No graduate credit. Prerequisite: RST 460.

RST 480 Orientation to Internship credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/RST/480/**)**
Prepares and places students in the RST Internship (RST 485). Topics include placement requirements and policies, resume preparation, interviewing skills, acquiring letters of application, and the roles and issues of professional practice. 1 undergraduate hour. No graduate credit.

RST 485 Internship credit: 12 Hours. **(**https://courses.illinois.edu/schedule/terms/RST/485/**)**
The internship course requires you to complete a minimum of 400 hours over 10 weeks with an agency that relates to your major. The course is designed to enhance the internship experience by leading you through practical steps that empower you in the learning/working experience, practice skills and concepts presented in academic classes, explore areas of personal and professional interest, and by introducing problem and conflict solving techniques. 12 undergraduate hours. No graduate credit. Approved for S/U grading only. Prerequisite: RST 100, RST 101, RST 200, RST 255, RST 210, RST 240, RST 325, RST 480, and one of the following - RST 120, RST 130, or RST 150. Restricted to students with Junior or Senior standing.

RST 501 Concepts & Applications in Recreation, Sport & Tourism credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/RST/501/**)**
Basic philosophical, historical, and scientific foundations and developments in leisure and recreation; analyses of the significance of leisure in modern societies; critical review of major writings in the field with attention to particular special problem areas and current issues. Prerequisite: RST 100 or equivalent.

RST 502 Critical Issues Recreation Mgt credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/RST/502/**)**
In-depth study of the public administrative functions in large complex organizational structures; development of an understanding of change and evolution in leisure service agencies as related to the internal and external environments; study of various management styles and situations in leisure service agencies. Same as NRES 504. 4 graduate hours. No professional credit. Prerequisite: Basic course in administration or organization of leisure service agencies.

RST 503 Adv Leisure Research Methods credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/RST/503/**)**
Examines methods and techniques of conducting and evaluating leisure research; experimental and survey designs and procedures; data collection, reduction and analysis. Prerequisite: RST 100 or equivalent; RST 370 or equivalent; a course in introductory statistics.

RST 504 Applied Evaluation and Needs Assessment in RST credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/RST/504/**)**
Designed to increase students' understanding of applied research and program evaluation with an emphasis on research approaches, strategies, and methods used in park, recreation, sport, and tourism settings to address management issues and improve overall organizational functioning. 4 graduate hours. No professional credit. Prerequisite: RST 370 or equivalent research methods course at the undergraduate level.

RST 512 Managing Recreation, Sport & Tourism Organizations credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/RST/512/**)**
Examines theoretical and technical principles of personnel managers in leisure service agencies; recruitment, training, selection, and evaluation of personnel with special emphasis on applied measurement concepts and legislation related to personnel administration in leisure services. Prerequisite: RST 410 or consent of instructor.

RST 515 Marketing in RST credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/RST/515/**)**
Examines quality service issues and service strategies needed to attain competitive advantage across leisure industries. Using a customer-focused management framework, the course focuses on customer satisfaction and retention, linking service quality, customer lifetime value, profitability segmentation, services mapping, understanding customer expectations and developing service and customer-focused relationship marketing strategies.

RST 516 Finance & Budgeting in RST credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/RST/516/**)**
Addresses the financial needs of organizations in recreation, sport and tourism. Students are introduced to the terminology and financial measurement tools used by academics and firms in the industry. Current economic issues, revenue streams, and budgeting are emphasized. Students develop the ability to critically assess the financial strengths and vulnerabilities of individual organizations and the field as a whole. An in-depth examination of an organization's internal and external environment in recreation, sport or tourism serves as the capstone.

RST 518 Event Management credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/RST/518/**)**
Analyze special events from theoretical and applied perspectives and draw from the social sciences, management, the arts, and related professional fields to analyze the experience and attributed meanings of planned events. Students will acquire an in-depth knowledge of the specialized field of event management and become familiar with techniques and strategies required for successful planning, promotion, implementation and evaluation of special events within recreation, sport and tourism contexts.

RST 519 Strategic Management in RST credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/RST/519/**)**
In this capstone module, students integrate previous knowledge, including management, marketing, finance, RST operations and human resources, in the development of business strategy in a competitive setting in recreation, sport and tourism industries. Students acquire in-depth knowledge and critical understanding of the environment in which RST organizations operate, the strategic management process, industry and competitive analysis, strategies to build competitive advantage, managing the internal organization and issues pertaining to the social responsibility of RST organizations. 4 graduate hours. No professional credit. Prerequisite: RST 512, RST 515, RST 516, or consent of instructor.

RST 520 Critical Issues Sport Mgt credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/RST/520/)
An analysis of the sport industry with special emphasis given to the role and function of the sport manager. Addresses advanced issues related to organizational theory, finance, marketing, sponsorship, contemporary management and leadership, decision making and strategic planning.

RST 530 Critical Issues Tourism Mgt credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/RST/530/)
Exposes students to advanced theories, methods, practices and principles that govern tourism behavior. Survey the body of literature on tourism, examining ongoing debates regarding how individuals travel and the structures of institutions that shape travel.

RST 550 Theory and Methods of Leisure credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/RST/550/)
Surveys concepts, methods, and problems of leisure research that are common to community recreation, sport and tourism. Histories of theoretical and methodological development are discussed, appreciated and critiqued. Examines the development of ideas through literature, with discussion centered on explaining the evolution of a given concept.

RST 551 Contemporary Issues in Leisure credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/RST/551/)
Provides students with a greater understanding and appreciation of the various disciplines that influence, and are related to, leisure. Examines how these disciplines might influence future research in leisure studies. Prerequisite: RST 550.

RST 555 Diversity in Leisure Behavior credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/RST/555/)
Examines diversity as it relates broadly to leisure behavior and services, and quality of life issues. Examines leisure diversity in terms of sexual identity, age, social class, gender, race, ethnicity, as well as mental and physical ability.

RST 560 Teaching in the Professoriate credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/RST/560/)
Same as CHLH 565, KIN 565, and SHS 565. See KIN 565.

RST 570 Cultural Aspects of Tourism credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/RST/570/)
Develops an advanced understanding of relationships between tourists and the toured, including in-depth knowledge of the phenomenon of tourism and its consequences for individuals and societies. Examines the complexity of movement of peoples across cultural boundaries, coupled with theories related to authenticity, modernity, image creation, social justice, diversity, and representation of social, racial and ethnic groups. Same as ANTH 570. Prerequisite: Graduate standing.

RST 584 Management Internship credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/RST/584/)
Work-study experience in the management aspects of leisure service delivery systems. Students are assigned to agencies in their special fields of study and are closely supervised by University faculty. Prerequisite: RST 484 or graduate standing.

RST 586 Health and Leisure in Recreation, Sport and Tourism credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/RST/586/)
In this graduate course, current issues and trends in research and practice on the topics of leisure, health and wellness across the lifespan are examined as they relate to RST. The variety of ways leisure/recreation affects health/well-being and how health/well-being affects leisure is examined from the perspectives of many disciplines. This course also emphasizes RST policy and program implications and approaches to research and program evaluation (e.g., methodologies, translational, transformative, community participatory). Same as HDFS 586. 4 graduate hours. No professional credit.

RST 587 Sport and Development credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/RST/587/)
Provides an overview of sport development (development of sport systems and skills) and sport for development (use of sport for individual and community development). These concepts are linked, as many organizations engage in both aspects, and one cannot exist without the other. Sport development topics explore comparative sport development, participation pathways, and design and evaluation of sport systems. Sport for development topics include, theory and program design, inter-organizational partnerships, and monitoring and evaluation. 4 graduate hours. No professional credit.

RST 590 Doctoral Research Seminar and Colloquium credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/RST/590/)
Required of all doctoral students for four semesters. Presentations and discussions of current research by doctoral students, faculty members, visiting scholars, and professional leaders. Discussion of topics critical to the academic preparation of doctoral students will also be included, e.g., ethics of conducting research, publication process, grantsmanship, and academic job search. Approved for S/U grading only. May be repeated for up to 4 credit hours toward degree requirements.

RST 593 Special Problems credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/RST/593/)
Independent research on special projects. May be repeated. Prerequisite: Open only to students majoring in recreation, sport and tourism.

RST 594 Special Topics in Leisure credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/RST/594/)
Lecture courses in topics of current interest; specific subject matter will be announced in the Class Schedule. 2 to 4 graduate hours. No professional credit. May be repeated, if topics vary, in the same semester to a maximum of 12 hours and in separate semesters to a maximum of 16 hours. Prerequisite: Will be determined for each section offered and will be indicated in the Class Schedule.

RST 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/RST/599/)
Preparation of thesis in leisure studies. Approved for S/U grading only. May be repeated.

REHB - REHABILITATION COUNSELING

REHB Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/REHB/)

Courses

REHB 199 Undergraduate Open Seminar credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/REHB/199/)
May be repeated to a maximum of 8 hours.

REHB 314 Introduction to Aging credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REHB/314/)
Same as CHLH 314, HDFS 314, RST 314, and PSYC 314. See CHLH 314.

REHB 322 Introduction to Intellectual Disability credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REHB/322/)
Same as PSYC 322 and SPED 322. See SPED 322.
This course satisfies the General Education Criteria for:
Social Beh Sci - Beh Sci

REHB 330 Disability in American Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REHB/330/)
Presents a range of issues pertaining to disability including demographics, disability rights, services, policies and current issues. Applies a disability studies perspective in which problems associated with individuals' impairments are seen to result from socially imposed barriers. Same as CHLH 330.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

REHB 401 Introduction to Rehabilitation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/REHB/401/)
Orientation to general field of rehabilitation; includes foundations, resources, assessment, counseling, and placement. 4 undergraduate hours. 4 graduate hours.

REHB 402 Medical Aspects of Disability credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/REHB/402/)
Examination of the scope of physical, mental and cognitive disabilities, their causes, complications, and treatment. 4 undergraduate hours. 4 graduate hours.

REHB 407 Disability, Culture & Society credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/REHB/407/)
Same as ANTH 404, CHLH 407, and KIN 407. See CHLH 407.

REHB 419 Counseling Psychology Pre-Practicum credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/REHB/419/)
Same as EPSY 419. See EPSY 419.

REHB 435 Work and Disability credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/REHB/435/)
Examines theories of job placement, job seeking skills, and techniques for outreach with employees. Focuses on a systems approach to job placement for persons with disabilities. Topics include supported employment, labor market trends, and job restructuring. Lab time with disabled clients who are active in the job search process is required. 2 undergraduate hours. 2 graduate hours.

REHB 501 Rehabilitation Research credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/REHB/501/)
This course has been designed for students who are interested in pursuing a career in rehabilitation and disability research. The course will cover major topics of research methods and techniques used in rehabilitation and disability research. A review of experimental designs and methods, human subject research, and disability related funding agencies will also be covered. 4 graduate hours. No professional credit.

REHB 520 Psycho-Social Aspects credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/REHB/520/)
Study of the social and emotional adjustment of individuals with disabilities; evaluation of effects imposed by societal attitudes; analysis of the implications for rehabilitation professionals in dealing with individuals who have a disability; review of relevant research. Same as SPED 520.

REHB 536 Assessment in Rehabilitation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/REHB/536/)
Theory and practice of vocational evaluation techniques for persons with disabilities. Reviews basic psychometric instruments and adds practical experience with work samples and computer-based testing. Includes hands-on experience in the evaluation of disabled clients. Prerequisite: REHB 401 or one basic course in testing.

REHB 545 Transition and Vocational Planning credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REHB/545/)
Same as SPED 545. See SPED 545.

REHB 583 Counseling Internship credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/REHB/583/)
Development of individual counseling skills in a rehabilitation setting; emphasis on vocational evaluation and placement skills as developed in case management and planning experiences as well as adjustment to disability, vocational choice, and job placement techniques. May be repeated to a maximum of 8 hours. Prerequisite: REHB 401, REHB 520, REHB 536, and consent of instructor.

REHB 585 Rehabilitation Practicum credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/REHB/585/)
Practical experience in a major area of rehabilitation; discussion/laboratory sections cover such practicum topics related to administration, counseling, or supported employment and other rehabilitation services. Prerequisite: REHB 301 and consent of instructor.

REHB 593 Special Problems credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/REHB/593/)
Independent research on special projects. Open only to majors. May be repeated to a maximum of 8 hours. Prerequisite: REHB 401; consent of instructor.

REHB 594 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/REHB/594/)
Lecture course on topics of current interest; specific subject matter announced in Schedule. May be repeated to a maximum of 8 hours. Prerequisite: Will be determined for each topic and will be indicated in Schedule; REHB 401; consent of instructor.

REHB 599 Thesis Research credit: 0 to 8 Hours. (https://courses.illinois.edu/schedule/terms/REHB/599/)
Preparation of thesis in rehabilitation. Approved for S/U grading only. May be repeated to a maximum of 8 hours. Prerequisite: Satisfactory standing in the master's program.

REL - RELIGION

REL Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/REL/)

Courses

REL 101 Bible as Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/101/)
Themes and literary genres in the Bible, emphasizing content important in Western culture. Same as CWL 111 and ENGL 114.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

REL 104 Asian Mythology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/104/)
Introductory survey of the mythologies of India, China, and Japan. Same as ASST 104.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

REL 106 Archaeology and the Bible credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/106/)
Examination of archaeological evidence, especially from Syria-Palestine, and discussion of its use in the interpretation of Biblical literature.
This course satisfies the General Education Criteria for:
Advanced Composition
Humanities - Hist Phil

REL 108 Religion & Society in West I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/108/)
Introduction to classic writers and texts in Western religious and social thought from antiquity to the Enlightenment, with emphasis on their social and historical contexts. Same as JS 108, ANTH 108, and PHIL 108.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

REL 109 Religion & Society in West II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/109/)
Introduction to classic writers and texts in Western religious and social thought from the Enlightenment to the present, with emphasis on their social and historical contexts. Same as ANTH 109 and PHIL 109..
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

REL 110 World Religions credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/110/)
Survey of the leading living religions, including Hinduism, Buddhism, Confucianism, Taoism, Judaism, Christianity, and Islam; examination of basic texts and of philosophic theological elaborations of each religion. Same as PHIL 110.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

REL 111 Elementary Greek I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/111/)
Same as GRK 101. See GRK 101.

REL 112 Elementary Greek II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/112/)
Same as GRK 102. See GRK 102.

REL 115 Language and Culture in India credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/115/)
Same as HNDI 115 and LING 115. See LING 115.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West

REL 116 Faith & Self in Global Context credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/116/)
Whether in fourth-century North African, tenth-century Japan, fourteenth-century Spain, or twentieth-century America, men and women have wrestled with the question of who they are and how they are to relate to the world. Through autobiographic writings, by reading the words of women and men attempting to make sense of the world and their place in it, we hope to focus attention on the personal dimensions of faith and of cross cultural contact at the same time that we provide an introduction to the worlds' major religions.
This course satisfies the General Education Criteria for:
Cultural Studies - Western

REL 120 A History of Judaism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/120/)
Examines the social, political, economic, and intellectual history of the Jews from Abraham to the present-day, with particular attention to Jewish thought and society. Same as HIST 168 and JS 120.
This course satisfies the General Education Criteria for:
Advanced Composition
Humanities - Hist Phil

REL 121 Introduction to Christianity credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/121/)
Typological and historical approaches to major forms of Christianity: Eastern Orthodoxy, Catholicism, and Protestantism.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil

REL 122 History East Asian Religions credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/122/)
Same as EALC 122. See EALC 122.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

REL 132 Zen credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/132/)
Introduces the history, teachings, and practice of Zen Buddhism in China and Japan. Same as EALC 132.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

REL 134 Religion, Race, and Resistance credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/134/)
Examination of religiously-informed responses to and rejections of racialized oppression in the history of North America, focusing on Native American, African American, and Muslim American experiences. Same as AFRO 134.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

REL 160 Ancient Greek & Roman Religion credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/160/)
Same as CLCV 160. See CLCV 160.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

REL 170 Nature Religion credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/170/)
Introductory survey of religious traditions that locate sacred realities in the natural world, and of ecological traditions that attribute spiritual significance to nature. Same as ESE 170.

REL 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/REL/199/)
Undergraduate Open Seminar. May be repeated.

REL 200 Classical & Koine Greek I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/200/)
Same as GRK 201. See GRK 201.

REL 201 Hebrew Bible in English credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/201/)
Analyzes the critical issues in the interpretation of the literature of the Hebrew Bible/Old Testament; surveys the history and religion of Ancient Israel with special reference to Israel's setting in the ancient Near East. Prerequisite: Sophomore standing or consent of instructor.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil

REL 202 New Testament in English credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/202/)
Analyzes the literature of the New Testament in its social and religious setting, with special reference to the ministry and teaching of Jesus, the emergence of the church as a sect within ancient Judaism, and the development of Christian institutions in the Graeco-Roman world. Prerequisite: Sophomore standing or consent of instructor.

REL 204 Classical & Koine Greek II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/204/)
Same as GRK 202. See GRK 202.

REL 205 Intensive Biblical Hebrew credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/REL/205/)
Acquisition of reading knowledge of biblical Hebrew and a familiarity with all major aspects of biblical Hebrew grammar. Same as HEBR 205.

REL 208 Cultures & Literatures of South Asia credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/208/)
Introduction to the literary traditions of South Asia from the beginnings to the end of the Mughal era. Students will read - in translation - selections from a wide range of texts beginning with the earliest Vedic Hymns to the seventeenth and eighteenth century Sufi poetry and songs. Provides students an understanding of the heterogeneous and rich literary and cultural past of the region. Same as ASST 208, CWL 208, and SAME 208.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Non-West

REL 212 History of Antisemitism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/212/)
Same as JS 201. See JS 201.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

REL 214 Introduction to Islam credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/214/)
History of Islamic thought from the time of Muhammad to the present, including the prophethood of Muhammad, the Qur'an, theology and law, mysticism and philosophy, sectarian movements, modernism and legal reform, and contemporary resurgence. Same as SAME 214. Credit is not given for both REL 213 and REL 214.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

REL 215 African Muslim Societies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/215/)
Same as AFST 213 and HIST 213. See HIST 213.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

REL 220 Jewish Storytelling credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/220/)
Same as CWL 221, ENGL 223, JS 220, and YDSH 220. See YDSH 220.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

REL 223 The Qur'an (Koran) credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/223/)
Introduction to the Qur'an (Koran), the holy scripture of Islam, examining its major doctrines, thematic development, literary style, and its relationship to pre-Qur'anic, especially Biblical, traditions. Special attention is given to various methods Muslims have used to interpret the Qur'an. Same as CWL 223 and SAME 223. Prerequisite: REL 213 or REL 214.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Non-West

REL 224 Chinese Thought and Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/224/)
Same as EALC 222 and HIST 222. See EALC 222.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

REL 230 Philosophy of Religion Intro credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/230/)
Same as PHIL 230. See PHIL 230.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil

REL 231 Religion and Philosophy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/231/)
Introduces students to philosophical and theological perspectives and methodologies by focusing on one or two key thinkers, books, or topics. Study and critical assessment will attend to the larger historical context. Same as PHIL 231.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil

REL 232 Ancient Greek Sanctuaries credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/232/)
Same as ARTH 218, and CLCV 232. See CLCV 232.

REL 235 History of Religion in America credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/235/)
Examines the religious history of the lands that have become the United States and the people who have become known as Americans through texts written by and about people of all races and creeds. From the precontact era through the twentieth century, this course emphasizes the diversity of American religion, the discord caused by and present in American religion, and the many instances of dialogue that have been a part of America's religious history. Same as HIST 289.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil

REL 236 Religion, Violence & America credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/236/)
Examination of the interactions among religion, violence, and American culture from the colonial period to the twenty-first century. Using a wide range of primary and secondary texts, students will study the perspectives of the perpetrators and victims of religiously motivated and/or religiously justified violence, both in domestic and international affairs. Same as HIST 290.
This course satisfies the General Education Criteria for:
Cultural Studies - Western

REL 251 Viking Mythology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/251/)
Same as CWL 251, MDVL 251, and SCAN 251. See SCAN 251.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

REL 258 Muslims in America credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/258/)
Same as AAS 258 and LLS 258. See AAS 258.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - US Minority

REL 260 Mystics and Saints in Islam credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/260/)
Examines mystical concepts and practices in Islam through the ages, through the lives and writings of important mystics and Sufi holy men and women, as well as the integration of mysticism and the Sufi Orders into Muslim society and Islamic orthodoxy. Same as SAME 260. No knowledge of Islam or foreign language is required.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Non-West

REL 269 Jewish History Since 1700 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/269/)
Same as HIST 269 and JS 269. See HIST 269.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

REL 270 Religion, Ethics, Environment credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/270/)
Introduction to various religious and philosophical perspectives on environmental ethics. Asks whether the religious traditions can provide us with any resources that can help us to deal with contemporary environmental problems. Religious and philosophical perspectives on these topics will be central to the course: attitudes to individual animals, to other species, and in general to non-human nature; the place of human beings in nature; the relative importance of human development and environmental protection; relations between rich and poor; whether we might need to change our conception of what it is to live successfully; and the concepts of stewardship and sustainability.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

REL 283 Jewish Sacred Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/283/)
Literary study of the major post-biblical sacred texts of Judaism; includes readings in translation from Mishnah, Tosefta, Talmudim, midrashim, piyyutim, and mystical treatises. Emphasizes nature, history, function, and development of literary patterns and forms and the relationships between form and content in these texts. Same as CWL 283.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

REL 284 Modern Jewish Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/284/)
Same as CWL 284, ENGL 284, and JS 284. See JS 284.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

REL 286 Introduction to Hinduism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/286/)
Elements of Hindu thought and practice; selected topics presented in historical order and in the context of Indian cultural history (including the present).
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

REL 287 Introduction to Buddhism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/287/)
Thematic approach to the history of Buddhism from its origin in India to its spread throughout China and Japan; explores how the doctrinal and social development of Buddhism in East Asia is related to the process of cultural adaptation. Same as EALC 287.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

REL 291 Hinduism in the United States credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/291/)
Introduction to the historical, religious, and socio-cultural aspects of Hinduism in the US. The role of Hinduism in the maintenance of the ethnic identity of Indians in the US will be examined in the context of the rituals, languages, temples, family, and other social organizations. The maintenance and/or shift of the features of traditional (Indian) Hinduism in the transplanted counterpart in the US will be examined. Same as AAS 291. Prerequisite: REL 104 or REL 286 or consent of instructor.

REL 308 Psychology of Religion and Spirituality credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/308/)
Same as PSYC 308. See PSYC 308.

REL 320 Responses to the Holocaust credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/320/)
Same as CWL 320, ENGL 359, JS 320, and YDSH 320. See CWL 320.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

REL 332 Interfaith Service and Theory credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/332/)
Students will work for a semester with a partner organization and study academic issues that pertain to interfaith studies and interfaith activities.

REL 335 Religion in Contemp America credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/335/)
Examines the religious dynamics of the twenty-first century United States. Tasks will be to map the religious landscape of contemporary America, to learn something of the history of the many traditions being practiced and lived in our communities, and then to study a series of salient issues involving people of faith; the emergence of new religions, expressions of religious intolerance, religion and politics, race and religion, and religious interpretations of economics and the market.

REL 340 Love & Sex in Hebrew Lit credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/340/)
Same as CWL 341, JS 341, and SAME 341. See CWL 341.

REL 341 Native People and Christianity credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/341/)
An interdisciplinary survey of the native religious experience, focusing on the native encounter with Christianity. Charts the cultural context for native religious history and explores native religious diversity in the contemporary period, particularly the relationship between tribal and Christian traditions in reservation and urban communities. Class discussions address the broader theoretical and practical questions raised by the intersections of religion, culture, and politics in a diverse and conflicted world, and are supplemented by audiovisual materials and guest speakers. Same as ANTH 341. Prerequisite: Sophomore standing or consent of instructor.

REL 342 Archaeology of Religion credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/342/)
Same as ANTH 340. See ANTH 340.

REL 343 Islamic Philosophy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/343/)
Survey of major developments within Islamic philosophy from the early classical to the early modern period. Focuses on the ideas and figures that have shaped Islamic philosophy through the centuries, as well as the contexts in which those ideas were produced. Topics covered include the transmission of Greek philosophy into Arabic. Islamic Peripatetic philosophy, Illuminationism, Shi'ite philosophy, and philosophical Sufism, including the great synthesis of Mulla Sadra.

REL 344 Medieval Jewish Thought credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/344/)
Study of the distinctive religious ideas, movements, and figures of Medieval Judaism [500 CE-1700 CE]. Topics include theology, philosophy, Talmudic and Biblical exegesis, mysticism, Jewish-Christian polemics, and law. Emphasis will be placed not only on content and form, but also on historical and social context. Same as JS 344 and MDVL 344.

REL 345 Medieval Civilization credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/345/)
Same as HIST 345 and MDVL 345. See HIST 345.

REL 346 The Age of the Renaissance credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/346/)
Same as HIST 346 and MDVL 346. See HIST 346.

REL 347 Protestant & Catholic Refs credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/347/)
Same as HIST 347. See HIST 347.

REL 350 South Asian Goddesses credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/350/)
Introduction to the most well-known Hindu goddesses, at both the pan-Hindu and local level, and explores their mythical narratives, associated powers, iconography, and rituals of worship. Presents different methodological approaches scholars employ in the interpretation of goddess worship in South Asia and abroad. Materials are drawn from textual, historical sources as well as contemporary ethnographic research, and seek to include representative figures from different regions throughout India and the Himalayan region. Same as CWL 350 and SAME 350.

REL 390 Independent Study credit: 1 to 6 Hours. (https://courses.illinois.edu/schedule/terms/REL/390/)
Special topics not treated in regularly scheduled courses; designed primarily for upperclassmen. May be repeated. Prerequisite: Evidence of adequate preparation for such study; consent of staff member supervising the work.

REL 393 The World of Jewish Sepharad credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/393/)
Same as ANTH 393 and HIST 393. See ANTH 393.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

REL 401 Gender and Hinduism credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/401/)
Exploration of the traditional identities, role and expectations of Hindu women and men, as well as popular Hindu beliefs and lived practices informed by understandings of gender, from the ancient period through the present day. Further, the course assesses the way in which these normative ideologies and gendered practices are being perpetuated and/or challenged in the modern world. Sources will include traditionally authoritative texts and treatises, myths and other historical narratives, contemporary ethnographies, and film. Same as SAME 410. 3 undergraduate hours. 4 graduate hours.

REL 403 Women in Muslim Societies credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/403/)
Examination of gender ideologies and social realities affecting the lives of women in various Muslim countries. Same as ANTH 403, GLBL 403, GWS 403, HIST 434, and SAME 403. 3 undergraduate hours. 4 graduate hours. Prerequisite: A course in Islam or the Middle East, or consent of instructor.

REL 405 Jihad and Just War credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/405/)
Historical and conceptual overview of jihad and just war. The first half of the course focuses on the origins of these two doctrines and their roles in medieval Islamic and Christian civilizations. The second half focuses on the shifting modern understanding of the relationship of religion to the state and violence, European colonialism, the rise of terrorism, and the War on Terror. 3 undergraduate hours. 4 graduate hours.

REL 408 Islam & Politics in Mid. East credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/408/)
Examines the role of Islam in contemporary politics, the contemporary resurgence of Islam, and the articulation of Islamic approaches to the new economic order, nationalism, and the changing role of women. Same as PS 408 and SAME 408. 3 undergraduate hours. 4 graduate hours. Prerequisite: Junior standing or consent of instructor.

REL 409 Transnational Islam, Europe-US credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/409/)
Same as ANTH 402 and ASST 402. See ANTH 402.

REL 412 Readings in Sanskrit I credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/412/)
Same as SNSK 403. See SNSK 403.

REL 413 Readings in Sanskrit II credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/413/)
Same as SNSK 404. See SNSK 404.

REL 414 Advanced Biblical Hebrew credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/414/)
In-depth study of the grammar and syntax of selected texts from the Hebrew Bible. Texts to be studied will change from year to year. Selections will cover the full range of biblical genres and styles, including prophecy, law, historical narrative, psalms, and wisdom literature. Same as HEBR 414. 3 undergraduate hours. 4 graduate hours. May be repeated for a maximum of 6 undergraduate hours or 8 graduate hours in separate terms. Prerequisite: REL 205, or demonstrated proficiency at the 205 level.

REL 416 Readings in Rabbinic Midrash credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/416/)
Seminar on the foundational text of Judaism- the Midrashic collections (3rd c. - 8th C.E.). We will consider the distinctiveness of Midrashic form and content, and also reflect upon the central methodological issues and problems for the study of this classic corpus. 3 undergraduate hours. 3 graduate hours.

REL 418 Afterlife in Early Judaism credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/418/)
Examines Israelite and Jewish attitudes to death and the afterlife from Ancient Israelite belief until the rise of Islam. Topics include death, divine judgement, immortality of the soul, resurrection, and hell. We will also selectively compare Jewish afterlife traditions to those found in early Christianity. Particular attention will be paid to the transformations of belief over time, and to the changing contexts that gave rise to new Jewish soteriologies and eschatologies. 3 undergraduate hours. 4 graduate hours.

REL 420 Jewish Life-Writing credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/420/)
Same as CWL 421, HIST 436, SLAV 420, and YDSH 420. See YDSH 420.

REL 424 Philosophy of Religion credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/424/)
Same as PHIL 424. See PHIL 424.

REL 432 Approaches to the Study of Religion credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/432/)
Introduction to the principal themes and debates that have animated the academic study of religion since the late nineteenth century. The relationship of religion to society, the economy, the state, culture, tradition, colonialism, and secularism are all considered, drawing on several different disciplines, including anthropology, sociology, philosophy and history. 3 undergraduate hours. 4 graduate hours.

REL 434 History of Jews in Diaspora credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/434/)
Same as HIST 433. See HIST 433.

REL 435 Revivalism and Evangelicalism credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/435/)
Examination of the history of revivalistic and evangelical Christianities in North America from the colonial period to the twenty-first century. A combination of primary texts and scholarly studies will focus on religious, social, and political legacies, and the current shape of evangelical Christianity in America. Same as HIST 486. 3 undergraduate hours. 4 graduate hours.

REL 436 Religion in America: 1900-1941 credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/436/)
An exploration of the religious lives and thoughts of Americans in the first four decades of the twentieth century and the many overlapping issues confronting American society and American religion during that time. Focuses on four themes: debates over the meaning of modernity, understandings of the relationship between religion and society, the gendering of faith, and the relationship between religion and American identity. 3 undergraduate hours. 4 graduate hours. Prerequisite: REL 235 or REL 236.

REL 437 Religion in American Cinema credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/437/)
By using films from the 1940s-2010s we will examine the changing religious dynamics of modern American society. We will also use the conceptual tools of religious studies to describe Americans' changing relationships to cinema. 3 undergraduate hours. 4 graduate hours. Prerequisite: Course work in the religious history of the United States or in film studies.

REL 439 Catholicism in the United States credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/439/)
Examines Catholic experiences in America from the colonial period to the present day. Mindful of the institutions that make Catholicism a credibly global community and of the diversity that has always characterized Catholic thought and practice, we will seek to highlight distinctive features of Catholicism in the United States and to chart changes in "American" Catholicism over time. 3 undergraduate hours. 4 graduate hours.

REL 440 Early Christian Thought credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/440/)
Study of major developments in early Christian thought (first four centuries) through discussion of primary texts in translation. Same as MDVL 440. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: REL 121 or REL 202, or consent of instructor.

REL 442 History of Early Judaism credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/442/)
The history of Judaism from Ezra to the rise of Islam: Hellenism and Judaism, varieties of Judaism, Palestinian Judaism and its documents, Babylonian Judaism, the rabbis, and popular Jewish culture. Same as HIST 432 and JS 442. 3 undergraduate hours. 4 graduate hours. Prerequisite: Credit in one course in religion at the 200-, 300-, or 400-level, or consent of instructor.

REL 461 Indigenous Traditions credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/461/)
Interdisciplinary seminar on indigenous religious traditions, focusing especially on the study of native North American religions. 3 undergraduate hours. 4 graduate hours.

REL 463 Religion and Society credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/463/)
Same as ANTH 463. See ANTH 463.

REL 464 Theories & Theologies of Liberation credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/464/)
Same as AAS 464, ANTH 464, and GWS 464. See GWS 464.

REL 472 Kierkegaard and the Self credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/472/)
Same as CWL 472, PHIL 472, and SCAN 472. See SCAN 472.

REL 478 19thC US Intel & Cultr Hist credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/478/)
Same as HIST 479. See HIST 479.

REL 479 20th Century US Culture Wars credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/479/)
Same as HIST 481. See HIST 481.

REL 480 Islamic Law credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/480/)
Introduction to Islamic legal philosophy and the historical evolution of Islamic legal and jurisprudential system. Begins by studying the origins, nature, sources and interpretive methodologies of classical Islamic law, and the main institutions for upholding this law, the madhhab, or school of law, examining its development from the formative to the post-formative periods and highlighting important controversies generated along the way. Then looks at the early encounter of Islamic law with modernity. Followed by an exploration of several contemporary topics that have served as catalysts for new tensions and alternative approaches and interpretive theories. 3 undergraduate hours. 4 graduate hours. Prerequisite: Previous coursework on Islam or consent of instructor.

REL 481 Muslim Ethics in Global Age credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/481/)
Exploration of contemporary, often revisionist Muslim ideas on a broad range of ethical issues that face societies today, such as human rights, democracy, gender equality, just war, pluralism, and bioethics. Same as SAME 481. 3 undergraduate hours. 4 graduate hours. Prerequisite: Previous coursework on Islam or the Middle East.

REL 482 Muslim-Christian Interactions credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/482/)
Explores the complexity of Muslim-Christian interactions since early Islam, including theological and philosophical exchanges, debates, polemics, interfaith dialogue, perceptions of each other, Muslim minorities in the West, and Christian minorities in the Muslim world, and the relationship of religion to culture. 3 undergraduate hours. 4 graduate hours.

REL 484 Buddhist Meditation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/484/)
Examines classical systems of Buddhist meditation and their relation to Buddhist psychology and world view. Same as EALC 484. 3 undergraduate hours. 3 graduate hours. Prerequisite: REL 287 or consent of instructor.

REL 488 History of Chinese Buddhism credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/488/)
Same as EALC 488. See EALC 488.

REL 493 Honors Senior Thesis credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REL/493/)
Two-term research project. 3 undergraduate hours. No graduate credit. May be repeated in separate terms for a total of 6 undergraduate hours. Prerequisite: Senior majors in religion who are eligible for graduating with distinction from the program.

REL 494 Topics in Religious Thought credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/494/)
Various topics in religious thought. 3 undergraduate hours. 4 graduate hours. May be repeated as topics vary.

REL 495 Topics in Asian Religions credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/495/)
Topics in Hinduism, Buddhism, Taoism, and other Asian religious traditions. Same as EALC 495. 3 undergraduate hours. 4 graduate hours. May be repeated to a maximum of 6 undergraduate hours or 8 graduate hours as topics vary. Prerequisite: Sophomore standing or consent of instructor.

REL 496 Topics in History of Judaism credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/496/)
Examination of two or three of the most important practices, beliefs, icons, texts, myths, and spiritual encounters that have and continue to shape Judaism as a religion. Same as JS 496. 3 undergraduate hours. 4 graduate hours. May be repeated to a maximum of 6 undergraduate hours or 8 graduate hours.

REL 498 Topics in Biblical Studies credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/498/)
Detailed interpretation of selected books of the Bible. 3 undergraduate hours. 4 graduate hours. May be repeated to a maximum of 6 undergraduate hours or 8 graduate hours as topics vary.

REL 504 Genesis in History credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/504/)
Survey of Jewish and Christian cultural reception of Genesis in the ancient and medieval worlds. Examines techniques of exegesis and strategies of interpretation in the ancient world, such as allegory, narrative expansion, and retelling. Engages with foundational studies of modern scholarship on biblical reception. While focusing on the initial chapters of Genesis, we will also explore the appropriation of Abraham traditions and the Joseph story. Same as MDVL 504.

REL 510 Graduate Intro to Religion credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/510/)
Introduction for first semester graduate students to selected methods and techniques for conducting research in the area of Religion. Students will receive general guidance on strategies for conducting bibliographic research and designing research projects. Includes study of some currently salient issues and areas of inquiry in a number of disciplines pertaining to the study of religion. The course will be supervised by one professor and will offer a series of presentations on several methodologies and historical issues by experts in various fields. 4 graduate hours. No professional credit.

REL 511 Seminar in Study of Religion credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/511/)
Intensive study of select topics or issues in the study of religion. May be repeated in the same or separates terms as topics vary.

REL 514 Islamic Theology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/514/)
Study of the language, arguments and schools of classical Islamic theology, mainly through direct study of English translations of theological texts from two different theological schools. Same as SAME 514.

REL 515 History of Jewish Theology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/515/)
Study of Israelite and Jewish thought from the biblical to modern period. Particular attention will be paid to theological matters and to the historical, cultural and intellectual challenges that engendered a re-thinking and re-conceptualization of the Jewish faith.

REL 520 Hindu Pilgrimage, Power & Place credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/520/)
This course undertakes a critical examination of the nature and practices of Hindu pilgrims, pilgrimages, and pilgrimage sites. We will examine central beliefs and practices of lived religion in the Hindu tradition and situate Hindu pilgrimage within the broader context of pilgrimage and related discussions of power and place. Same as SAME 520. 4 graduate hours. No professional credit.

REL 535 Historiography of Religion in America credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/535/)
Immerses students in major works of recent American religious history. Written from multiple disciplinary perspectives and wrestling with the knotty problems in which religion has been interwoven, these books will give the student a solid foundation in American religious history. Same as HIST 574. 4 graduate hours. No professional credit.

REL 564 Global Religion and Politics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/564/)
Same as SAME 564 and SOC 564. See SOC 564.

REL 567 Mahayana Buddhism credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/567/)
An investigation of Buddhist core notions as conceived from the point of view of the three Major Mahayana traditions with an examination of the ways in which these Mahayana traditions are presented in modern and early modern scholarship. At stake is the fundamental hermeneutic issue of the ways in which the "moderns" look at pre-modern thought, that is, the questions of the historical situatedness of thought. Prerequisite: At least one previous course in Buddhism or consent of instructor.

REL 568 Popular Religion in East Asia credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/REL/568/)
Study of the history of East Asian religions through primary and secondary sources primarily focusing on Buddhism and indigenous faiths. Students will gain an understanding of the social and historical character of popular religion through East Asia. Same as EALC 567. Prerequisites: Graduate Students majoring in East Asian religions must be prepared to read some primary sources written in the original language; graduate students in the other majors are not required to read in the original language.

REL 590 Independent Study credit: 2 to 6 Hours. (https://courses.illinois.edu/schedule/terms/REL/590/)
Special topics not treated in regularly scheduled courses; for graduates. 2 to 6 graduate hours. No professional credit. May be repeated. Prerequisite: Evidence of adequate preparation for such study and consent of staff member supervising the work.

REL 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/REL/599/)
Researching and writing a thesis in consultation with a faculty adviser. 0 to 16 graduate hours. No professional credit. Approved for S/U grading only. May be repeated. The M.A. program in Religion allows students to receive a maximum of 8 hours for the M.A.

RHET - RHETORIC AND COMPOSITION

RHET Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/RHET/)

Courses

RHET 101 Principles of Writing credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/RHET/101/)
Instruction in structuring academic, argumentative essays, including how to develop thesis statements and use evidence across different types of writing. This course is the first semester of a two-semester sequence (RHET 101 - RHET 102) that fulfills the campus Composition I general education requirement. This course includes weekly individual tutorials. Credit is not given for both RHET 101 and RHET 105. Prerequisite: Placement in RHET 101.
This course satisfies the General Education Criteria for:
Composition I

RHET 102 Principles of Research credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/RHET/102/)
Continued instruction in structuring academic, argumentative essays; concentrating on the use of primary and secondary sources as evidence in research-based arguments. Second semester of a two-semester sequence (RHET 101 - RHET 102) that fulfills the campus Composition I general education requirement. This course includes weekly individual tutorials. Credit is not given for both RHET 102 and RHET 105. Prerequisite: RHET 101.
This course satisfies the General Education Criteria for:
Composition I

RHET 105 Writing and Research credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/RHET/105/)
Introduction in research-based writing and the construction of academic, argumentative essays that use primary and secondary sources as evidence. This course fulfills the Campus Composition I general education requirement. Credit is not given for both RHET 105 and any of these other Comp I courses: RHET 101, RHET 102, CMN 111 or CMN 112.
This course satisfies the General Education Criteria for:
Composition I

RHET 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/RHET/199/)
May be repeated.

RHET 233 Adv Rhetoric & Composition credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RHET/233/)
Instruction in developing research-based arguments of moderate complexity within a special topics format. Introduction to the use of multimodal or other non-print resources as evidence in written arguments. Prerequisite: Completion of campus Composition I general education requirement.
This course satisfies the General Education Criteria for:
Advanced Composition

RMLG - ROMANCE LINGUISTICS

RMLG Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/RMLG/)

Courses

RMLG 199 Undergraduate Open Seminar credit: 1 to 5 Hours. **(**https://courses.illinois.edu/schedule/terms/RMLG/199/**)**
May be repeated.

RMLG 417 Topics in the History of Romance Languages credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/RMLG/417/**)**
Same as FR 417 and MDVL 417. See FR 417.

RMLG 435 Introduction to Romance Linguistics credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/RMLG/435/**)**
Same as FR 462, ITAL 435, LING 462, PORT 435, and SPAN 435. See SPAN 435.

RMLG 559 Sem Romance Ling credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/RMLG/559/**)**
Same as FR 559, ITAL 559, LING 559, PORT 559, and SPAN 557. See SPAN 557.

RSOC - RURAL SOCIOLOGY

RSOC Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/RSOC/)

Courses

RSOC 110 Intro to Rural Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RSOC/110/)
Basic concepts for understanding and analyzing rural society; topics include changes in major rural institutions, impacts of technological change on rural people and communities, demographic patterns and trends, migration, rural minorities and subcultures, the city-countryside relationship, emerging controversies and conflicts in rural areas, and cross-cultural comparisons of rural life.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

RSOC 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/RSOC/199/)
May be repeated.

RSOC 270 Global Demography credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RSOC/270/)
Same as SOC 270. See SOC 270.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

RSOC 447 Environmental Sociology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/RSOC/447/)
Same as ENVS 447 and SOC 447. See SOC 447.

RUSS - RUSSIAN

RUSS Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/RUSS/)

Courses

RUSS 101 First-Year Russian I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/101/)
Oral-aural practice and elements of grammar, reading, and writing. For students who have no credit in Russian.

RUSS 102 First-Year Russian II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/102/)
Continuation of RUSS 101. Oral-aural practice and elements of grammar, reading, and writing. Prerequisite: RUSS 101.

RUSS 115 Intro to Russian Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/115/)
Introduction to the culture of Russia and the USSR. Course addresses two central themes. First, the very distinctiveness of Russian culture, and the functions of that notion within Russia and for outsiders; Second, Russia as a cultural space between East and West. We will explore Russian culture through the following, the language(s); foundational narratives of collective memory going back to the medieval times; the cultural impact of colonial subjugation both by and of peoples to the East, South, and West; Russian Orthodoxy's connection with the political and cultural spheres; peak achievements in literature, music, architecture and visual arts. Same as REES 116.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

RUSS 122 Russia and Black America credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/122/)
A survey of the interactions and intersections between key African American figures and cultural practices, and Russian imperial, Soviet, and post-Soviet culture, in a historical, social, and political context, with emphasis on Russian-sourced cultural transfers that influenced and sometimes shaped the Black American experience and which functioned as the currency and medium of the African American–Russian connection. Same as CWL 122.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

RUSS 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/199/)
May be repeated.

RUSS 201 Second-Year Russian I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/201/)
Oral-aural practice, systematic functional grammar, reading, and writing. Prerequisite: RUSS 102 or equivalent.

RUSS 202 Second-Year Russian II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/202/)
Systematic review of the structure of Russian covered in RUSS 101, RUSS 102, and RUSS 201 through class lectures, drills, and homework exercises. Prerequisite: RUSS 201.

RUSS 219 Russian Cinema Survey credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/219/)
Survey of Russian and Soviet film, from Eisenstein to the present. Weekly film screenings. No knowledge of Russian required.

RUSS 220 Golden Age of Russian Lit credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/220/)
Survey of Russian literature in the long 19th century; romanticism, realism, nationalism, orientalism, empire; writers may include Pushkin, Gogol, Lermontov, Pavlova, Turgenev, Dostoevsky, Tolstoy, Chekhov, and others; reading and discussion in English. Same as CWL 227.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

RUSS 225 Russian Lit and Revolution credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/225/)
Major works from 1900 to the present; futurism, modernism, Stalinism, post-modernism, and after; writers may include Mayakovsky, Babel, Olesha, Akhmatova, Bulgakov, Nabokov, Solzhenitsyn, Tolstaya, and others; readings and discussion in English. Same as CWL 249.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

RUSS 260 Medicine & Russian Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/260/)
Examines cultural significance of medicine and the figure of the physician, and understandings of illness and health, primarily in literature of Russia and the USSR from the 1860s to present. Asks what larger issues are at stake in the literary representation of medical practice by physicians and non-physicians alike in the Russian and Soviet contexts; investigates what medicine and literature offer each other, and the bearing on this of the latter's formal, aesthetic qualities. Considers how medical practice is conditioned by the broader culture, how medical discourse, knowingly or unknowingly, 'borrows' from, is conditioned by, or otherwise reciprocally involved with other greater or peripheral discursive spheres. Reads fiction by leading literary figures who were physicians (Chekhov, Bulgakov, Veresaev, and Aksyonov); fiction by "lay" authors about doctors and medical practice (such as Solzhenitsyn); memoirs by physicians (tales of training and practice, apologies, denunciations); memoirs by patients; 'real' and fictional case histories; theoretical and methodological readings.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

RUSS 261 Intro Russian-Jewish Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/261/)
Introduction to the interaction of the intellectual, artistic, political, social, and religious life of the Jewish community in Russia through film, literature, art and historical record. Same as HIST 261.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

RUSS 290 Readings in Russian credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/290/)
Individual topics or projects chosen in consultation with a Slavic Department representative. May be repeated to a maximum of 8 hours. Prerequisite: RUSS 202 or equivalent proficiency.

RUSS 301 Third Year Russian I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/301/)
Grammar review; training in writing Russian; translation from English and free composition. Prerequisite: RUSS 202 or consent of instructor.

RUSS 302 Third Year Russian II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/302/)
Practice in intermediate-level speaking, listening, reading, and writing, based upon advanced grammar and conversation topics and upon readings from current fiction and non-fiction. Students are expected to write essays and give oral reports based on in-class assignments and outside Interests. Prerequisite: RUSS 301 or consent of department.

RUSS 305 Business Russian credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/305/)
Basic tools and skills for conducting business in Russian, including introduction to Russian economy, banking, insurance, media, internet technology, advertising, law and culture, practicum in writing the c.v and business correspondence in Russian. Prerequisite: Successful completion of RUSS 301 or consent of instructor.

RUSS 320 Russian Writers credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/320/)
Focused study of the work of a single Russian writer, or the comparison of that writer with another major author, in translation. No Russian required. Same as CWL 321. May be repeated in separate terms to a maximum of 6 hours, if topics vary. Prerequisite: At least one other college literature course or consent of instructor.

RUSS 322 Dostoevsky credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/322/)
Introduction to the major works of Fyodor Mikhailovich Dostoevsky. No Russian required. Same as CWL 324 and ENGL 322. May be repeated up to 6 credit hours in separate terms. Prerequisite: At least one other college literature course or consent of instructor.

RUSS 323 Tolstoy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/323/)
Introduction to the major works of Lev Tolstoy. No Russian required. Same as CWL 323 and ENGL 323. May be repeated up to 6 credit hours in separate terms, if topics vary. Prerequisite: One other college literature course or consent of instructor.

RUSS 325 Chekhov credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/325/)
Introduction to the major works of playwright and author Anton Chekhov. Same as CWL 325 and THEA 362. Prerequisite: At least one other literature course or consent of instructor.

RUSS 335 Nabokov credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/335/)
Nabokov' s Russian and American novels read in a comparative context. All works in English, no knowledge of Russian is required. Same as CWL 335. Prerequisite: At least one other college-level literature course or consent of instructor.

RUSS 401 Fourth Year Russian I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/401/)
Practice in advanced speaking, listening, reading, and writing, based upon reading selected from current fiction and non- fiction, and covering a wide variety of styles: literary, conversational, scientific, etc. Course taught in Russian. Students are expected to write essays and give oral reports based on what they read in class and on their outside interests. 3 undergraduate hours. 3 graduate hours. Prerequisite: Three years of college Russian or consent of instructor.

RUSS 402 Fourth Year Russian II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/402/)
Practice in advanced speaking, listening, reading, and writing, based upon reading selected from current fiction and non- fiction, and covering a wide variety of styles: literary, conversational, scientific, etc. Course taught in Russian. Students are expected to write essays and give oral reports based on what they read in class and on their outside interests. 3 undergraduate hours. 3 graduate hours. Prerequisite: RUSS 401 or consent of instructor.

RUSS 418 18th Century Literature credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/418/)
Reading of texts; historical and literary background of the period. 3 undergraduate hours. 4 graduate hours.

RUSS 424 Russian Modernism credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/424/)
Representative works of the period 1880 to 1917, with emphasis on Chekhov, Gorky, and Blok; readings for non-majors and class discussions in English. Same as CWL 457. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: Junior standing or consent of instructor.

RUSS 438 Modern Russian Poetry credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/438/)
Study of major Russian poets and their works from romanticism to the present. Historical background, textual analysis and connections with Western European poetry. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: Consent of instructor.

RUSS 444 Problems in Romanticism credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/444/)
Study of major authors of the romantic period, and some lesser authors. Historical background, textual analysis, and connections with Western European romanticism. Same as CWL 444. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: Consent of instructor.

RUSS 445 Problems in Realism credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/445/)
Study of the major texts of nineteenth century Russian realism, including works by Turgenev, Goncharov, Nekrasov, Dostoevsky, and Tolstoy. Historical background, relevant intellectual currents, textual analysis, and connections with Western European realist authors. Same as CWL 445. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: Consent of instructor.

RUSS 460 Russian Culture Studies credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/460/)
Role of Russian literature in the social, political, and intellectual life of Russia from the 1840s to the present. Same as CWL 440. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: Junior standing.

RUSS 461 Russia and the Other credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/461/)
Interdisciplinary and comparative topics including, but not limited to: Russia and the West, Russia and the East, the Cold War, and post-Soviet cultural studies. Same as CWL 466. 3 undergraduate hours. 4 graduate hours. May be repeated to a maximum of 6 undergraduate hours or 8 graduate hours. Prerequisite: Russian course at the 200 or 300 level or consent of instructor.

RUSS 465 Russian-Jewish Culture credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/465/)
Study of Russian-Jewish cultural, social, and political life through literature and film. No Russian required. 3 undergraduate hours. 4 graduate hours. Prerequisite: One literature course in the Slavic department at the 200 or 300 level, or consent of instructor.

RUSS 466 Russian Women's Writing credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/466/)
Study of fiction and non-fiction writing by Russian women, including discussion of historical context and feminist theory. 3 undergraduate hours. 4 graduate hours. Prerequisite: One literature course in the Slavic department at the 200 or 300 level, or consent of instructor.

RUSS 474 Russian Translation credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/474/)
Theory and practice of translation in Russia from the eighteenth century to the present; "literal" versus "creative" translation; and practical work in translation into English of various Russian texts. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: RUSS 302 or equivalent.

RUSS 493 Honors Senior Thesis credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/493/)
Intended primarily for candidates for honors in Russian but open to other seniors. 2 undergraduate hours. No graduate credit. May be repeated. Prerequisite: Senior standing.

RUSS 501 Russian for Grad Students I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/501/)
Provides training in academic Russian for graduate students in social sciences and humanities. Designed for advanced learners of Russian who are interested in developing more specialized language skills. The content of the course will be tailored to the needs of the specific group. May be repeated to a maximum of 8 hours. Prerequisite: RUSS 402 or consent of instructor.

RUSS 502 Russian for Grad Students II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/502/)
Continuation of Russian 501. Provides training in academic Russian for graduate students in social sciences and humanities. Designed for advanced learners of Russian who are interested in developing more specialized language skills. The content of the course will be tailored to the needs of the specific group. May be repeated to a maximum of 8 hours. Prerequisite: RUSS 501 or consent of instructor.

RUSS 511 Russian Literature 1800-1855 credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/511/)
Graduate-level study of major literary trends and developments in Russian literature from 1800-1855, from early romanticism to the emergence of a realist tradition, in criticism, drama, poetry, and prose. Prerequisite: Ability to read in Russian.

RUSS 512 Russian Literature 1855-1905 credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/512/)
Graduate-level survey of Russian literature of the second half of the nineteenth century, tracing the emergence, blossom, and decline of the great Russian realist novel, as well as the social and ideological debates of the 1850s and 1860s that were that form's most significant context. Explores the emergence and varied meanings of the term "realism" in Russian literature and criticism of the nineteenth century and will cover the rise of the short form in the 1880s and then, of Russian Decadence/Symbolism in the 1890s. Key developments in Russian drama will also be covered: Ostrovskii, Sukhovo-Kobylin, Chekhov and the Moscow Art Theater. Prerequisite: Ability to read in Russian.

RUSS 520 Russian Writers credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/520/)
Study of a Russian author's works in the original Russian, historical and philosophical contexts, current critical approaches. May be repeated to a maximum of 8 hours.

RUSS 521 Gogol credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/521/)
Study of Nikolai Gogol's works in the original Russian, historical contexts, and current critical approaches. 4 graduate hours. No professional credit.

RUSS 522 Dostoevsky credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/522/)
Study of Dostoevsky's works in the original Russian, historical and philosophical contexts, current critical approaches. May be repeated to a maximum of 8 hours.

RUSS 523 Tolstoy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/523/)
Study of Tolstoy's works in the original Russian, of their historical and philosophical context, and of current critical approaches to Tolstoy's works. 4 graduate hours. No professional credit.

RUSS 524 Pushkin credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/524/)
Study of Alexander Pushkin's works in the original Russian, of their historical context, and of current critical approaches to Pushkin's works. 4 graduate hours. No professional credit.

RUSS 535 Nabokov credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/RUSS/535/)
Study of Nabokov's Russian and American novels in the original Russian and English, read in a comparative and theoretical context. Same as CWL 535. Prerequisite: Knowledge of Russian or consent of instructor.

REES - RUSSIAN, EAST EUROPEAN AND EURASIAN STUDIES

REES Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/REES/)

Courses

REES 115 Intro to Polish Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REES/115/)
Same as POL 115. See POL 115.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

REES 116 Intro to Russian Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REES/116/)
Same as RUSS 115. See RUSS 115.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

REES 200 Intro to Russia and Eurasia credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REES/200/)
Survey of the societies and states formerly constituted as the Soviet Union. Interdisciplinary and team-taught. Combines lectures, discussions, and films covering the history, political science, economics, sociology, and culture of the area.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

REES 201 Introduction to Eastern Europe credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REES/201/)
Interdisciplinary survey of Eastern Europe focusing mostly on the 20th century to the present, exploring issues of nationalism, socialism, post socialism and EU accession. Focuses on Central Europe and the Balkans, but also references the Baltic States, Belarus, Ukraine, and Russia. Students will learn about the region using perspectives and methodology from historical, economic, political, sociological and anthropological texts.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

REES 265 Central Asian Societies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REES/265/)
Same as SAME 265 and SOC 265. See SOC 265.

REES 296 Special Topics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REES/296/)
Topics in the interdisciplinary study of Russia, Eastern Europe, and Eurasia. Approved for letter and S/U grading. May be repeated in separate terms to a maximum of 6 hours.

REES 325 Social Media and Global Change credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REES/325/)
Same as AFST 325, ASST 325, EPOL 325, EPS 325, EURO 325, INFO 325, LAST 325, and SAME 325. See EPOL 325.

REES 390 Individual Study or Research credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REES/390/)
Directed reading or research on selected topics. May be repeated to a maximum of 6 hours. Prerequisite: Consent of instructor supervising the work.

REES 477 Post-Communist Fiction credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/REES/477/)
Same as SLAV 477 and CWL 477. See SLAV 477.

REES 493 Honors Senior Thesis credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REES/493/)
Undergraduate honors thesis. 3 undergraduate hours. No graduate credit. May be repeated to a maximum of 6 hours. Prerequisite: REES major with senior standing and 3.5 grade-point average; consent of instructor supervising the work and the REEEC director.

REES 495 Senior Seminar credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/REES/495/)
Interdisciplinary seminar normally taken in the senior year. Involving faculty in a number of disciplines, this course approaches understanding Russia, Eastern Europe, and Eurasia and the methodologies of its study through questions of identities, cultural values, and change. Taught in conjunction with REES 550. 3 undergraduate hours. No graduate credit. Prerequisite: Declared major in Russian, East European, and Eurasian Studies or consent of instructor; junior or senior standing.

REES 496 Topics in REEE Studies credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/REES/496/)
Topics in the interdisciplinary study of Russia, Eastern Europe, and Eurasia. 3 undergraduate hours. 4 graduate hours. May be repeated to a maximum of 9 undergraduate hours or 12 graduate hours.

REES 550 Seminar in REEE Studies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/REES/550/)
Interdisciplinary seminar involving faculty in a number of disciplines. The course examines Russia, Eastern Europe, and Eurasia and the methodologies of its study through questions of identities, cultural values, and change.

REES 590 Individual Study or Research credit: 1 to 8 Hours. (https://courses.illinois.edu/schedule/terms/REES/590/)
Directed reading or research on selected topics for graduate students. May be repeated in the same or separate terms to a maximum of 8 graduate hours. Prerequisite: Consent of instructor supervising the work.

REES 596 Topics in REEE Studies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/REES/596/)
Topics in the interdisciplinary study of Russia, Eastern Europe, and Eurasia. May be repeated to a maximum of 12 graduate hours.

REES 599 Thesis Research credit: 0 to 8 Hours. (https://courses.illinois.edu/schedule/terms/REES/599/)
Designed to meet the thesis requirement for the M.A. in Russian, East European, and Eurasian Studies; taken under supervision of a faculty member in the Russian, East European, and Eurasian Center. Approved for S/U grading only. May be repeated to a maximum of 8 hours. Prerequisite: Enrollment in the M.A. program in REEES and consent of the Director of the Russian, East European, and Eurasian Center.

SAME - SOUTH ASIAN & MIDDLE EASTERN

SAME Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/SAME/)

Courses

SAME 150 Lang&Culture of Arab World credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SAME/150/)
Same as ARAB 150. See ARAB 150.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West

SAME 152 The New Middle East credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SAME/152/)
Same as PS 152. See PS 152.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West
Social Beh Sci - Soc Sci

SAME 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/SAME/199/)
Special topics in Middle Eastern or South Asian studies; content is variable. May be repeated in the same or separate terms if topics vary.

SAME 208 Cultures & Literatures of South Asia credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SAME/208/)
Same as ASST 208, CWL 208 and REL 208. See REL 208.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Non-West

SAME 211 The Arab-Israeli Conflict credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SAME/211/)
Same as CWL 211 and JS 211. See CWL 211.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

SAME 212 Israeli Cinema and Television credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SAME/212/)
Same as CWL 212 and JS 212. See JS 212.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

SAME 214 Introduction to Islam credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SAME/214/)
Same as REL 214. See REL 214.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Non-West

SAME 223 The Qur'an (Koran) credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SAME/223/)
Same as CWL 223, REL 223. See REL 223.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Non-West

SAME 250 Introduction to Middle East Studies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SAME/250/)
Introduction to the study of the region known as the "Middle East." Students will gain an appreciation of the variety of cultures, ethnicities, and religious traditions in the region, as well as how recent history has changed long standing norms, and the resulting challenges.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West

SAME 260 Mystics and Saints in Islam credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SAME/260/)
Same as REL 260. See REL 260.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Non-West

SAME 265 Central Asian Societies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SAME/265/)
Same as REES 265 and SOC 265. See SOC 265.

SAME 272 Language and Culture in Turkey credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SAME/272/)
Same as ANTH 272, GLBL 272, and TURK 270. See TURK 270.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West

SAME 325 Social Media and Global Change credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SAME/325/)
Same as AFST 325, ASST 325, EPOL 325, EPS 325, EURO 325, INFO 325, LAST 325, and REES 325. See EPOL 325.

SAME 341 Love & Sex in Hebrew Lit credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SAME/341/)
Same as CWL 341, JS 341 and REL 340. See CWL 341.

SAME 350 South Asian Goddesses credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SAME/350/)
Same as CWL 350 and REL 350. See REL 350.

SAME 403 Women in Muslim Societies credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SAME/403/)
Same as ANTH 403, GLBL 403, GWS 403, HIST 434, and REL 403. See REL 403.

SAME 408 Islam & Politics in Mid. East credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SAME/408/)
Same as PS 408 and REL 408. See REL 408.

SAME 410 Gender and Hinduism credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SAME/410/)
Same as REL 401. See REL 401.

SAME 454 Topics in Israeli Lit &Culture credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SAME/454/)
Same as CWL 454 and JS 454. See CWL 454.

SAME 481 Muslim Ethics in Global Age credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SAME/481/)
Same as REL 481. See REL 481.

SAME 490 Special Topics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SAME/490/)
Study of selected topics in Middle Eastern studies; content is variable. Check Class Schedule for specific topics each semester. 3 undergraduate hours. 4 graduate hour. May be repeated in separate terms as topics vary to a maximum of 6 undergraduate hours or 12 graduate hours.

SAME 514 Islamic Theology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SAME/514/)
Same as REL 514. See REL 514.

SAME 520 Hindu Pilgrimage, Power & Place credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SAME/520/)
Same as REL 520. See REL 520.

SAME 564 Global Religion and Politics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SAME/564/)
Same as REL 564 and SOC 564. See SOC 564.

SAME 590 Independent Study credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/SAME/590/)
Directed reading or research on selected topics for graduate students. 0 to 4 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated in separate terms up to 8 hours. Prerequisite: Graduate standing and consent of instructor supervising the work.

SAME 599 Thesis Research credit: 0 to 8 Hours. (https://courses.illinois.edu/schedule/terms/SAME/599/)
Researching and writing a thesis in consultation with a faculty adviser. 0 to 8 graduate hours. No professional credit. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 8 hours. Prerequisite: Enrollment in the M.A. program in Middle Eastern or South Asian Studies and consent of the Director of the Center for South Asian and Middle Eastern Studies.

SNSK - SANSKRIT

SNSK Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/SNSK/)

Courses

SNSK 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/SNSK/199/)
May be repeated.

SNSK 201 Elementary Sanskrit I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SNSK/201/)
Introduction to Sanskrit, treating in full the grammar of the language as preparation for reading.

SNSK 202 Elementary Sanskrit II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SNSK/202/)
Continuation of SNSK 201. Prerequisite: SNSK 201.

SNSK 403 Readings in Sanskrit I credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SNSK/403/)
Introduction to the reading of Sanskrit texts. Same as REL 412. 3 undergraduate hours. 4 graduate hours. Prerequisite: SNSK 202.

SNSK 404 Readings in Sanskrit II credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SNSK/404/)
Readings in Sanskrit texts. Topics may vary according to students' needs; they may include religious texts, classical literature, or a general survey of texts. Same as REL 413. 3 undergraduate hours. 4 graduate hours. May be repeated if topics vary. Prerequisite: SNSK 403 and consent of instructor.

SCAN - SCANDINAVIAN

SCAN Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/SCAN/)

Courses

SCAN 101 Beginning Scandinavian I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SCAN/101/)
First course in the Scandinavian language sequence (usually Swedish). Instruction is by immersion, emphasis is on basic skills: reading, writing, speaking, and aural comprehension.

SCAN 102 Beginning Scandinavian II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SCAN/102/)
Second course in the Scandinavian language sequence (usually Swedish). Instruction is by immersion, emphasis is on further developing basic skills: reading, writing, speaking, and aural comprehension. Prerequisite: SCAN 101 or consent of instructor.

SCAN 103 Intermediate Scandinavian I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SCAN/103/)
Third course in the Scandinavian language sequence (usually Swedish). Emphasis is on conversational skills, discussion techniques and aural comprehension through the study of authentic texts, television and films, with emphasis on learning about contemporary issues in Sweden, including its relationship to the European Union. Instruction is by immersion. Prerequisite: SCAN 102 or consent of instructor.

SCAN 104 Intermediate Scandinavian II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SCAN/104/)
Fourth course in the Scandinavian language sequence (usually Swedish). Emphasis is on close reading, translation and analysis of authentic texts, such as novels and drama in the target language. Instruction is by immersion. Prerequisite: SCAN 103 or consent of instructor.

SCAN 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/SCAN/199/)
May be repeated.

SCAN 215 Madness, Myth, and Murder credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SCAN/215/)
Focuses on the achievements of major Scandinavian writers of prose fiction, from 1850 to today. Explores topics of madness, myth, and murder in literature. All reading, discussion, and writing in English. Same as CWL 215.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

SCAN 225 Vikings to Volvos: Scandinavia credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SCAN/225/)
An introduction to the history, literature, and culture of Scandinavia and the Nordic region, from the Viking age until the modern era (700s-present). Includes discussion of Denmark, Norway, Sweden, Finland, Iceland, Faroe Islands, Svalbard, and Greenland. All readings in English. Same as HIST 254.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

SCAN 251 Viking Mythology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SCAN/251/)
Studies pre-Christian beliefs of the Germanic peoples as reflected primarily in medieval Icelandic prose and poetry (in translation). Same as CWL 251, MDVL 251, and REL 251.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil
Cultural Studies - Western

SCAN 252 Viking Sagas in Translation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SCAN/252/)
Studies Old Norse-Icelandic literature: kings' sagas, family sagas, mythical-heroic sagas, and romances. Texts and lectures in English. Same as CWL 252 and MDVL 252.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

SCAN 305 Old Norse - Icelandic I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SCAN/305/)
Provides a solid proficiency in reading texts in Old Norse, the language of the Viking sagas and mythology. Prerequisite: Any SCAN course or knowledge or one other foreign language.

SCAN 306 Old Norse - Icelandic II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SCAN/306/)
Assumes general competence in reading Old Norse. Readings and exploration of a wide assortment of essential text in the original language. Prerequisite: SCAN 305 or consent of instructor.

SCAN 376 Children and Youth Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SCAN/376/)
Explores the understanding of childhood and youth in Scandinavia, with comparative focus on the US and the UK through children's literature and classic accounts of childhood in fiction, film, and related media. Will investigate how childhood is construed in books self-described as children's literature as well as in adult-audience fiction and memoirs; and how representations of childhood correlate with evolving ideas about family formation, child-rearing, the welfare state, and education in twentieth- and twenty-first century Scandinavia. This is put in comparative context with British and/or US children's literature. Same as CWL 376, EURO 376, and GWS 376. Credit is not given for both SCAN 376 and SCAN 576.

SCAN 463 Modern Scandinavian Drama credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SCAN/463/)
Thematic and conceptual study of the Scandinavian dramatic tradition, from the late-nineteenth century classics of Henrik Ibsen and August Strindberg, to mid-century intermediality in works by Ingmar Bermgan, and to hyperrealism, postmodernism, and digital performativity by contemporary playwrights. Interpretive contexts include text-image studies, performativity, socio-cultural aspects of the Nordic region, theatre and production history, and gender and sexuality studies. Same as CWL 463 and THEA 483. 3 undergraduate hours. 4 graduate hours. Prerequisite: One college-level literature or theatre course, or consent of instructor.

SCAN 470 Scandinavian Politics and Society credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SCAN/470/)
Investigate conceptions of Nordic and West-European countries from the early twentieth-century to today from critical interpretive, historical, and cultural studies perspectives. Building on close analysis of influential works in literature, film, arts, and architecture from primarily Denmark, Sweden, and Norway, the course will address historical factors and characteristics of the socio-cultural imaginary surrounding the rise and, some argue, subsequent dismantling of the Nordic welfare state. Same as CWL 470 and EURO 470. 3 undergraduate hours. 4 graduate hours. Prerequisite: At least one course in literature, film, or the arts; or consent of the instructor.

SCAN 472 Kierkegaard and the Self credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SCAN/472/)
Soren Kierkegaard is an early author who wrestled with the concept of the individual self and championed subjective experience as a counterbalance to objective rationalism. Students in this seminar-style course will gain extensive familiarity with Kierkegaard's major works, as well as how they relate to two currents in 19th century society, existentialism and pietism. These works will be evaluated within their particular Nordic literary context, through critical analysis of related novels, plays and films by Andersen, Ibsen, Bremer, Strindberg, Lagerlof, Blixen, and Bergman (readings in English translation). Same as CWL 472, PHIL 472, and REL 472. 3 undergraduate hours. 4 graduate hours.

SCAN 490 Green Screen: Film and Nature credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SCAN/490/)
Provides a thorough examination of documentary and feature film in relation to the natural environment, sustainability studies, ecocriticism, and landscape representation especially in the Scandinavian film tradition. Incorporates theory, film culture and production analysis, and thematic interpretation. Films by Victor Sjostrom, Ingmar Bergman, Mai Zetterling, Lars von Trier, Susanne Bier, Jan Troell, and others. Same as EURO 489 and MACS 490. 3 undergraduate hours. 4 graduate hours.

SCAN 492 Scandinavian Cinema credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SCAN/492/)
Covers major directors, traditions, genres, themes, and production and distribution contexts of Scandinavian cinema and media industries. Addressing early cinema, fiction feature, documentary, shorts, experimental, and new and emergent artistic forms, the course will provide students with an in depth understanding of the rich culture of Scandinavian cinema since its inception. Same as MACS 492. 3 undergraduate hours. 4 graduate hours.

SCAN 493 Honors Senior Thesis credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/SCAN/493/)
2 to 4 undergraduate hours. No graduate credit. May be repeated to a maximum of 4 hours. Prerequisite: Senior standing; consent of instructor.

SCAN 494 Topics in Scan Languages credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/SCAN/494/)
Advanced Scandinavian languages instruction. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated in separate terms to a maximum of 9 undergraduate or 9 graduate hours if topics vary. Prerequisite: SCAN 104 or equivalent as approved by instructor.

SCAN 496 Special Topics in Scan Studies credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/SCAN/496/)
Individual study in selected topics, such as individual authors, literary movements, periods, genres, or themes, and Scandinavian culture. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated. Prerequisite: Consent of instructor.

SCAN 505 Old Norse-Icelandic I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SCAN/505/)
Grammar and selected readings. Same as MDVL 505. Offered in alternate years.

SCAN 506 Old Norse-Icelandic II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SCAN/506/)
Readings; selections from the Elder Edda and the sagas. Same as MDVL 506. Offered in alternate years. Prerequisite: SCAN 505.

SCAN 576 Children and Youth Literature credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SCAN/576/)
Explores the understanding and youth in Scandinavia, with comparative focus on the US and the UK, through children's literature and classic accounts of childhood in fiction, film and related media. Will investigate how childhood is construed in books self-described as children's literature as well as in adult-audience fiction and memoirs; and how representations of childhood correlate with evolving ideas about family formation, child-rearing, the welfare state, and education in twentieth- and twenty-first century Scandinavia. This is put in comparative context with British and/or US children's literature and society. Same as CWL 586, EURO 576, and GWS 576. 4 graduate hours. No professional credit.

SCAN 593 Research in Special Topics credit: 1 to 8 Hours. (https://courses.illinois.edu/schedule/terms/SCAN/593/)
Research seminar or research topic. Content varies in consultation with instructor. May be repeated in separate terms to a maximum of 8 hours.

SLAV - SLAVIC

SLAV Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/SLAV/)

Courses

SLAV 117 Russ & E Euro Science Fiction credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SLAV/117/)
Survey of the science fiction writing of Russia and the countries of Eastern Europe since 1750, with particular emphasis on the post-World War II period. The role of the Science Fiction tradition in the respective national cultures. The influence on Russian and East European Science Fiction of Anglo-American Science Fiction. All readings are in English. Same as CWL 117.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

SLAV 120 Russian & E Euro Folktales credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SLAV/120/)
Introduction to Russian and East European folktales, focusing on folk beliefs, fairy tales, and folk narratives in Slavic languages from a comparative perspective, with an emphasis on methods of analysis and the role of gender.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

SLAV 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/SLAV/199/)
May be repeated.

SLAV 277 Slavic Literature Survey credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SLAV/277/)
Examines masterpieces of Czech, Polish, and Yugoslav literatures from medieval times to the present in English translation. Representative works are by Capek, Kundera, Mickiewicz, Milosz, Andric and others. Attention given to the European context and national traditions. Same as CWL 277. Prerequisite: One course in Slavic literature.

SLAV 300 Languages and Literatures Career Preparation credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/SLAV/300/)
Explores career and educational opportunities for foreign language and literature majors; the skills gained in the major; long-term career planning and preparation; researching jobs and organizations, graduate school options; resume preparation and interviewing skills. Career fair participation. Same as SLCL 300. Students may not receive credit for both SLAV 300 and HUM 275.

SLAV 399 Advanced Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/SLAV/399/)
Topics will vary. May be repeated, if topics vary.

SLAV 417 11th-17thC Russ Lit & Lang credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SLAV/417/)
Historical grammar, origin, and development of the East Slavic/Russian literary language, survey of literary genres of Old Russian Literature. 3 undergraduate hours. 4 graduate hours. Credit is not given for both SLAV 417 and RUSS 517. Prerequisite: Graduate standing; for undergraduates, completion of or placement beyond RUSS 301-RUSS 302; or, consent of instructor.

SLAV 418 Language & Minorities in Europe credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SLAV/418/)
Same as EURO 418, FR 418, GER 418, ITAL 418, LING 418, PS 418, and SPAN 418. See FR 418.

SLAV 419 Russian & East European Film credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SLAV/419/)
Study and analysis of major film makers, genres, trends, and theories, including the 1920's Soviet avant garde and the Polish and Czech "New Wave" since 1953; lectures, discussions, screenings, term paper. No reading knowledge of Russian required, except for majors in Slavic Languages and Literatures. Same as MACS 419. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: RUSS 219; or a college level course REES or in CINE; or consent of instructor.

SLAV 420 Jewish Life-Writing credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SLAV/420/)
Same as CWL 421, HIST 436, REL 420, and YDSH 420. See YDSH 420.

SLAV 430 History of Translation credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SLAV/430/)
Study of the historical development of translation ideas and practices in Europe and in particular cases across major global regions. Reading and analysis of key texts in the development of translation theory and case studies of practices and roles played by translation in different periods and geographical regions. Same as CLCV 430, CWL 430, ENGL 486, GER 405, SPAN 436, and TRST 431. 3 undergraduate hours. 4 graduate hours.

SLAV 452 Slavic Cultural Studies credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SLAV/452/)
Selected topics in the literatures of Russia and Eastern Europe. Topics covered will range from in-depth studies of specific authors, time periods, and thematic discussions of specific genre and literary traditions. Readings in English unless specified. Same as CWL 453. 3 undergraduate hours. 4 graduate hours. May be repeated to a maximum of 6 undergraduate hours or 8 graduate hours in same term; or 9 undergraduate hours or 12 graduate hours in separate terms. Prerequisite: Two years of literature, preferably Russian or East European; or consent of instructor.

SLAV 477 Post-Communist Fiction credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SLAV/477/)
Survey of the central and east European novel in the postcommunist period. Explores how fiction has responded to and creatively figured the period of the so-called "transition" to capitalism and the continuities and discontinuities in literary traditions in these societies, as well as the relevance of theories of postmodernism and postmodern literary analysis to these literatures. Same as CWL 477 and REES 477. 3 undergraduate hours. 4 graduate hours. Prerequisite: Two courses in Slavic literature including one at the 300-level or consent of the instructor.

SLAV 480 Intro to Slavic Linguistics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SLAV/480/)
The development of Common Slavic from Indo-European and its relationship to contemporary Slavic languages. Same as LING 480. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: Knowledge of a Slavic language.

SLAV 501 Applied Literary Translation I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SLAV/501/)
Same as CWL 511, EALC 511, GER 511, and TRST 501. See TRST 501.

SLAV 502 Applied LiteraryTranslation II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SLAV/502/)
Same as CWL 512, EALC 512, GER 512, and TRST 502. See TRST 502.

SLAV 505 Old Church Slavonic credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SLAV/505/)
Analysis of grammar and reading of texts. Prerequisite: Knowledge of a Slavic language.

SLAV 525 Problems in Slavic Literature credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/SLAV/525/**)**
Selected subjects in Russian and Slavic prose, poetry, drama, and literary criticism. Topics vary. May be repeated to a maximum of 12 hours.

SLAV 576 Methods in Slavic Grad Study credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/SLAV/576/**)**
Comparative, interdisciplinary methods and theoretical issues crucial to studies in Slavic literature, history, and culture. Theoretical bookshelf followed by specific case studies from Slavic. Same as CWL 576. May be repeated to a maximum of 8 hours as topics vary.

SLAV 577 Slavic Languages Pedagogy Seminar credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/SLAV/577/**)**
Seminar for graduate students who are currently teaching (or preparing to teach) languages in the Department of Slavic Languages and Literatures. The seminar will help participants develop expertise in language pedagogy by discussing both theoretical and practical aspects of teaching and learning and by adopting a hands-on approach to communicative language teaching through micro-teaching, classroom presentations, discussion, self-reflection, and peer-reviewing. 2 graduate hours. No professional credit. May be repeated to a maximum of 4 graduate hours if topics vary. Prerequisite: Enrollment restricted to Department of Slavic Languages and Literatures Graduate Students.

SLAV 591 Individual Topics credit: 1 to 8 Hours. **(**https://courses.illinois.edu/schedule/terms/SLAV/591/**)**
May be repeated. Prerequisite: Graduate standing with a major or minor in Russian; consent of department.

SLAV 599 Thesis Research credit: 0 to 16 Hours. **(**https://courses.illinois.edu/schedule/terms/SLAV/599/**)**
Approved for S/U grading only. May be repeated.

SOCW - SOCIAL WORK

SOCW Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/SOCW/)

Courses

SOCW 101 SOCW Orientation Seminar credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/101/)
Informational orientation seminar for Social Work majors to enhance their understanding of college life and social work as a profession.

SOCW 199 Undergraduate Open Seminar credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/199/)
Approved for letter and S/U grading. May be repeated.

SOCW 200 Introduction to Social Work credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/200/)
Broad survey of the field of social work; introduction to social services, social welfare organizations, major social problems and target population groups, and the methods used in working with individuals, groups, and communities; includes the range of personnel and skills in social work agencies, and the means of education and training for social work professionals.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

SOCW 210 Queer Visibility credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/210/)
Examines a broad scope of key LGBTQ topics from a social science perspective, and addresses such themes as identity development, critical social movements, community characteristics, sub-cultures, public policy, resilience, and health disparities within queer communities. Applies a social justice, sex-positive, and health promotion lens to the topics addressed. Also explores issues related to intersectional identities (i.e., the overlap of multiple [often marginalized] group membership, such as race/ethnicity, gender identity, age, ability, sexual orientation, etc.) within this population. Students will learn the ways in which the helping professions (e.g. social work, public health, etc.) engage with the LGBTQ community using both research and practice, in order to promote the health and wellbeing of LGBTQ persons.

SOCW 225 Social Work Statistics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/225/)
Introduction of basic concepts in statistics with emphasis on the application of statistical methods in social work research. Topics include: descriptive statistics, probability theory and distributions, point and interval estimation, hypothesis testing, central tendency, variability, independence, contrasts, correlation and regression, non-parametrics, concepts of levels of measurements, and statistical vs. practical significance. Priority will be given to Social Work majors. Credit is not given for SOCW 225 if credit for a college level introductory statistics course has already been earned.
This course satisfies the General Education Criteria for:
Quantitative Reasoning I

SOCW 240 Death & Dying credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/240/)
This course will focus on various aspects of death and dying. Content will examine different types of death, impact of death throughout the lifespan, cultural beliefs and practices regarding death and dying, grief, healing after loss, legal and ethical issues related to death, and the roll of social workers at the end of life. Students will be encouraged to examine their own thoughts, values, feeling, and beliefs about death and dying.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

SOCW 245 Doing Good through the Nonprofit Sector credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/245/)
Study of the nonprofit sector theory, activity and structures in the US and abroad. Challenges students to think critically about the role and value of the nonprofit/voluntary sector in society, to understand ethical principles and values that guide nonprofit work, and to assess research evidence about effectiveness and impact. Helps inform students' thinking about future career choices and/or volunteer activities in the "third sector".
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

SOCW 297 Asian Families in America credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/297/)
Offers a comparative analysis of Asian families as they cope and adapt to American society. Examines: 1) how families from four major Asian-American groups (Chinese, Indian, Japanese and Korean) function in American society; 2) how these families compare to families in their country of origin; and 3) how these families are similar to or different from the 'typical American' family. Includes visits to Asian cultural institutions and with Asian families. Same as AAS 297 and HDFS 221.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - US Minority

SOCW 298 Social Work Experiential Learning Fees credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/298/)
This is a shell course to assess fees to support the cost of providing student learning experiences in social work practice settings. Additional fees may apply. See Class Schedule. Approved for S/U grading only. Prerequisite: The SOCW Admissions and Records Officer will manually add this course to student schedules.

SOCW 299 Study Abroad credit: 0 to 18 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/299/)
Lectures, seminars, and practical work in an approved study-abroad program in Social Work appropriate to the student's course of study. Approved for Letter and S/U grading.

SOCW 300 Diversity: Identities & Issues credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/300/)
This introductory course explores multiple dimensions of diversity in a pluralistic and increasingly globalized society. Using a social work strengths perspective as well as historical, constructivist, and critical conceptual frameworks; the course examines issues of identity, culture, privilege stigma, prejudice, and discrimination. The social construction and implications of race, class, gender, sexual orientation, and other dimensions of difference is examined at individual, interpersonal, and systems levels. Students are expected to use the course material to explore their personal values, biases, family backgrounds, culture, and formative experiences in order to deepen their self-awareness and develop interpersonal skills in bridging differences. Finally, students apply learning from the course to identify characteristics of effective social work and other health and human service provision among people culturally different themselves; and to identify opportunities for change contributing to prejudice reduction and cross-cultural acceptance at home, work and in society.
This course satisfies the General Education Criteria for:
Advanced Composition
Cultural Studies - US Minority

SOCW 310 UG Research Assistance credit: 0 to 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/310/)
Assist departmental faculty in on-going research. Topics and nature of assistance vary. Capstone paper required. Approved for Letter and S/U grading. May be repeated in separate terms up to 6 hours. Prerequisite: Evidence of adequate preparation for such study; consent of faculty member supervising the work; and approval of the department head. Restricted to Majors and Minors.

SOCW 315 Social Work Services for Older Adults credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/315/)
Focus on the aging process, special needs of older adults, and the role of social work in addressing these needs. All levels of social work intervention are considered, direct practice with older persons and their families, service delivery systems in local communities, and state and national policies. Special attention is given to the needs of caregivers, person-centered care, diverse vulnerable populations and resources for older adults to age in place.

SOCW 321 Social Entre & Social Change credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/321/)
Intended for undergraduates who have an interest in creating programs and products that have social values for communities. Features social entrepreneurship as an approach to social development and will consider its application and related change strategies to a wide array of social problems. Social entrepreneurship has emerged as a change approach that features the application of entrepreneurial practices to social ventures. Social entrepreneurship is similar to business entrepreneurship in its emphasis on selected program development and management principles and processes, but social entrepreneurs have the primary goal of creating social value in communities rather than personal or shareholder wealth. The initial part of the class will emphasize instructing students in broad concepts and principles related to entrepreneurship, while the latter portion of the course will feature students working on teams to design social projects.

SOCW 325 International Development with Grassroots Organizations credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/325/)
This course engages students to think critically about international aid and development by cultivating an awareness of moral and ethical dilemmas that often go unconsidered by young professionals. It intends to help students develop greater cultural awareness and humility by recognizing differences in equity and global social, economic, and political structures. The course is a second eight-week offering and uses a blended learning approach with asynchronous online content combined with in-person classroom educational activities. Students apply the knowledge learned through the course by working directly with an international grassroots social organization during a 4-8 week immersion experience abroad. Course is an 8 week pre-departure training is required. Students complete a service learning placement in summer with an international grassroots organization.

SOCW 330 International Perspectives credit: 3 to 6 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/330/)
This course provides cross-cultural learning experiences within the context of international community-based service learning. Students will explore human service delivery through direct involvement with international social service institutions. This cultural immersion course is a collaborative partnership between the University of Illinois School of Social Work and selected international universities. Countries visited, varies by semester. May be repeated in separate terms up to 12 undergrad hours if topics vary.

SOCW 335 Cities and Immigrants credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/335/)
Same as UP 335. See UP 335.

SOCW 350 Health Promotion Practicum credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/350/)
Same as CHLH 340. See CHLH 340.

SOCW 360 Social Work and the Military credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/360/)
This course provides an overview of military social work practice including: military culture, issues and needs of soldiers and their families, ethical considerations, and the roll of social workers. Prerequisite: For majors only.

SOCW 370 Social Work and Disability Studies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/370/)
This course provides a foundation for generalist practice and promotes social justice, inclusion, and ability when working with all people. Skills and knowledge will be gained to help empower individuals with disabilities and to intervene in various systems to ameliorate bias. The course examines key policies, historic legislation, service delivery, education, and social issues that impact individuals with disabilities. Through projects and assignments completed in-class and in the community, students will learn about the varying abilities and strengths of people with a variety of different needs. Applications of social work values and ethics are stressed in relation to working with people with disabilities.

SOCW 375 Social Enterprise Lab credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/375/)
Enables students to launch and scale social enterprises spanning a wide range of organizations focused on technological innovations, human services, and the performing and visual arts. It couples structured lectures with interactive modules, field trips, guest speakers, and workgroup labs to discuss and troubleshoot startup challenges and opportunities. Modular topics include strategic plans, business models, mapping the external environment, market segmentation, partnership and the value chain, organizational governance, incorporation, the operating plan, human resources, financing, marketing and outreach, branding and identity, legal and liability issues, and monitoring and evaluation. The course develops entrepreneurial and management skillsets through deep engagement with entrepreneurial action.

SOCW 380 Current Topics in Social Work credit: 3 to 6 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/380/)
Presents and analyzes special topics related to current social work practice, policy and research. Topics vary; see Class Schedule for current offering. May be repeated in the same or separate terms.

SOCW 400 Generalist SW Practice Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/400/)
Foundation methods course that is a prerequisite for all advanced methods courses. Overview of generalist social work practice and intervention with individuals, groups, organizations and communities; introduction to core concepts, value base and ethical principles of the profession. Emphasis is given to the bio-ecological framework, person-in-environment and systems theory. Skills in developing beginning professional relationships are addressed via a skills lab component. Students begin the process of professional self-awareness to begin to identify how the personal values and beliefs they hold impact upon their interactions. 4 undergraduate hours. 4 graduate hours. Prerequisite: Admission to MSW program.

SOCW 401 Practice I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/401/)
Overview of generalist social work practice with individuals, families, groups, organizations, and communities. Designed to introduce core concepts, values, and ethical principles of the profession as well as to provide basic skills, and knowledge related to generalist social work practice with a broad array of client systems. Emphasis is give to the biological-psychological-social-spiritual framework, person-in-environment, strengths perspective, and system theory. Skills in developing beginning professional relationships, which are characterized by mutuality, collaboration, empowerment, and client self determination within the problem-solving process are addressed. 3 undergraduate hours. No graduate credit. Prerequisite: SOCW 200.

SOCW 402 Practice II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/402/)
Provides students with culturally responsive, micro-level skills development for working with and on behalf of individuals, families, and groups. Builds on the basic helping skills learned in SOCW 401 and offers further practice on interviewing skills, more emphasis on ethical decision-making, assessment, and intervention, evaluation applied to individuals, families, and groups. 3 undergraduate hours. No graduate credit. Prerequisite: SOCW 401.

SOCW 403 Practice III credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/403/)
Provides knowledge and skills about the theory and practice of planned change in communities and organizations using a generalist model of social work practice. Builds on the foundation knowledge and skills gained in SOCW 401 with emphasis on assessment, planning, intervention, and evaluation skills for macro-level practice. 3 undergraduate hours. No graduate credit. Prerequisite: SOCW 401.

SOCW 404 Social Work Case Management Practice credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/404/)
This course builds upon and extends generalist social work theories, knowledge and clinical skills required for case management practice. Content focuses on inter-professional collaborative team-based approaches for patient/client assessment, care planning, service delivery coordination, and evaluating outcomes. Emphasis is on organizational context, theoretical models, social work roles, culturally sensitive approaches, biopsychosocial assessments, triage, advocacy, interdisciplinary and inter-organizational collaboration and record keeping. 3 undergraduate hours. No graduate credit. Prerequisite: SOCW 401. Restricted to Social Work majors only.

SOCW 410 Social Welfare Pol and Svcs credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/410/)
Examination of social welfare within a historical context, addressing the economic, political, social and ideological influences that have shaped the social welfare system and programs. Critical study of the income maintenance system in the United States as a response to the problems of inequality of opportunity and income, poverty, and income security; consideration of alternative approaches with discussion of the social worker's role in the system. 3 undergraduate hours. 4 graduate hours.

SOCW 412 Hispanics in the U.S. credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/412/)
Hispanics constitute a growing population in the United States. The size and heterogeneity of Hispanics raises complex issues in crafting public policy and in designing and delivering social services. This course offers an extensive portrait of Hispanics in the United States. Students will explore questions and demographic characteristics, language and religious practices, education, criminal justice, neighborhood and economic restructuring, immigration, social service systems, and community action in the context of creating an effective public policy agenda. Same as LLS 412. 3 or 4 undergraduate hours. 3 or 4 graduate hours.

SOCW 416 Child Welfare Issues & Trends credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/416/)
This course examines theoretical and programmatic aspects for child welfare practice. Emphasis is placed on the roles and functions of child welfare workers, including engagement, assessment, intervention and permanency planning. 4 undergraduate hours. 4 graduate hours. Prerequisite: SOCW major. For majors only.

SOCW 417 Dementia Care for Older Adults credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/417/)
This course will equip students with a body of knowledge to supervise, participate in, and facilitate care for persons with dementia throughout the lifespan. Upon completion of the course, students will be eligible for certification as approved dementia trained practitioners. The course will introduce and develop social work practice skills on all levels and choices of dementia care interventions and assessments. Special attention is given to practice skills for working with vulnerable populations and their caregivers through service learning site opportunities and assignments. The course uses an integrated health and person-center care approach with special attention to multi-cultural backgrounds and new family lifestyles related to dementia care. 3 undergraduate hours. 4 graduate hours. Prerequisite: Prior completion of SOCW 315 or other Introduction to Aging course is strongly recommended. BSW majors and MSW students only.

SOCW 418 Independent Study credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/418/)
Independent study of a topic of special interest in the field of social work. 1 to 3 undergraduate hours. 4 graduate hours. Prerequisite: Consent of instructor.

SOCW 420 Subst Use in Social Context credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/420/)
Introduces students to the problem of substance abuse and its impact on society. Examines the physiological, psychological, social, and cultural aspects of substance abuse. At the individual and familial levels, the course examines the causes, development, prevention, and treatment of substance abuse. At the societal level, the course examines public policy efforts to regular and control substance use from both historical and contemporary perspective. Implications for social and economic justice are also examined. 3 undergraduate hours. No graduate credit.

SOCW 427 Social Work Research Methods credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/427/)
Basic principles of social science research and importance for social work practice: overview of research principles including the stages of a research project, design of research; quantitative and qualitative methodologies, design of questionnaires, methods of data collection and preparation of reports. Introduction to various research designs such as the survey, program evaluation, single subject design, quasi-experiments, and experimental design. Enrollment preference given to students in the MSW program. 3 undergraduate hours. 4 graduate hours.

SOCW 436 Intl SW & Development credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/436/)
This online course introduces students to policy and practice issues associated with international social work. It emphasizes ethical dilemmas, with the goal of sensitizing students to the importance of culturally sensitive practice for marginalized populations in global contexts. Weekly online discussion sessions use the Blackboard Online Platform. Students must have high speed internet connection and headset with microphone for course interaction. 3 undergraduate hours. 4 graduate hours.

SOCW 451 HBSE I: Human Development credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/451/)
Examination of the major theories that inform social work's understanding of human behavior in a variety of social contexts. A bio-ecological systems framework, together with a developmental approach in understanding the ways in which individuals, families, groups, organizations, institutions, and communities interact, is presented. Issues of gender, race, ethnicity, socioeconomic status, disability and sexual orientation are introduced so students can gain understanding of how these components affect and influence development across the lifespan. 3 undergraduate hours. 4 graduate hours.

SOCW 455 Social Work with Women credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/455/)
Focuses on women and now cultural belief systems related to gender are instantiated through the differential treatment of females and males in our education, mental health, social welfare and health care systems; and the consequences of such practices through the lifespan. Includes consideration of policies and practices that support women emphasizing issues of special concern to women of color, lesbians, older women, impoverished women and disabled women. Same as GWS 454. 3 undergraduate hours. 4 graduate hours.

SOCW 457 Health Planning credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/457/)
Same as CHLH 457. See CHLH 457.

SOCW 461 Professional Practice Seminar I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/461/)
The goal of this course is to begin the process of integrating all the foundation knowledge of generalist social work that students have learned and begin applying it to real life situations. Students will complete a portfolio and a service learning experience that will help them being to make the connection between the core competencies, theories and applications to real life experiences. During this course students will begin the process of being matched with the agency where they will serve their internship during the last semester of their senior year. 4 undergraduate hours. No graduate credit. Prerequisite: SOCW 401.

SOCW 470 Field Practicum & Professional Seminar II credit: 15 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/470/)
This course is a supervised field practice experience and seminar where students apply knowledge and skills in social work engagement, assessment, planning and interventions to individuals, groups, families, organizations, and communities. Students are expected to promote sustainable social change through planned problem solving and empowerment to enhance the well-being of others. The practicum consists of 32 hours/week for 16 weeks. 15 undergraduate hours. No graduate credit. May be repeated; instructor approval required. Prerequisite: SOCW 461. SOCW majors only.

SOCW 473 Immigration, Health & Society credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/473/)
Same as CHLH 473, LLS 473, and SOC 473. See LLS 473.

SOCW 475 Undergraduate Research Abroad credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/475/)
Students assist in research under faculty supervision at a location outside of the United States. Topics and type of assistance vary. 1 to 4 undergraduate hours. No graduate credit. May be repeated in separate terms up to 6 hours. Prerequisite: Evidence of adequate preparation for such study; consent of faculty member supervising the work (who will have examined the proposed research plan); and approval of department. Not available to freshman.

SOCW 480 UG Research Project credit: 0 to 3 Hours. **(**https://courses.illinois.edu/schedule/terms/SOCW/480/**)**
Conduct research study under the supervision of a departmental faculty member. Topics and nature of assistance vary. Capstone paper required. 0 to 3 undergraduate hours. No graduate credit. Approved for letter and S/U grading. May be repeated in separate terms up to 6 hours. Prerequisite: Evidence of adequate preparation for such study; consent of faculty member supervising the work; and approval of the department head. Majors only. Not available to freshman and sophomores.

SOCW 500 SW Practice with Indiv and Fam credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/SOCW/500/**)**
Systematically and critically examines the theory, procedures, and techniques of selected practice models within four main approaches to social work: cognitive-behavioral, systemic (family and ecological systems; crisis intervention), task-centered, and radical-structural (structural; feminist). Uses selected criteria to analyze and assess those models, examines outcome research, and identifies current practice issues. Prerequisite: SOCW 400.

SOCW 501 SW Practice with Groups credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/SOCW/501/**)**
Social work practice theory in social group work through comparative study of various practice approaches and research about those approaches, including the use of group work method in contemporary social work practice, practice principles, and the use of group process as applied in the student's area of specialization. Looks at group work for children, adolescents, and adults considering developmental and environmental issues; also includes investigation of practice strategies and models of group therapy and task group leadership across diverse populations. Prerequisite: SOCW 400.

SOCW 502 Brief Motivational Interventions for Substance Use credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/SOCW/502/**)**
This course prepares social workers to deliver brief interventions that build motivation for change among individuals that use substances. Students participate in hands-on skill development activities for two empirically supported treatments, Screening Brief Intervention and Referral to Treatment (SBIRT) and Motivational Interviewing. Students are expected to reach beginning competency in delivering these two clinical models. 4 graduate hours. No professional credit. Prerequisite: SOCW 400. MSW: Social Work - UIUC.

SOCW 503 Trauma Informed Social Work with Children and Adolescents credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/SOCW/503/**)**
This course uses a case study and inquiry based approach to foster student learning of the core concepts of trauma (theory and foundational knowledge) and evidence-based practice interventions effective in treating children, youth, and families that experience trauma. Cases discussed include children, youth, and families exposed to traumatic events (i.e. abuse, neglect, domestic violence, community violence and natural disasters). Strength-based practice interventions that build on existing child and family strengths that enhance growth and resiliency after trauma are studied. Prerequisite: SOCW 400.

SOCW 504 SUD Treatment in S W credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/SOCW/504/**)**
Introduces selected counseling approaches for substance use disorders. Begins with an overview of the causes of substance use disorders, assessment, diagnosis, and treatment planning. Focuses on treatment theories and techniques applied to counseling substance abusers. Selected theories include 12 Step approaches, cognitive and behavioral theories, family systems theory, harm reduction, and motivational interviewing. Special attention is devoted to apply substance abuse treatment models with diverse populations. Prerequisite: SOCW 400.

SOCW 505 Behav and Cogn Methods for SW credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/SOCW/505/**)**
Students are introduced to brief behavioral and cognitive methods for treating a wide range of human problems, crises, and mental disorders. Content includes: (1) conceptualizing and assessing client problems; (2) identifying appropriate treatment goals; (3) developing comprehensive and differential treatment plans; (4) conducting brief interventions; and (5) evaluating client outcomes using research, consultation, and supervision. Prerequisite: SOCW 400.

SOCW 506 SW Practice with Child/Adol credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/SOCW/506/**)**
Examination and critical evaluation of selected methods/approaches of intervention; research on their effectiveness and application to specific problems of children and adolescents that come to the attention of social workers and other helping professionals; attention given to remediation and prevention. The course provides opportunities for students to develop skills through participation in a service learning project. Prerequisite: SOCW 400.

SOCW 507 School Social Work Practice credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/SOCW/507/**)**
Examination of the design and delivery of school social work interventions with special emphasis given to students with physical/mental disabilities and vulnerable populations. Course content provides a foundation for the development of a comprehensive and in-depth understanding of an ecological systems approach to social work practice based upon a foundation of professional values and ethics. Prerequisite: SOCW 400.

SOCW 508 Family Therapy Seminar credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/SOCW/508/**)**
Advanced seminar providing in-depth exposure to the principles, values, ethics, issues and practice of family therapy in social work. Focuses on family therapy process, the practitioner role, issues in assessment, intervention and evaluation; how discrimination and oppression impact intervention strategies; skills that advance social and economic justice; presentation of cases; use of supervision and consultation, and family therapy with diverse populations. Combines lecture/discussion with taped observations of noted family therapists and participation in a family therapy practicum. Prerequisite: SOCW 400.

SOCW 509 Adv Clin Assess & Interviewing credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/SOCW/509/**)**
Advanced practice class designed to enhance students' understanding of clinical assessment and interviewing methods. Includes methods for therapeutically intervening with clients who are highly distressed, angry or agitated, resistant or involuntarily mandated for treatment, experiencing severe symptoms, or who have unique and complex problems. Clinical interviewing skills taught in this class will build upon knowledge and skills acquired in previous direct practice classes. Prerequisite: SOCW 400 and SOCW 552.

SOCW 510 Theories of Diversity, Inequality, and Social Change credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/510/)
Explores important dimensions of social justice and social change relevant to social work leadership. The first phase of the course focuses on theories of diversity, social identity and social justice. The second phase focuses on theories of social change and stasis. Students will develop their own working models of these theories. They will also understand how issues of diversity and social justice should inform social work practice at micro, meso and macro-social work levels. Implications for social work leadership will also be explored. 4 graduate hours. No professional credit. Prerequisite: Restricted to Social Work MSW students.

SOCW 513 Delivery of Health Care credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/513/)
Delivery of health care in the United States is examined from a multidisciplinary perspective including social, cultural, political, economic, ethical and legal issues. Health care services are described in relation to various definitions of health, health status and access to care. Current problems and issues in health care including government responsibility and source of authority, policy development and analysis, proposals for reforms, and financing and cost containment are discussed and analyzed. Prerequisite: Admission to MSW program or consent of instructor.

SOCW 514 Mental Health Pol and Svcs credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/514/)
Examination of comprehensive community mental health services as they evolve from definitions of the problems and changes in federal and state social policy; the concept of normalization and its criteria for program evaluation; and changing roles of mental health professionals, paraprofessionals, and consumers in policy making and service delivery. Presents the history of mental health policy and services in the U.S.; current policies and activities of the mental health delivery system are critically analyzed. Prerequisite: SOCW 410.

SOCW 515 Integrated Health Care Policy and Services credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/515/)
Integrated Health Care Policy and Services is examined from a multidisciplinary perspective including social, cultural, political, economic, ethical and legal issues. Integrated health care services are described in relation to various definitions of health and mental health conditions and access to care. Current problems and issues in integrated health care including government responsibility and source of authority, policy development and analysis, proposals for reforms, and financing and cost containment are discussed and analyzed. 4 graduate hours. No professional credit. Prerequisite: Admission to MSW program or consent of instructor. Restricted to those in the MSW and iMSW program.

SOCW 516 Child, Youth and Family Svcs credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/516/)
Examines a range of direct service and public policy issues that social workers encounter when working with vulnerable children, adolescents, and families. Focuses particular attention on the families involved with child protection. Addresses the following questions: What factors help explain the etiology of violence and neglect in the family home? Once vulnerable families are identified and become involved with social service agencies, what interventions are most effective with regard to decreasing risks and strengthening protective factors? How can social service systems best prepare vulnerable adolescent for the transition to adulthood? Prerequisite: SOCW 410.

SOCW 519 Public School Policy/Services credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/519/)
Presents content on children with physical and mental disabilities, educational policies related to vulnerable populations, and federal and state legislation, with particular emphasis given to the Individuals with Disabilities Act (IDEA). The following topics are highlighted: eligibility requirements, general characteristics of the disabling conditions, education as a continuum from early childhood to adulthood, school finance, and current educational issues. Content is presented pertaining to meeting the needs of exceptional children, students with other special needs, and their families in public schools and the community. Prerequisite: SOCW 410.

SOCW 520 Social Welfare Planning credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/520/)
Introduces students to the theory and practice of social welfare planning. The course is designed to help students apply concepts and methods to their specific social work fields of interest. Content includes a review of policy analysis, needs assessment, establishing goals and objectives, program design, budgeting, management information systems, and program evaluation. Prerequisite: Admission to MSW program or consent of instructor.

SOCW 521 Leadership and Social Change credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/521/)
Introduces MSW students to a broad range of strategies for creating social change. Several overarching concepts that are useful in undertaking a wide range of social change efforts are introduced. These concepts are applied to different change strategies. This includes attention to the role of leadership in social change, as the quality of leadership is critical to the success of most social change efforts. The importance of policy or social entrepreneurs in creating social change will also be examined. These entrepreneurs play critical roles by both identifying and implementing new ideas and by diffusing them on a wider scale after initial experimentation. Finally, social workers often tend to be uninformed about sound business practices as they engage in social change efforts, yet knowledge of basic business concepts can be critical to the success or failure of a social venture. Therefore, the course addresses issues such as opportunity recognition and risk assessment, sustainability and scalability of projects, and attention to both fiscal management and outcome accountability. Prerequisite: SOCW 400 or by consent of instructor for non Social Work majors.

SOCW 522 SW Practice with Communities credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/522/)
Examines principles and methods that characterize identifiable approaches used in community organization practice at neighborhood, community, state, and other levels. This course is an in-depth study of how citizens can organize. Questions discussed include: What institutions aid communities in their organizing and self-improvement efforts? What circumstances encourage the erosion of civil society, civic involvement, and community institutions? What role should the social worker and the human service or social service agency play in organizing communities? Prerequisite: SOCW 400.

SOCW 525 Supervision/Staff Development credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/525/)
Course focuses on the acquisition of the essential knowledge and skills needed to work with people to achieve desired client outcomes. Includes management and organizational theories, and research and theory regarding the practice of supervision. Addresses understanding of the agency context and purposes, interpersonal insights and skills, the importance of procedural and technical expertise, communication skills, mastery of the functions of management and leadership ability. Examines supervisory process in terms of interpersonal sensitivity and interaction skills including influence techniques. Prerequisite: Admission to MSW program or consent of instructor.

SOCW 526 Managing Human Service Orgs credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/526/)
Focus on the design, administration and management of social programs from a social work perspective. Content includes: principles and process of administration and management, history of social welfare administration and how this relates to the design of current programs, review of administration Organizational and leadership theories, policy formulation, agency structure, staff organization, budgeting and evaluation of management practice. Prerequisite: SOCW 400 or by consent of instructor for non Social Work majors.

SOCW 531 Field Practicum and Integrative Seminar I credit: 8 to 12 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/531/)
This course is comprised of a field practicum and integrative seminar. The field practicum is educationally directed and supervised by an approved field instructor. The seminar component assists students with the integration of knowledge, skills, values and attitudes of social work practice acquired in the classroom with the hands-on practice experience in the field practicum setting. Learning experiences emphasize the application of knowledge and practice in the areas of ethical and professional behavior, diversity and difference, human rights and social, economic and environmental justice, research informed practice, policy practice, and engagement, assessment, intervention and evaluation with individuals, families, groups, organizations and communities. 8 to 12 graduate hours. No professional credit. May be repeated in separate terms.

SOCW 532 Field Practicum and Integrative Seminar II credit: 8 to 12 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/532/)
This course builds on the learning of SOCW 531 and is comprised of a field practicum and integrative seminar. Learning is directed at the development and demonstration of advanced competency skills. The field practicum is educationally directed and supervised by an approved field instructor. The seminar component assists students with the integration of advanced knowledge, skills, values and attitudes of social work practice acquired in the classroom with the hands-on practice experience in the field practicum setting. The advanced learning experiences emphasize the application of knowledge and practice in the areas of ethical and professional behavior, diversity and difference, human rights and social, economic and environmental justice, research informed practice, policy practice, and engagement, assessment, intervention and evaluation with individuals, families, groups, organizations and communities. 8 to 12 graduate hours. No professional credit. May be repeated in separate terms. Prerequisite: Successful Completion of SOCW 531.

SOCW 533 Field Practicum III credit: 4 to 6 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/533/)
This course is for students completing a part-time field practicum and is the final semester of the practicum experience. Learning is directed at the development and demonstration of advanced competency skills. The field practicum is educationally directed and supervised by an approved field instructor. The advanced learning experiences emphasize the application of knowledge and practice in the areas of ethical and professional behavior, diversity and difference, human rights and social, economic and environmental justice, research informed practice, policy practice, and engagement, assessment, intervention and evaluation with individuals, families, groups, organizations and communities. 4 to 6 graduate hours. No professional credit. Approved for S/U grading only. May be repeated in separate terms. Prerequisite: Successful completion of SOCW 532. Restricted to Master of Social Work students.

SOCW 535 Local Policy & Immigration credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/535/)
Same as LA 535 and UP 535. See UP 535.

SOCW 541 Clinical Research Seminar credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/541/)
Develops skills for assessing effectiveness of social work interventions using research methods. The course assumes students have had prior courses in research methods and statistical analysis. Building on these courses, this course will focus on the use of research methods in examining important aspects of social work interventions. Students will also develop skills necessary to evaluate social work research practice and practice evidence, as well as skills in grant writing and data analysis. Prerequisite: SOCW 427 or equivalent.

SOCW 542 Program Evaluation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/542/)
An advanced research course that develops skills for evaluating social service programs. The course assumes students have had prior courses in research methods and statistical analysis. This course provides an understanding of theoretical concepts, techniques, and research findings for evaluating a specific program, its implementation, and its effectiveness. It systematically analyzes program evaluation models and critically examines application of these models in the context of social work practice and social welfare policy. Prerequisite: SOCW 427 and a college level statistics course.

SOCW 552 HBSE II: Mental Disorders credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/552/)
Interrelationship of biological, emotional, learning and social aspects of mental disorders, and implications for the patient/client, family, and community. Focus on diagnostic assessment and biopsychosocial treatment methods including psychosocial treatment methods, medications, and social work interventions. Students also learn to recognize the potential for bias that can result when assessments are applied across cultural, ethnic, racial, socioeconomic, gender and other groups. Prerequisite: SOCW 451.

SOCW 553 Integrated Behavorial Health & Health Care credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/553/)
Students will learn therapeutic approaches, brief interventions and bioethical frameworks to help patients/family navigate illness, disability, and healthcare systems and promote health and wellness. Students will learn roles and functions of clinical social workers in healthcare settings with special attention to Integrated Care models and roles of the behavioral health consultant/provider and medical social worker on healthcare teams. Holistic biopsychosocial models that are patient/family centered, team-based, collaborative, and that integrate physical and behavioral health care to address social determinants of health and health equity will be emphasized. Common chronic and acute health conditions and medical terminology are discussed as well as evidence-based psychosocial interventions in hospital, primary care, and other outpatient settings. 4 graduate hours. No professional credit. Prerequisite: Admission to MSW program.

SOCW 554 Inequalities In A Diverse Society credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/554/)
In contemporary American society, not all inequality leads to inequity. In this course, we will explore structural and cultural disparities that proceed from race, ethnicity, and class. Such critical inquiry enables students to understand the factors that contribute to the creation and implementation of public policy and guide the delivery of social goods such as adequate housing, safe communities, efficient transportation, affordable health care, quality education, and other public services. Therefore, we emphasize processes of analysis and the application of social entrepreneurial principles as important tools to generate policies and interventions that lead to a more equitable society. Same as HDFS 541 and LLS 554. 4 graduate hours. No professional credit. Prerequisite: SOCW 451 or consent of instructor for non Social Work majors.

SOCW 561 Special Studies in Soc Work I credit: 1 to 8 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/561/)
Independent or group study in areas of special interest; application of social work principles to special problems or settings. May be repeated in the same or subsequent terms as topics vary. Prerequisite: Consent of instructor.

SOCW 562 Special Studies in Soc Work II credit: 2 to 8 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/562/)
Independent or group study in areas of special interest; application of social work principles to special problems or settings. Prerequisite: Consent of instructor.

SOCW 570 Childhood Obesity I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/570/)
Same as CHLH 530, FSHN 530, HDFS 551, KIN 530, NUTR 530. See NUTR 530.

SOCW 571 Childhood Obesity II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/571/)
Same as CHLH 531, FSHN 531, HDFS 552, KIN 531, NUTR 531. See NUTR 531.

SOCW 575 Social Work Teaching Seminar credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/575/)
Doctoral seminar on social work education and the pedagogy of college teaching. Topics include history of social work education, competencies for social work education, course development, principles of active learning, use of diverse instructional methods for teaching and assessing learning, and the scholarship of teaching and learning. The course has a required practicum component where students receive structured mentoring in some aspect of teaching in a social work class.

SOCW 576 Teaching Practicum credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/576/)
This course is designed to provide doctoral students with supervised, hands-on teaching training and experience with a faculty member after they complete the required Social Work Teaching Seminar. The primary objective of the teaching practicum is to strengthen the students' teaching ability and experiences for their entry into the job market. The purpose is for students to be involved in as many aspects of the teaching process as possible (e.g. syllabus development, class preparation, classroom time, office hours, assignment review/grading, meetings with faculty supervisor and any other relevant activities). Approved for S/U grading only.Prerequisite: SOCW 575.

SOCW 579 Social Work Practice Theories credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/579/)
Presents theories for social work interventions with individuals, families, groups, and communities and organizations; critically analyzes different theoretical frameworks for such interventions; and examines the conceptual links between theory, process, outcome, and evaluations. This course is intended for students in the Ph.D. program in Social Work.

SOCW 580 Advanced Child Welfare credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/580/)
Examines laws, scientific concepts, ethical dilemmas, and new practice directions with respect to protecting children, preserving families, regulating foster care, achieving family permanency, and assisting foster youth in transitioning to independence. Review of legislative, court, and administrative frameworks for promoting these outcomes at the city, state, and federal levels. The course analyzes and critiques historical and contemporary social science, public policy, community organization, and legal advocacy perspectives on child protection and child welfare. Contemporary topics and issues are discussed and debated. Prerequisite: SOCW 516 or consent of instructor.

SOCW 581 Gender Relations & Intl Dev credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/581/)
Same as GWS 512 and WGGP 581. See WGGP 581.

SOCW 584 Policy Practice and Advocacy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/584/)
Examines approaches for analyzing social policy development, implementation and advocacy in the United States; and development of skills to become effective policy practitioners. Involves ability to formulate viable policy options as well as skills in advocating for adoption of desired policies. Content includes knowledge about the political processes associated with policy development, the technologies needed to develop policies, communication skills need for policy advocacy, and knowledge in a specialized area. Course builds on policy material presented in SOCW 410. Prerequisite: SOCW 410 or consent of MSW Program Director.

SOCW 585 National Social Welfare Policy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/585/)
This seminar focuses on social policy development, implementation, evaluation, and research. The class will analyze theories of governmental policy intervention, both from substantive and procedural standpoints. Because the social policy arena is heavily politicized, political factors affecting policy development and implementation will be stressed. In addition, policy implementation discussions will attend both to program administration and intergovernmental relations issues. The growing importance of globalization in social policy development also will receive attention, as will selected issues in the evaluation of social policy interventions. 4 graduate hours. No professional hours.

SOCW 589 Social Work and the Law credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/589/)
Legal procedures and issues of special relevance to social work practice; includes legal provisions related to poverty, family development and crises, racial and ethnic minorities, institutionalized persons, crime and delinquency, legal authority of social agencies, and regulation of the profession. Prerequisite: Admission to the MSW program or consent of instructor.

SOCW 593 Applied Qualitative Research credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/593/)
Provides a doctoral level overview of contemporary qualitative research with an emphasis on applications. Through readings, discussions, and assignments students will be introduced to: the history and philosophical underpinnings of qualitative research; research designs, methods and analysis used in qualitative research; criteria for rigor in qualitative research; the application of qualitative research to addressing contemporary social issues; technical and professional issues including the use of computer programs in qualitative research and grant writing. Students will begin to elaborate their own research interests through critical reading, discussion and various applied and written assignments. Prerequisite: Admission to Ph.D. program.

SOCW 594 Individual Research credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/594/)
Course is designed to enhance the research skills of Doctoral students in social work through research collaboration with a faculty member. May be repeated to a maximum of 8 hours. Prerequisite: SOCW 593.

SOCW 595 Quantitative Research Designs credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/595/)
Provides a doctoral level overview of quantitative designs and conceptual issues in social work research. It presents a framework for structuring the statistical analysis and systematic evaluation of the efficacy and effectiveness of social interventions in achieving desired outcomes for diverse populations. Although the purpose is not to emphasize statistical training, the course will reinforce the learning of basic concepts, mathematical foundations, and assumptions underlying advanced applications of statistical description and causal inference. Prerequisite: Admission to the Ph.D. program.

SOCW 599 Dissertation Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/SOCW/599/)
Research and writing of doctoral thesis in social work. Approved for S/U grading only. May be repeated.

SOC - SOCIOLOGY

SOC Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/SOC/)

Courses

SOC 100 Introduction to Sociology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOC/100/)
Sociology offers a unique lens through which we can examine the world around us. In this course you will develop a perspective that will allow you to analyze the social world in a way that reveals the hidden and/or overlooked social forces that shape our lives. This approach, the sociological imagination, will enable you to explore how social forces influence the ways we view and navigate our social world. We will discuss how sociologists use theory and research to better understand important social issues such as inequalities of race, class, gender, sexualities and how social order and social change are possible. We will discuss how society affects individuals and in turn how individuals can affect society.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

SOC 101 Sociology of Gender credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/101/)
An exploration of current questions of gender and their applications to students today. The course will focus primarily on the United States emphasizing individual, interactional, and institutional aspects of the social world. Topics for study include sociological research on femininities, masculinities, gendered bodies, socialization, work, family, politics, sport, and sexualities.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

SOC 122 Africa in World Perspective credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/122/)
This course provides an introduction to Africa, focusing on the different ways in which the continent has been perceived and impacted by the outside world and the consequences of these (mis)understandings and (mis)treatment. Our aim this semester is to comprehend how external views and interests have shaped, and continue to shape, conditions on the ground in Africa, as well as its peoples' relations with one another and the outside world.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West
Social Beh Sci - Soc Sci

SOC 130 Intro Gender & Women's Studies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/130/)
Same as GWS 100 and HDFS 140. See GWS 100.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

SOC 160 Global Ineq and Social Change credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/160/)
Introduces sociological concepts of poverty, inequality, and social change within a global context. Themes explored include basic food security, poverty and hunger; population and resource distribution; foreign aid and development institutions; and social policies and movements for change. Course approach is historical and transnational, and typically includes case studies from Africa, Asia, Latin America, and the United States.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West
Social Beh Sci - Soc Sci

SOC 161 Introduction to Poverty credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/161/)
Introduction to sociological research about the views, experiences, causes, and consequences of poverty in both advanced and developing countries. The purpose of the course is to set the facts straight about who experiences poverty, why poverty remains pervasive, and what is being done, at home and abroad, to alleviate poverty.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - Western

SOC 162 Intro to Intl Health Policy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/162/)
Introduces students to international health policy. Students will learn about data sources, basic analytical techniques, and theoretical frameworks for understanding international health policy. From a sociological perspective, students will explore why health issues are essential components to discussion of globalization, immigration, and migration. Students also will learn how health policy and foreign policy decisions in the developed world influence health policy and health care delivery in the developing world.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - Western

SOC 163 Social Problems credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/163/)
A study of social problems in the United States necessarily entails a discussion of global issues. To that end, this course will examine many contemporary social issues such as crime, war and terrorism, the environment, inequality, poverty, discrimination, the economic recession, and others, through a global framework. Many of the topics we will cover could motivate an entire semester's study in their own right; indeed, some scholars devote their entire careers to but one of these topics. However, this breadth allows us to think broadly about the issues that are identified as social problems and the ways in which individuals and groups attempt to resolve those problems; both processes are revealing about the time and society in which we live. One of the main objectives of this class is to learn about how sociologists examine social problems through analysis and research. Alongside that process, you will improve your critical thinking skills and become a better/more informed consumer of information.

SOC 170 Integration, Assimilation and Multiculturalism: America's Immigrant Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/170/)
How has the United States welcomed immigrants over the past century? Provided and denied opportunities for immigrant integration? Pursued programs to encourage assimilation, or supported multiculturalism? This course examines the structural and attitudinal barriers immigrants navigate on their paths to finding their place in US society over the past century. Using texts, films, memoirs, we will gain insight into the challenges faced by immigrant groups, gain familiarity with how immigrants are classified, and develop basic understandings of core theories, measures, and methods relating to immigrant flows, acceptance and socio-cultural equality.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - US Minority

SOC 179 Social Organization credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/179/)
Beginning with an examination of various examples of organizing, from street gangs to industrial corporations and modern universities, this course will discuss common patterns in organizational phenomena. Basic conceptual frameworks will be provided in the context of contemporary and local problems, illustrating the core issues.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

SOC 196 Issues in Sociology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/196/)
Origin of problems; consequences of ameliorative strategies. Typical topics include crime, mental illness, drug use, suicide, sexual behavior, violence, and intergroup conflict. May be repeated as topics vary.

SOC 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/SOC/199/)
Approved for both letter and S/U grading. May be repeated.

SOC 200 Introduction to Sociological Theory credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/200/)
This course is an introduction to the foundations of sociological theory. Topics may include the problem of social order and the nature of social conflict; capitalism and bureaucracy; the relationship between social structure and politics; and the evolution of modern societies. Prerequisite: Sophomore standing.

SOC 201 Race, Gender & Power credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/201/)
Same as GWS 201. See GWS 201.
This course satisfies the General Education Criteria for:
Cultural Studies - Western

SOC 202 Sexualities credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/202/)
Same as GWS 202. See GWS 202.
This course satisfies the General Education Criteria for:
Cultural Studies - Western

SOC 221 Latina/o Migration credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/221/)
Same as LLS 220. See LLS 220.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - US Minority

SOC 222 Introduction to Modern Africa credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/222/)
Same as AFST 222, ANTH 222, and PS 242. See AFST 222.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West

SOC 223 Black Women Contemp US Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/223/)
Same as AFRO 226 and GWS 226. See AFRO 226.

SOC 225 Race and Ethnicity credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/225/)
Sociological and social-psychological analysis of minority groups; illustrative material drawn from representative racial, ethnic, and status groups. Prerequisite: SOC 100, SOC 101, OR SOC 163.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - US Minority

SOC 226 Political Sociology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/226/)
This course provides an introduction to the study of political sociology, which, broadly conceived, is concerned with the social bases of power and the social consequences of the organization of power. If politics is, as famously suggested by Howard Lasswell, "who gets what, when, how," then our primary aim is to explain the emergence, reproduction, and transformation of different forms of political ordering.

SOC 230 The Sociology of Political Polarization: Bigots and Snowflakes credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/230/)
Communicating across ideological and political divides has become increasingly difficult and conversations that touch sensitive topics (like race, gender, or immigration) often lead nowhere. This is, in part, due to a collective tendency to oversimplify problems that are anything but simple. In this course, we examine the prevalence, nature, and sources of these communication breakdowns. Our class is an informed exploration of the kind of society we want to live in, where we currently stand, and how we might get closer to where we want to be.

SOC 255 Queer Lives, Queer Politics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/255/)
Same as GWS 255. See GWS 255.

SOC 265 Central Asian Societies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/265/)
Through the theoretical lens of Sociology, this course examines issues of ethnicity, religion, health, gender, demography and social stability within the nations of Central Asia (Afghanistan, Pakistan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan). Examining these will improve our understanding of the complex nature of identity in Central Asian societies. Through a combination of texts, films, and lectures, students will gain familiarity with the region and a solid understanding of sociological theory, measures, and methods. Same as REES 265 and SAME 265.

SOC 270 Global Demography credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/270/)
Critically examines the meaning and measurement of demographic change across time, levels of socio-economic development, national boundaries, and socio-cultural groups. Discussions focus on theories, trends, and measurement of mortality, fertility, migration and the relationship of these core demographic issues to macro and micro level trends in stress, inequality, infrastructure, and global warming. Same as RSOC 270.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

SOC 273 Social Perspectives on the Family credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/273/)
Examines the societal forces shaping aspects of stable and changing family relations in the U. S. and other countries; focuses on social-structural factors affecting marriage, divorce, co-habitation, child-bearing, the division of work and authority, and other features of life. Prerequisite: One of the following: SOC 100, SOC 101, or SOC 163.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

SOC 274 Health, Illness and Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/274/)
What do you do when you get sick? Where do you go? Who provides your medical care? In this course we will discuss why the answers to these basic questions are actually quite complex. This course is designed to introduce students to medical sociology and will examine issues surrounding health, illness and healing from a sociological perspective. Throughout the course we will cover numerous topics including: the social construction of health and illness, healthcare providers, healthcare systems - including contemporary debates regarding healthcare reform - and the social determinants of health inequalities. Additionally, this course offers an introduction to sociological theories and concepts that may be particularly useful for those interested in pursuing medical school or any career in a health-related field.

SOC 275 Criminology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/275/)
Nature and extent of crime; past and present theories of crime causation; criminal behavior in the United States and abroad, and its relation to personal, structural and cultural conditions; the nature of the criminal justice system and the influences of the exercise of discretion among actors in the criminal justice system. Prerequisite: One of the following: SOC 100, SOC 101, SOC 163 or equivalent.

SOC 278 Mapping Latina/o Inequalities credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/278/)
Same as LLS 278. See LLS 278.

SOC 280 Intro to Social Statistics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOC/280/)
First course in social statistics for students without mathematics beyond the high school level; topics include the role of statistics in social science inquiry, measures of central tendency and dispersion, simple correlation techniques, contingency analysis, and introduction to statistical inference; includes the statistical analysis of social science data using personal computers. Same as GEOG 280. Credit is not given for SOC 280 if credit for a college level introductory statistics course has been earned.
This course satisfies the General Education Criteria for:
Quantitative Reasoning I

SOC 310 Sociology of Deviance credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/310/)
Study of traits, conditions, actions, and behaviors that violate social norms and elicit negative societal reactions. Explores social, cultural and individual factors in the etiology of deviance; the establishment and maintenance of deviant categories; the motivations behind deviant behavior; the identification as deviant of individuals and of particular segments of society, by formal and informal means; the effects of institutionalization and social control upon the deviant; and the efforts of deviants to eradicate the label society has placed upon them. Prerequisite: One of the following: SOC 100, SOC 101, or SOC 163.

SOC 320 Queer Theory credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/320/)
Same as GWS 370. See GWS 370.

SOC 321 Gender & Latina/o Migration credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/321/)
Same as LLS 320 and GWS 320. See LLS 320.

SOC 322 Gender, Relationshps & Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/322/)
Same as GWS 340 and HDFS 340. See HDFS 340.

SOC 324 Social Network Analysis credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/324/)
Same as IS 324. See IS 324.

SOC 325 Black Men and Masculinities credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/325/)
Same as AFRO 342. See AFRO 342.

SOC 328 Asian Americans & Inequalities credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/328/)
An examination of various forms of social inequality between Asian Americans and other groups as well as among Asian Americans, including those based on race, gender, class, citizenship and sexuality. Same as AAS 328. Prerequisite: SOC 100 and/or AAS 100 are recommended.

SOC 345 Digital & Gender Cultures credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/345/)
Same as GWS 345, INFO 345, and MACS 345. See GWS 345.

SOC 350 Technology and Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/350/)
Examines the social and cultural origins of modern technology and technological innovation; the effects of technology and its change on society. Topics include the impact of technology on beliefs and values, accommodation and resistance to change, and technology and the Third World.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

SOC 355 Race and Mixed Race credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/355/)
Same as AAS 355 and LLS 355. See LLS 355.

SOC 364 Impacts of Globalization credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/364/)
In this course, we seek to make sense of the impacts of globalization. Is the freer flow of trade, people, and capital around the world responsible for the world's economic, social, and political ills, or are we inclined to say that, on balance, it is still a good thing? As more people become more connected across larger distances in different ways, are they following more of the same norms and growing aware of what they share, or are they more aware of cultural differences and see integration as a threat to social cohesion? Upon completion of this course, students should be able to demonstrate content expertise using both written and verbal communication skills. They will do so by: identifying the different drivers of the phenomenon widely described as globalization; distinguishing between the social, cultural, political, and economic processes of globalization and give examples of how they interact in specific and contingent ways; analyzing the advantages and disadvantages of further global integration; combining the different aspects of globalization into a coherent narrative; designing and defending their own alter-globalization campaign. Prerequisite: One of the following: SOC 100, SOC 101, SOC 163, or consent of instructor.

SOC 366 Postsocialism Eastern Europe credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/366/)
Examines the sociological realities of state socialism and postsocialism in Eastern Europe and the former Soviet Union. Prerequisite: One of the following: SOC 100, SOC 101, SOC 163, HIST 142, PS 100, or any REES course.

SOC 373 Social Inequality credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/373/)
Who gets what, and why? How are power, privilege, and prestige distributed across individuals and groups, and why is it that some enjoy more than others? We consider how different dimensions of inequality have evolved over time, with special focus on inequalities across race, class, and gender. We assess how inequality shapes the lives of individuals in society, how and why inequality persists, and how people have worked to both challenge and reproduce their places in society. We approach social inequality from a variety of angles, developing an understanding of how inequality works in and through schooling, labor markets, employment, identity and prejudice, social mobility, and the role of major social institutions such as work, family, education, politics and law. We examine core statements of social stratification from sociology and engage with contemporary theories from sociology, psychology, political science, and economics. By the end of this course, you will have a clearer understanding of the types of inequality that exist in society, how inequality operates through the broader social context, and the constraints and opportunities faced by individuals in different positions in society. Prerequisite: One of the following: SOC 100, SOC 101, or SOC 163.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

SOC 375 Criminal Justice System credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/375/)
Exploration of the actors, institutions, and processes that make up the criminal justice system. We review sociological and other social scientific research on topics including the police, prosecutors, the courtroom work-group, forensic evidence, juries, sentencing, and the impact of mass incarceration. Grades are based on exams, research exercises, and ethnographic observations of criminal courtrooms. Prerequisite: SOC 275 is recommended.

SOC 378 Sociology of Law credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/378/)
Examination of law and legal institutions sociologically. We begin with an introduction to theoretical perspectives on the problem of order, illustrated by juxtaposing formal law with other means of achieving order. Next, we consider law and legal systems in action, including relations between law and the economy, stratification, culture, ideology and social change. Finally, we investigate the relationship between law's aims and principles, and law's real-world implementation.

SOC 380 Social Research Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOC/380/)
Introduction to the foundations of social research and to the major types of research methods employed in sociology. Provides exposure to the major tools and terminology of social research, including the use of computers in sociology. Topics include: research design, finding and using sociology literature, measurement, sampling, survey research, field methods, use of available data, quantitative data analysis and presentation, and computer resources for research. Prerequisite: SOC 280 and one of the following: SOC 100, SOC 101, or SOC 163.
This course satisfies the General Education Criteria for:
Quantitative Reasoning II

SOC 387 Race, Gender and the Body credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/387/)
Same as LLS 387. See LLS 387.

SOC 390 Individual Study credit: 1 to 6 Hours. (https://courses.illinois.edu/schedule/terms/SOC/390/)
Individual study or research project. May be repeated. Prerequisite: Six hours of sociology; written consent of instructor on form available in the Sociology Department Office.

SOC 392 Chicanas&Latinas: Self&Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/392/)
Same as GWS 392 and LLS 392. See LLS 392.
This course satisfies the General Education Criteria for:
Advanced Composition

SOC 396 Topics in Sociology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/396/)
Explores topics not covered in regularly scheduled Sociology courses. See Class Schedule for topics. May be repeated if topics vary. Prerequisite: One of the following: SOC 100, SOC 101, SOC 163, or consent of instructor.

SOC 400 Internships credit: 0 to 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/400/)
Selected internship opportunities in which student and faculty member develop a program of study and research related to internship. Consult departmental undergraduate advisor. 0 to 3 undergraduate hours. No graduate credit. Approved for Letter and S/U grading. May be repeated to a maximum of 6 hours. Prerequisite: Junior or senior standing; and SOC 100 or SOC 101 or SOC 163; and six additional hours in Sociology or acceptance of faculty member and Director of Undergraduate Studies.

SOC 422 European Working Class History credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/SOC/422/)
Same as HIST 450 and LER 450. See HIST 450.

SOC 426 Race, Educational Policy, and Sociology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SOC/426/)
Examination of the origins and development of sociology as a discipline, as related to the sociology of education, and the reproduction of social and racial inequality. The course focuses on four issues: the production of racial inequality in social scientific knowledge, the role that social science plays in reproducing societal patterns of race, class, and gender inequality, the development of sociology and education in the United States and Africa, and the development of American social science and the reproduction of global inequality. Same as EPOL 411 and EPS 422. 3 undergraduate hours. 4 graduate hours. Prerequisite: SOC 100 or SOC 101 or SOC 163 or consent of instructor.

SOC 447 Environmental Sociology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SOC/447/)
Examination of historical and modern consequences of environmental alteration and pollution and resource limitations on human populations in the context of various social change theories. Explores the environmental movement, population explosion, the "limits to growth debate," and the impacts of environmental change on food production, land, and water quality. Same as ENVS 447 and RSOC 447. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: SOC 380 or equivalent; and one of the following: SOC 100, SOC 101, SOC 163, RSOC 110, or equivalent; or consent of instructor.

SOC 450 Senior Capstone Seminar credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/450/)
Over the course of the semester, students will conceive and execute an original sociological research project, using their knowledge of the sociological literature developed in substantive courses and their skills in data collection and analysis developed in methods courses. In parallel, students will explore professional opportunities in sociology and engage in professional development activities, including exploring opportunities for graduate education and learning skills in job search, and resume, c.v., personal statement and cover letter development. 3 undergraduate hours. No graduate credit. Prerequisite: One of the following: SOC 100, SOC 101 or SOC 163; and SOC 380. For Sociology majors only.

SOC 451 Climate & Social Vulnerability credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SOC/451/)
Same as ATMS 446 and GEOG 496. See GEOG 496.

SOC 470 Social Movements credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/SOC/470/)
Origins and development of groups in promoting and resisting change, resource mobilization, strategies and tactics, individual and social consequences. 3 undergraduate hours. 2 or 4 graduate hours. Prerequisite: One of the following: SOC 100, SOC 101, SOC 163, or six hours of anthropology, social geography, political science, or sociology.

SOC 471 Collective Action & Revolution credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SOC/471/)
Contemporary theory and research on the life course of social gatherings ranging from small scale and local to nationwide collective actions by people in pursuit of social and political change. Discusses the logic of practice in political, religious and street crowds; collective action of disperse people; and broad-based revolutionary mobilizations. Cases include pre-modern and modern movements from the western and non-western societies. 3 undergraduate hours. 4 graduate hours. Prerequisite: SOC 200, or equivalent, or consent of instructor.

SOC 472 Urban Communities & Public Pol credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SOC/472/)
Same as AFRO 481 and UP 481. See AFRO 481.

SOC 473 Immigration, Health & Society credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SOC/473/)
Same as CHLH 473, LLS 473, and SOCW 473. See LLS 473.

SOC 474 Population Trends and Patterns credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SOC/474/)
Introduction to contemporary demographic patterns and their historical development; transition theory and other models of demographic change; components of population growth and distribution; and trends and differentials in mortality and fertility. 3 undergraduate hours. 4 graduate hours.

SOC 477 Law and Society- ACP credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/477/)
Course is identical to SOC 479 except for the additional writing component. Examination of the social and political organization of the legal system, including the development of disputes, the role of gatekeepers to the legal system, and the political significance of litigation. Examines the role of law in sustaining and dismantling structural forms of inequality, as well as the relationship between law and social change. 3 undergraduate hours. No graduate credit. Credit is not given for both SOC 477 and SOC 479. Prerequisite: One of the following: SOC 100, SOC 101, SOC 163, or six hours of anthropology, social geography, political science, or sociology.
This course satisfies the General Education Criteria for:
Advanced Composition

SOC 478 Geography of Health Care credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SOC/478/)
Same as GEOG 438. See GEOG 438.

SOC 479 Law and Society credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SOC/479/)
Examination of the social and political organization of the legal system, including the development of disputes, the role of gatekeepers to the legal system, and the political significance of litigation. Examines the role of law in sustaining and dismantling structural forms of inequality, as well as the relationship between law and social change. 3 undergraduate hours. 4 graduate hours. Credit is not given for both SOC 477 and SOC 479. Prerequisite: One of the following: SOC 100, SOC 101, SOC 163, or six hours of anthropology, social geography, political science, or sociology.

SOC 480 Methods of Field Research credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/SOC/480/)
Instruction, training, and supervised practice in methods of field research as a basic tool of sociology; emphasis on the role of the field researcher as participant, observer, and interviewer in various kinds of research settings, and on approaches to and applications of field data. 3 undergraduate hours. 2 or 4 graduate hours. Prerequisite: SOC 380 or consent of instructor.

SOC 481 Survey Research credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SOC/481/)
Principles and applications of social science survey research methods; class project designing and conducting a sample survey; training and experience in analysis of survey data; sampling, questionnaire construction, interviewing and data reduction, and file management; and direct use of the computer in survey data analysis. 3 undergraduate hours. 4 graduate hours. Prerequisite: SOC 380 or consent of instructor.

SOC 483 Middle Eastern Societies & Cultures credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/483/)
Overview of the contemporary Middle East from social, political, and cultural perspectives. Explores how the internal dynamics together with the forces of globalization shape the societies of the Middle East today. Topics include social structure, political dynamics, family, gender, urban life Islam, social and religious movements. 3 undergraduate hours. 3 graduate hours. Prerequisite: One of the following: SOC 100, SOC 101, SOC 163, or six hours of Anthropology, Social Geography, Politics, or Sociology.

SOC 485 Intermediate Social Statistics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SOC/485/)
Intermediate course in the theory and application of statistical methods to social science data. Coverage includes overviews of measurement issues, the logic of hypothesis testing and estimation, the general linear model, one-way analysis of variance, correlation and regression. The core of the course is multiple regression analysis and its extensions. Topics include dummy variable analysis, statistical interaction, model assumptions and violations, non-linear and logistic regression, and an introduction to path analysis. Emphasis on the application of statistical computing packages (e. g. SPSS) and the substantive interpretation of results. 3 undergraduate hours. 4 graduate hours. Credit is not given for both SOC 485 and another course with a primary focus on applied multiple regression analysis such as ECON 203, STAT 420, or PSYC 406. Graduate students must incorporate research literature involving statistical analysis from their discipline into their assignments and class discussions. Prerequisite: SOC 280 or equivalent.

SOC 488 Demographic Analysis credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SOC/488/)
Focuses upon initial and intermediate techniques for the assessment of demographic data including quality assessment procedures, calculating core demographic metrics, gaining familiarity with approaches to population projection and estimation, and mastering risk assessment techniques linked to single and multi-decrement life tables. 3 undergraduate hours. 4 graduate hours. Prerequisite: SOC 270.
This course satisfies the General Education Criteria for:
Quantitative Reasoning II

SOC 490 Advanced Independent Study credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/490/)
3 undergraduate hours. No graduate credit. May be repeated. Prerequisite: Open only to seniors in the sociology major who have an overall GPA of 3.25 or higher and therefore may be eligible for departmental distinction; obtain written consent of instructor on form available in the Sociology Department Office.

SOC 495 Senior Honors Seminar credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/495/)
Intensive scrutiny of current literature on one selected topic. Critical reading and discussion followed by writing essays and research proposals. Subject will shift yearly. There may be community work as an aspect of this course; consult the Class Schedule for details. 3 undergraduate hours. No graduate credit. May be repeated to a maximum of 6 hours. Prerequisite: For sociology majors only. Student must have at least 3.5 grade-point average in sociology courses and consent of instructor.

SOC 496 Advanced Topics in Sociology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SOC/496/)
Explores topics not covered in regularly scheduled Sociology courses. See Class Schedule for topics. 3 undergraduate hours. No graduate credit. May be repeated if topics vary. Prerequisite: One of the following: SOC 100, SOC 101, SOC 163, or consent of instructor.

SOC 500 Classical Sociological Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOC/500/)
Analysis of major classical sociological theorists of the nineteenth and early twentieth centuries, stressing the social, historical, and philosophic foundations of sociological theory; primary emphasis on Marx, Durkheim, and Weber. Prerequisite: SOC 200 or equivalent.

SOC 501 Contemp Sociological Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOC/501/)
Major theorists and schools of thought since World War I with emphasis on the contemporary period; includes functionalism, exchange theory, conflict theory, symbolic interaction, and phenomenology. Prerequisite: SOC 500 or equivalent.

SOC 510 Professionalization Seminar credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/SOC/510/)
Introduction to the graduate program in Sociology and to graduate study in the discipline of Sociology. Approved for S/U grading only. May be repeated in separate terms to a maximum of 4 hours. Prerequisite: Graduate standing in Sociology and consent of the Director of Graduate Studies.

SOC 521 Sociology of Race and Racism credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOC/521/)
Examination of the social construction of race and racism, in various cultural contexts and historical moments and in relation to various groups and research problems.

SOC 561 Development Theories credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOC/561/)
Discussion of major trends in development thinking and policy, and development theories from the classics in political economy through modernization theory, dependency, alternative development, neoliberalism, human development and post-development. Addresses ongoing challenges and debates such as globalization and democratization, and trends in social science, such as discourse analysis. Enables participants to assess development theories in a historical context and from the viewpoint of sociology of development knowledge.

SOC 562 Sem in Transnational Studies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOC/562/)
Intensive study of a selected area in transnational sociology, e.g., diasporas, global political economy, global environmental studies, transnational racial stratification, etc. May be repeated in the same or separate terms to a maximum of 8 hours as topics vary. Prerequisite: Consent of instructor.

SOC 563 Global Social Movements credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOC/563/)
Why do people rebel when they do? Why some succeed and others fail? And how do such collective actions change people's lives and their societies? The course navigates through the 'everyday resistance', 'social movements', and 'social revolutions', human endeavors that have fundamentally transformed our modern societies. Going beyond the Eurocentric perspectives, the course takes a global outlook both conceptually and geographically to engage critically and productively with the sociology of resistance. 4 graduate hours. No professional credit.

SOC 564 Global Religion and Politics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOC/564/)
Explores the reasons behind the world-wide rise of religion as a key player in the public sphere, and the implications for politics in the contemporary world. The major religions of the world are considered, but with a focus on the Islamic revival and Muslim societies. Students will learn about the secularization debate, religious revivals and globalization, global fundamentalisms, religion and democracy, and post-secular and post-Islamist societies. Same as REL 564 and SAME 564.

SOC 565 Megacities of Global South credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOC/565/)
Exploration of the dynamics of urban life in the megacities of the Global South. Studies the ways in which the global, social, and economic restructuring is affecting urban space and people and how urban inhabitants respond to these merging circumstances. Focuses on the way in which politics is articulated in the megacities of the Global South. The course discusses cases from the Middle East, Latin America, Africa and South Asia. Prerequisite: Consent of the instructor.

SOC 572 Community In American Society credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOC/572/)
Same as HDFS 533 and UP 533. See HDFS 533.

SOC 575 Founds of Organizational Behav credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOC/575/)
Same as BADM 510, PS 514, and PSYC 553. See BADM 510.

SOC 576 Survey Methods in Mkt Res credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOC/576/)
Same as BADM 531. See BADM 531.

SOC 578 Ethnography Urban Communities credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOC/578/)
Same as AFRO 552, HDFS 543, and UP 578. See AFRO 552.

SOC 579 Categorical Data Analysis in Educational Psychology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOC/579/)
Same as EPSY 589 and PSYC 589. See EPSY 589.

SOC 580 Advanced Interpretive Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOC/580/)
Analysis of social interaction based on the social psychology of C. H. Cooley, G. H. Mead, and W. I. Thomas; presentation of problems of theory, concepts, and method. Same as MDIA 580. Prerequisite: 4 hours graduate credit in sociology.

SOC 581 Survey Research Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOC/581/)
Advanced course in the design of social surveys and collection of social survey data; covers stages from questionnaire construction to preparing data for statistical analysis; issues in survey design involving cross-national, longitudinal and multi-group research. Prerequisite: SOC 485 or equivalent.

SOC 583 Qualitative Research Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOC/583/)
Introduction to field and qualitative methods in social science research, in terms of both the practical issues of conducting this type of research and the conceptual debates in the field. Methods include interviewing, participant observation, unobtrusive observation, historical/archival methods, content analysis, and/or global ethnography. 4 graduate hours. No professional credit. May be repeated in separate terms up to 4 hours, as topics vary.

SOC 584 Multivar Anlys in Psych and Ed credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOC/584/)
Same as EPSY 584 and PSYC 594. See PSYC 594.

SOC 586 Adv Social Statistics I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOC/586/)
Examines social science applications of the general linear model and its extensions; topics include: model specification; ordinary and generalized least squares; multicollinearity; selection of predictors; interaction of variables and non-linear regression; panel and time-series data; measurement error; path analysis; recursive and non-recursive structural equation models. Applies statistical computing packages (e.g., SPSS) to social science data. Credit is not given for both SOC 586 and PSYC 406. Prerequisite: SOC 485 or equivalent.

SOC 587 Adv Social Statistics II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOC/587/)
Examines social science applications of discrete and continuous multivariate analysis; topics include: analysis of categorical data (loglinear modelling, probit analysis, etc.); geometric interpretation of matrices; factor analysis and index construction; canonical analysis; discriminant analysis; unobserved variables and structural equation models; issues in model specification and estimation. Applies statistical computing programs such as ECTA and LISREL to social science data. Credit is not given for both SOC 587 and PSYC 407. Prerequisite: SOC 586 or equivalent.

SOC 588 Covar Struct and Factor Models credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOC/588/)
Same as EPSY 588, PSYC 588, and STAT 588. See PSYC 588.

SOC 589 Psych Scaling Multidimen Meth credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOC/589/)
Same as PSYC 509. See PSYC 509.

SOC 590 Individual Topics in Sociology credit: 1 to 8 Hours. (https://courses.illinois.edu/schedule/terms/SOC/590/)
Supervised individual investigation or study of a topic not covered by regular courses; topic selected by the student and the proposed plan of study must be approved by the adviser and the staff member who supervises the work. Approved for letter and S/U grading. May be repeated.

SOC 596 Recent Developments in Soc credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SOC/596/)
Intensive study of selected topics based on contemporary works of major importance in the development of sociological theory. May be repeated if topics vary.

SOC 597 Readings in Sociology credit: 2 to 12 Hours. (https://courses.illinois.edu/schedule/terms/SOC/597/)
Individual guidance in intensive readings in the literature of one or more subdivisions of the field of sociology, selected in consultation with the student's advisor, in preparation for the specialization examination. Approved for S/U grading only. May be repeated in separate terms to a maximum of 12 hours. Prerequisite: Graduate standing in Sociology and consent of advisor.

SOC 598 Thesis Proposal credit: 2 to 12 Hours. (https://courses.illinois.edu/schedule/terms/SOC/598/)
Individual guidance in designing a doctoral research project and writing a thesis proposal. Focuses on developing a cogent theoretical framework, articulating significance of the project, identifying appropriate research methods, and considering ethical issues. Approved for S/U grading only. May be repeated in the same or separate terms to a maximum of 12 hours. Prerequisite: Graduate standing in Sociology and consent of advisor.

SOC 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/SOC/599/)
Approved for S/U grading only. May be repeated. Prerequisite: SOC 598.

SPAN - SPANISH

SPAN Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/SPAN/)

Courses

SPAN 101 Elementary Spanish I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/101/)
Intensive course for beginner students of Spanish. Students will develop basic listening, speaking, reading and writing skills in Spanish to a novice high level, based on the proficiency scale stipulated by the American Council for the Teaching of Foreign Languages (ACTFL) and to provide them with an introduction to the various cultures of the Spanish-speaking world and Hispanics in the United States.

SPAN 102 Elementary Spanish II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/102/)
Continuation of SPAN 101. Students continue developing basic listening, speaking, reading and writing skills in Spanish to an intermediate low level, based on the ACTFL proficiency and provides introduction to the various cultures of the Spanish-speaking world and Hispanics in the United States. Credit is not given for both SPAN 102 and SPAN 122. Prerequisite: SPAN 101 or equivalent.

SPAN 122 Intensive Elementary Spanish credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/122/)
Intensive beginning Spanish, equivalent to the first two semesters, for students with little or no experience in Spanish or whose skills need refreshing. This is considered a second level course for purposes of fulfilling the University General Education Language requirement. Prerequisite: None or assignment by placement exam. Students who have the equivalent of four or more years credit in Spanish at the secondary level will not receive credit for SPAN 122.

SPAN 130 Intermediate Spanish credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/130/)
Continued development of reading, writing and conversational skills. This is considered a third level course for purposes of fulfilling the University General Education Language requirement. Credit is not given for both SPAN 130 and SPAN 103. Prerequisite: SPAN 102, SPAN 122 or equivalent placement score.

SPAN 141 Introduction to Spanish Grammar credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/141/)
Introduction to the major structures of Spanish, from a linguistic perspective and will develop students' formal knowledge of Spanish grammar. This is considered a fourth level course for purposes of fulfilling the University General Education Language requirement. Credit is not given for both SPAN 141 and SPAN 142. Prerequisite: SPAN 130 (previously numbered 103), equivalent course, or placement score.

SPAN 142 Spanish in the Professions credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/142/)
Introduction to Spanish in business, law, medical, education & social service fields, with a focus on the importance of bilingualism in the U.S., strategies for lifelong learning, and culture considerations. The development of functional use of Spanish within the professional context is the major focus of the course. This is considered a fourth level course for purposes of fulfilling the University General Education Language requirement. Credit is not given for both SPAN 141 and SPAN 142. Prerequisite: SPAN 130 (formerly numbered 103), equivalent course, or placement score.

SPAN 150 Language and Identity in Latinx Communities in the US credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/150/)
Exploration of the complicated relationship between language and identity among Latinx in the US. You will develop an understanding of why there is a continuum of language ability in English and Spanish and why language shift to English is a natural phenomenon. You will learn about bilingualism at an individual, cognitive, and social level, and understand how language and identity are interconnected. In addition, you will learn the role that culture plays in the manner in which language is approached and practiced and how that interaction impacts identity constructions as related to race and gender.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - US Minority

SPAN 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/199/)
Approved for both letter and S/U grading. May be repeated.

SPAN 200 Readings in Hispanic Texts credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/200/)
Readings and discussion in Spanish of a variety of texts by leading Hispanic and Hispanic-American writers covering genres and themes; designed to emphasize reading, discussion, and enjoyment rather than literary criticism. Open to non-Spanish majors. Credit may be received by Advanced Placement "Language" or "Literature" examination. Prerequisite: SPAN 141, SPAN 142, or equivalent.

SPAN 202 Spanish for Business credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/202/)
Introduction to vocabulary of Hispanic commerce; composition of business letters and similar texts. Prerequisite: SPAN 141, SPAN 142, or equivalent.

SPAN 204 Advanced Spanish Grammar in Context credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/204/)
Overview of Spanish grammar, with emphasis on major challenges and areas of contrast with English. The overall goal of the course is to help students gain a greater understanding of some key aspects of Spanish grammar, which will lead to greater accuracy in their written and oral production. Prerequisite: SPAN 141 or equivalent.

SPAN 208 Oral Spanish credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/208/)
Practice in speaking Spanish. Prerequisite: SPAN 141, SPAN 142, or equivalent. To be taken concurrently with or subsequent to SPAN 204.

SPAN 228 Spanish Composition credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/228/)
Basic composition course; problems of written Spanish and principles of Spanish stylistic patterns; weekly written exercises. Prerequisite: SPAN 141, SPAN 142, or equivalent.

SPAN 232 Spanish in the Community credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/232/)
Introduction to Spanish-speaking communities in the Champaign-Urbana area, focusing on issues of particular interest to the local Hispanic community, developing contextualized oral proficiency, and facilitating student civic engagement. Active student reflection is structured throughout the course. Meets two hours a week in class and two hours a week in community-based service work. In their interactions with community members and organizations students both learn from and contribute to the community. Same as LAST 232. Prerequisite: SPAN 141, SPAN 142, or equivalent.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

SPAN 240 Latina/o Popular Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/240/)
Same as ENGL 224 and LLS 240. See LLS 240.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

SPAN 242 Intro to Latina/o Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/242/)
Same as ENGL 225 and LLS 242. See LLS 242.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - US Minority

SPAN 246 Gender & Sexuality in Latina/o Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/246/)
Examination of questions of gender, sexuality, and identity in contemporary Latina/Latino culture through a discussion of novels, performance pieces, essays and films. Spanish majors must complete writing assignments in Spanish. Same as LLS 246.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - US Minority

SPAN 248 Latin American Diaspora through Film: Beyond Braceros, Narcos, and Latin Lovers credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/248/)
Study of the relationships between Latinx and Latin American culture through film, focusing on sociohistorical processes (migrations, assimilation, political struggles, nationalism, globalization). It goes beyond onscreen stereotypes about Latinx and Latin Americans (narcotraffickers, undocumented migrants and Latin lovers) promoting nuanced perspectives on issues affecting Latinas/os and Latin Americans in their relationship with US culture. 40% of the films are Latin American and 60% Latinx (made in the US). Taught in English. Same as LLS 248.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - US Minority

SPAN 250 Approaches to Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/250/)
Words have the power to transport us to other worlds and help us understand how we see our own. In this class, students will learn to analyze a broad range of literary texts (short stories, essays, novels, poetry, comics, etc.) of the Spanish-Speaking world, and explore their intersections with broader historical and cultural issues. Prerequisite: SPAN 228.

SPAN 252 Introduction to Hispanic Linguistics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/252/)
Introduction to Spanish phonology, morphology, syntax, and at least one of the following areas: issues in Spanish semantics and pragmatics, variation in Spanish, Spanish in the U.S., history of Spanish, or acquisition of Spanish. Prerequisite: SPAN 228 or consent of instructor.

SPAN 254 Approaches to Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/254/)
Our world is filled with diverse and often contradictory cultural messages. In this class students will examine how culture shapes values, beliefs, habits and artistic production in Iberian, Latin American and/or Latinx communities. Focusing on issues relevant to the Spanish-speaking world, students will analyze a range of cultural objects and practices, such as film, visual art, social media, food, music and literature. Prerequisite: SPAN 228.

SPAN 295 Topics in Literature and Cultural Studies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/295/)
Selected topics in Spanish, Latin American and/or Latina/o literature and cultural studies. Specific topics may vary depending on the instructor. Course taught in Spanish. May be repeated in the same or separate terms to a maximum of 6 hours if topics vary. Prerequisite: SPAN 228.

SPAN 299 Study Abroad credit: 0 to 18 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/299/)
Non-advanced level course in Spanish language, literature, history, culture, and/or civilization completed in a Study Abroad program in Spain or Latin America. May be repeated in the same term to a maximum of 18 hours. May be repeated in separate terms to a maximum of 36 hours. Prerequisite: SPAN 141, SPAN 142 or equivalent.

SPAN 303 The Sounds of Spanish credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/303/)
Practical, introductory course to Spanish phonetics, stressing practice in pronunciation. May be offered as intensive eight-week course. Prerequisite: SPAN 228 or consent of instructor.

SPAN 305 The Structure of Spanish credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/305/)
An in-depth investigation of the structure of Spanish, with a secondary focus on syntactic variation, especially structural differences with English. Introduces concepts and techniques essential for syntactic analysis and description. Taught in Spanish. Prerequisite: SPAN 252 or consent of instructor. May be taken concurrently with SPAN 252.

SPAN 307 Bilingualism credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/307/)
Introduction to the fundamental issues in the study of bilingualism as an individual and social phenomenon, with special emphasis on Spanish bilingual communities in the United States, Spain and Latin America. Taught in Spanish. Prerequisite: SPAN 252 or consent of instructor. May be taken concurrently with SPAN 252.

SPAN 308 Spanish in the United States credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/308/)
Descriptive and critical overview of the linguistic practices of the different Spanish-speaking communities in the U.S. The main objective of the course is to develop critical and linguistic awareness about the relationship among language, individual, and society. Special emphasis on historical migration patterns and settlements, characteristics of Spanish in contact with English, and language use and attitude patterns. Same as LLS 308. Prerequisite: SPAN 228 or consent of instructor.

SPAN 309 Varieties of Spoken Spanish credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/309/)
Relationship between language, individual and society in the context of the spread of Spanish in the world, concentrating on Spanish varieties spoken in Spain and Latin America, including the United States, but will also give an overview of Spanish in Africa (Equatorial Guinea, Morocco), and other parts of the world (Israel, Turkey, the Philippines). Prerequisite: SPAN 252 or consent of instructor. May be taken concurrently with SPAN 252.

SPAN 310 Premodern Spanish Literatures & Cultures credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/310/)
A critical analysis of selected texts and authors representative of the Medieval and Early Modern periods in the context of Iberian cultures. Particular emphasis on the relationship between cultural practices and the construction of national identities prior to 1700, as well as on the plurality of cultures that shaped what is now Spain. Specific sections may emphasize critical topics such as gender, ideology, literary form, nationalisms, race, and sexuality, among others. Prerequisite: SPAN 228.

SPAN 312 Modern Spanish Literatures & Cultures credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/312/)
Critical analysis of selected texts and periods representative of Spain's literary production from the 18th century to the present, with special attention paid to broader literary and cultural contexts. Specific sections may emphasize critical topics such as gender, ideology, literary form, nationalisms, race, and sexuality, among others. Prerequisite: SPAN 228.

SPAN 316 Latin American Literatures & Cultures from 1800 credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/316/)
Critical analysis of selected texts and periods representative of Latin American literary and cultural production from 1800 to present, with special attention paid to broader literary and cultural contexts. Specific sections may emphasize critical topics such as gender, ideology, literary form, nationalisms, race, and sexuality, among others. Prerequisite: SPAN 228.

SPAN 318 Spanish Cultural Studies I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/318/)
A critical analysis of historical events, institutions, artistic production, symbols and values representative of Spanish (Iberian) cultures. Particular emphasis on the relationship between specific cultural practices and/or values and the construction of national identities prior to 1700. May be repeated in separate terms to a maximum of 6 hours, if topics vary. Prerequisite: SPAN 228.

SPAN 320 Spanish Cultural Studies II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/320/)
Critical analysis of selected historical events, artistic production, debates, symbols and values representative of Spanish (Iberian) cultures in the modern and contemporary periods. Particular emphasis on the relationship between cultural practices and national identities, as well as on contextualized analysis of different types of cultural phenomena. May be repeated in separate terms to a maximum of 6 hours, if topics vary. Prerequisite: SPAN 228.

SPAN 324 Latin America Cultural Studies I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/324/)
Examination of the complexities, ramifications and ambiguities of the cultural encounters, processes and expressions which took place in Latin America between different racial and ethnic groups from Pre-Columbian times to the 1800. Particular emphasis will be placed on the critical analysis of major cultural events, periods and issues that influenced the formation of identities in these territories. May be repeated in separate terms to a maximum of 6 hours. Prerequisite: SPAN 228.

SPAN 326 Latin America Cultural Studies II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/326/)
Panoramic view of Latin American cultures since the end of the colonial period (roughly 1820) to the present. Examination of the major debates, authors and cultural issues that shaped those cultures or that were shaped by them. Specific themes may vary by semester, and may include the following: slavery, colonialism and neocolonialism, revolution, mestizaje, gender, the state, and modernization. Analysis will include diverse cultural phenomena, as well as consideration of cultural perspectives and practices. May be repeated in separate terms to a maximum of 6 hours, if topics vary. Prerequisite: SPAN 228.

SPAN 332 Spanish and Entrepreneurship credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/332/)
Entrepreneurship means more than starting a business. This course emphasizes social entrepreneurship, in which the basic process of entrepreneurship-opportunity recognition, resource gathering and value creation is used to address social issues, not to create profits. Students do community-based learning in non-profits serving the local Spanish-speaking community, thereby building their language skills, acquiring cultural knowledge and gaining hands-on experience with social entrepreneurship (theory and practice). Each week class meets two hours in class and two hours in community-based service work. Prerequisite: SPAN 228.

SPAN 395 Advanced Topics in Literature & Cultural Studies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/395/)
Selected topics in Spanish, Latin American and/or Latina/o literatures and cultural studies. Specific topics may vary. May be repeated in separate terms to a maximum of 6 hours, if topics vary. Prerequisite: Two 300-level courses in Spanish/Latin American literature or cultural studies.

SPAN 399 Advanced Study Abroad credit: 0 to 18 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/399/)
Advanced level course in Spanish language, literature, history, culture, and/or civilization completed in a Study Abroad program taking place in Spain and Latin America. Approved for Letter and S/U grading. May be repeated to a maximum of 36 hours. Prerequisite: Credit or concurrent enrollment in SPAN 228.

SPAN 410 Spanish/English Translation credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/410/)
Review of current translation theory and analysis and practice of the translation from Spanish to English (and vice versa) of a variety of text types, ranging from short literary texts to everyday commercial discourse such as that found on product labels. Emphasis on linguistic and cultural aspects of literary discourses as well as non-literary texts. Conducted in Spanish. Same as TRST 412. 3 undergraduate hours. 4 graduate hours. Prerequisite: SPAN 250, SPAN 252, and SPAN 254; or consent of instructor.

SPAN 418 Language & Minorities in Europe credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/418/)
Same as EURO 418, FR 418, GER 418, ITAL 418, LING 418, PS 418, and SLAV 418. See FR 418.

SPAN 430 Spanish Phonology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/430/)
Systematic introduction to the sound structures of Spanish, concentrating on recent contributions of theoretical linguistics to the understanding of the phonology of Spanish in its standard and selected dialectal varieties. 3 undergraduate hours. 4 graduate hours. Prerequisite: SPAN 252 or SPAN 303 or consent of instructor.

SPAN 431 Spanish Morphology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/431/)
Introductory course to basic concepts of morphological structure and word formation from a functional perspective. The course centers around the specific morphological characteristics of Spanish, considering historical and dialectal variation. Taught in Spanish. 3 undergraduate hours. 4 graduate hours. Prerequisite: SPAN 305 or equivalent; or consent of instructor.

SPAN 432 Spanish Syntax credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/432/)
Systematic introduction to the foundations of Spanish syntax based on standard and more recent treatments of Spanish and syntactic theory. 3 undergraduate hours. 4 graduate hours. Prerequisite: SPAN 305 or consent of instructor.

SPAN 433 Spanish Sociolinguistics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/433/)
Introduction to the sociolinguistic variation (social, historical, and dialectal) of Spanish-speaking communities, and to the basic theoretical and methodological concepts of sociolinguistic research. Taught in Spanish. 3 undergraduate hours. 4 graduate hours. Prerequisite: SPAN 307 or SPAN 309; or consent of instructor.

SPAN 434 History of the Spanish Language credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/434/)
Study of the historical evolution of the Spanish language, from its origins in Latin to its spread and development in Spain and Latin America, considering also the influence of other languages on Spanish. Both internal history (changes in phonology, morphology, syntax and lexicon) and external history are examined. Taught in Spanish. 3 undergraduate hours. 4 graduate hours. Prerequisite: SPAN 252 or equivalent introduction to Spanish or General Linguistics or consent of instructor.

SPAN 435 Introduction to Romance Linguistics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/435/)
Comparative and historical analysis of the Romance languages. Same as FR 462, ITAL 435, LING 462, PORT 435, and RMLG 435. 3 undergraduate hours. 4 graduate hours. Prerequisite: Four semesters of a Romance language or Latin, or equivalent; LING 100, SPAN 252, FR 416, or equivalent; or consent of instructor.

SPAN 436 History of Translation credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/436/)
Same as CLCV 430, CWL 430, ENGL 486, GER 405, SLAV 430, and TRST 431. See SLAV 430.

SPAN 437 The Acquisition of Spanish credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/437/)
Examination of the acquisition of Spanish by monolinguals, bilinguals, and second language learners. After a general introduction to theories of language acquisition, the focus of the course is on empirical investigations of the acquisition of the phonology, lexicon, morphology and syntax of Spanish by each to the learner groups listed above. Taught in Spanish. 3 undergraduate hours. 4 graduate hours. Prerequisite: SPAN 303 and SPAN 305 or equivalent, or consent of instructor.

SPAN 442 Latina Literature credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/442/)
Same as LLS 442 and GWS 445. See LLS 442.

SPAN 460 Principles of Language Testing credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/460/)
Same as EIL 460, EPSY 487, FR 460, GER 460, ITAL 460, and PORT 460. See EIL 460.

SPAN 462 Early Modern Spanish Studies credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/462/)
Study of the major authors and texts of the early modern period (Renaissance and Baroque) with particular attention to the cultural and political contexts of sixteenth and seventeenth century Span. 3 undergraduate hours. 4 graduate hours. May be repeated to a maximum of 6 undergraduate hours or 8 graduate hours if topic varies. Prerequisite: SPAN 310 and SPAN 318.

SPAN 463 18-19thC Spanish Studies credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/463/)
Selected literary and non-literary texts published in Spain during the 18th and 19th centuries. Focus on analysis of literary and other manifestations of major cultural movements and artistic currents and preoccupations. 3 undergraduate hours. 4 graduate hours. May be repeated to a maximum of 6 undergraduate hours or 8 graduate hours as topic varies. Prerequisite: SPAN 312 and SPAN 320.

SPAN 464 Spanish Studies 1898-1960 credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/464/)
Selected literary and non-literary texts published in Spain between 1898-1960. Focus on analysis of literary and other manifestations of major cultural movements and artistic currents and preoccupations. 3 undergraduate hours. 4 graduate hours. May be repeated to a maximum of 6 undergraduate hours or 8 graduate hours as topic varies. Prerequisite: SPAN 312 and SPAN 320.

SPAN 465 20th-21stC Spanish Studies credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/465/)
Examines the cultural production of 20th and 21st century Spain, with emphasis on major works, critical movements and debates. 3 undergraduate hours. 4 graduate hours. May be repeated to a maximum of 6 undergraduate hours or 8 graduate hours if topic varies. Prerequisite: SPAN 312 and SPAN 320.

SPAN 466 Colonial Span Amer Studies credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/466/)
In-depth study of colonial Spanish American discursive and cultural production from Pre-Hispanic times to the eighteenth century. Emphasis is placed upon the intellectual and cultural climate from which these texts emerged. 3 undergraduate hours. 4 graduate hours. May be repeated to a maximum of 6 undergraduate hours or 8 graduate hours if topic varies. Prerequisite: SPAN 314 and SPAN 324.

SPAN 467 19thC Sp American Studies credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/467/)
Provides a panoramic view of literary and cultural production in Spanish America between 1810 and 1900. Special attention paid to the emergence of "national literatures" within specific historical and political contexts. 3 undergraduate hours. 4 graduate hours. May be repeated to a maximum of 6 undergraduate hours or 8 graduate hours if topic varies. Prerequisite: SPAN 316 and SPAN 326.

SPAN 468 20th-21stC Span Am Studies credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/468/)
Examines major works, critical movements and/or theoretical issues in the 20th and 21st century Spanish American literary and cultural studies. 3 undergraduate hours. 4 graduate hours. May be repeated to a maximum of 6 undergraduate hours or 8 graduate hours if topic varies. Prerequisite: SPAN 316 and SPAN 326.

SPAN 477 Spanish Grammar and Communicative Language Teaching credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/477/)
Survey of major Spanish syntactic and morphological patterns with particular emphasis on the acquisition of Spanish grammar by non-native speakers. Students will develop a sensitivity for appropriate teaching of Spanish grammar. 3 undergraduate hours. No graduate credit. Required for teacher education. Prerequisite: FLTE 475 or consent of instructor.

SPAN 489 Theoretical Foundations of SLA credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/489/)
Same as FR 481, GER 489, ITAL 489, LING 489, and PORT 489. See LING 489.

SPAN 490 Advanced Readings in Spanish credit: 0 to 3 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/490/)
Directed reading course intended to develop an advanced student's interest in a special area of Hispanic linguistics or literature (author, genre, period, group of works, etc.). Topics to be chosen in consultation with an advisor. Only topics not covered in regular offerings will be considered. 0 to 3 undergraduate hours. No graduate credit. May be repeated if topics vary. Prerequisite: SPAN 252 for linguistics topics; and any two of SPAN 310, SPAN 312, SPAN 314, or SPAN 316 for literature topics.

SPAN 491 Topics for Honors Students credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/491/)
For candidates for honors in Spanish; intensive study of topics in Hispanic literature or linguistics. 1 to 3 undergraduate hours. No graduate credit. May be repeated to a maximum of 6 hours. Prerequisite: Consent of instructor and of departmental honors advisor.

SPAN 528 Sem 20thC Spanish Lit credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/528/)
Investigation of literary problems presented by the Spanish novel, drama, poetry and/or essay since 1900. May be repeated to a maximum of 8 hours if topics vary. Prerequisite: SPAN 465 or equivalent.

SPAN 535 Sem Spanish-American Lit credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/535/)
Special problems in methodology and research; includes other prose fiction. Same as CWL 562. May be repeated to a maximum of 8 hours if topics vary. Prerequisite: A related 400-level course in Spanish American Studies or consent of instructor.

SPAN 557 Sem Romance Ling credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/557/)
Selected topics in comparative Romance linguistics. Same as FR 559, ITAL 559, LING 559, PORT 559, and RMLG 559. May be repeated if topics vary. Prerequisite: SPAN 435 and consent of instructor.

SPAN 558 Sem Spanish Synchronic Ling credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/558/)
Selected topics of Spanish phonology, syntax and sociolinguistics in the light of present-day linguistic theory. May be repeated to a maximum of 16 hours if topics vary. Prerequisite: Graduate standing in Spanish or consent of instructor.

SPAN 559 Sem Spanish Diachronic Ling credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/559/)
Selected topics on the development of Spanish and its dialects in the light of present-day historical methods. May be repeated to a maximum of 8 hours if topics vary. Prerequisite: Consent of instructor.

SPAN 571 Proseminar For Lang Tchg credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/571/)
In-depth exploration of fundamental concepts in foreign language teaching; designed for departmental Teaching Assistants; topics include classroom discourse, teaching approaches, reading, listening, writing, and principles of language testing. Same as PORT 571. 4 graduate hours. No professional credit. Prerequisite: Teaching assistantship in the Department of Spanish and Portuguese or consent of instructor.

SPAN 572 Theory and Literary Criticism credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/572/)
Presentation of major critical theories for the analysis of literary and cultural texts since the mid-20th century. Hispanic, Luso-Brasilian, and U.S. Latina/o critical theory will be studied. Students will demonstrate their understanding of these theories by critically engaging texts written in Spanish, Portuguese, or the foreign language of their specialization. Same as PORT 572. 4 graduate hours. No professional credit. Prerequisite: Graduate standing in the Department of Spanish and Portuguese or consent of instructor.

SPAN 580 Classroom Language Acquisition credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/580/)
Provides for an introduction to the context, process(es), and product of classroom language acquisition; emphasis is placed upon research, research findings, and implications of research. Same as EIL 580, FR 580, GER 580, ITAL 580, and PORT 580. 4 graduate hours. No professional credit. Prerequisite: FLTE 471 or equivalent, or consent of instructor.

SPAN 584 Theories in Second Language Acquisition credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/584/)
Course introduces doctoral students to current mainstream theories (e.g., linguistic, psycholinguistic, cognitive, and social) used in SLA research. Emphasis is on gaining fundamental understanding of how theories work in SLA, how to evaluate them, and what they attempt to explain. Same as CI 584, EALC 584, EPSY 563, FR 584, GER 584, ITAL 584, LING 584, and PORT 584. 4 graduate hours. No professional credit. Prerequisite: LING 489 or equivalent or consent of instructor.

SPAN 588 Sem Second Lang Learn credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/588/)
Treats specific topics in second language learning that are of current research and/or theoretical interest. Topics vary from term to term. Same as EALC 588, FR 588, GER 588, ITAL 588, LING 588, and PORT 588. May be repeated to a maximum of 16 hours if topics vary. Prerequisite: SPAN 580 or equivalent or consent of instructor.

SPAN 590 Topics in Hispanic Studies credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/590/)
Topical studies of Hispanic literature or linguistics beyond the scope of regular offerings at the 400- or 500-level. May be repeated to a maximum of 12 hours if topics vary. Prerequisite: Corresponding introductory course at the 400-level, or consent of instructor.

SPAN 595 Special Topics in Spanish credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/595/)
Independent study/research under the direction of a faculty member. May or may not fulfill requirements for a particular degree program in SIP. Consult Graduate Advisor. Approved for letter and S/U grading. May be repeated to a maximum of 8 hours.

SPAN 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/SPAN/599/)
Approved for S/U grading only. May be repeated.

SPED - SPECIAL EDUCATION

SPED Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/SPED/)

Courses

SPED 117 The Culture of Disability credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPED/117/)
The purpose of this course is to provide an introduction to the culture of disability across the lifespan. The impact of disabilities on an individual across the lifespan will be explored, and the unique culture that is created by having a disability will be addressed. The historical basis for the disability movement and special education will be addressed, including legislation and litigation that has had a significant impact on the field. Students also will learn about the characteristics of individuals with diverse abilities as well as current trends in educational services.
This course satisfies the General Education Criteria for:
Humanities - Hist Phil

SPED 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/SPED/199/)
Additional fees may apply. See Class Schedule. May be repeated.

SPED 312 Introduction to Educational Technology credit: 2 or 3 Hours. (https://courses.illinois.edu/schedule/terms/SPED/312/)
This course provides preservice teachers with the foundation for growth in technology integration through professional preparation, student teaching, and licensure. Major areas covered include the use of productivity tools, effective integration of the internet, and enhancing instruction through the use of multimedia. Additional topics include learning theories, professional development, evaluation, and technology use across multiple disciplines. Special equipment needed includes a USB-Flash Drive and SCD-R disks.

SPED 317 Characteristics & Eligibility credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPED/317/)
The purpose of this course is to provide an introduction to issues associated with the identification and characteristics of students with disabilities, eligibility for special education, and placement to meet students' educational needs. Prerequisite: SPED 117 and admission into the teacher education program in special education.

SPED 322 Introduction to Intellectual Disability credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPED/322/)
Study of the history and current status of the social, emotional, physical, and learning characteristics and problems of persons with an intellectual disability; identification and diagnosis; available services and provisions; and educational programs and lifelong processes of adaptation for these individuals and their families. Same as PSYC 322 and REHB 322. Prerequisite: PSYC 100 or SPED 117; or equivalent.
This course satisfies the General Education Criteria for:
Social Beh Sci - Beh Sci

SPED 391 Thesis credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/SPED/391/)
Prerequisite: Senior standing.

SPED 395 Independent Study credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/SPED/395/)
Study of problems not considered in other courses; designed for students who excel in self-direction and intellectual curiosity. Prerequisite: Upperclassman; upper five percent of class in grade-point average; demonstrated writing competence, research potential, scholarly attitude, and interest as attested to by instructors; consent of adviser and staff member who supervises the work.

SPED 405 General Educator's Role in Special Education credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPED/405/)
Examination of issues in educating students with special needs: service delivery models, roles of teachers and related service providers, student assessment, curriculum individualization, instructional strategies, management of problem behaviors, and program evaluation. 3 undergraduate hours. 3 graduate hours. Prerequisite: Must be registered in teacher licensure program.

SPED 414 Assessment in Early Childhood Special Education credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPED/414/)
Practice in designing and applying assessment devices and procedures and in using them to make educational decisions for children with special needs, birth through kindergarten age. 3 undergraduate hours. No graduate credit. Prerequisite: Credit or concurrent registration in SPED 524 or consent of instructor.

SPED 416 Perspectives on Gifted Education credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SPED/416/)
Consideration of persons in society exhibiting gifted behavior; who they are, their physical, psychological, social, and educational characteristics, and society's needs and provisions for them. The major portion of the course is devoted to the consideration and evaluation of instructional and administrative adjustments that should be made for the gifted in the educational structure. 3 undergraduate hours. 3 or 4 graduate hours.

SPED 424 Foundations of Assessment credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPED/424/)
Course focuses on the theoretical and practical considerations in the psychological and educational assessment of individuals with disabilities. An emphasis will be placed on understanding the technical and practical aspects of current assessment procedures and their application to the education of children and youth with disabilities. 3 undergraduate hours. 3 graduate hours. Prerequisite: Admission to the Department of Special Education or consent of instructor.

SPED 426 Collaboration and Teaming credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPED/426/)
Course is designed to provide participants with the information needed for effective collaboration and interactive teaming. Participants will learn effective models of collaboration and consultation, team member roles and responsibilities, collaborative practices for participating on teams, and strategies for securing appropriate resources for students with disabilities. Emphasis is placed on skills necessary for working collaboratively with parents, teachers, and other service providers. 3 undergraduate hours. 3 graduate hours. Prerequisite: Requires concurrent enrollment in SPED 524 or EDPR 420, or consent of instructor.

SPED 431 Assistive Technology and Physical Disabilities credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/SPED/431/)
Course focuses on specialized health care needs, policies, and procedures for working with students with disabilities. An overview is provided of methods for accommodating students including task or environmental modifications, assistive technology, and adaptive equipment options. 2 undergraduate hours. 2 graduate hours. Prerequisite: Admission to the Department of Special Education or consent of instructor.

SPED 432 Multiple Disabilities credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPED/432/)
Focuses upon the physical and educational characteristics of individuals with multiple disabilities, particularly those with physical disabilities and other health and sensory impairments; covers educational curricula, teaching methods, and other educational considerations such as working with parents, medical personnel, and support staff, and educational adaptations. 3 undergraduate hours. 3 graduate hours. Prerequisite: Admission to the Department of Special Education or consent of instructor.

SPED 435 Behavior Analysis in Special Education credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPED/435/)
Remediation of behavior problems of exceptional students and adults using applied behavior analysis techniques; includes defining, observing, recording, charting, and evaluating behavior change and application of behavioral procedures to remediate behavior problems in the classroom. 3 undergraduate hours. 3 graduate hours. Prerequisite: Admission to the Department of Special Education or consent of instructor.

SPED 436 Systematic Instruction in Special Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SPED/436/)
Elements of data-based instruction emphasizing educational planning for individuals with special needs; includes task and developmental analysis, writing instructional programs, and individualization of instruction. Covers infancy to young adults; mild to severe disabilities. 4 undergraduate hours. 4 graduate hours. Prerequisite: Credit or concurrent registration in SPED 435, or consent of instructor.

SPED 437 Curriculum for Severe Disabilities credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SPED/437/)
Curriculum design, development, and adaptation for students with moderate and severe disabilities; includes the following basic curriculum areas: domestic/home living, self-care, socialization, community living, leisure and recreation, and functional academics; a focus is on providing instruction in these areas in inclusive educational settings; and an emphasis throughout the course is on the evaluation of curriculum and program effectiveness. 4 undergraduate hours. 4 graduate hours. Prerequisite: SPED 436.

SPED 438 Collaborating with Families credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SPED/438/)
The impact of children with special needs on their families; models for the study of family systems are applied to understanding families of children with special needs; emphasis on planning family-focused interventions and exploring strategies for working with parents in a variety of settings. 3 or 4 undergraduate hours. 3 or 4 graduate hours. Prerequisite: Practicum experience or consent of instructor.

SPED 440 Instructional Strategies I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SPED/440/)
Course is designed to provide participants with information on effective instructional practices for working with students with disabilities. Participants are provided with information on generic strategies and principles of learning, instructional formats and strategies for informal assessment. Throughout this course emphasis is placed on methods and strategies for instructing individuals and groups of students. Important consideration is given to legal and ethical issues and an understanding of diverse needs in instructional design and delivery. 4 undergraduate hours. 4 graduate hours. Prerequisite: SPED 317 and SPED 517 or consent of instructor.

SPED 441 Instructional Strategies II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SPED/441/)
Course focuses the design of instruction based on diverse student characteristics, student performance data, curriculum goals, and the community context. Emphasis is placed on application of techniques and strategies to facilitate learning and on evaluating assessment information to modify methods, materials, or environments to enhance student success. 4 undergraduate hours. 4 graduate hours. Prerequisite: SPED 440 and concurrent enrollment in SPED 524 or EDPR 250, or consent of instructor.

SPED 444 Career Development and Transition credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPED/444/)
Course focuses on developing transition plans and activities that prepare students with disabilities for adulthood, including post school employment, independent living, and postsecondary education. Particular emphasis is placed on career development including determining job interests, career exploration, work experiences prior to graduation, job development, and job placement. 3 undergraduate hours. 3 graduate hours. Prerequisite: Admission to the Department of Special Education, or consent of instructor.

SPED 446 Curriculum Development I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SPED/446/)
Principles and practices for teaching students with disabilities. Topics include models of curriculum development, procedures for identifying curriculum priorities across content areas, and relationships between curriculum and instructional settings. Emphasis is on development of inclusive educational programs that are outcome-driven and on evaluation of program effectiveness. 4 undergraduate hours. 4 graduate hours. Prerequisite: Admission to the Department of Special Education, or consent of instructor.

SPED 447 Curriculum Development II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SPED/447/)
Course focus is on ensuring access for students with disabilities to the general education curriculum in English language arts, mathematics, science and social studies by considering the interaction among content area knowledge, pedagogical knowledge, and evidence-based practice. Construction of curriculum in academic content areas with a scope and sequence tailored to individual student characteristics in an area of emphasis. 4 undergraduate hours. 4 graduate hours. Prerequisite: SPED 446 and admission to the Department of Special Education, or consent of instructor.

SPED 448 Curriculum Development III credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SPED/448/)
Review and application of curriculum development and adaptation principles and strategies to life skill domain areas. Curriculum areas addressed include domestic/home-living, leisure and recreation, community living, and vocational programs and job preparation. Emphasis on designing instruction to address life skill curriculum needs in inclusive educational programs and on critically evaluating curriculum and program effectiveness. 4 undergraduate hours. 4 graduate hours. Prerequisite: SPED 446 and admission to the Department of Special Education, or consent of instructor.

SPED 450 Introduction to Early Childhood Special Education credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/SPED/450/)
Overview of the history, trends, and issues of the field of Early Childhood Special Education (ECSE) with particular attention to federal and state policy, service system models, and professional roles and ethics. Emphasis is on current research, theory, and practice. 2 undergraduate hours. 2 graduate hours. Prerequisite: Junior standing.

SPED 460 Communication and Physical Disabilities credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SPED/460/)
Focuses upon issues and intervention strategies that can impact the communication skills of persons with moderate or severe intellectual and/or physical disabilities. Specific assessment and intervention strategies are discussed as they relate to both verbal and augmentative communication. 4 undergraduate hours. 4 graduate hours.

SPED 461 Alternative and Augmentative Communication and Literacy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPED/461/)
Course focuses on issues and strategies for teaching communication and literacy to individuals with significant intellectual or physical disabilities. Specific assessment and intervention strategies are discussed as they relate to alternative and augmentative communication (AAC) and the development of beginning literacy skills. 3 undergraduate hours. 3 graduate hours. Prerequisite: Concurrent enrollment or prior completion of SPED 440, and admission to the Department of Special Education, or consent of instructor.

SPED 465 Curriculum and Methods in Early Childhood Special Education credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPED/465/)
Introduction to the field of early childhood special education, including its history and major issues; instructional methods used in teaching and facilitating development in young children with disabilities are covered in depth. 3 undergraduate hours. 3 graduate hours. Prerequisite: Concurrent registration in SPED 524 or consent of instructor.

SPED 470 Learning Environments I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPED/470/)
Course is designed to provide participants with an introduction to theories and interventions related to school climate and classroom management. Course will focus on using positive behavioral supports to create an effective classroom and school climate. 3 undergraduate hours. 3 graduate hours. Prerequisite: Admission to the Department of Special Education, or consent of instructor.

SPED 471 Learning Environments II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPED/471/)
Course is designed to provide participants with specific information on intervention and evaluation strategies related to designing and managing effective learning environments and to becoming a discriminating consumer of the professional literature related to behavior interventions. 3 undergraduate hours. 3 graduate hours. Prerequisite: SPED 470, and admission to the Department of Special Education, or consent of instructor.

SPED 488 Ethics and Professional Behavior credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPED/488/)
Designed to introduce students to ethical issues and challenges that teacher educators and other professionals, including Board Certified Behavior Analysts, may encounter in practice. The topics to be covered all revolve around ethical conduct in practice and research, as well as the decision-making foundations for resolving ethical issues. Students will obtain knowledge and skills through readings, discussion and various case scenarios, reflections, and discussion of the concepts of issues addressed in the reading and assignments. 3 undergraduate hours. 3 graduate hours. Prerequisite: Graduate standing. Undergraduate Seniors (with permission).

SPED 510 Legal Aspects of Disabilities credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SPED/510/)
Study of the legal rights of individuals with disabilities and their families, with emphasis on educational aspects; inter-relationship of constitutional, statute, administrative and case law at the federal, state and local levels. Case study simulations and mock due process hearings are included.

SPED 514 Equity Issues in Special Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SPED/514/)
A graduate-level overview of issues in equity and access for students with disabilities. Historical and legal foundations are reviewed, but the course focus is issues related to characteristics of individuals with disabilities, challenges in instructional service delivery, including of students with special needs in the general curriculum, and transition of students with disabilities to independent living. Participants reflect on issues in light of their own experiences. Prerequisite: Acceptance into the Master of Education with an emphasis on Diversity and Equity in Education Program or instructor approval.

SPED 517 Disability Issues in Special Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SPED/517/)
Overview of special education at the graduate level. Focus is placed on issues related to: assessment, identification, and characteristics across all disability areas. The greatest emphasis is placed on strategies for including students with disabilities in the general curriculum. Historical and legal perspectives that provide the foundation for special education are discussed.

SPED 520 Psycho-Social Aspects credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SPED/520/)
Same as REHB 520. See REHB 520.

SPED 521 Administration and Supervision in Special Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SPED/521/)
Examination of administrative and supervisory practices in educating children with disabilities and gifted children in public and private schools; application of administrative theory to special education programs. Designed for graduate students in education administration or special education preparing to direct special education programs. 4 graduate hours. No professional credit. Prerequisite: SPED 517 or consent of instructor.

SPED 524 Supervised Practice in Special Education credit: 1 to 8 Hours. (https://courses.illinois.edu/schedule/terms/SPED/524/)
Supervised practice in one or more settings in which students with mild to severe disabilities are served; practicum settings may include day, residential, special, and regular schools which serve students with disabilities. Additional fees may apply. See Class Schedule. Approved for S/U grading only. May be repeated in same or subsequent terms to a maximum of 8 hours. Prerequisite: Admission to the graduate program in special education; consent of supervising faculty member.

SPED 526 Collaborative Leaders in Special Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SPED/526/)
Course provides special educators and other professionals with skills and strategies to assume a leader/change agent role in their schools. Participants focus on effective leadership, collaborative practices, and innovative programs in special education that create unique learning environments, ultimately impacting all stakeholders (student with and without disabilities, teachers, families). Course readings, lectures, and activities address how leaders in the field affect change in special education through grant writing, professional development, and the implementation and evaluation of innovative programs and practices. 4 graduate hours. No professional credit. Prerequisite: SPED 426 or equivalent.

SPED 538 Interdisciplinary Teaming credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SPED/538/)
Study of roles and functions of teams in early intervention and special education service delivery; considers models of team process within and between service settings; explores dynamics of interaction on teams, including approaches to decision-making, communication, and conflict resolution; examines professional roles and tasks of team members in the intervention process.

SPED 545 Transition and Vocational Planning credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SPED/545/)
Provides an orientation to transition planning and vocational training as integrated components of secondary- level education curriculum. Topics include transition planning practices and participants, vocational assessment methods, supported employment concepts and issues, and vocational training strategies and programs Same as REHB 545.

SPED 550 Methods of Educational Inquiry credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SPED/550/)
Same as CI 550, EPOL 550, and EPSY 550. See CI 550.

SPED 556 Problems and Trends in Special Education credit: 4 to 8 Hours. (https://courses.illinois.edu/schedule/terms/SPED/556/)
Introduction to significant problems, points of view, and trends in the field concerned; explores significant research related to organization, content, and techniques in the field in question. Students are encouraged to design/propose/conduct special studies in approved areas.

SPED 565 Atypical Development: B to 6 credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SPED/565/)
Examines characteristics of children with major biological risk conditions and disabilities, birth - six, with a focus on the impact of these conditions on development; briefly examines interventions used by a variety of professionals in addressing specific developmental needs of children with a variety of disabilities Prerequisite: EPSY 236 or equivalent.

SPED 566 Leadership in Early Childhood Special Education credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SPED/566/)
Program issues and research on the efficacy of various program models for young children with special needs from infancy to six; implications for program organization variables such as space, personnel roles, and curriculum Prerequisite: SPED 465 and concurrent enrollment in SPED 524, or consent of instructor.

SPED 575 Mixed Method Inquiry credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SPED/575/)
Same as EPSY 575. See EPSY 575.

SPED 583 Single Case Experimental Design credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SPED/583/)
Study of the analysis of behavior in one or a few subjects using advanced time series designs; includes making accurate and reliable assessment of objective behaviors and designing experiments that feature interpretable comparisons among interventions and credible generalizability to subjects, settings, and time periods other than those specifically studied. Classic and current exemplars of these designs are studied and critiqued in depth. Same as EPSY 583.

SPED 585 Individual Differences: B to 6 credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SPED/585/)
Examines major developmental themes in young children from birth to six. Emphasizes individual differences resulting from environmental and biological factors that influence development, including those resulting from disabilities. Focuses on integration among multiple domains of development. Prerequisite: Graduate standing or consent of instructor.

SPED 590 Seminar for Advanced Students credit: 0 to 8 Hours. (https://courses.illinois.edu/schedule/terms/SPED/590/)
Seminar in the education of individuals with special needs; open only to persons who have been admitted for graduate study. Additional fees may apply. See Class Schedule. Approved for letter and S/U grading.

SPED 591 Field Study and Thesis Seminar credit: 1 to 8 Hours. (https://courses.illinois.edu/schedule/terms/SPED/591/)
Planning field studies and thesis problems by graduate students; students present their studies at each of four stages: (1) the inception, delimitation, tentative design stage; (2) the proposed design stage; (3) the revised design stage; and (4) the final design stage. Students are expected to analyze all presentations critically. May be repeated up to 8 hours. Prerequisite: Admission to graduate studies in Special Education or consent of instructor.

SPED 592 Concepts and Issues in Special Education I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SPED/592/)
Roles and competencies for special education leadership positions; includes literature critique, and preparation and presentation of a major review paper in an area of research interest. Prerequisite: Admission to doctoral studies in Special Education or consent of instructor.

SPED 593 Concepts and Issues in Special Education II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SPED/593/)
Seminar in current concepts and issues relating to all children with special needs; introduction to grant proposal writing; and introduction to journal reviewing; requires critical review of key readings and preparation of a literature review of a topic of current research in special education. Prerequisite: SPED 592 or consent of instructor.

SPED 595 Independent Study credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/SPED/595/)
Self-directive, independent study, that is, develops the individual's ability as an independent student and enables the student to pursue needed study in a field in which appropriate courses are not being offered during a given term. May be repeated with approval. Prerequisite: Approval of study outline by advisor and the department head prior to enrollment.

SPED 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/SPED/599/)
Individual direction of research and thesis writing. Approved for S/U grading only. May be repeated.

SHS - SPEECH AND HEARING SCIENCE

SHS Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/SHS/)

Courses

SHS 111 Living-Learning ASL Part 1 credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/SHS/111/)
An introductory course in American Sign Language (ASL); no previous knowledge or skills are needed. It is offered through the Living in Residence Program at Allen Hall. The focus is on the acquisition of beginning-level vocabulary items and grammar of ASL. ASL is a non-Indo-European language that uses the visual/manual rather than spoken/auditory modality. Students develop a core vocabulary and basic grammar to enable you to communicate using ASL. The Deaf Community, like other cultural groups, defines a population that shares both a language and pattern of transmission of beliefs and values. The course provides an introduction to the culture, traditions, and values of the Deaf Community.

SHS 112 Living-Learning ASL Part 2 credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/SHS/112/)
The second part of an introductory course in American Sign Language (ASL); some knowledge of and skills in ASL are required. It is offered through the Living in Residence Program at Allen Hall. The focus is on the continued acquisition of beginning-level vocabulary items and grammar of ASL. ASL is a non-Indo-European languages that uses the visual/manual rather than spoken/auditory modality. Students develop core vocabulary and grammar to enable you to communicate using ASL. The Deaf Community, like other cultural groups, defines a population that shares both a language and pattern of transmission of beliefs and values. The course provides further information of the culture, traditions, and values of the Deaf Community.

SHS 120 Child, Comm, & Lang Ability credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SHS/120/)
Provides an introduction to the study of the human communication and language capacity and includes an overview of three areas of inquiry: language science, language development in children, and language disability in children.
This course satisfies the General Education Criteria for:
Social Beh Sci - Beh Sci

SHS 121 American Sign Language I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/121/)
This is an introductory course in American Sign Language (ASL). No prior experience with the language is necessary. Students will learn vocabulary, elementary-level grammatical structures, and elements of U.S. Deaf Culture in order to engage in entry-level conversations in ASL. Basic social and communication skills associated with the use of ASL will be emphasized. This course is part of a sequence of courses that will fulfill the foreign language requirement for UIUC undergraduate students. Approved for Letter and S/U grading.

SHS 150 Hearing Processes & Disorders credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SHS/150/)
An introduction to basic and clinical aspects of audition and their relevance to communication processes and communication disabilities from biological, humanistic, and technological perspectives. Communication processes and development are explored within historical, behavioral, and scientific frameworks. Hearing disabilities are described according to prevention etiology, manifestation, evaluation and treatment. The effects of disability on individuals and families across the lifespan are also addressed.

SHS 170 Intro Hum Comm Sys & Disorders credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SHS/170/)
Examines broad perspectives of theories and information regarding normal and abnormal communication: how speech and language develop, how people hear, how they produce speech and what can go wrong; addresses the impact of speech and hearing science on society, culture, and modern technologies.

SHS 191 Freshmen Seminar credit: 0 to 9 Hours. (https://courses.illinois.edu/schedule/terms/SHS/191/)
Special experimental seminar or independent study course intended to cover topics not treated by regular course offerings; open to undergraduates at any level. Requests for activation of this course may be made by students or by faculty and should be directed to the head of the academic department concerned. Although credit toward graduation is normally granted, credit toward satisfying specific college or departmental requirements is contingent upon approval by the appropriate college or departmental committee. Approved for S/U grading only.

SHS 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/SHS/199/)
Approved for letter and S/U grading. May be repeated, if topics vary.

SHS 200 General Phonetics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SHS/200/)
Basic principles of phonetic study; includes observation and representation of pronunciation, ear training, and practice in transcription.

SHS 221 American Sign Language II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/221/)
This intermediate course in American Sign Language (ASL) is part of a sequence to fulfill the foreign language requirement. Students must have successfully completed SHS 121 or should be able to demonstrate advanced beginner ASL skills. Students will continue to learn vocabulary items and intermediate-level grammatical structures in order to improve conversation skills. As compared to SHS 121, a greater focus is placed on ASL constructions involving the complex use of space (e.g., verb inflections, so-called "classifiers", and constructed action). Same as LING 221. Approved for letter and S/U grading. Prerequisite: SHS 121 or equivalent language skills.

SHS 222 Language & Culture of Deaf Communities credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SHS/222/)
Students will learn about culture and how it is manifested in various subgroups of society with a particular focus on the culture and language of Deaf people in the United States. Themes include: the linguistics of American Sign Language, aspects of social unity for Deaf people, common experiences of Deaf individuals, the educational system and Deaf students, and current issues that affect the Deaf community. For those students requiring 4 semesters of language other than English credit (LAS or BUS), SHS 222 can be used as the fourth course in the American Sign Language sequence that includes SHS 121, 221, and 321 to fulfill that requirement but cannot also then be used for Gen Ed requirements. Same as EPSY 222.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci
Cultural Studies - US Minority

SHS 231 Lang Diff Dis: American Persp credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SHS/231/)
Same as AFRO 231. See AFRO 231.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

SHS 240 Intro Sound & Hearing Science credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SHS/240/)
Acoustics, anatomy, and physiology of the auditory system; psychophysical methods; and a consideration of auditory theories and mechanics.

SHS 270 Comm Disability in the Media credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/270/)
Introduction to the study of human communication disability across the lifespan as depicted in the media and includes an overview of three areas of inquiry: behavioral/psychosocial impact of communication disability, ethical decisions in rehabilitation interventions, and disability rights.
This course satisfies the General Education Criteria for:
Advanced Composition
Social Beh Sci - Soc Sci

SHS 271 Communication and Aging credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SHS/271/)
Course introduces social and physical issues of communication and aging, with particular emphasis on intergenerational interactions and on the physical disabilities of aging (e.g., hearing loss, Parkinson's disease, strokes, dementia). Discourse analysis techniques are used to integrate the social and physical aspects of aging and communication that are discussed in class.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

SHS 280 Communication Neuroscience credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SHS/280/)
This course provides and overview of neuroscience with emphasis on human communication, moving from general concepts in neuroanatomy and neurophysiology to the specifics of the neuroscience of hearing, speech and language.

SHS 291 Research Lab Experience in SHS credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/SHS/291/)
Supervised participation in research laboratory and scholarly activities, usually as an assistant to an investigator. Approved for S/U grading only. May be repeated in the same or separate terms to a maximum of 6 hours.

SHS 300 Anat & Physiol Spch Mechanism credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/300/)
Introduction to the anatomic and physiologic characteristics of the normal speech mechanism. Same as LING 300.

SHS 301 General Speech Science credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/301/)
Consideration of the physiology of the speaking act, and the acoustical and perceptual aspects of speech. Same as LING 303.

SHS 320 Development of Spoken Language credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SHS/320/)
Study of the correlates of language development from the prelinguistic period to adulthood.

SHS 321 American Sign Language III credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/321/)
This advanced-intermediate course in American Sign Language (ASL) is part of a sequence to fulfill the foreign language requirement. Students must have successfully completed SHS 221 or should be able to demonstrate intermediate ASL conversation skills. Students will learn technical vocabulary items and complex elements of ASL narratives. In this course, students will focus on the fluid use of ASL across various registers and situations. Special emphasis will be placed on receptive fluency of complex constructions in ASL. Same as LING 321. Approved for letter and S/U grading. Prerequisite: SHS 221 or equivalent language skills.

SHS 333 Children with Neurodevelopmental Disorders Across Communication Contexts credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SHS/333/)
This course introduces students to the developmental issues involved in supporting communication for children with neurodevelopmental disorders (NDDs), with emphasis on the needs of children with autism spectrum disorders (ASD), fragile X syndrome (FXS), Down syndrome (DS), and Williams syndrome (WS), in family, educational and community contexts.

SHS 352 Hearing Health and Society credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SHS/352/)
An analysis of how hearing loss influences behavior of individuals and interactions among individuals within larger social/societal groups across the lifespan. Considers issues associated with early detection of hearing loss and promoting hearing conservation in different environments. Approaches to promoting behaviors that enhance communication in the presence of hearing loss will be explored. Philosophical, policy, and cultural controversies for defining hearing loss as a disability will be examiend. Each of these topics will be considered within the interplay between the individual person, culture, age, disability, educational environment, community, and social/family interactions.

SHS 370 Civic Engagement in Wellness credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SHS/370/)
Same as AHS 365, CHLH 365, KIN 365, and RST 365. See KIN 365.

SHS 375 Comm Partners & Health credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SHS/375/)
Combines a community-based volunteer experience with class-based readings/discussion to introduce students to the study of communication in context. Students will use learning journals to document their volunteer experiences, describe the characteristics of conversational interactions they observe, and reflect on their own skills as flexible communication partners with people of various backgrounds and abilities and in a variety of clinical and professional settings. Includes a one-hour weekly discussion section (taught by SHS faculty/instructional staff) and three-four hour weekly community volunteer experiences (supervised by volunteer site employees). Same as AHS 375 and KIN 375. May be repeated in separate terms to a maximum of 6 hours.

SHS 380 Comm Competence and Disorders credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SHS/380/)
This course explores ways of defining and documenting communicative competence for individuals with communication disorders in everyday interactions. It introduces students to theories of communication-in-context and methods of discourse analysis. Students will critically review research on discourse of individuals with communication disorders across the lifespan and discuss its relevance to clinical practice. Prerequisite: Minimum sophomore standing or consent of instructor.

SHS 383 Special Topics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/383/)
Lecture course in topics of current interest in speech and hearing science; specific subject matter announced in the Class Schedule. May be repeated if topics vary.

SHS 385 Evidence-Based Practice in Communication Sciences and Disorders credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SHS/385/)
This course is designed to examine how the field of Speech and Hearing Science creates knowledge or evidence to support the assessment and intervention for individuals with communication disorders. Students will gain an introductory understanding of clinical research methodology and become familiar with the process of selecting evidence-based practices. Prerequisite: Sophomore standing or consent of instructor.

SHS 389 Neuroplasticity and Communication credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SHS/389/)
The human brain adapts and changes continually throughout the human lifespan. This phenomenon is known as neuroplasticity. In this course, we will come to a better understanding of the principles of neuroplasticity, including during development, critical periods, learning and skill mastery, and reorganization/rehabilitation of functional abilities following brain damage. We will draw heavily on current research pertaining to neuroplasticity involving brain structures and functions important for communication.

SHS 390 Individual Study credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/390/)
Individual investigation of special problems. May be repeated to a maximum of 6 hours. Prerequisite: Ten hours of speech and hearing science, and written approval by the faculty members who will supervise the student's work.

SHS 395 Honors Individual Study credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/SHS/395/)
Individual study leading either to a thesis or to departmental honors. May be repeated to a maximum of 4 hours. Prerequisite: Senior standing; a cumulative grade point of 3.5 or consent of the head of the department.

SHS 410 Stuttering: Theory & Practice credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/410/)
Study of the theoretical and research literature concerning the causes, diagnosis, and treatment of stuttering and an analysis of clinical procedures in stuttering therapy. 3 undergraduate hours. 4 graduate hours. Prerequisite: For undergraduate credit, students must have senior level status in the SHS Program or consent of instructor. For graduate credit, students must have graduate level status in SHS Program or consent of instructor. Additional work involved.

SHS 411 Normal and Disordered Voice credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/411/)
Study of the biomechanics of normal and disordered voice production with application to both clinical and pedagogical voice training and care. 3 undergraduate hours. 4 graduate hours. Additional work is involved for 4 credit hours.

SHS 427 Language and the Brain credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/427/)
How the human brain supports production and comprehension of language. Topics covered include: neuroanatomy of language; neuroimaging of language; language disorders; brain lateralization for language; bilingualism and the brain; sign language and the brain. Same as LING 427 and PSYC 427. 3 undergraduate hours. 4 graduate hours. Prerequisite: One of PSYC 210, PSYC 224, PSYC 248, LING 225, SHS 170, or consent of instructor.

SHS 430 Devel & Disorders Phonol Artic credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/430/)
Survey of basic knowledge concerning normal and deviant phonological development, and principles for applying this knowledge to the assessment and remediation of phonological disorders. 3 undergraduate hours. 4 graduate hours. Prerequisite: For undergraduate credit, students must have senior level status in the SHS Program or consent of instructor. Additional work is involved for 3 hours. For graduate credit, students must have graduate level status in the SHS Program or consent of instructor. Additional work involved for 4 hours.

SHS 431 Lang Disorders Preschool Child credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/431/)
Advanced study of early language milestones, processes, and theories; examination of the nature and character of disordered language acquisition in preschool children, and evaluation of current theory and intervention research in the area. 3 undergraduate hours. 4 graduate hours. Prerequisite: For undergraduate credit, students must have senior level status in the SHS program or consent of instructor. For graduate credit, students must have graduate level status in the SHS Program or consent of instructor. Additional work involved for 4 hours credit.

SHS 450 Intro Audiol & Hear Disorders credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/450/)
Review of the history of audiology as a profession; study of symptoms, causes, and treatment of hearing losses; and principles and application of basic audiometry. 4 undergraduate hours. 4 graduate hours. Prerequisite: Consent of Instructor.

SHS 451 Aural Rehab Children to Adults credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/451/)
Principles and methods of clinical and classroom retraining of the hard-of-hearing; includes lip reading, auditory training, speech disorders and conservation, and counseling. 2 to 4 undergraduate hours. 2 to 4 graduate hours. Prerequisite: Consent of instructor.

SHS 470 Neural Bases Spch Lang credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/470/)
Advanced study of neuroanatomy and neurophysiology with emphasis on current research pertaining to nervous system structures and functions important for speech and language. Critical analyses of current theories of the function of neural mechanisms utilized in speech and language. 4 undergraduate hours. 4 graduate hours. Prerequisite: SHS 300 and SHS 301, or equivalent, or consent of instructor.

SHS 473 Augmentative & Alt Comm credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/473/)
Introduces students to the field of augmentative and alternative communication (AAC), to the range of assistive technologies, and to diagnostic and treatment approaches used by speech-language pathologists. Focuses on the communicative needs of adults and children with acquired communication disorders in a variety of settings (e.g., hospital, school, home, work). 2 to 4 undergraduate hours. 2 to 4 graduate hours. Prerequisite: For undergraduate credit, 2 or 3 hours, students must have senior level status in the SHS Program, or consent of instructor. Additional work is involved for 3 hours. For graduate credit, 2 to 4 hours, students must have graduate level status in the SHS Program, or consent of instructor. Additional work involved for 4 hours.

SHS 475 Prepracticum in SHS credit: 1 to 2 Hours. (https://courses.illinois.edu/schedule/terms/SHS/475/)
A mentoring experience in which students will be paired with clinical instructors in SHS and provided opportunities to observe clinical speech-language pathology and audiology sessions in a variety of settings. Prepracticum is designed to provide students: 1) initial opportunities to integrate course work with clinical practice; 2) supported experiences in documentation/data collection skills used in clinical settings; and 3) supervised observation hours required by the American Speech-Language and Hearing Association (ASHA) for certification as a Speech-Language Pathologist or Audiologist. 1 to 2 undergraduate hours. No graduate credit. Approved for S/U grading only. May be repeated in the same or separate terms to a maximum of 2 hours.

SHS 477 Beginning Practicum in SHS credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/SHS/477/)
Mentored experience in which students are paired with a clinical instructor in SHS and provided opportunities to assist in the ongoing management of clinical cases in a variety of settings. The beginning practicum is designed for students with less than a year of supervised clinical experience(i.e. 100 or fewer contact hours as defined by the American Speech-Language Hearing Assoc.-ASHA). Working with the clinical team, the beginning practicum will provide students with: 1) supported opportunities to assist in all aspects of clinical practice (e.g., diagnosis, intervention, documentation, team meetings/planning); 2) opportunities to obtain supervised contact hours required by ASHA for certification in Speech-Language Pathology or Audiology. 1 to 3 undergraduate hours. 1 to 3 graduate hours. May be repeated in same term to a maximum of 3 undergraduate or 4 graduate hours. May be repeated in separate terms to a maximum of 3 undergraduate or 6 graduate hours. Prerequisite: For students pursuing clinical preparation in speech-language pathology and/or audiology.

SHS 500 Exper Phon I Spch Physiol credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/500/)
Theoretical consideration of speech as motor behavior, special reference to physiological investigations of normal respiration, phonation, and supralaryngeal articulation; and survey of the experimental literature in articulatory phonetics. Same as LING 575. Prerequisite: Consent of instructor.

SHS 501 Exper Phon II Spch Acous Perc credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/501/)
Theoretical consideration of speech as an acoustical phenomenon; special reference to acoustical investigations of the laryngeal source and radiated speech signal; and survey of the experimental literature in acoustic phonetics and speech perception. Same as LING 576. Prerequisite: Consent of instructor.

SHS 510 Advanced Seminar in Stuttering credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/510/)
Advanced study of stuttering disorders; topics vary, but emphasis is placed on research, measurement, evaluation, and methods. Prerequisite: SHS 410 or consent of instructor.

SHS 511 Assessment and Management of Voice Disorders credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/511/)
Study of the anatomy, pathophysiology, etiology, acoustics, and perception of abnormal voice production, including foundational skills for assessment, differential diagnosis, and management of voice disorders. 4 graduate hours. No professional credit. Prerequisite: SHS 300, SHS 301, SHS 411 or equivalent or consent of instructor.

SHS 512 Orofacial Anomalies credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/512/)
Evaluation of current theories and intervention research associated with cleft palate and orofacial anomalies. Advanced study and critical analysis of speech, dental, and surgical treatment procedures. Prerequisite: SHS 300, SHS 301 or equivalent or consent of instructor.

SHS 513 Assessment and Management of Dysphagia credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/513/)
Study of the anatomy, physiology, and pathophysiology of the oral and pharyngeal stages of swallowing and critical review of the research literature pertaining to methods for diagnosis and treatment of dysphagia. Prerequisite: SHS 300 or equivalent and SHS 470, or consent of instructor.

SHS 514 Motor Speech Disorders credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/514/)
Study of the etiology and symptomatology of pediatric and adult speech problems resulting from neurological impairment, and critical review of the research literature pertaining to methods for assessment and treatment of these disorders. Prerequisite: SHS 300 or equivalent and SHS 470, or consent of instructor.

SHS 520 Language Science credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/520/)
Study of recent research and theory in neurolinguistics, psycholinguistics, and sociolinguistics. Intensive examination of data collection and analysis procedures in language acquisition, and interpretation of research results relative to different age groups. Implications for clinical practice and clinical research in language disorders are addressed. Prerequisite: SHS 320 or equivalent, or consent of instructor.

SHS 532 Lang Disorders Schl-Age Child credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/532/)
Advanced study of the nature of language impairments and language/learning disabilities found in the school-age population, and ramifications for academic success and social development; critical review of theoretical models and empirical evidence of language learning in older children; evaluation of research in the diagnosis and treatment of language impairments in older children. Prerequisite: SHS 320 or equivalent, or consent of instructor.

SHS 533 Advanced Language Diagnostics credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/533/)
Advanced study of the diagnosis of language disorders in children from infancy through adolescence; particular emphasis on critical evaluation of current methods in assessment, the development of problem-solving skills, and the application of computer technology in language analysis Prerequisite: SHS 520 or equivalent, or consent of instructor.

SHS 534 Aphasia and Related Disorders credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/534/)
Advanced study of the communication disorders resulting from neurological impairments in adults: critical analysis of the research literature, examination of current theories regarding aphasia and related disorders; evaluation of existing paradigms of diagnosis and intervention. Prerequisite: SHS 470 or consent of instructor.

SHS 535 Cognitive Communication Disorders credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/535/)
A graduate-level course on cognitive communication disorders associated with traumatic brain injury (TBI) and dementia. It is intended to provide students with a better understanding of the role of clinicians and researchers in the assessment and management of TBI and dementia. Content areas include cognitive correlates of communication; clinical characteristics of TBI, mild cognitive impairment, and a range of dementia; and interdisciplinary assessment and treatment of cognitive communication disorders with an emphasis on evidence-based practice. 4 graduate hours. No professional credit. Prerequisite: Restricted to graduate students.

SHS 540 Psychoacoustics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/540/)
Advanced study of physical nature of sound and its measurement; theory and practice of psychophysics, including the various aspects of psychoacoustics (sensitivity, masking, loudness, pitch, binaural hearing, speech perception) and the nonlinear nature of the auditory system. Prerequisite: SHS 240 or equivalent.

SHS 541 Clinical Auditory Anat & Phys credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/541/)
The objective of the course is for students to gain an understanding of the structure and function of the peripheral and central auditory system from a clinically oriented perspective. Clinically relevant topics on the pathophysiology of the auditory system will be presented. Prerequisite: SHS 240, SHS 450 or equivalent, or consent of instructor.

SHS 542 Signals and Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/542/)
Provides an overview of the fundamental theory of signals and systems analysis with applications to hearing and speech sciences. Topics include: Introduction to MATLAB, time and frequency domain characterizations of signals and of systems, analyses of signals through systems, time/frequency relations, spectrograms, applications to hearing (e.g., hearing aid and cochlear implant signal processing), applications to speech, and digital signal processing. Practical experience with signal processing (primarily in MATLAB) will supplement lectures. No explicit background in signal processing or MATLAB is assumed. 4 graduate hours. No professional credit.

SHS 543 Business Planning in Audiology credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/SHS/543/)
Provides graduate students with an overview of the business planning and management aspects of audiology. Students will learn about the tools needed to start or purchase a practice and understand the economics of audiology. The concepts discussed in this course will be relevant to a variety of audiology employment settings, including private practice. 2 graduate hours. No professional credit. Prerequisite: Restricted to graduate students.

SHS 550 Assess Audition & Aud Disorder credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/550/)
Study of technical and clinical aspects of audiological assessment and auditory disorders; critical analysis of clinical and experimental literature; laboratory experience in audiological assessment techniques. Prerequisite: SHS 240, SHS 450, or equivalent, or consent of instructor.

SHS 551 Electrophys Indices Audition credit: 4 or 5 Hours. (https://courses.illinois.edu/schedule/terms/SHS/551/)
Study of technical and clinical aspects of electrophysiologic measures of audition; critical analysis of clinical and experimental literature; laboratory experience in electrophysiologic techniques. 4 or 5 graduate hours. No professional credit. Prerequisite: SHS 550 or consent of instructor.

SHS 552 Diag Hear Impair Infants Child credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/552/)
Study of the major etiologies underlying hearing impairments encountered in the pediatric population, program models for infants and young children at risk for hearing impairment, behavioral and physiologic issues in assessment and evaluation of residual hearing, and selection of hearing aids and other sensory prosthetic devices. Prerequisite: SHS 550.

SHS 553 Hearing Aids and Amplification credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/553/)
Study of technical and clinical aspects of personal hearing aids and amplification devices; survey of clinical and experimental literature; laboratory experience in electroacoustic and real-ear measurement, earmold impressions and modification procedures, and solving fitting problems. Prerequisite: SHS 550.

SHS 554 Advanced Audiological Assess credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/554/)
Seminar on current research in advanced audiology, with emphasis on experimental and clinical protocols involving electrophysiologic and behavioral measures in areas including newborn auditory screening using evoked potentials, intraoperative and intensive care unit monitoring, brain-mapping, event-related potentials, central auditory assessment, and computerized assessment of balance function. Prerequisite: SHS 551 or equivalent, or consent of instructor.

SHS 555 Comm Lang Probs Hear Impaired credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/555/)
Advanced course in the problems and procedures involved in the acquisition of language and communication by persons with severe hearing impairment, particularly those with profound prelingual deafness; emphasis on research and measurement in the development of speech, speechreading, residual hearing, reading, written language, and manual communication, including finger spelling and the language of signs; and stress on the applications of recent approaches in linguistics and psycholinguistics to language development. Prerequisite: Consent of instructor.

SHS 556 Sens Prosth Devices Hear Loss credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/556/)
Seminar on current research in signal processing approaches and experimental protocols for the development and fitting of hearing aids, tactile aids, cochlear implants, and assistive listening devices. Prerequisite: SHS 553 or consent of instructor.

SHS 557 Adv Clin Prac Aud Assess Rehab credit: 1 to 8 Hours. (https://courses.illinois.edu/schedule/terms/SHS/557/)
Supervised assessment and management of patients. Includes audiological evaluation techniques; treatment counseling; hearing aid selection, evaluation, and dispensing; and aural rehabilitation therapy. External placement in a variety of sites is available as well as in the departmental Audiology Clinic. May be repeated with approval. Prerequisite: Graduate standing, plus SHS 240, SHS 450, SHS 451, or equivalent coursework and consent of instructor.

SHS 558 Tinnitus credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/SHS/558/)
This advanced seminar on tinnitus covers the types of tinnitus, pathophysiology of chronic subjective/sensorineural tinnitus, latest research involving both animal and human studies, assessment of tinnitus, and management of tinnitus. It examines the complexity of tinnitus, its consequences for individuals and societies, and how health-care providers, specifically audiologists, may mitigate its impact. 2 graduate hours. No professional credit. Prerequisite: SHS 541 or consent of instructor. Graduate student status in Speech and Hearing Science or consent of instructor.

SHS 559 Hearing Conservation credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/SHS/559/)
Study of hearing conservation programs in various settings; study of auditory and non-auditory effects of noise; study of standards and regulations for hearing conservation programs. 2 graduate hours. No professional credit. Prerequisite: Consent of instructor. Restricted to graduate students only.

SHS 560 Audiological Assessment Lab credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/SHS/560/)
Clinical laboratory experience in audiological assessment including the evaluation, identification, diagnosis and treatment of hearing loss. Patient counseling and case history intake skills are addressed. Prerequisite: SHS 550 or concurrent enrollment in SHS 550.

SHS 561 Medical Audiology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/561/)
Students will gain in-depth knowledge of the etiology, prevention, identification, diagnosis, and management of auditory disorders, with focus on pathophysiology, ototoxicity, and genetic influences. 4 graduate hours. No professional credit. Prerequisite: SHS 541 and SHS 550 or consent of instructor. Graduate students only.

SHS 562 Educational Audiology credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/SHS/562/)
Provides in-depth understanding of educational needs for children with hearing loss, addressing the education process from birth through late adolescence. The course will include knowledge of educational options, classroom acoustics, auditory processes, amplification options, individualized education program (IEP) meetings, and classroom management. The course will focus on the collaboration and communication methodologies between educators, audiologists, speech-language pathologists and caregivers to determine the best educational placements and curriculum for a child with hearing loss. 2 graduate hours. No professional credit. Prerequisite: Restricted to graduate students.

SHS 563 Amplification Lab credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/SHS/563/)
Clinical laboratory experience in the selection, testing, fitting and maintenance of current technology amplification devices. Prerequisite: Concurrent enrollment in SHS 553.

SHS 564 Vestibular Assessment and Rehabilitation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/564/)
This course on vestibular assessment and rehabilitation covers the anatomy and physiology of the vestibular system, common vestibular disorders and other causes of dizziness, bedside examination of the dizzy patient, administration and interpretation of vestibular tests including videonystamography (VNG) and electronystagmography (ENG). It will also cover the role of audiologists and other health care professionals in the assessment and management of dizzy patients, and vestibular rehabilitation. 4 graduate hours. No professional credit. Prerequisite: Graduate student status or consent of instructor.

SHS 565 Teaching in the Professoriate credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/565/)
Same as CHLH 565, KIN 565, RST 560. See KIN 565.

SHS 570 Quant Reasoning Spch Hear Sci credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/570/)
Introduction to experimental designs and methods of statistical analysis in speech and hearing research. Prerequisite: Consent of instructor.

SHS 571 Clinical Sociolinguistics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/571/)
Clinical application of sociolinguistic concepts for communicatively impaired populations. Focuses on language difference, and utilizes technological strategies needed for assessment and intervention with linguistically diverse populations. Includes computer analysis of talk data from language disordered and linguistically different speakers. Prerequisite: Consent of instructor.

SHS 572 Counseling in Comm Disorders credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/572/)
Focuses on counseling principles, theories, and methods useful to the speech-language pathologist and audiologist when working with communication disordered individuals and their families. Issues related to ethics, values, grief, culture, family systems, the impact of disability, referral sources and techniques for interviewing and counseling are discussed. Prerequisite: Consent of instructor.

SHS 574 Communication in Individuals with Autism Spectrum Disorders credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/SHS/574/)
This is a graduate-level course on foundational issues in autism spectrum disorder (ASD) for speech-language pathologists and other professionals. It is intended to prepare them to understand this neurodevelopmental disorder and serve this unique population as key team members in assessment and intervention. Ninety percent of school-based professionals serve students with ASD. Content areas include diagnostic criteria (signs & symptoms), etiology, language and communication patterns, assessment, and interventions for individuals with ASD. 2 graduate hours. No professional credit. Prerequisite: Restricted to Graduate Students.

SHS 575 School Spch-Lang Clin Methods credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/SHS/575/)
Study of methods and materials used in the schools by the speech and language clinician. Approved for S/U grading only. Prerequisite: Consent of instructor.

SHS 576 School Intrnshp Spch-Lang Path credit: 4 to 8 Hours. (https://courses.illinois.edu/schedule/terms/SHS/576/)
The student is assigned to a school-based speech-language pathologist for a practical learning experience in P-12 schools full-time for 8-16 weeks. The student is expected to apply knowledge learned in the academic and clinical portions of their program to the entire school caseload by the end of this experience. Approved for letter and S/U grading. May be repeated to a maximum of 8 graduate hours. Prerequisite: Forty graduate hours of coursework including a minimum of 6 graduate hours of clinical practicum in SHS 475 C, D, or E, or consent of instructor.

SHS 577 Advanced Practicum in SHS credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/577/)
A mentored experience in which students are paired with a clinical instructor in SHS and provided opportunities to assist and take leadership roles in the ongoing management of clinical cases in a variety of settings. The advanced practicum is designed for students with more than a year of supervised clinical experience (i.e., more than 100 contact hours as defined by the American Speech-Language and Hearing Association-ASHA). Working within a clinical team, the advanced practicum will provide students with: 1) supported opportunities to assist in all aspects of clinical practice (e.g., diagnosis, intervention, documentation, team meetings/planning); 2) take lead clinician and/or case management roles for some cases; 3) opportunities to obtain supervised contact hours required by the ASHA for certification in Speech-Language Pathology or Audiology. May be repeated with approval. Prerequisite: SHS 477.

SHS 579 Prof/Eth/Legal Issues AuD/SLP credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SHS/579/)
Emphasis will be placed on issues on ethical and professional integrity in speech and hearing clinical practice, including certification and licensure, quality assurance, evidence based practice, and health care and reimbursement. Prerequisite: SHS 555 or SHS 557.

SHS 580 Cochlear Implants credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/580/)
Focuses on current cochlear implant technologies, principles of evidence-based practice of cochlear implant assessment and intervention by audiologists and speech-language pathologists, and empirical outcomes for children and adults. 4 graduate hours. No professional credit. Prerequisite: Graduate standing in the Department of Speech and Hearing Science.

SHS 581 Auditory Processing Disorders credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SHS/581/)
Study of experimental and clinical aspects of auditory processing disorders; critical analysis of clinical and experimental literature; laboratory experience in auditory processing assessment techniques. 3 graduate hours. No professional credit. Prerequisite: Consent of instructor. Restricted to graduate students.

SHS 586 Adv Sem Development Com Dis credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/SHS/586/)
Study of theoretical and empirical research in typical and atypical developmental aspects of children's communication. Students will critically analyze and interpret the extant literature; lead seminar discussions and write scholarly reviews; and/or design original research projects. Specific topics will vary and be announced in the Class Schedule. 2 graduate hours. No professional credit. Approved for letter and S/U grading. May be repeated in separate terms, if topics vary.

SHS 587 Advanced Seminar in Acquired Communication Disorders credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/SHS/587/)
Study of theoretical and empirical research in acquired communication disorders in adulthood. Students will critically analyze and interpret the extant literature; lead seminar discussions and write scholarly reviews; and/or design original research projects. Specific topics will vary and be announced in the Class Schedule. 2 graduate hours. No professional credit. Approved for letter and S/U grading. May be repeated in separate terms, if topics vary.

SHS 588 Adv Sem Neural Bases Com Dis credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/SHS/588/)
Study of theoretical and empirical research in the neural bases of speech, language, hearing, cognitive, and/or swallowing disorders in pediatric and adult populations. Students will critically analyze and interpret the extant literature; lead seminar discussions and write scholarly reviews; and/or design original research projects. Specific topics will vary and be announced in the Class Schedule. 2 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated in separate terms, if topics vary.

SHS 590 History of CSD credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/590/)
This doctoral seminar explores the evolution of the field of Communication Sciences and Disorders (CSD) by examining: 1) the historical research base of the field; 2) critical research and practice issues that have emerged across the history of field; and 3) the contributions of key figures in the field. The course is designed to help students understand how the discipline has been organized and where their own research interests fit with the respect to the history of the discipline. Prerequisite: Doctoral students in SHS or consent of instructor.

SHS 592 Prosem Spch & Hear Sci credit: 0 to 1 Hours. (https://courses.illinois.edu/schedule/terms/SHS/592/)
Required seminar for all graduate students; involves reporting of ongoing research of faculty, visiting researchers, and students as well as discussion of topics related to professional and academic research careers. Approved for S/U grading only. May be repeated up to 4 credit hours toward degree requirements as topics vary.

SHS 593 Special Problems credit: 1 to 8 Hours. (https://courses.illinois.edu/schedule/terms/SHS/593/)
Investigative projects in speech and hearing not including theses. 1 to 8 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated to a maximum of 8 hours. Prerequisite: Consent of instructor.

SHS 594 PhD Early Research Project credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/SHS/594/)
This mentored research experience provides individualized opportunities for PhD students to conduct research projects under the direction of their faculty mentors/advisors. Approved for S/U grading only. May be repeated in separate terms to a maximum of 8 hours.

SHS 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/SHS/599/)
Individual research in the various areas of speech and hearing science. Approved for S/U grading only. May be repeated.

STAT - STATISTICS

STAT Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/STAT/)

Courses

STAT 100 Statistics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/STAT/100/)
First course in probability and statistics at a precalculus level; emphasizes basic concepts, including descriptive statistics, elementary probability, estimation, and hypothesis testing in both nonparametric and normal models. Credit is not given for both STAT 100 and any one of the following: ECON 202, PSYC 235, or SOC 485. Prerequisite: MATH 112.
This course satisfies the General Education Criteria for:
Quantitative Reasoning I

STAT 107 Data Science Discovery credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/107/)
Data Science Discovery is the intersection of statistics, computation, and real-world relevance. As a project-driven course, students perform hands-on-analysis of real-world datasets to analyze and discover the impact of the data. Throughout each experience, students reflect on the social issues surrounding data analysis such as privacy and design. Same as CS 107 and IS 107.
This course satisfies the General Education Criteria for:
Quantitative Reasoning I

STAT 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/STAT/199/)
See course schedule for topics. Approved for Letter and S/U grading. May be repeated if topics vary.

STAT 200 Statistical Analysis credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/STAT/200/)
Survey of statistical concepts, data analysis, designed and observational studies and statistical models. Statistical computing using a statistical package such as R or a spreadsheet. Topics to be covered include data summary and visualization, study design, elementary probability, categorical data, comparative experiments, multiple linear regression, analysis of variance, statistical inferences and model diagnostics. May be taken as a first statistics course for quantitatively oriented students, or as a second course to follow a basic concepts course. Credit is not given for both STAT 200 and STAT 212.
This course satisfies the General Education Criteria for:
Quantitative Reasoning I

STAT 207 Data Science Exploration credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/207/)
Explores the data science pipeline from hypothesis formulation, to data collection and management, to analysis and reporting. Topics include data collection, preprocessing and checking for missing data, data summary and visualization, random sampling and probability models, estimating parameters, uncertainty quantification, hypothesis testing, multiple linear and logistic regression modeling, classification, and machine learning approaches for high dimensional data analysis. Students will learn how to implement the methods using Python programming and Git version control. Prerequisite: STAT 107 or consent of instructor.
This course satisfies the General Education Criteria for:
Quantitative Reasoning II

STAT 212 Biostatistics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/STAT/212/)
Application of statistical reasoning and statistical methodology to biology. Topics include descriptive statistics, graphical methods, experimental design, probability, statistical inference and regression. In addition, techniques of statistical computing are covered. Credit is not given for both STAT 212 and STAT 200.
This course satisfies the General Education Criteria for:
Quantitative Reasoning I

STAT 361 Probability & Statistics for Computer Science credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/STAT/361/)
Same as CS 361. See CS 361.

STAT 385 Statistics Programming Methods credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/STAT/385/)
Statisticians must be savvy in programming methods useful to the wide variety of analysis that they will be expected to perform. This course provides the foundation for writing and packaging statistical algorithms through the creation of functions and object oriented programming. Fundamental programming techniques and considerations will be emphasized. Students will also create dynamic reports that encapsulate their implemented algorithms. Students must have access to a computer on which they can install software. Prerequisite: STAT 200 or STAT 212.

STAT 390 Individual Study credit: 1 or 2 Hours. (https://courses.illinois.edu/schedule/terms/STAT/390/)
May be repeated to a maximum of 8 hours. Prerequisite: Consent of instructor.

STAT 391 Honors Individual Study credit: 1 or 2 Hours. (https://courses.illinois.edu/schedule/terms/STAT/391/)
May be repeated to a maximum of 8 hours. Prerequisite: Consent of instructor.

STAT 400 Statistics and Probability I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/400/)
Introduction to mathematical statistics that develops probability as needed; includes the calculus of probability, random variables, expectation, distribution functions, central limit theorem, point estimation, confidence intervals, and hypothesis testing. Offers a basic one-term introduction to statistics and also prepares students for STAT 410 and STAT 425. Same as MATH 463. 4 undergraduate hours. 4 graduate hours. Prerequisite: MATH 231. Concurrent Enrollment in MATH 241 is required. Not intended for first-time freshmen.

STAT 408 Actuarial Statistics I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/408/)
Examines elementary theory of probability, including independence, conditional probability, and Bayes' theorem; combinations and permutations; random variables, expectations, and probability distributions; joint and conditional distributions; functions of random variables; sampling; central limit theorem. Same as ASRM 401. 4 undergraduate hours. 4 graduate hours. Credit is not given for both STAT 408 and either MATH 461 or STAT 400. Prerequisite: MATH 241 or equivalent.

STAT 409 Actuarial Statistics II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/409/)
Continuation of STAT 408. Examines parametric point and interval estimation, including maximum likelihood estimation, sufficiency, completeness, and Bayesian estimation; hypothesis testing; linear models; regression and correlation. Same as ASRM 402. 4 undergraduate hours. 4 graduate hours. Credit is not given for both STAT 409 and STAT 410. Prerequisite: STAT 408.

STAT 410 Statistics and Probability II credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/410/)
Continuation of STAT 400. Includes moment-generating functions, transformations of random variables, normal sampling theory, sufficiency, best estimators, maximum likelihood estimators, confidence intervals, most powerful tests, unbiased tests, and chi-square tests. Same as MATH 464. 3 undergraduate hours. 4 graduate hours. Credit is not given for both STAT 410 and STAT 409. Prerequisite: MATH 241 and STAT 400.

STAT 420 Methods of Applied Statistics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/420/)
Systematic, calculus-based coverage of the more widely used methods of applied statistics, including simple and multiple regression, correlation, analysis of variance and covariance, multiple comparisons, goodness of fit tests, contingency tables, nonparametric procedures, and power of tests; emphasizes when and why various tests are appropriate and how they are used. Same as ASRM 450. 3 undergraduate hours. 4 graduate hours. Prerequisite: STAT 408 or STAT 400; MATH 231 or equivalent; knowledge of basic matrix manipulations; or consent of instructor.

STAT 424 Analysis of Variance credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/424/)
Estimation and hypotheses testing in linear models; one-, two-, and higher-way layouts; incomplete layouts; analysis of covariance; and random effects models and mixed models. 3 undergraduate hours. 4 graduate hours. Prerequisite: Credit or concurrent registration in MATH 415 and STAT 410.

STAT 425 Statistical Modeling I credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/425/)
This is the foundation for advanced statistical modeling with a focus on multiple strategies for analyzing data. The course explores linear regression, least squares estimates, F-tests, analysis of residuals, regression diagnostics, transformations, model building, generalized and weighted least squares, PCA, A/B testing, randomization tests, ANOVA, random effects, mixed effects, and longitudinal data. Statistical computing is an integral part of the course. 3 undergraduate hours. 4 graduate hours. Prerequisite: STAT 400; MATH 257 or MATH 415. Concurrent Enrollment in STAT 410 is preferred.

STAT 426 Statistical Modeling II credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/426/)
This is a continuation in the study of advanced statistical modeling techniques with a focus on categorical data. The course explores logistic regression, generalized linear models, goodness-of-fit, link functions, count regression, log-linear models, probability models for contingency tables, and ordinal response models. Statistical computing is an integral part of the course. 3 undergraduate hours. 4 graduate hours. Prerequisite: STAT 410; STAT 425.

STAT 427 Statistical Consulting credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/427/)
Students, working in groups under the supervision of the instructor, consult with faculty and graduate students through the Statistical Consulting Service; readings from literature on consulting. 3 undergraduate hours. 4 graduate hours. Prerequisite: STAT 425 or consent of instructor.

STAT 428 Statistical Computing credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/428/)
Examines statistical packages, numerical analysis for linear and nonlinear models, graphics, and random number generation and Monte Carlo methods. Same as CSE 428. 3 undergraduate hours. 4 graduate hours. Prerequisite: STAT 410 or equivalent; knowledge of a programming language.

STAT 429 Time Series Analysis credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/429/)
Studies theory and data analysis for time series; examines auto-regressive moving average model building and statistical techniques; and discusses spectral model building and statistical analysis using windowed periodograms and Fast Fourier Transformations. 3 undergraduate hours. 4 graduate hours. Prerequisite: STAT 410.

STAT 430 Topics in Applied Statistics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/430/)
Formulation and analysis of mathematical models for random phenomena; extensive involvement with the analysis of real data; and instruction in statistical and computing techniques as needed. 3 undergraduate hours. 4 graduate hours. May be repeated in the same or separate terms if topics vary. Prerequisite: STAT 410; STAT 425. Some topics may require additional prerequisites. Read the section text for each topic.

STAT 431 Applied Bayesian Analysis credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/431/)
Introduction to the concepts and methodology of Bayesian statistics, for students with fundamental knowledge of mathematical statistics. Topics include Bayes' rule, prior and posterior distributions, conjugacy, Bayesian point estimates and intervals, Bayesian hypothesis testing, noninformative priors, practical Markov chain Monte Carlo, hierarchical models and model graphs, and more advanced topics as time permits. Implementations in R and specialized simulation software. Same as ASRM 453. 3 undergraduate hours. 4 graduate hours. Prerequisite: STAT 410 and knowledge of R.

STAT 432 Basics of Statistical Learning credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/432/)
Topics in supervised and unsupervised learning are covered, including logistic regression, support vector machines, classification trees and nonparametric regression. Model building and feature selection are discussed for these techniques, with a focus on regularization methods, such as lasso and ridge regression, as well as methods for model selection and assessment using cross validation. Cluster analysis and principal components analysis are introduced as examples of unsupervised learning. Same as ASRM 451. 3 undergraduate hours. 4 graduate hours. Prerequisite: STAT 400, and either STAT 420 or STAT 425.

STAT 433 Stochastic Processes credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/433/)
A stochastic process is a random process that represents the evolution of some system over time. Topics may include discrete-time and continuous-time Markov chains, birth-and-death chains, branching chains, stationary distributions, random walks, Markov pure jump processes, birth-and-death processes, renewal processes, Poisson process, queues, second order processes, Brownian motion (Wiener process), and Ito's lemma. 3 undergraduate hours. 4 graduate hours. Prerequisite: STAT 400 required, STAT 410 preferred, and MATH 225 (or equivalent knowledge of Linear Algebra) highly recommended.

STAT 434 Survival Analysis credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/434/)
Introduction to the analysis of time-to-event outcomes. Topics center around three main procedures: the Kaplan-Meier estimator, the log-rank test, and Cox regression. Emphasis on big-picture concepts, basic methodological understanding, and practical implementation in R. 3 undergraduate hours. 4 graduate hours. Prerequisite: STAT 410, STAT 420, and knowledge of R at the level of STAT 420.

STAT 440 Statistical Data Management credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/440/)
The critical elements of data storage, data cleaning, and data extractions that ultimately lead to data analysis are presented. Includes basic theory and methods of databases, auditing and querying databases, as well as data management and data preparation using standard large-scale statistical software. Students will gain competency in the skills required in storing, cleaning, and managing data, all of which are required prior to data analysis. Same as CSE 440. 3 undergraduate hours. 4 graduate hours. Prerequisite: STAT 400 or STAT 409.

STAT 443 Professional Statistics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/443/)
This project-based course emphasizes written, visual, and oral communication of statistical results and conclusions. An introduction to statistical consulting is also provided. Additional topics include introductions to statistical methodologies in industry and aspects of careers in statistics. 3 undergraduate hours. 4 graduate hours. Prerequisite: STAT 420 or consent of instructor.

STAT 447 Data Science Programming Methods credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/447/)
The field of data science is revolutionizing science and industries. Work across many fields is becoming more data driven, affecting available jobs and required skills. Increasing amounts of data, along with novel ways of analyzing them, lead the economy as well as society and daily life to become more data-dependent. This course aims to provide the principal foundations to working with data at scale. We will cover shell programming, git version control, SQL basics, a lot of R, and some more advanced topics such as Docker and some C++. 3 undergraduate hours. 4 graduate hours. Prerequisite: STAT 410.

STAT 448 Advanced Data Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/448/)
Several of the most widely used techniques of data analysis are discussed with an emphasis on statistical computing. Topics include linear regression, analysis of variance, generalized linear models, and analysis of categorical data. In addition, an introduction to data mining is provided considering classification, model building, decision trees, and cluster analysis. Same as CSE 448. 4 undergraduate hours. 4 graduate hours. Prerequisite: STAT 400 or STAT 409, and credit for or concurrent registration in STAT 410.

STAT 458 Math Modeling in Life Sciences credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/458/)
Same as ANSC 448 and IB 487. See ANSC 448.

STAT 480 Data Science Foundations credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/480/)
Examines the methods of data management and analysis for "big data", characterized by high volume, variety, velocity, and veracity. Attention will be focused on advanced statistical analysis and visualization in data science applications employing parallel processing, storage and distribution techniques necessary for analysis of massive data sets. Data mining techniques, machine learning methods, and streaming technologies will be utilized for real-time analysis. Students must have access to a computer on which they can install software. 3 undergraduate hours. 4 graduate hours. Prerequisite: STAT 425 and familiarity with high-level language (e.g. Python, Java, C, F#), and command line programming.

STAT 510 Mathematical Statistics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/510/)
Distributions, transformations, order-statistics, exponential families, sufficiency, delta-method, Edgeworth expansions; uniformly minimum variance unbiased estimators, Rao-Blackwell theorem, Cramer-Rao lower bound, information inequality; equivariance. Prerequisite: STAT 410.

STAT 511 Advanced Mathematical Statistics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/511/)
Provides an advanced introduction to rigorous mathematical foundations of statistical inference, covering topics such as distribution theory, point estimation theory, interval estimation, theory of hypothesis testing, and decision theory. 4 graduate hours. No professional credit. Prerequisite: Familiarity with probability theory and statistics at the level of STAT 410. For Graduate Students Only.

STAT 525 Computational Statistics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/525/)
Various topics, such as ridge regression; robust regression; jackknife, bootstrap, cross-validation and resampling plans; E-M algorithm; projection pursuit; all with a strong computational flavor. Same as CSE 525. May be repeated if topics vary. Prerequisite: STAT 425, STAT 426, and STAT 511; or consent of instructor.

STAT 527 Advanced Regression Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/527/)
An advanced introduction to regression analysis with applications to analysing data from disciplines such as biostatistics and economics. The course will introduce classical as well as modern regression methods and goes into the depths of those techniques to understand the motivation, justification, implementation of those methods. An emphasis will be given to understand the statistical properties of those methods along with their practical advantages and limitations. Both theoretical and applied aspects of regression analysis will be discussed. 4 graduate hours. No professional credit. Prerequisite: STAT 410, STAT 510 (concurrent enrollment is sufficient), and knowledge of R. For Graduate Students Only.

STAT 528 Advanced Regression Analysis II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/528/)
An advanced (graduate-level) introduction to generalized linear models and categorical data analysis with applications to analyzing data from disciplines such as biostatistics, economics, evolutionary biology, and medicine. The course will introduce classical techniques as well as modern methods. A strong emphasis will be placed on statistical properties of presented methods as well as data analysis practice and critical statistical thinking. Practical advantages, limitations, and comparisons of methods will be discussed. 4 graduate hours. No professional credit. Prerequisite: STAT 510, STAT 527. Restricted to graduate students only.

STAT 530 Bioinformatics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/530/)
Same as ANSC 543, CHBE 571, and MCB 571. See CHBE 571.

STAT 533 Advanced Stochastic Processes credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/533/)
A nonmeasure theoretic introduction of stochastic processes. Students with suitable background in probability theory, real analysis and linear algebra are welcome to attend. Some classical topics will be included, such as discrete time Markov chains, continuous time Markov chains, Martingales, Renewal processes and Brownian motion. Students will learn some basic theory of stochastic processes, and their applications in several areas, including Queueing theory, Risk theory and Statistics. Students will also learn some probabilistic intuition and insights in thinking about problems, and some basic tools in the theoretical investigation of stochastic phenomenon and models. 4 graduate hours. No professional credit. Prerequisite: MATH 540, MATH 415 and MATH 461.

STAT 534 Advanced Survival Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/534/)
Introduction to the analysis of time-to-event outcomes. Topics include censoring, discrete survival, parametric models, nonparametric one- and K-sample methods, Cox regression, regression diagnostics, time-dependent covariates, and multivariate survival outcomes. Emphasis on key underlying concepts. Counting process-based theoretical justification and practical implementation will also be discussed. 4 graduate hours. No professional credit. Prerequisite: STAT 410, STAT 425, and knowledge of R.

STAT 538 Clinical Trials Methodology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/538/)
The topics of the course focus on clinical trials designs and inferential techniques that are commonly used in the pharmaceutical industry. Topics include fixed sample designs for normal and survival data, two-sided group sequential design, Pocock's and O'Brien-Fleming boundaries, general theory of group sequential design, alpha and beta spending functions, one-sided designs with early stopping to accept the null hypothesis, non-inferiority designs, and inferential techniques. Computing in SAS will be emphasized. 4 graduate hours. No professional credit. Prerequisite: STAT 410, STAT 425, and familiarity with SAS.

STAT 541 Predictive Analytics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/541/)
Same as ASRM 552. See ASRM 552.

STAT 542 Statistical Learning credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/542/)
Modern techniques of predictive modeling, classification, and clustering are discussed. Examples of these are linear regression, nonparametric regression, kernel methods, regularization, cluster analysis, classification trees, neural networks, boosting, discrimination, support vector machines, and model selection. Applications are discussed as well as computation and theory. Same as ASRM 551 and CSE 542. 4 graduate hours. No professional credit. Prerequisite: STAT 410 and STAT 425.

STAT 543 Appl. Multivariate Statistics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/543/)
Same as CPSC 543. See CPSC 543.

STAT 545 Spatial Statistics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/545/)
Theory and methods for analyzing univariate and multivariate spatial and spatio-temporal data. Covers both fundamental theories and cutting-edge research advances for geostatistics, and statistical methods for aggregated data and point processes. Real data examples will be provided in class and statistical software will be used to illustrate the data analysis. 4 graduate hours. No professional credit. Prerequisite: STAT 425 or equivalent.

STAT 546 Machine Learning in Data Science credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/546/)
Trains students to analyze large complex data using advanced statistical learning methods and algorithms. The main topics in the course include: data exploration and interpretation in data science; large data processing; regularization methods; optimization tools; deep learning; recommender systems; network and graphical models; text mining; and imaging analyses. Students will gain practical skills of data mining and knowledge discovery in various applications such as business, political science, biology and medicine. 4 graduate hours. No professional credit. Prerequisite: STAT 510 or STAT 410 (students must have taken either STAT 510 or STAT 410) and STAT 425.

STAT 551 Theory of Probability I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/551/)
Same as MATH 561. See MATH 561.

STAT 552 Theory of Probability II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/552/)
Same as MATH 562. See MATH 562.

STAT 553 Probability and Measure I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/553/)
Measures and probabilities; integration and expectation; convergence theorems and inequalities for integrals and expectations; independence; convergence in probability, almost surely, and mean; Three Series Theorem; laws of large numbers. Prerequisite: MATH 447 or consent of instructor.

STAT 554 Probability and Measure II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/554/)
Measure extensions, Lebesque-Stieltjes measure, Kolmogorov consistency theorem; conditional expectation, conditional probability, martingales; distribution functions and characteristic functions; convergence in distribution; Central Limit Theorem; Brownian Motion. Credit is not given for both STAT 554 and either MATH 561 or MATH 562.

STAT 555 Applied Stochastic Processes credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/555/)
Same as MATH 564. See MATH 564.

STAT 556 Advanced Time Series Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/556/)
This is a graduate-level course on time series analysis, with an emphasis on nonlinear and multivariate time series. Topics include: linear time series, nonlinear time series, continuous-time models, multivariate and high-dimensional models. Students will learn how to build adequate models, perform statistical estimation and inference, conduct prediction, and related topics. Students will also learn some basic mathematical tools (such as Markov chains, martingales, stochastic calculus, concentration inequalities, etc.) for theoretically analyzing large-sample properties of general nonlinear random processes. 4 graduate hours. No professional credit.

STAT 558 Risk Modeling and Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/558/)
Same as MATH 563. See MATH 563.

STAT 571 Multivariate Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/571/)
Inference in multivariate statistical populations emphasizing the multivariate normal distribution; derivation of tests, estimates, and sampling distributions; and examples from the natural and social sciences. Prerequisite: STAT 410 and MATH 415, or consent of instructor.

STAT 575 Large Sample Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/575/)
Limiting distribution of maximum likelihood estimators, likelihood ratio test statistics, U-statistics, M-, L-, and R-estimators, nonparametric test statistics, Von Mises differentiable statistical functions; asymptotic relative efficiencies; asymptotic expansions. Same as ECON 578. Prerequisite: STAT 511 and either MATH 561 or STAT 554.

STAT 576 Empirical Process Theory and Weak Convergence credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/576/)
A graduate-level introduction to Empirical Process Theory with applications to statistical M estimation, nonparametric regression, and high dimensional statistics. Empirical Process Theory deals with two fundamental questions: the uniform law of large numbers, and the uniform central limit theorems, both of which will be covered. This course provides rigorous training in empirical process for students with a strong background in mathematical statistics. Topics covered are useful for conducting modern theoretical research in statistics and probability. 4 graduate hours. No professional credit. Prerequisite: STAT 511, STAT 575, STAT 553. Restricted to graduate students only.

STAT 578 Topics in Statistics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/578/)
May be repeated if topics vary. Prerequisite: Consent of instructor.

STAT 587 Hierarchical Linear Models credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/587/)
Same as PSYC 587 and EPSY 587. See EPSY 587.

STAT 588 Covar Struct and Factor Models credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/STAT/588/)
Same as EPSY 588, PSYC 588, and SOC 588. See PSYC 588.

STAT 590 Individual Study and Research credit: 0 to 8 Hours. (https://courses.illinois.edu/schedule/terms/STAT/590/)
Directed reading and research. Approved for letter and S/U grading. May be repeated with approval. Prerequisite: Consent of instructor.

STAT 593 STAT Internship credit: 0 to 8 Hours. (https://courses.illinois.edu/schedule/terms/STAT/593/)
Supervised, off-campus experience in a field in which statistical science plays an important role. Approved for letter and S/U grading. Prerequisite: STAT 425 and consent of instructor.

STAT 595 Preparing Future Faculty credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/STAT/595/)
Prepares Ph.D. students who are interested in an academic career to develop a successful academic career path, and to prepare graduate students for their future roles as teachers, and researchers. The course will focus on profession, job search, research, teaching and service. The course will involve guest panels, small and large group presentations and interactive Q&A with student participation.

STAT 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/STAT/599/)
Approved for S/U grading only. May be repeated. Prerequisite: Consent of instructor.

SBC - STRATEGIC BRAND COMMUNICATION

SBC Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/SBC/)

Courses

SBC 500 Strategic Brand Communication Essentials credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/SBC/500/)
This course provides an overview of marketing and brand management: consumer analysis; brand positioning, integration, metrics and value. 2 graduate hours. No professional credit. Prerequisite: Restricted to MS: SBC students.

SBC 501 Strategic Branding: Global Perspectives credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/SBC/501/)
Within the context of globalization, the course underscores the importance of understanding consumers' values, attitudes, and behaviors for effective product positioning, brand value and effective marketing communications across borders. Focus on consumer behavior and brand positioning across local, regional, and global contexts. This course is designed to provide students with an advanced understanding of consumer behavior in a global context. 2 graduate hours. No professional credit. Prerequisite: Restricted to MS SBC students.

SBC 502 Entrepreneurship in Business credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SBC/502/)
Covers key elements of starting a business or launching a product including ideation, legal formation, funding, positioning, targeting and marketing. Students can apply these principles and skills to develop and launch new initiatives or become more entrepreneurial in their job. 3 graduate hours. No professional credit. Approved for Letter and S/U grading. Prerequisite: Restricted to MS: SBC Students.

SBC 503 Consumer Insights I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SBC/503/)
The course explores how cultural, sociological and psychological factors shape consumer behavior. It will provide an overview of the key concepts of the discipline of consumer behavior and enable students to put into practice the new found understanding of consumer behavior to shape branding strategies. 3 graduate hours. No professional credit. Approved for Letter and S/U grading. Prerequisite: Restricted to MS: SBC students.

SBC 504 Managing Projects & Teams credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SBC/504/)
Successful Strategic Brand Communication requires working on a series of projects. This course provides a socio-technical perspective to the management of projects. The technical dimensions deal with needs analysis, work breakdown, scheduling, resource allocation, risk management, and performance tracking and evaluation - within the allocated time frame and cost. The sociocultural dimensions include attributes of sound leadership, formation and management of teams, and managing customer expectations in order to formulate consistent, integrated campaigns across channels. 3 graduate hours. No professional credit. Approved for Letter and S/U grading. Prerequisite: Restricted to MS: SBC students.

SBC 505 Consumer Insights II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SBC/505/)
The course will provide an overview of the key qualitative methods used to gain strategic insights into consumer behavior and to provide practice in planning research projects, data collection, and analysis. 3 graduate hours. No professional credit. Approved for Letter and S/U grading. Prerequisite: Restricted to MS: SBC students.

SBC 506 Measurement and Evaluation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SBC/506/)
This course will focus on the method and analysis for consumer insights but also for measuring effectiveness of various promotional strategies and campaign effectiveness. This includes an overview of quantitative research methods with emphasis on analysis and interpretation of data, and application to evaluating effectiveness of promotional strategies. 3 graduate hours. No professional credit. Prerequisite: Restricted to MS: SBC students.

SBC 507 Promotional Strategy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SBC/507/)
This course will familiarize students with the topic of marketing communications and promotion management, and will teach students the steps for strategically planning a strategic brand communications campaign. The culmination of this course will be a campaign for a real-world client. 3 graduate hours. No professional credit. Prerequisite: Restricted to MS: SBC students.

SBC 508 Promotional Strategy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SBC/508/)
Familiarizes students with the topic of marketing communications and promotion management, and will teach students the steps for strategically planning a strategic brand communications campaign. The culmination of this course will be a campaign for a real-world client. 3 graduate hours. No professional credit. Credit is not given for both SBC 508 and SBC 507. Prerequisite: Restricted to MS: SBC students.

SBC 509 Strategic Media Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SBC/509/)
Analyzes the markets served by various advertising media and factors to consider in the selection and evaluation of media. Markets include investors, employees, and consumer segments. This course will also cover managing media in a global context. This course is designed to provide students with an advanced understanding of media analysis, planning, buying and optimization. 3 graduate hours. No professional credit. Prerequisite: SBC 502, SBC 507. Restricted to MS: SBC students.

SBC 510 Messaging Strategy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SBC/510/)
Creating and executing successful messages across communication channels. Explores the development of persuasive messaging through theories of persuasion, consumer-information processing and theories of creativity. The course examines the relationship between creative strategy and creative executions while allowing students to practice creating content for traditional and non-traditional media. Strategic brand communication manages every message and contact point within an organization. Audiences include not only consumers, but employees, stockholders, the media, and others. 3 graduate hours. No professional credit. Students may not earn credit for SBC 510, Messaging Strategy, if credit was earned for SBC 508, Messaging Strategy, prior to Spring 2021. Prerequisite: SBC 507.

SBC 511 Strategic Analytics & Data Visual credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/SBC/511/)
This course will prepare students to utilize data for targeting and building customer and brand relationships, with an emphasis on new and emerging media. The students will get exposure to principles of working with structured data using relational databases and data warehouses. They will understand how to work with unstructured data from the web. They will also get exposure to select data mining methods relevant to data commonly worked on by marketing and communication executives and apply these concepts with cases/exercises during each of these modules. 2 graduate hours. No professional credit. Approved for Letter and S/U grading. Prerequisite: Restricted to MS: SBC student.

SBC 512 Professional SBC Capstone Project credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/SBC/512/)
This course serves as a capstone, requiring the student to demonstrate a mastery of knowledge in the primary areas of Strategic Brand Communication. The project is designed to allow the student to demonstrate his/her mastery of strategic brand communication, focused on Creating and Executing a Research Plan; Repositioning Analysis and Strategy; Strategic Brand Communication Strategy & Tactics; Media Strategy & Tactics; Campaign Monitoring and Evaluation. 2 graduate hours. No professional credit. Prerequisite: SBC 511. Restricted to MS: SBC students.

SWAH - SWAHILI

SWAH Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/SWAH/)

Courses

SWAH 199 Undergraduate Open Seminar credit: 1 to 5 Hours. **(**https://courses.illinois.edu/schedule/terms/SWAH/199/**)**
Topics in Swahili language and culture. Specific topic varies by semester. May be repeated in separate semesters up to a maximum of 6 undergraduate hours if topics vary.

SWAH 201 Elementary Swahili I credit: 5 Hours. **(**https://courses.illinois.edu/schedule/terms/SWAH/201/**)**
Beginning standard Swahili; emphasizes grammar, pronunciation, reading and conversation in standard Swahili. Same as AFST 231. Participation in language laboratory required.

SWAH 202 Elementary Swahili II credit: 5 Hours. **(**https://courses.illinois.edu/schedule/terms/SWAH/202/**)**
Continuation of elementary Swahili, with introduction of more advanced grammar; emphasizes more fluency in speaking, reading, and writing simple sentences in standard Swahili. Same as AFST 232. Participation in language laboratory required. Prerequisite: SWAH 201.

SWAH 403 Intermediate Swahili I credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/SWAH/403/**)**
Second-year Swahili with emphasis on developing conversational fluency; some readings on Swahili culture and customs. Same as AFST 433. 4 undergraduate hours. 4 graduate hours. Prerequisite: One year of Swahili.

SWAH 404 Intermediate Swahili II credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/SWAH/404/**)**
Continuation of SWAH 403; emphasis on the development of appropriate reading, writing, speaking, and comprehension skills in Standard Swahili, and understanding of East African culture. Same as AFST 434. 4 undergraduate hours. 4 graduate hours. Prerequisite: SWAH 403 or equivalent.

SWAH 405 Advanced Swahili I credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/SWAH/405/**)**
Third-year Swahili with emphasis on conversational fluency and on increased facility in reading Swahili texts, including current newspaper prose and (East) African culture materials. Same as AFST 435. 3 undergraduate hours. 3 graduate hours. Prerequisite: SWAH 404 or equivalent.

SWAH 406 Advanced Swahili II credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/SWAH/406/**)**
Third-year Swahili with emphasis on conversational fluency and on increased facility in reading Swahili texts, including current newspaper prose and (East) African culture materials. Same as AFST 436. 3 undergraduate hours. 3 graduate hours. Prerequisite: SWAH 405 or equivalent.

SWAH 407 Topics Swahili Lang & Lit I credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/SWAH/407/**)**
Selected readings from modern Kiswahili authors, with a focus on novels, plays, and basic poetry illustrative of East African cultural issues and advanced level Kiswahili grammar, as well as development of expository writing skills. Same as AFST 405. 3 undergraduate hours. 3 graduate hours. Prerequisite: SWAH 406.

SWAH 408 Topics Swahili Lang & Lit II credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/SWAH/408/**)**
Continuation of SWAH 407 with increased emphasis on the reading and comprehension of literary texts exemplified in advanced level novels, plays, and poetry, as well as on advanced mastery of expository writing skills. Same as AFST 406. 3 undergraduate hours. 3 graduate hours. Prerequisite: SWAH 407.

SWAH 409 Adv Topics Swahili Lang&Lit I credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/SWAH/409/**)**
Introduction to Kiswahili in the professions as documented in selected newspapers, educational radio and TV programs, works of fiction, biographies, anthologies, and professional journals. Students will be introduced to argumentative writing in Kiswahili, expected to make oral presentations, and to write a research paper in their field. Same as AFST 407. 3 undergraduate hours. 4 graduate hours. Prerequisite: SWAH 408.

SWAH 410 Adv Topics Swahili Lang&Lit II credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/SWAH/410/**)**
Continuation of SWAH 409 with increased emphasis on the development of comprehension and writing of professional language. Same as AFST 408. 3 undergraduate hours. 4 graduate hours. Prerequisite: SWAH 409.

SE - SYSTEMS ENGINEERING AND DESIGN

SE Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/SE/)

Courses

SE 100 Introduction to ISE credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/SE/100/)
Overview of the engineering profession, the Industrial & Enterprise Systems Engineering Department, and the curricula in Industrial Engineering and Systems Engineering and Design.

SE 101 Engineering Graphics & Design credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SE/101/)
Computer-aided design (CAD) software modeling of parts and assemblies. Parametric and non-parametric solid, surface, and wireframe models. Part editing and two-dimensional documentation of models. Planar projection theory, including sketching of perspective, isometric, multiview, auxiliary, and section views. Spatial visualization exercises. Dimensioning guidelines, tolerancing techniques. Team design project. Credit is not given for both SE 101 and ME 170.

SE 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/SE/199/)
Undergraduate Open Seminar. May be repeated.

SE 261 Business Side of Engineering credit: 1 or 2 Hours. (https://courses.illinois.edu/schedule/terms/SE/261/)
Important elements and metrics of business and contemporary engineering economics: wealth creation, cash flow diagrams, internal rate of return, net present value, breakeven analysis, companies, corporations, profits, prices, balance sheets, income statements, and the basics of business plan writing. Particular emphasis is given to preparation for the economic analysis component of engineering practice.

SE 290 ISE Undergraduate Seminar credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/SE/290/)
Lecture-discussion series by department faculty and visiting professional engineers addressing ethics, professional registration, the role of technical societies, and the relation of engineering to such disciplines as economics, sociology, and government. Approved for S/U grading only.

SE 297 Independent Study credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/SE/297/)
Individual investigations of any phase of Systems Engineering and Design selected by the students and approved by the department. May be repeated. Prerequisite: Consent of instructor.

SE 298 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/SE/298/)
Subject offerings of new and developing areas of knowledge in general engineering intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites.

SE 310 Design of Structures and Mechanisms credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SE/310/)
Fundamental concepts in the classical and computer-based analysis and design of structural and machine components and assemblies. External loads, internal forces, and displacements in statically determinate and indeterminate configurations: kinematics of linkages, gears, and cams; static forces in machines. Prerequisite: CS 101, TAM 212, and TAM 251. Credit or concurrent enrollment in MATH 415.

SE 311 Engineering Design Analysis credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SE/311/)
Stress-strain conditions; analytical and numerical (CAD) solution techniques; analysis of various engineering materials and configurations as applied to the development and application of design analysis criteria. Prerequisite: SE 310; concurrent registration in SE 312.

SE 312 Instrumentation and Test Lab credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/SE/312/)
Preparation for experimental projects; mechanical and electrical instruments; mechanical testing of materials; experimental stress analysis and photoelastic methods. Prerequisite: SE 310; concurrent registration in SE 311.

SE 320 Control Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SE/320/)
Fundamental control systems and control systems technology. Sensors, actuators, modeling of physical systems, design and implementation of feedback controllers; operational techniques used in describing, analyzing and designing linear continuous systems; Laplace transforms; response via transfer functions; stability; performance specifications; controller design via transfer functions; frequency response; simple nonlinearities. Credit is not given for both SE 320 and either AE 353 or ME 340. Prerequisite: CS 101, MATH 285, and TAM 212; credit or concurrent registration in ECE 211.

SE 361 Emotional Intelligence Skills credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SE/361/)
Understanding emotions in ourselves and others. Assessment and improvement of interpersonal skills and emotional intelligence competencies including self-regulation, motivation, empathetic listening, communication, influence collaboration and cooperation, conflict management, leadership, teamwork, and managing change. Includes one Saturday laboratory session.

SE 397 Independent Study credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/SE/397/)
Individual investigations or studies of any phase of General Engineering selected by the students and approved by the department. May be repeated in same term. Prerequisite: Consent of instructor.

SE 398 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/SE/398/)
Subject offerings of new and developing areas of knowledge in general engineering intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites.

SE 400 Engineering Law credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SE/400/)
Nature and development of the legal system; legal rights and duties important to engineers in their professions; contracts, uniform commercial code and sales of goods, torts, agency, worker's compensation, labor law, property, environmental law, intellectual property. 3 undergraduate hours. 4 graduate hours. Prerequisite: RHET 105.

SE 402 Comp-Aided Product Realization credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SE/402/)
Computer-aided design, analysis, and prototyping tools used in the produce development process. Principles of computer graphics and geometric modeling, including transformations, coordinate systems, parametric solid modeling, spline curves, and surface modeling. Finite element and kinematics analyses. Rapid prototyping, product dissection, CAD-CAM-CAE operability issues, and CAD collaboration tools. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: SE 101 and SE 311.

SE 410 Component Design credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SE/410/)
Design of basic engineering components: structural members, machine parts, and connections. Principles applied include: material failure (yield, fracture, fatigue); buckling and other instabilities; design reliability; analytical simulation. 3 undergraduate hours. 3 graduate hours.
This course is an approved Design Elective in the SE Undergraduate curriculum. Prerequisite: SE 311 and SE 320.

SE 411 Reliability Engineering credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SE/411/)
Concepts in engineering design, testing, and management for highly reliable components and systems. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: IE 300.

SE 412 Nondestructive Evaluation credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SE/412/)
Nondestructive Evaluation (NDE) principles and the role of NDE in design, manufacturing, and maintenance. Primary Nondestructive Testing and Evaluation (NDT&E) techniques, introduced from the fundamental laws of physics, including visual, ultrasonic, acoustic emission, acousto-ultrasonic, radiology, electro-magnetic, eddy-current, penetrant, thermal, and holographic. Industrial applications of probability of flaw detection, material properties characterization, impact and fatigue damage evaluation, adhesion, etc. Current literature. 3 or 4 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CEE 300.

SE 413 Engineering Design Optimization credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SE/413/)
Application of optimization techniques to engineering design problems. Emphasis on problem formulation, including applications in structural, mechanical, and other design domains. Important theoretical results and numerical optimization methods. Matlab programming assignments to develop software for solving nonlinear mathematical programming problems. 3 or 4 undergraduate hours. 3 or 4 graduate hours. Prerequisite: MATH 241 and MATH 415.

SE 420 Digital Control Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SE/420/)
Theory and techniques for control of dynamic processes by digital computer; linear discrete systems, digital filters, sampling signal reconstruction, digital design, state space methods, computers, state estimators, and laboratory techniques. 4 undergraduate hours. 4 graduate hours. Prerequisite: SE 320.

SE 422 Robot Dynamics and Control credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SE/422/)
Fundamental concepts and analytical methods for analysis and design of robot systems. Laboratory experiments complement theoretical development. Same as ECE 489 and ME 446. 4 undergraduate hours. 4 graduate hours. Prerequisite: SE 320. Recommended: ECE 470.

SE 423 Mechatronics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SE/423/)
Mechatronics concepts and practice: computer interfacing of physical devices (sensors, actuators); data acquisition; real time programming and real time control; human-machine interfaces; design principles of mechatronics in manufacturing systems and in consumer systems. 3 undergraduate hours. 3 graduate hours. Prerequisite: SE 320.

SE 424 State Space Design for Control credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SE/424/)
Design methods; time domain modeling; trajectories and phase plane analysis; similarity transforms; controllability and observability; pole placement and observers; linear quadratic optimal control; Lyapunov stability and describing functions; simulation. 3 undergraduate hours. 3 graduate hours. Prerequisite: SE 320 and MATH 415.

SE 450 Decision Analysis I credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SE/450/)
Rules of thought that transform complex decision situations into simpler ones where the course of action is clear. Practical application of decision analysis in large organizations; methods to generate insights into real-life decision problems, avoid the common pitfalls in decision processes, and overcome the possible barriers to implementing a high-quality decision-making process for individual and organizational decision making; graphical representations of decision problems such as decision diagrams and utility diagrams. 3 or 4 undergraduate hours. 3 or 4 graduate hours. Prerequisite: IE 300.

SE 494 Senior Engineering Project I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/SE/494/)
Senior engineering project - team component. Student teams of three or four, guided by faculty advisors, develop solutions to real-world engineering problems provided by industry-partnering companies, subject to realistic constraints and supported by economic analyses and recommendations for implementation. Prototype solutions fabricated where practical. Multiple reports and presentations throughout the term. Several trips to company typical. Common project grade for all team members. SE 494 and SE 495 taken concurrently fulfill the Advanced Composition Requirement. Approval of the department is required to register. 3 undergraduate hours. No graduate credit. Prerequisite: SE 261, SE 290 and; SE 311, IE 300, IE 310, and TAM 335; or IE 310, IE 311, and IE Technical Elective; credit or concurrent registration in a SE Design Elective and IE Engineering Science Elective. Must enroll concurrently in SE 495.
This course satisfies the General Education Criteria for:
Advanced Composition

SE 495 Senior Engineering Project II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/SE/495/)
Adjunct to SE 494. Senior engineering project -- individual component. Individual grade for each team member. SE 494 and SE 495 taken concurrently fulfill the Advanced Composition Requirement. 2 undergraduate hours. No graduate credit. Prerequisite: Concurrent registration in SE 494.
This course satisfies the General Education Criteria for:
Advanced Composition

SE 497 Independent Study credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/SE/497/)
Advanced problems related to General Engineering. 0 to 4 undergraduate hours. 0 to 4 graduate hours. Approved for Letter and S/U grading. May be repeated in same term. Prerequisite: Consent of instructor.

SE 498 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/SE/498/)
Subject offerings of new and developing areas of knowledge in general engineering intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. 1 to 4 undergraduate hours. 1 to 4 graduate hours.

SE 520 Analysis of Nonlinear Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SE/520/)
Same as ECE 528 and ME 546. See ECE 528.

SE 521 Multivariable Control Design credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SE/521/)
Same as AE 555. See AE 555.

SE 523 Discrete Event Dynamic Systems credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SE/523/)
Modeling, analysis, control, and performance evaluation of discrete event dynamic systems (DEDS), which are characterized by state changes only at discrete points in time in response to the occurrence of particular events. Discrete-state and discrete-event models decidability, computational issues, forbidden-state problems, forbidden-string problems, enforcing safety and liveness properties via supervision, generalized semi-Markov processes, sensitivity analysis via likelihood ratio and infinitesimal perturbation methods. 3 or 4 graduate hours. No professional credit. Prerequisite: CS 173 or MATH 213; CS 225; MATH 415; MATH 461.

SE 524 Data-Based Systems Modeling credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SE/524/)
Identification and building of mathematical and computational models directly from data. Systems and model types, such as state-space and distributed-parameter; parametric estimation methods, such as regression and least-squares recent subspace identification methods; data preprocessing techniques; model validation methods. Assignment applications to a wide range of dynamical systems, including biological, electro-mechanical, and economic. 4 graduate hours. No professional credit. Prerequisite: SE 424 and IE 300.

SE 525 Control of Complex Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SE/525/)
Control methodologies for complex (i.e., interconnected) dynamic systems. A unified framework based on the vector Liapunov functions concept is used to examine various methodologies: decentralized overlapping control; optimal control of interconnected systems; multi-player differential game theory; decentralized optimization and its link with the multi-criteria optimization. Illustrative examples in areas such as control of groups of unmanned vehicles, control of power systems, and coverage control. 4 graduate hours. No professional credit. Prerequisite: SE 424.

SE 530 Multiattribute Decision Making credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/SE/530/)
Tools for subjective multiple attribute decision making when present or future states of nature are uncertain. Exploration of current research in developing computer aids to decision making. Issues in descriptive versus normative approaches in the context of the interface between operations research and artificial intelligence. Multiattribute utility analysis from theoretical foundations through assessment procedures, practice, and pitfalls of potential cognitive bases. 4 graduate hours. No professional credit. Prerequisite: CEE 202 or IE 300.

SE 550 Decision Analysis II credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/SE/550/)
Continuation of SE 450. Fundamental requirements of a decision-making system; comparison of different decision-making methods; "paradoxes" in decision making; foundations and history of probability as a degree of belief; Bayesian vs. classical statistics; entropy of a random variable; experimentation and optimal stopping; invariance formulations in utility and probability; one-switch preferences; graph-based methods to incorporate dependence in multiattribute utility functions. 3 or 4 graduate hours. No professional credit. Prerequisite: SE 450.

SE 590 Seminar credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/SE/590/)
Presentations by graduate students, staff, and guest lecturers of current topics in research and development in Systems and Entrepreneurial Engineering. 0 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated. Prerequisite: Required of all graduate students each term.

SE 594 Project Design credit: 1 to 8 Hours. (https://courses.illinois.edu/schedule/terms/SE/594/)
Engineering design projects emphasizing advanced engineering analysis, synthesis, optimization, and engineering economics. 1 to 8 graduate hours. No professional credit. May be repeated to a maximum of 8 hours for credit toward the Master's degree.

SE 597 Independent Study credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/SE/597/)
Advanced problems related to Systems and Entrepreneurial Engineering. 1 to 4 graduate hours. No professional credit. May be repeated. Prerequisite: Consent of instructor.

SE 598 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/SE/598/)
Subject offerings of new and developing areas of knowledge in general engineering intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. 1 to 4 graduate hours. No professional credit. May be repeated in the same or separate terms if topics vary to a maximum of 12 hours.

SE 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/SE/599/)
Thesis Research. 0 to 16 graduate hours. No professional credit. Approved for S/U grading only. May be repeated to a maximum of 16 hours for credit toward the Master's or PhD degree.

TSM - TECHNICAL SYSTEMS MANAGEMENT

TSM Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/TSM/)

Courses

TSM 100 Technical Systems in Agr credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TSM/100/)
Examples, problems, discussions, and laboratory exercises pointing to present and potential engineering applications in agriculture; emphasis on power and machinery, soil and water control, electricity, and structures.

TSM 103 Agricultural Machinery and Technology credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/TSM/103/)
Provides an exploratory experience in modern agricultural machinery and technology. It covers the fundamentals of modern agriculture as a system including markets, plant and soil science, and operations. Agricultural machinery and its integration with advanced technologies will be introduced. Topics include seeders, combine harvesters, GPS and navigation, field robotics, remote sensing, and a global perspective of agricultural technology. Content is designed for any academic discipline or experience level.

TSM 130 Basics of CAD credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/TSM/130/)
Introduction to Computer Aided Drawing and Design (CAD). Application of two and three dimensional CAD tools in construction systems for creating project plans, structures and building floor plans with fixtures and layers representing electrical and plumbing configurations. Self-paced learning through on-line tutorials with instructor guidance.

TSM 132 Basics of Project Management credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/TSM/132/)
Covers the basic concepts of project management software. Students will learn introductory features of project management software and utilize these features to complete class projects.

TSM 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/TSM/199/)
Open seminar or experimental course on a topic in technical systems management. May be repeated to a maximum of 12 hours.

TSM 232 Materials and Construction Sys credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TSM/232/)
Selection, use, and maintenance of hand and power tools; shop safety; selection of building and roofing materials; concrete masonry construction; and site preparation. Includes laboratory. Priority is given to technical systems management majors.

TSM 233 Metallurgy & Welding Process credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TSM/233/)
Selecting and using metal-arc, inert-gas, submerged arc, oxyacetylene welding and plasma cutting processes for construction and maintenance. Includes laboratory. Additional fees may apply. See Class Schedule.

TSM 234 Wiring, Motors and Control Sys credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TSM/234/)
Selecting and using wiring materials, electric motors and controls in lighting, heating, ventilation, and materials handling problems. Includes laboratory. Prerequisite: TSM 100.

TSM 262 Off-Road Equipment Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TSM/262/)
Performance, costs, application, selection, and replacement of off-road machinery and field implements; analysis of mechanized field operations. Includes laboratory.

TSM 293 Off-Campus Internship credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/TSM/293/)
Supervised off-campus experience in a field directly pertaining to technical systems management. May be repeated to a maximum of 6 hours. Prerequisite: Sophomore standing and consent of instructor.

TSM 295 Undergrad Research or Thesis credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/TSM/295/)
Individual research, special problems, thesis, development and/or design work under the supervision of an appropriate member of the faculty. May be repeated to a maximum of 12 hours. Prerequisite: Sophomore standing, cumulative GPA of 2.5 or above at the time the activity is arranged, and consent of instructor.

TSM 311 Humanity in the Food Web credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TSM/311/)
The human food web is the complex network of technologies, environments, people, and social institutions that produces, processes, and distributes the world's food supply. Students will study the food webs of the past, present, and future and will explore various human roles, including their own, in the global technology-environment-society-food system. Course topics include domestication, mechanization, urbanization, the green revolution, biotechnology, food safety, the environment, and appropriate technologies for developing countries. Additional fees may apply. See Class Schedule.
This course satisfies the General Education Criteria for:
Advanced Composition
Humanities - Hist Phil

TSM 339 Optimization in Engineering Technology and Management credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TSM/339/)
Covers foundational skills in applied data analysis with a primary focus on optimization. Concepts related to sensors and data will first be discussed followed by data acquisition and basic digital signal processing. Foundations of optimization will be introduced with an emphasis on application. This will include linear and non-linear, single and multiple objective, spatial, and stochastic optimization methods. Assignments will contain real world examples in the topic areas of agriculture, construction, manufacturing, and the environment. Prerequisite: MATH 234 or equivalent; ACE 262, CPSC 241, ECON 202 or equivalent, STAT 107; and CS 105 or equivalent, or consent of the instructor.

TSM 352 Land and Water Mgt Systems credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TSM/352/)
Principles of planning, implementing and utilizing land and water practices for Illinois land uses, especially agriculture. Includes laboratory. Prerequisite: Completion of Quantitative Reasoning requirement.

TSM 363 Fluid Power Systems credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/TSM/363/)
Emphasizes basic principles of fluid power systems related to off-road vehicles. Topics include fundamentals of fluid power systems, principles of key fluid power components, and maintenance of fluid power systems. Credit is not given for both TSM 363 and ABE 223.

TSM 371 Residential Housing Design credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TSM/371/)
Principles and practices in residential housing; space planning, house types, structures, materials, utilities, environmental control, energy conservation, remodeling, and economic influences. Includes laboratory.

TSM 372 Environ Control & HVAC Systems credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TSM/372/)
Introduction to heating, ventilating, and air-conditioning (HVAC) systems for building environment control. Topics include: psychrometrics, basic calculation of heating and cooling loads, human comfort and ventilation requirements, typical HVAC and control systems.

TSM 381 Grain Drying & Storage Systems credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TSM/381/)
Grain drying fundamentals, air-moisture relationships, grain drying systems for efficient energy use, fans, grain-handling devices and systems, planning of grain handling systems, grain standards, moisture measurement, grain storage, fungi and insect problems, aeration, processing and milling of corn and soybeans. Includes laboratory.

TSM 396 UG Honors Research or Thesis credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/TSM/396/)
Individual research, special problems, thesis, development and/or design work under the direction of the Honors advisor. May be repeated to a maximum of 12 hours. Prerequisite: Junior standing, admission to the ACES Honors Program, and consent of instructor.

TSM 421 Ag Safety-Injury Prevention credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TSM/421/)
Issues associated with agricultural injuries and their prevention. Areas include: agricultural injury situation; injury causation; injury intervention strategies and their applications to agricultural issues; and, specific safety issues in the areas of farm machinery, grain and forage systems, animals, materials handling, electricity, fire safety, special populations, and emergency preparedness. Course Information:3 undergraduate hours. 3 graduate hours.

TSM 422 Ag Health-Illnesses Prevention credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TSM/422/)
Overview of occupational illnesses and diseases in the agricultural industry and its practicies. Hazards within agricultural production are examined and potential hazards to non-farm populations and those interacting with production personnel are explored. Agricultural industry practices are summarized and potential human health effects of specific practices identified. Specific preventative measures are outlined to reduce exposures and remediate exposure symptoms. Interaction with health/medical professionals is on-going during the semester to familiarize students with medical procedures pertinent to agricultural occupational medicine. 3 undergraduate hours. 3 graduate hours.

TSM 425 Managing Ag Safety Risk credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TSM/425/)
Management aspects of farm and agriculturally related business safety and health. Topics include: orientation to farm and agricultural related business safety and health issues, legal and ethical responsibilities, liability issues, injury/illness incident investigation, agricultural safety and health resources, how to approach and organize a safety and health management plan, and safety and health worker education and training. Case study approach to devise a safety and health management plan for an existing farm or agricultural related business. Team work to emulate development of safety management programs in general industry. Student exposure through class discussion exercises to recent agricultural safety and health research studies conducted in North America and Europe. 3 undergraduate hours. 3 graduate hours. Prerequisite: Credit or concurrent registration in TSM 421 or TSM 422, or consent of instructor.

TSM 430 Project Management credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/TSM/430/)
Same as ABE 430. See ABE 430.

TSM 435 Elec Computer Ctrl Sys credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TSM/435/)
Microcomputer and electrical control applications; electrical fundamentals; solid-state devices; relays; biosensors; motor types and characteristics; three-phase power; logic devices; analog/digital convertors; and interfacing for agricultural control applications. Includes laboratory. 3 undergraduate hours. 3 graduate hours.

TSM 438 Renewable Energy Applications credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TSM/438/)
Renewable energy sources and applications, including solar, geothermal, wind, and biomass. Environmental consequences of energy conversion including how renewable energy can reduce air pollution and global climate change. Economics of alternative energy systems. 3 undergraduate hours. 3 graduate hours. Credit is not given for both TSM 438 and ABE 436. Prerequisite: Junior, senior, or graduate standing required.

TSM 439 Capstone Experience credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TSM/439/)
Develop solutions to real-world problems by demonstrating and enhancing students' abilities as problem solvers, project managers, team members, technical writers, and builders on multiple projects simultaneously. This will involve project planning and budgeting, prototype development and construction, testing, data collection and analysis, marketing, and navigating project challenges outside of students' control. 4 undergraduate hours. No graduate credit. Prerequisite: TSM 430. Restricted to TSM Majors Only, senior standing required, or consent of instructor.

TSM 464 Engine and Tractor Power credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TSM/464/)
Construction, performance and maintenance of internal combustion engines, power trains, and hydraulic systems for off-road equipment; methods and equipment for performance testing; and weight transfer and traction. Includes laboratory. 3 undergraduate hours. 3 graduate hours. Credit is not given for both TSM 464 and ABE 466.

TSM 465 Chemical Applications Systems credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TSM/465/)
Hydraulic principles; liquid application systems including pumps, controls, and spray nozzles; granular application systems; safe storage, handling, and disposal of pesticides and fertilizers; federal and state legal requirements. Includes laboratory. 3 undergraduate hours. 3 graduate hours.

TSM 467 Precision Agric Technology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TSM/467/)
Practices and equipment used in precision agriculture. Global positioning systems; geographic information systems; mapping; grid sampling of soil fertility and physical properties; yield monitoring; remote sensing; variable-rate technologies. 3 undergraduate hours. 3 graduate hours.

TSM 486 Grain Bioprocessing Coproducts credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TSM/486/)
Bioprocessing of cereals and oilseeds by milling, fermentation and extraction processes in the production of a wide variety of coproducts used in animal foods. Includes the effects of the process variables and bioprocess on coproduct quality and the post-processing of coproducts. 3 undergraduate hours. 3 graduate hours.Bioprocessing of cereals and oilseeds by milling, fermentation and extraction processes in the production of a wide variety of coproducts used in animal foods. Includes the effects of the process variables and bioprocess on coproduct quality and the post-processing of coproducts. Course Information: 3 undergraduate hours. 3 graduate hours. Credit is not be given for both TSM 486 and TSM 586.

TSM 496 Independent Study credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/TSM/496/)
Individual research, special problems, thesis, development and/or design work under the supervision of a faculty member. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated to a maximum of 6 hours. Prerequisite: consent of instructor.

TSM 499 Seminar credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/TSM/499/)
Group discussion or an experimental course on a special topic in technical systems management. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated in separate terms to a maximum of 12 hours.

TSM 501 Graduate Research I credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/TSM/501/)
First of a two-course sequence (with TSM 502) for graduate students in Technical Systems Management. Prepares students to perform successfully in a research environment and to develop skills in teaching. Topics to be covered include research methodology, teaching methods, lecture preparation and delivery, critical review of scientific articles, peer review and publishing, mentoring and peer relationships, time management, and intellectual property.

TSM 502 Graduate Research II credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/TSM/502/)
Second of a two-course sequence (with TSM 501) for graduate students in Technical Systems Management. Prepares students to perform successfully in a research environment and to develop skills in teaching. Topics to be covered include research methodology, teaching methods, lecture preparation and delivery, critical review of scientific articles, peer review and publishing, mentoring and peer relationships, time management, and intellectual property.

TSM 586 Advanced Bioprocess Coproducts credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TSM/586/)
Bioprocessing of cereals and oilseeds by milling, fermentation and extraction processes in the production of a wide variety of coproducts used in animal foods. Includes the effects of the process variables and bioprocesses on coproduct quality and the post-processing of coproducts; also analysis of current literature and issues relating to coproducts. 3 graduate hours. No professional credit. Credit is not be given for both TSM 486 and 586. Prerequisite: Graduate standing or consent of instructor.

TSM 594 Graduate Seminar credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/TSM/594/)
Presentations of thesis research by graduate students; other presentations on teaching or current research issues related to technical systems management. Approved for S/U grading only. May be repeated to a maximum of six times.

TSM 596 Independent Study credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/TSM/596/)
Individual investigations or studies of any phases of technical systems management selected by the student and approved by the advisor and the faculty member who will supervise the study. May be repeated in the same or separate terms if topics vary to a maximum of 6 hours. Prerequisite: Consent of instructor.

TSM 598 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/TSM/598/)
Group discussion or an experimental course on a special topic in technical systems management. May be repeated in the same term to a maximum of 8 hours. May be repeated in separate terms to a maximum of 12 hours. Prerequisite: As specified for each topic offering; see Class Schedule or departmental course information.

TSM 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/TSM/599/)
Individual research in the various areas of technical systems management under the supervision of faculty members. Approved for S/U grading only. May be repeated in separate terms.

TMGT - TECHNOLOGY AND MANAGEMENT

TMGT Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/TMGT/)

Courses

TMGT 366 Product Design and Development credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TMGT/366/)
Same as BADM 366. See BADM 366.

TMGT 367 Mgmt of Innov and Technology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TMGT/367/)
Same as BADM 367. See BADM 367.

TMGT 460 Business Process Modeling credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TMGT/460/)
Same as BADM 460. See BADM 460.

TMGT 461 Tech, Eng, & Mgt Final Project credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/TMGT/461/)
Same as BADM 461. See BADM 461.

TE - TECHNOLOGY ENTREPRENEURSHIP

TE Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/TE/)

Courses

TE 100 Introduction to Innovation, Leadership and Engineering Entrepreneurship credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/TE/100/)
Students will learn about innovation, identify key attributes of innovation leadership, and practice innovation leadership personally and professionally. Students will identify opportunities and work in teams to address them, practicing leadership and followership and honing their written and verbal presentation skills. Students also complete a personal plan for continuing to develop their innovation leadership skills. Open to all majors.

TE 110 Communicating and Presenting in Engineering credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/TE/110/)
Same as ENG 110. See ENG 110.

TE 200 Introduction to Innovation credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/TE/200/)
Fundamental concepts of entrepreneurship, creativity and innovation will be explored within the context of new and existing businesses. Creative thinking and inventive problem solving will be emphasized. Prerequisite: Restricted to Innovation LLC students.

TE 230 Design Thinking/Need-Finding credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TE/230/)
Same as ARTD 230. See ARTD 230.

TE 250 From Idea to Enterprise credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/TE/250/)
Examines the fundamentals of technology entrepreneurship and addresses critical areas of the entrepreneurial process such as: problem and solution identification; validation of product-market fit; market assessment; team formation; product development; intellectual property; financing a technology-based startup. This class combines lecture, discussion & case studies, and is built around a hands-on group project leveraging the lean startup methodology from the National Science Foundation I-Corps program. The class is intended for all students of all disciplines interested in technology entrepreneurship.

TE 298 Special Topics I credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/TE/298/)
Subject offerings of innovation, creativity, technology and entrepreneurship intended to augment the existing curriculum. See class schedule or departmental course information for topics and prerequisites. May be repeated in the same or separate terms if topics vary.

TE 333 Creativity, Innovation, Vision credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TE/333/)
Personal creativity enhancement via exploration of the nature of creativity, how creativity works, and how to envision what others may not. Practice of techniques and processes to enhance personal and group creativity and to nurture a creative lifestyle. Application to a major term project providing the opportunity to move an idea, product, process or service from vision to reality.

TE 360 Lectures in Engineering Entrepreneurship credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/TE/360/)
Fundamental concepts of entrepreneurship and commercialization of new technology in new and existing businesses. Guest speaker topics vary, but typically include: evaluation of technologies and business ideas in genera; commercializing new technologies; financing through private and public sources; legal issues; product development; marketing; international business issues. May be repeated in separate terms to a maximum of 2 hours, if topics vary; instructor approval required. Prerequisite: For undergraduate students only.

TE 398 Special Topics II credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/TE/398/)
Subject offerings of innovation, creativity, technology and entrepreneurship intended to augment the existing curriculum. See class schedule or departmental course information for topics and prerequisites. May be repeated in the same or separate term if topics vary.

TE 401 Developing Breakthrough Projects credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/TE/401/)
Project-based exploration with teams of students working together in a large innovation and entrepreneurial context. Encourage development of innovative, leadership, and entrepreneurial skill sets, including financing, marketing, sales, operations, business plans, and management. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated.

TE 450 Startups: Incorporation, Funding, Contracts, & Intellectual Property credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TE/450/)
Explores how legal tools may be used in the construction and successful operation of your company to deliver the next great product to market. Topics covered in the class include: issues with business formation, funding, intellectual property, non-disclosure agreements, contracts, and other corporate legal issues particularly impacting startups. 3 undergraduate hours. 3 graduate hours.

TE 460 Lectures in Engineering Entrepreneurship credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/TE/460/)
Fundamental concepts of entrepreneurship and commercialization of new technology in new and existing engineering and high-tech businesses. Guest speaker topics vary, but typically include: evaluation of technologies and business ideas in general; commercializing new technologies; financing through private and public sources; legal issues; product development; marketing; international business issues. 1 undergraduate hour. 1 graduate hour. May be repeated in separate terms to a maximum of 2 hours, if topics vary; instructor approval required. Credit is not given for both TE 360 and TE 460.

TE 461 Technology Entrepreneurship credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TE/461/)
Critical factors affecting technology-based ventures: opportunity assessment; the entrepreneurial process; founders and team building; preparation of a business plan including market research, marketing and sales, finance, and manufacturing considerations. Students must have an idea for a new venture to participate in the course, and must be prepared to develop this new venture idea as part of the course. 3 undergraduate hours. 3 graduate hours.

TE 462 Leading Sustainable Change credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TE/462/)
Theories and process of change; systems thinking concerning change consequences; building coalitions and communities to support change; and implementing and managing projects effectively. Processes to plan, implement, manage, and sustain change with an organization through alignment of change strategies with organizational and individual concerns. 3 undergraduate hours. 3 graduate hours. Prerequisite: Restricted to undergrads with senior standing and graduate students.

TE 466 High-Tech Venture Marketing credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/TE/466/)
Cornerstone marketing concepts for innovators and engineers to enable analysis of products and technologies from a marketing perspective: engineering product development and adoption life cycle; objectives and strategies; marketing management; communication skills; sales process and tactics; special considerations for new high-tech engineering products and innovations. 2 undergraduate hours. 2 graduate hours. Credit is not given for both TE 466 and BADM 365.

TE 497 Independent Study credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/TE/497/)
Advanced projects related to Technology Entrepreneurship. Approved for S/U grading only. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated to a maximum of 3 undergraduate hours or 4 graduate hours in the same term if topics vary; may be repeated for an unlimited number of hours in separate terms. Prerequisite: Consent of instructor.

TE 498 Special Topics III credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/TE/498/)
Subject offerings of innovation, creativity, technology and entrepreneurship intended to augment the existing curriculum. See class schedule or departmental course information for topics and prerequisites. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated in the same or separate term if topics vary.

TE 560 Managing Advanced Technol I credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/TE/560/)
Business perspective of managing advanced technology in industry: strategic context of advanced technology; analytical financial tools used to estimate its potential value; legal concepts important in its management; interpersonal issues related to leading and advocating on behalf of advanced technology groups. 1 graduate hour. No professional credit.

TE 565 Technol Innovation & Strategy credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/TE/565/)
Concepts and frameworks for analyzing how firms can create, commercialize and capture value from technology-based products and services. Business, commercialization, and management aspects of technology. Emphasis on reasons that existing firms or startups which have successfully commercialized products or services fail to sustain their success as technology changes and evolves. 2 graduate hours. No professional credit.

TE 566 Finance for Engineering Mgmt credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/TE/566/)
Cornerstone financial concepts for engineering management to enable analysis of engineering projects from a financial perspective: income statements; the balance sheet; cash flow statements; corporate organization; the time value of money; net present value; discounted cash flow analysis; portfolio theory. 2 graduate hours. No professional credit.

TE 567 Venture Funded Startups credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/TE/567/)
Concepts, tools, and language used by venture capitalists (VCs). Venture-scale opportunity assessment and articulation; venture capital financing and valuation; deal structure; term sheets; financial plans for startups; customer development and marketing; product iterations; sales execution. 1 graduate hour. No professional credit. Prerequisite: TE 566.

TE 598 Special Topics IV credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/TE/598/)
Subject offerings of innovation, creativity, technology and entrepreneurship intended to augment the existing curriculum. See class schedule or departmental course information for topics and prerequisites. May be repeated in the same or separate terms for unlimited graduate hours if topics vary.

THEA - THEATRE

THEA Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/THEA/)

Courses

THEA 100 Practicum I credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/100/)
Practical work in the design, construction, and handling of scenery, lighting, sound, properties, costumes, and makeup for public performance. A minimum of forty hours of production activity to be arranged for each credit hour. May be repeated to a maximum of 12 hours. Prerequisite: Consent of instructor required for non-theatre majors.

THEA 101 Introduction to Theatre Arts credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/101/)
Introduction to the arts of theater for non-majors, including acting, design, directing, dramaturgy, and playwriting, together with a survey of theatrical history, minority theater, and plays by women. Attendance at Department of Theater productions (ticket fee required). Credit not given for both THEA 101 and THEA 102.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

THEA 110 Broadway Musicals credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/110/)
A cultural context of the uniquely "American" Broadway musical through an introduction to the art form, an analysis of the pertinent time period, and historical and critical placement of the work as a reflection (and development) of the identity of the United States. This course will introduce the collaborative artistry of the musical, survey specific iconic works, and explore the socio-economic impacts of the Broadway musical. Attendance at selected performances is required.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

THEA 119 BFA Production Seminar credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/THEA/119/)
A seminar class for undergraduate theatre majors in the following 6 concentrations: Lighting Design and Technology; Sound Design and Technology; Costume Design and Technology; Scenic Design; Scenic Technology; Arts and Entertainment Technology. The course provides an opportunity for students studying technical and design aspects of live performance to investigate topics in production and/or design as related to their particular field of study. Course activities vary per section but include analysis of production and design approaches/techniques, skills development and practice, and reviews of student and professional production work. The course provides an open, collaborative environment that allows for all students to participate in the exchange of ideas, promote analytical thinking, and to work with principles that may be applied to practical production and design scenarios. Guests artists and special topics may be included. May be repeated to a maximum of 8 hours in separate semesters. Credit is not given for THEA 119 if credit for the corresponding section of THEA 199 has been given. Prerequisite: Restricted to BFA Theatre students in the following 6 concentrations: Lighting Design and Technology; Sound Design and Technology; Costume Design and Technology; Scenic Design; Scenic Technology; Arts and Entertainment Technology.

THEA 121 Theatre Foundations: Performance credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/121/)
Practical exploration of the foundations of performance for Theatre Majors with emphasis on ensemble building, self-expression, performance of "self," acting explorations, script analysis, and professional standards. Attendance at Department of Theatre productions required. Prerequisite: Restricted to BFA Theatre Majors Only.

THEA 122 Theatre Foundations: Theory and Practice credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/122/)
Focuses on understanding the historical and contemporary creative practices of playwrights, directors, and dramaturgs. Provides a brief overview of theatre history and theory for understanding critical concepts and approaches that inform contemporary theatrical practices. Students will develop creative projects as well as critical analyses in support of course objectives. Credit not given for both THEA 122 and THEA 101. Credit not given for both THEA 122 and THEA 102.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

THEA 123 Theatre Foundations: Production credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/123/)
Provides an overview of historical and contemporary production practices focused on designing, building and managing a theatrical performance. Students will consider what performance production means within its social and historical context and develop a theatrical vocabulary essential to participating in the production process and in conducting research into production practices. Credit is not given for both THEA 103 and THEA 123. Prerequisite: BFA Theatre Majors Only.

THEA 125 Designer Skills credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/125/)
Introduction to principles and elements of design and non-verbal communication techniques, focusing specifically on drawings, sketches, color theory, models and technical drafting. Drawing and drafting supplies are required. Prerequisite: Enrollment limited to Theatre majors only.

THEA 126 Stagecraft credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/126/)
Studies and training in the materials, techniques, and processes used while executing scenery for the theatre. Includes both classroom lectures and practical laboratory work in the Krannert Center Scene Shop. Prerequisite: THEA 103.

THEA 151 Introduction to Digital Audio Workstations credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/151/)
Develop understanding and beginning mastery of digital audio workstations and equipment. Topics include the physics of sound and acoustics, familiarization with and utilization of studio equipment, and developing skills with a range of production techniques. Students will enhance their understanding and appreciation of audio technology and recording.

THEA 153 Introduction to Theatre Sound credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/153/)
Exploration of audio production techniques, software, and equipment as related to theatrical sound. Students will actively engage in recording, script analysis, sound effect creation, utilization of playback software and other audio equipment. This course is specifically for undergraduate students. Prerequisite: For Undergraduate students only.

THEA 170 Fundamentals of Acting I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/170/)
Study of the methods of acting, with emphasis on basic acting techniques; role of character in relation to the play as a whole, the play's internal and emotional values, and their interpretation through voice and action.

THEA 175 Fundamentals of Acting II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/175/)
Exploration and communication of experience through speech and action on the stage. Prerequisite: THEA 170.

THEA 180 Violence as a Narrative Tool credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/180/)
This course will examine the use of violence as a key element in the creation of narrative for theatre and film. Students will learn to identify and critique specific choices that directors, performers, and filmmakers use in developing scenes of violence to evoke specific responses from their audiences. In addition, this course will interrogate the relationship between theatrical violence and society. Using examples from works of theatre and cinema, students will examine, analyze, and critique the genres of "violence design," while gaining insight to the creative process of fight direction.

THEA 199 Undergraduate Open Seminar credit: 0 to 5 Hours. (https://courses.illinois.edu/schedule/terms/THEA/199/)
Approved for letter and S/U grading. May be repeated to a maximum of 12 hours.

THEA 200 Practicum II credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/200/)
This course is designed for students to acquire an introductory understanding of technical theatre roles, learn new skills and apply new knowledge in a hands-on, experiential learning setting. Students will work on a live performance project in a supporting position on productions of varying scope and scale to both gain an opportunity to practice new skills and an opportunity to learn more about the various areas of technical theater production. Practicum II serves as a foundational course for students in the design, technical or management areas who are progressing to more advanced study in technical theatre and are preparing for roles as lead or assistant designers, artisans, engineers and managers. Practicum II roles include serving as crew leaders, assistants and run crew for various resident productions at Krannert Center and as technical leads and crew in various Krannert Center shops. The course supports practical work in the student's area of concentration by continued emphasis in backstage technical work for public performance. A minimum of forty hours of production activity to be arranged for each credit hour. May be repeated to a maximum of 12 hours.

THEA 203 Theatre of Black Experience credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/203/)
Surveys the history and literature, and studies dramatic works focused on the black experience through the rehearsal and performance of representative works of black dramatists. May be repeated to a maximum of 9 hours.

THEA 204 Introduction to Contemporary Performance Practice credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/204/)
This practice-based course explores how to collaboratively create performances. Devised performance creates theatre "from scratch," often through improvisation and ensemble exercises. Focus on developing skills for working with an ensemble to create and adapt text, design, technology, and performance through in-class workshops and a final project. Prerequisite: THEA 102, THEA 103.

THEA 208 21st Century Dramaturgy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/208/)
Introduction to the research, communication, and analytical skills of the dramaturg through study of contemporary trends in theatre, including immersive theatre, documentary/verbatim theatre, approaches to adaptation, new play development, solo performance, and devised theatre. Requires written assignments exploring dramatic structure and historical and contemporary cultural contexts and performance practices. Prerequisite: THEA 101 or THEA 122 or consent of instructor.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

THEA 210 Introduction to Greek and Roman Theater credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/210/)
Same as CLCV 222 and CWL 264. See CLCV 222.
This course satisfies the General Education Criteria for:
Advanced Composition
Humanities - Lit Arts
Cultural Studies - Western

THEA 211 Introduction to Playwriting credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/211/)
Practical course in writing for the stage, including a study of basic dramatic construction, focusing on structure, style, and imagination, culminating in a final project of a ten-minute play. Creative writing prompts and individual ideas will be the inspiration for weekly writing assignments. Prerequisite: THEA 208 or consent of instructor.

THEA 212 Introduction to Directing credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/212/)
Practical course in directing for the stage, focusing on script analysis, script preparation, casting, staging techniques, and design strategies, culminating in a directorial concept presentation of a contemporary play. Prerequisite: THEA 208.

THEA 218 Intro to Social Issues Theatre credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/218/)
An introductory exploration/survey of the rich histories, theories, and practices of community-based and social issues theatre. Through discussion, participation, lecture, and performance, representative works, movement, and artists will be explored. Lively connections will be made to an array of social issues in today's world. Same as GWS 218.

THEA 220 Survey of Theatrical Design credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/220/)
Survey of design elements in theatrical production including the function of scenery, costuming, lighting, and sound in conveying directorial concepts, style, and dramatic meaning. Intended for students not concentrating on theatrical design, this course requires both theoretical and practical projects. Prerequisite: THEA 102, THEA 208, or consent of instructor.

THEA 222 Introduction to Scenic Design credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/222/)
Projects and lectures addressing basic technical and aesthetic skills of scene design. Enrollment limited to Theatre majors. Prerequisite: THEA 125.

THEA 223 Introduction to Stage Rigging credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/223/)
This course serves as an introduction to theatrical rigging materials, approaches, and techniques. The class will examine the basics of rigging in both traditional proscenium and black box theatrical spaces. Prerequisite: THEA 126.

THEA 225 Scenographic Drafting credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/225/)
Lecture/Studio course focused on the basic skills of creating scenographic drafting for theatrical stage productions. Lectures will introduce students to underlying concepts of two-dimensional representation of three-dimensional space. Studio time develops traditional hand drafting and computer aided drafting techniques. Prerequisite: THEA 125 or permission of instructor.

THEA 231 Intro to Lighting Design credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/231/)
Develop an understanding of the basic aspects of lighting design and stage electrics for live performance.

THEA 242 Introduction to Costume Production credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/242/)
This course goes beyond the design process and delves into the next steps of moving a designed show through a costume shop. Students will obtain a basic knowledge of the role of costumer as well as organizational techniques and costume construction skills.

THEA 243 Introduction to Costume Design credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/243/)
Introduces the principles and terminology used in the process of designing costumes for the stage. Class assignments will develop skills in costume design and focus on specific elements of design, variety, characterization, and stylization. Assignments and projects will emphasize different aspects of costume design, focusing on research, character exploration and visual concept, as well as learning practical aspects of production: use of fabric and crafts, costume construction, paper work, and effective communication skills in design presentations.

THEA 260 Intro Asian American Theatre credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/260/)
Introduction to Asian American theatre, with emphasis on theatre companies, actors, playwrights, and audiences, through the reading of major dramatic works, examining production histories, and viewing Asian American performances and film. Same as AAS 260.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

THEA 262 Literature of Modern Theatre credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/262/)
Introduction to the principal modes of dramatic expression from around 1870 to the present day. Prerequisite: Completion of campus Composition I general education requirement and THEA 208; or consent of instructor.
This course satisfies the General Education Criteria for:
Advanced Composition
Humanities - Lit Arts

THEA 263 Intro African American Theat credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/263/)
Focuses on theatre artists, theatre companies, and the role of Historically Black Colleges and Universities (HBCU's). Students will read plays, view productions, screen documentaries, and examine various primary sources. Same as AFRO 212.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

THEA 270 Relationships in Acting I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/270/)
Behavior in stage performance explored on the basis of the actor's relationship with self, with objects, and with other players; emphasizes analysis of playscript to discover action, environment, and relationships. Prerequisite: THEA 175 or consent of instructor.

THEA 271 Voice and Movement I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/THEA/271/)
Fundamental development of vocal production as connected to body awareness and movement for the actor. Various exercised, conditioning, and training methods are used. Prerequisite: THEA 175 or consent of instructor.

THEA 275 Relationships in Acting II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/275/)
Beginning scene work with special emphasis on analysis of plays, roles, characterization, and application of skills learned through improvisation and relationships in acting. Prerequisite: THEA 270 or consent of instructor.

THEA 276 Voice and Movement II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/THEA/276/)
Further development of the interconnected vocal production and movement processes for the actor. Various exercised, conditioning, and training methods are used. Prerequisite: Enrollment limited to Theatre majors only.

THEA 300 Practicum III credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/300/)
The objective of this course is for students to demonstrate an understanding of the principles of theatre design/technology/management, acting or theatre studies – and implement acquired skills and apply acquired knowledge in a hands-on, experiential learning setting progressing toward more independent work at a larger scope and scale. Students work on a live performance project in a lead position on a smaller scale production or as an assistant on a large or small scale production such as: Designer or Assistant Designer, Technical Director, Assistant Technical Director, Stage Manager, Assistant Stage Manager, Scenic Charge, Crafts Head, Stage Carpenter, Actor, Dramaturg or Assistant Dramaturg, Assistant Director etc. THEA 300 projects are assigned either faculty/professional advisor or faculty/professional mentor, depending on the nature and needs of the project and the individual learning objectives for the student. May be repeated to a maximum of 12 hours. Prerequisite: Enrollment limited to Theatre majors.

THEA 304 Global Theatre Performance credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/304/)
Explores distinctive historical and contemporary theatrical events from performance sites primarily in Africa, Asia, and Latin America, as well as performance in diaspora. Investigating theatre and performance as forms of cultural production and public practice, the course will review a range of influential developments in global theatrical performance and interpretive practices. Using case studies for exploration, the course will focus on developing historical understanding through a variety of analytical lenses such as post-colonialism, transnationalism and adaptation, diaspora studies, etc. Prerequisite: THEA 208 or consent of instructor.
This course satisfies the General Education Criteria for:
Advanced Composition

THEA 323 The Comic Imagination credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/323/)
Same as CLCV 323 and CWL 322. See CLCV 323.
This course satisfies the General Education Criteria for:
Advanced Composition
Humanities - Lit Arts
Cultural Studies - Western

THEA 359 Professional Stage Management credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/THEA/359/)
In depth review of principles, techniques and practices related to professional stage management. Each semester will explore a different aspect of stage management and live performance through a series of readings, activities and class discussions. May be repeated to a maximum of 12 hours in separate semesters. Prerequisite: BFA Stage Management Majors Only.

THEA 360 History of Theatre I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/360/)
History of the drama and theatre of ancient Greece and Rome, the Middle Ages, and the Italian and English Renaissance. Prerequisite: Junior standing or consent of instructor.

THEA 361 History of Theatre II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/361/)
History of the drama and theatre of the Spanish Renaissance, seventeenth-century France, the English Restoration, the eighteenth and nineteenth centuries in Europe and America, and Asia. Prerequisite: THEA 360 or consent of instructor.

THEA 362 Chekhov credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/362/)
Same as RUSS 325 and CWL 325. See RUSS 325.

THEA 364 Topics in Theatre History credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/364/)
Survey of the methods for producing theatre history through a focus on a specific topic. Course will cover a broad range of time periods, styles and genres, geographic region organized around a central topic. Projects and papers will offer instruction in theatre history methods. May be repeated in the same term to a maximum of 6 hours, if topics vary and in separate terms to a maximum of 12 hours, if topics vary. Prerequisite: THEA 102, THEA 103.

THEA 371 Acting Studio I: Dynamics credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/THEA/371/)
Development of movement and voice skills for actors. Enrollment limited to Theatre majors. Prerequisite: THEA 275, consent of chair of Acting Program, and concurrent registration in THEA 372, THEA 373, and THEA 374.

THEA 372 Acting Studio I: Voice credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/THEA/372/)
Concentrated training in standard speech for the stage and the International Phonetic Alphabet. Enrollment limited to Theatre majors. Prerequisite: THEA 275, consent of chair of Acting Program, and concurrent registration in THEA 371, THEA 373, and THEA 374.

THEA 373 Acting Studio I: Movement credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/THEA/373/)
Concentrated training in movement skills and mask characterization. . Enrollment limited to Theatre majors. Prerequisite: THEA 275, consent of chair of Acting Program, and concurrent registration in THEA 371, THEA 372, and THEA 374.

THEA 374 Acting Studio I: Acting credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/374/)
Acting in realistic and naturalistic plays. A performance is given at the end of the term. Enrollment limited to Theatre majors. Prerequisite: THEA 275, consent of chair of Acting Program, and concurrent registration in THEA 371, THEA 372, and THEA 373.

THEA 375 Acting Studio II: Dynamics credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/THEA/375/)
Continuing development of movement and voice skills for actors. Enrollment limited to Theatre majors. Prerequisite: THEA 371, THEA 372, THEA 373 and THEA 374, and concurrent registration in THEA 376, THEA 377 and THEA 378.

THEA 376 Acting Studio II: Voice credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/THEA/376/)
Continued training in standard speech for the stage and the International Phonetic Alphabet. Enrollment limited to Theatre majors. Prerequisite: THEA 371, THEA 372, THEA 373, and THEA 374, and concurrent registration in THEA 375, THEA 377 and THEA 378.

THEA 377 Acting Studio II: Movement credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/THEA/377/)
Concentrated training in movement for the stage, body alignment and awareness. Enrollment limited to Theatre majors. Prerequisite: THEA 371, THEA 372, THEA 373, and THEA 374; and concurrent registration in THEA 375, THEA 376 and THEA 378.

THEA 378 Acting Studio II: Acting credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/378/)
Development of acting skills for musical theatre including dance, singing, and the analysis of British and American musical theatre materials. A performance is given at the end of the term. Enrollment limited to Theatre majors.Prerequisite: THEA 371, THEA 372, THEA 373, and THEA 374, and concurrent registration in THEA 375, THEA 376 and THEA 377.

THEA 391 Individual Topics credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/THEA/391/)
Individual projects and problems. Prerequisite: Consent of instructor.

THEA 392 Individual Topics credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/THEA/392/)
Individual projects and problems. Prerequisite: Consent of instructor.

THEA 399 Undergraduate Group Seminar credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/399/)
Group exploration of specialized topics. May be repeated in the same term to a maximum of 8 hours. May be repeated in subsequent terms to a maximum of 12 hours.

THEA 400 Practicum IV credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/400/)
The objective of this course is for students to demonstrate an advanced understanding of the principles of theatre design, technology or management, implement acquired skills and apply acquired knowledge in a hands-on, experiential learning setting. Students work on a live performance project in a lead position such as: Scene Designer, Lighting Designer, Costume Designer, Technical Director, Assistant Technical Director, Production Stage Manager, Stage Manager, Assistant Stage Manager, Assistant Production Manager, Actor, Dramaturg or Assistant Dramaturg, Assistant Director etc. THEA 400 projects are assigned either faculty/professional advisor or faculty/professional mentor, depending on the nature and needs of the project and the individual learning objectives for the student. 1 to 3 undergraduate hours. 1 to 3 graduate hours. May be repeated to a maximum of 12 hours. Prerequisite: Enrollment limited to Theatre majors.

THEA 404 Professional Career Development credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/THEA/404/)
This course is for senior BFA Theatre majors and is designed to prepare students to enter the professional world. Resumes, online presence, social media, website, agents/managers, unions, entertainment taxes, and other topics will be explored. 1 undergraduate hour. No graduate credit. Prerequisite: For senior BFA Theatre Majors only.

THEA 406 Opera/Dance Stage Management credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/406/)
Explores the professional practice of opera and dance stage management including understanding producing models, rehearsal and performance practices, and management techniques. Emphasis on building skills to prepare opera and dance prompt-books and production paperwork. 3 undergraduate hours. 4 graduate hours. In the BFA Stage Management Curriculum, this course would replace 3 credits of THEA 409 Stage Management Workshop. Prerequisite: Stage Management Majors only unless approved by instructor.

THEA 407 Production Management credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/THEA/407/)
Lecture and seminar course focusing on advanced topics of professional practice in operations and design, management and leadership, and collaborative process for theatre practitioners. Participants in this course will explore current trends in production management. Students will develop an understanding of the production manager role within an organization, the responsibilities of a production manager, and the tools of the production manager. Assignments are designed to enhance knowledge and develop skills. 2 undergraduate hours. 2 graduate hours. Prerequisite: Theatre majors only.

THEA 408 AEA Union Stage Management credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/408/)
Exploration of the Actors' Equity Association LORT contract: practices and concerns. Emphasis on practical use an application of union contracts with particular focus on workplace rules and regulations. 3 undergraduate hours. 4 graduate hours. Prerequisite: THEA 451.

THEA 409 Stage Management Workshop credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/409/)
Explores advanced topics in stage management focusing on practical applications of principles learned in earlier courses. Possible topics include: Touring Stage Management, Stage Managing Opera and Dance, and Production Management. 3 undergraduate hours. 4 graduate hours. May be repeated in the same or separate terms to a maximum of 6 undergraduate hours or 8 graduate hours as topics vary. Prerequisite: THEA 445 and THEA 446.

THEA 410 Dramaturgs Workshop credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/410/)
Seminar course focusing on the role of the dramaturg in the collaborative process. 3 undergraduate hours. 4 graduate hours. May be repeated to a maximum of 6 undergraduate hours and 12 graduate hours, if topics vary.

THEA 411 Playwrights' Workshop credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/411/)
Advanced level seminar course focusing on the key elements of writing for the theatre, including character, structure and dialogue. Writers may focus on a draft of a one-act, full-length or series of ten-minute plays connected by a theme or a solo performance piece. 3 undergraduate hours. 3 graduate hours. May be repeated to a maximum of 6 undergraduate hours or 9 graduate hours. Prerequisite: THEA 211.

THEA 412 Directors Workshop credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/412/)
Seminar course exploring the role of the director in the collaborative process. Course may be repeated as topics will vary. 3 undergraduate hours. 3 graduate hours. May be repeated to maximum of 6 undergraduate hours or 9 graduate hours. Prerequisite: THEA 212.

THEA 413 Advanced Costume Design credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/413/)
An intermediate class designed for students who have a basic understanding of the principles of theatrical design. Students explore in more depth through lectures and focused projects components of costume design process, such as script and character analysis, concept development, research, sources of inspiration, psychology of clothing, rendering as a communication tool, fabric and texture, collaboration principles, and then implement this knowledge in a finished project of costume design for a play/movie and/or musical. 4 undergraduate hours. 4 graduate hours. Prerequisite: Restricted to BFA/MFA students only or consent of instructor.

THEA 414 Figure Drawing for Theatre Design credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/414/)
Figure Drawing as a foundation for theatrical design is a somewhat different animal: we may not need to accurately render subtle nuances of the human figure to the extent required for portraiture, but it is imperative to explore and understand fundamental aspects of drawing such as anatomy, volume, proportion, value, negative/positive space, etc. In addition to these skills, students will develop an ability to describe design concept and intention more accurately and expressively. This course strengthens observational and drawing skills while encouraging freedom and experimentation, which are crucial to all design processes. 3 undergraduate hours. 3 graduate hours. May be repeated to a maximum of 9 undergraduate hours and 6 graduate hours in separate semesters. Prerequisite: Consent of instructor. For theatre majors only.

THEA 415 Scenic Design I credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/415/)
In-depth focus on the scenic design process exploring dramaturgy, research, collaboration, and deliverables. 3 undergraduate hours. 4 graduate hours. Prerequisite: For undergraduates, THEA 222 or permission of instructor.

THEA 416 Scenic Design II credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/416/)
Advanced problems in scene design for period and style plays and development of professional portfolio. 3 undergraduate hours. 4 graduate hours. May be repeated to a maximum of 6 undergraduate or 8 graduate hours, if topics vary. Prerequisite: THEA 415 or consent of instructor. Restricted to Theatre majors only.

THEA 417 Leading Post-Perform Dialog credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/417/)
Study of the history, processes, and methods of leading discussions with social issues theatre audiences. Emphasis on the skills and techniques of facilitators/peer educators; artistic considerations; function and application of the dramaturg; and practical experience through facilitation of social issues theatre dialog. Same as GWS 417. 4 undergraduate hours. 4 graduate hours. Prerequisite: Junior standing or above or consent of instructor.

THEA 418 Devising Social Issues Theatre credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/418/)
Focuses on the role of the artist as 'cultural worker' through devising theatre in a community-based context that is explicitly concerned with social and/or health-related issues. While there is substantial research, reading and critique involved, the overall experience will be that of rigorously composing theatrical work vital to the community. Same as GWS 418. 3 undergraduate hours. 4 graduate hours.

THEA 419 Theatrical CAD Drafting credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/THEA/419/)
A functional, working knowledge of computer assisted design (CAD) is required for most advanced theatre technicians working in the field today. This course is a multilevel exploration into various CAD programs. Students will gain a basic familiarity with the capability of programs and how to apply gained knowledge to the creation of technical drawings used in the Entertainment Industry. 2 undergraduate hours. 2 graduate hours. May be repeated to a maximum of 4 undergraduate or graduate hours in the same semester and to 8 undergraduate hours in separate semesters. Prerequisite: THEA 126. Enrollment limited to Theatre majors or by consent of instructor.

THEA 420 Shop Practice credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/420/)
This course is an exploration of techniques and tooling for wood and plastic fabrication. The course provides hands-on training to develop fabrication skills and problem solving abilities. A strong sense of craft, accuracy, and quality will be emphasized throughout this course. 4 undergraduate hours. 4 graduate hours. Prerequisite: THEA 126.

THEA 421 Welding for the Stage credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/421/)
This course is an introduction and training in materials, techniques, and processes used in metalworking and MIG Welding. The course will provide both classroom and hands-on training and experience. This course is primarily project-based and will focus on developing metalworking and welding skill, but also provide the means to analyze and manage other metalworkers and their projects. 4 undergraduate hours. 4 graduate hours.

THEA 422 Structures for the Stage credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/422/)
The incorporation of structural analysis into the technical design of theatrical scenery has become a necessary tool for every Technical Director. This course is a study of the foundational vocabulary, the mathematical equations, and the graphical representations that are used to assist in solving these design challenges. Knowledge of these foundational ideas will help students to make more informed and structurally sound technical designs. 3 undergraduate hours. 3 graduate hours. May be repeated to a maximum of 6 undergraduate hours in separate semesters. Prerequisite: THEA 126. Enrollment limited to Theatre majors or by consent of instructor.

THEA 423 Advanced Lighting Design credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/423/)
A study of lighting design as it relates to color, intensity, distribution, and movement. Material covered includes: script analysis, scenic breakdowns, photometrics and lighting for live performance. 3 undergraduate hours. 4 graduate hours. Prerequisite: THEA 231.

THEA 424 Automation for the Stage credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/424/)
The addition of automation to the Entertainment Industry was a major turning point in the capabilities of live theatre. This course begins the study of the equipment and processes commonly used to move scenery onstage. We will be covering the vocabulary, the typical components and machines used, safety requirements of using automation, and will involve hands-on practice in assembling and disassembling various scenic effects. The knowledge gained will build a foundation for students to identify and select appropriate equipment for use, and will aid in communicating automated-movement concepts and practice with artistic collaborators. 3 undergraduate hours. 3 graduate hours. Prerequisite: THEA 126. Enrollment limited to Theatre majors or by consent of instructor.

THEA 425 Advanced Scenographic Drafting credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/425/)
Advanced drafting techniques for scenic design, lighting design, and technical production. 3 undergraduate hours. 3 graduate hours. Prerequisite: THEA 225 or permission of the instructor. Restricted to Theatre majors only.

THEA 426 History of Decor credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/426/)
Historical and comparative survey of designs, motifs, and forms of decor in the West. Emphasis on the relation between research and design for the stage. Enrollment limited to Theatre majors. 3 undergraduate hours. 3 graduate hours. May be repeated in separate terms to a max of 6 hours if topics vary.

THEA 427 Scenic Painting I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/427/)
Techniques and practice of scenic painting; lab time required. 3 undergraduate hours. 3 graduate hours. Prerequisite: Consent of instructor.

THEA 428 Scenic Painting II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/428/)
In this course, students will study and apply advanced materials, techniques, and skills of scenic painting. Over the semester, students will work to improve their own skills and techniques, with an emphasis on techniques, mediums, surfaces, and process. 3 undergraduate hours. 3 graduate hours. May be repeated in separate terms to a maximum of 3 hours if topics vary. Prerequisite: THEA 427.

THEA 429 Scenic Technology Topics credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/THEA/429/)
The study of Scenic Technology includes assembling a toolkit that creates a broad and diverse skill set. This course provides the opportunity to delve into and explore a wide range of Scenic Technology topics while providing students the foundation needed to seek more advanced learning. 2 undergraduate hours. 2 graduate hours. May be repeated to a maximum of 4 hours in the same semester and a total of 16 hours in separate semesters, if topics vary. Prerequisite: Consent of instructor. Restricted to theatre majors only.

THEA 430 Technical Direction I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/430/)
Introduces the students to various aspects of working on a production at Krannert Center and to the resources available to them. The remainder of the semester will focus on the foundations of theatrical technical design and the production process typical of a professional regional theatre. Students will put this knowledge to practical use by working through necessary steps for theoretical productions, from beginning to end during the second half of the semester. In addition, there will be discussions on topics related to the other duties and responsibilities of a Technical Director. 3 undergraduate hours. 3 graduate hours. Prerequisite: THEA 223 and THEA 419. Restricted to Theatre majors or by consent of instructor.

THEA 431 The Lighting Laboratory credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/431/)
The investigation of lighting design theories through paper projects and practical experimentation in the lighting lab. 3 undergraduate hours. 4 graduate hours. Prerequisite: THEA 231, THEA 423, or graduate standing.

THEA 432 Lighting for Non-Theatrical Spaces and Styles credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/432/)
A strong focus on lighting for architecture, landscape architecture, special events, theme parks, museums, concerts and site-specific venues. 3 undergraduate hours. 4 graduate hours. Prerequisite: THEA 231, THEA 423, THEA 431.

THEA 433 Business of Entertainment Design credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/THEA/433/)
Practical approaches to working as a professional designer. Material covered includes: unions and union membership, contract negotiation and execution, how to get an agent, the difference between assistant and associate designers, urban survival, creating personal websites, touring, residencies, etc. 2 undergraduate hours. 2 graduate hours.

THEA 434 Advanced Lighting Seminar credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/THEA/434/)
An open discussion of current shows and trends in the lighting industry including Skype interviews with business professionals. 1 undergraduate hour. 1 graduate hour. Prerequisite: Theatre Majors Only.

THEA 435 Professional Lighting Systems credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/THEA/435/)
Practical study of state-of-the-art lighting technology for the theatre, using the facilities of the Krannert Center for the Performing Arts. In-depth study of lighting control systems and programming, instrument maintenance, special effects, and the role of the master electrician in production. 2 undergraduate hours. 2 graduate hours. May not be repeated for credit.

THEA 437 Software for Lighting Design credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/THEA/437/)
Practical study of lighting design software currently used in the professional theatre and the entertainment industry. As technology evolves and new software developed, software programs will be added. Accommodating upgrades may necessitate offering the course every other year. 2 undergraduate hours. 2 graduate hours. May be repeated to a maximum of 4 hours. Prerequisite: THEA 231 and THEA 425.

THEA 438 Traditional Rendering Techniques credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/438/)
Lecture and studio course focused on the basic skills of creating hand renderings of scenographic ideas for theatrical stage productions using traditional materials, tools, and techniques. The course will be divided into two parts: 1) Introduction to traditional rendering materials and techniques, and 2) Creation of technically and materially accurate final renderings based on scaled drawings. 3 undergraduate hours. 3 graduate hours. Prerequisite: THEA 125 is required for undergraduates.

THEA 441 Advanced Costume Construction credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/441/)
Focuses on advanced costume construction and organizational practice. Students will learn to efficiently and expertly cut and construct garments and complex assembly processes according to theatrical standards. Students will also gain experience planning the execution of costume designs from rendering to reality, to enhance an understanding of appropriate scope and scale of designs. 4 undergraduate hours. 4 graduate hours. Prerequisite: THEA 242 is required for undergraduates. For MFA Costume Technology and MFA Costume Design majors. BFA Costume Design and Technology majors may be admitted with junior standing.

THEA 442 Introduction to Costume Patterning and Draping credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/442/)
Methods of draping and drafting patterns for period theatrical costumes. 3 undergraduate hours. 4 graduate hours. Prerequisite: Consent of instructor.

THEA 443 Flat Pattern Drafting credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/443/)
Building on Introduction to Costume Patterning, Flat Pattern Drafting is focuses on mathematical drafting systems and paper manipulation to achieve the desired garment shape. 4 undergraduate hours. 4 graduate hours. Prerequisite: THEA 442. Restricted to BFA/MFA students only or consent of instructor.

THEA 444 Costume Draping credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/444/)
Development of patterns for theatrical costumes through advanced draping techniques. Extensive lab work culminating in draping and constructing. 4 undergraduate hours. 4 graduate hours. Prerequisite: THEA 442.

THEA 445 Costume History I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/445/)
Surveys theatrical costume and fashion of major periods. The course emphasizes relationships between styles of art, dramaturgy, social milieu, and production design. 3 undergraduate hours. 3 graduate hours. Prerequisite: BFA/MFA Majors or consent of instructor.

THEA 446 Costume History II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/446/)
Continuation of THEA 445 Costume History I. 3 undergraduate hours. 3 graduate hours. Prerequisite: BFA/MFA Students or approval of instructor.

THEA 447 Costume Rendering credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/447/)
Studio course in costume rendering techniques: analysis of costume figure, rendering of fabrics, exploration of various rendering media. Enrollment limited to Theatre majors. 3 undergraduate hours. 4 graduate hours. Prerequisite: Consent of instructor.

THEA 448 Costume Crafts credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/448/)
The research, rendering, and execution of armor, millinery, jewelry, and masks; dyeing with natural substances and with chemical dyes and the art of distressing clothing to achieve an aged, worn, tired or tattered look. Student is responsible for providing all materials used to complete the various projects. 3 undergraduate hours. 3 graduate hours.

THEA 449 Technology and Costume Crafts credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/449/)
This is a mixed-level course for students who are exploring costume technology in depth. Modern technologies such as 3D printing, use of programmable LED lights, fiber optics, laser cutting, and other innovations are the new resources available to create cutting-edge costumes. During the course students will learn the theory and foundations of these technologies and their practical implementation. 4 undergraduate hours. 4 graduate hours. Prerequisite: Theatre majors only.

THEA 450 Management Seminar credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/THEA/450/)
Addresses production and management issues surrounding Theater Department and KCPA productions. Guest speakers provide professional points of view on various management topics. 1 undergraduate hour. 1 graduate hour. May be repeated in separate terms to a maximum of 8 undergraduate or 6 graduate hours.

THEA 451 Principles of Stage Management credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/451/)
Studies in the principles and the craft of stage management. Enrollment limited to Theatre majors. 3 undergraduate hours. 4 graduate hours. Prerequisite: Minimum of sophomore standing in a Theatre curriculum.

THEA 452 Principles of Arts Management credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/452/)
Introduction to the basic practices of theatre and arts management with emphasis on facilities management, arts marketing, and financial planning in the performing arts. 3 undergraduate hours. 4 graduate hours. Prerequisite: Junior, senior or graduate standing.

THEA 453 Introduction to Theatre Sound credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/453/)
Exploration of audio production techniques, software, and equipment as related to theatrical sound. Students will actively engage in recording, script analysis, sound effect creation, utilization of playback software and other audio equipment. 3 undergraduate hours. 3 graduate hours. Each graduate student is required to create 2 sound stories in addition to normal requirements of the course.

THEA 454 Sound Design I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/454/)
Introduction to concepts of theatrical sound design and basic sound system design as applied to the modern theatre. 3 undergraduate hours. 3 graduate hours. Graduate students do an additional in-depth audio mixing project and an additional sound effects creative project. Prerequisite: THEA 351 and THEA 453.

THEA 455 Sound Design II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/455/)
Rotating Topics Course: Multi-semester study of project-based advanced sound design concepts and techniques in audio recording. Projects focus on mixing and editing for music, theatre and film production, and utilization of current digital technology. 3 undergraduate hours. 3 graduate hours. May be repeated in separate terms to a maximum of 18 hours, as topics vary. Prerequisite: THEA 454 Sound Design I.

THEA 456 Properties Design credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/456/)
Principles of stage property design, planning and management. 3 undergraduate hours. 3 graduate hours.

THEA 457 Model Making for the Stage credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/THEA/457/)
Familiarizes students with diverse techniques, materials, and tools available to model makers, especially in theatre design. Focuses work on traditional craftsmanship of 1/4" scale and 1/2" scale models including sculpting, casting, and soldering. Also address issues of scale, texture, color, and specialty finishes. Open to all designers, artists, and technicians, including students in Museum Studies. Prior knowledge of studio art helpful but not required. 2 undergraduate hours. 2 graduate hours. Prerequisite: Contact instructor for approval.

THEA 458 Digital Rendering Techniques credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/458/)
Introduce students to techniques for manipulating images and creating renderings using computer rendering and drafting programs. 3 undergraduate hours. 3 graduate hours. Prerequisite: THEA 125 or permission of instructor.

THEA 459 Sound Systems credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/THEA/459/)
Project-based study of professional techniques in sound system applications and design for sound reinforcement in music, theatre, and architectural applications. 2 undergraduate hours. 2 graduate hours. May be repeated to a maximum of 6 hours. Prerequisite: THEA 453.

THEA 460 Multi-Ethnic Theatre credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/460/)
Focuses on the history and aesthetics of African, Asian, African American, Asian American, Latino/Latina, and Native American plays and productions. 4 undergraduate hours. 4 graduate hours. Prerequisite: THEA 102.

THEA 461 Introduction to Media Design credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/461/)
Lecture/Studio Course focused on the skill of creating programmed images for live performance of dance, theatre and music theatre. Students will acquire technical skills as well as be introduced to the relationship of projected images to text, performer, space and time. Lecture and classwork projects develop skills with digital technology, images and projections in live performance. 3 undergraduate hours. 4 graduate hours.

THEA 462 Advanced Media Design credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/462/)
Lecture/Studio Course focused on the advanced tools and skills of creating programmed images for live performance of dance, theatre and music theatre. Students will acquire advanced technical skills as well as continue to explore to the relationship of projected images to text, performer, space and time. Lectures and projects develop advanced skills with digital technology, images and projections in live performance. 3 undergraduate hours. 4 graduate hours.

THEA 463 American Theatre History I credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/463/)
Survey of the development of American theatre as a cultural, social, political, and economic institution from the colonial era to 1900. 3 undergraduate hours. 4 graduate hours. Prerequisite: Junior, senior, or graduate standing.

THEA 464 American Theatre History II credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/464/)
Survey of the development of American theatre as a cultural, social, political, and economic institution from the late nineteenth century to the present. 3 undergraduate hours. 4 graduate hours. Prerequisite: Junior, senior or graduate standing.

THEA 465 Musical Theatre History credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/465/)
History of the American musical in the twentieth century, studied through the contributions of major composers, lyricists, directors, and choreographers. 4 undergraduate hours. 4 graduate hours. Prerequisite: Junior standing or above, or consent of instructor.

THEA 467 Contemporary Theatrical Forms credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/467/)
Study of post-World War I theatre, including the New Stagecraft, expressionism, Brecht and epic theatre, theatre of the absurd, and later developments. 3 undergraduate hours. 4 graduate hours. Prerequisite: THEA 208, and junior, senior or graduate standing.

THEA 471 Acting Studio III: Dynamics credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/THEA/471/)
Continuing development of movement and voice skills for actors. Enrollment limited to Theatre majors. 1 undergraduate hour. No graduate credit. Prerequisite: THEA 375, THEA 376, THEA 377 and THEA 378, and concurrent registration in THEA 472, THEA 473 and THEA 474.

THEA 472 Acting Studio III: Voice credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/THEA/472/)
Advanced training in voice and speech for the stage with emphasis on classic texts. Enrollment limited to Theatre majors. 2 undergraduate hours. No graduate credit. Prerequisite: THEA 375, THEA 376, THEA 377 and THEA 378, and concurrent registration in THEA 471, THEA 473 and THEA 474.

THEA 473 Acting Studio III: Movement credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/THEA/473/)
Training in stage combat, sword, and rapier. Enrollment limited to Theatre majors. Additional fees may apply. See Class Schedule. 2 undergraduate hours. No graduate credit. Prerequisite: THEA 375, THEA 376, THEA 377 and THEA 378, and concurrent registration in THEA 471, THEA 472 and THEA 474.

THEA 474 Acting Studio III: Acting credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/474/)
Acting in Shakespearean and other Elizabethan, Jacobean, and Caroline drama. A performance is given at the end of the term. Enrollment limited to Theatre majors. 3 undergraduate hours. No graduate credit. Prerequisite: THEA 375, THEA 376, THEA 377 and THEA 378, and concurrent enrollment in THEA 471, THEA 472 and THEA 473.

THEA 475 Acting Studio IV: Dynamics credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/THEA/475/)
Continuing development of movement and voice skills for actors. Enrollment limited to Theatre majors. 1 undergraduate hour. No graduate credit. Prerequisite: THEA 471, THEA 472, THEA 473 and THEA 474, and concurrent enrollment in THEA 476, THEA 477 and THEA 478.

THEA 476 Acting Studio IV: Voice credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/THEA/476/)
Advanced training in voice and speech for the stage with emphasis on dialects. Enrollment limited to Theatre majors. 2 undergraduate hours. No graduate credit. Prerequisite: THEA 471, THEA 472, THEA 473 and THEA 474, and concurrent enrollment in THEA 475, THEA 477 and THEA 478.

THEA 477 Acting Studio IV: Movement credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/THEA/477/)
Advanced training in unarmed stage combat and quarterstaff. Enrollment limited to Theatre majors. 2 undergraduate hours. No graduate credit. Prerequisite: THEA 471, THEA 472, THEA 473 and THEA 474, and concurrent enrollment in THEA 475, THEA 476 and THEA 478.

THEA 478 Acting Studio IV: Acting credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/478/)
Studies in the techniques of acting for the camera and cold readings; analysis of distinguished film acting. Scenes are recorded in the television studio. Enrollment limited to Theatre majors. 3 undergraduate hours. No graduate credit. Prerequisite: THEA 471, THEA 472, THEA 473 and THEA 474, and concurrent enrollment in THEA 475, THEA 476 and THEA 477.

THEA 479 Preparation for Auditions credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/THEA/479/)
Each actor, through extensive research, prepares a portfolio of audition pieces for the opportunities imminent before and after graduation for resident companies, commercial productions, and film, or professional graduate schools. Enrollment limited to Theatre majors. 2 undergraduate hours. 2 graduate hours. Prerequisite: THEA 375, THEA 376, THEA 377, THEA 378.

THEA 480 Upholstery Techniques credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/480/)
This course is an introduction to the techniques, tools, and materials commonly used when upholstering furniture for the stage. Students will have the opportunity to learn a variety of skills and complete several sewing and upholstery samples, building basic upholstery skills into advanced techniques through class projects. All of these skills are paramount for anyone considering a career in the performing arts as a crafts person. 3 undergraduate hours. 4 graduate hours. Prerequisite: Students talking this class should have prior sewing experience and a familiarity with common soft craft tools such as a serger, sewing machine, foam cutter, and various glues and adhesives. For Theatre Majors only. Only MFA and upper level BFA Technical/Design Theatre Students may take this class.

THEA 481 Content Creation 1: Camera and Editing for Media Design credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/481/)
Lecture/Studio Course focused on creating original video content. There is special emphasis on producing media assets to be used as a part of live performance of dance, theatre and music theatre. Lecture and classwork projects develop skills in developing image ideas from text to storyboards to camera images to completed motion video. 3 undergraduate hours. 4 graduate hours.

THEA 482 Content Creation 2: Motion Graphics & VFX for Media Design credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/482/)
Lecture/Studio Course focused on creating motion graphics & video special effects content. There is special emphasis on producing media assets to be used as a part of live performance of dance, theatre and music theatre. Lecture and classwork projects are intended to explore and develop skills in preparing still images and animating them into motion video. 3 undergraduate hours. 4 graduate hours.

THEA 483 Modern Scandinavian Drama credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/483/)
Same as CWL 463 and SCAN 463. See SCAN 463.

THEA 485 Prop Furniture Construction credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/485/)
This course explores the skills and tools commonly used for furniture construction. Students will learn a variety of fine woodworking techniques while constructing samples that will ultimately lead to a realized piece of furniture. In this advanced course of study, students will focus on joinery, the properties of finer lumber choices, programing the CNC for automated cutting assistance, the use of a wood lathe, and natural fiber upholstery techniques such as rushing and caning. 3 undergraduate hours. 4 graduate hours. Prerequisite: Students taking this class should have prior carpentry and woodworking experience and a familiarity with bench tools, hand tools, various glues, and common construction materials.

THEA 489 Leatherworking Techniques credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/489/)
Leatherworking is a class designed to introduce students to the many tools and techniques involved in working with a variety of leathers, either for crafts or costumes. We will mainly focus on projects incorporating leather inlay and overlay, patterning, skiving, and using a roller-wheel presser foot. A class trip to a local leather merchant is also a required part of this course. 3 undergraduate hours. 3 graduate hours. Prerequisite: Restricted to Costume Technology and Properties Design & Management majors.

THEA 490 Professional Internship credit: 0 to 14 Hours. (https://courses.illinois.edu/schedule/terms/THEA/490/)
Professional work with an approved host theatre or institution in an area related to the student's academic program; exposure to and participation in professional theatre. Full documentation and approval of internship activities required. 0 to 14 undergraduate hours. 0 to 12 graduate hours. Approved for S/U grading only. May be repeated in the same or subsequent terms, if topics vary. Prerequisite: Junior, senior, or graduate standing in Theatre; consent of Internship Coordinator.

THEA 491 Advanced CAD Drafting for Lighting Designers credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/491/)
Advanced practical study of CAD drafting for lighting designers and technicians utilizing current industry software. 3 undergraduate hours. 4 graduate hours. Prerequisite: THEA 437.

THEA 492 Digital Rendering for Lighting credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/492/)
An exploration of 3-D rendering techniques for live performance using software specific to the lighting industry. Teach skills necessary to create an artistic representation of a design and to imagine a production. 3 undergraduate hours. 4 graduate hours.

THEA 493 Lighting Opera & Musicals credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/493/)
An advanced study of techniques used for lighting musicals and operas through paper projects and various lectures. 3 undergraduate hours. 4 graduate hours.

THEA 494 Advanced Problem Solving for Lighting Designers credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/494/)
Practical projects to help lighting designers and technicians prepare for unforeseen problems that arise in professional situations when dealing with various lighting projects and gear. Topics addressed include storytelling, plot, practical lighting, and repertory. 3 undergraduate hours. 4 graduate hours.

THEA 495 Capstone Project credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/THEA/495/)
This course is intended for students to demonstrate their proficiency, creativity, ability, and authority as a professional in their specific area of study. Students will implement the knowledge gained in courses taken and production to prove their understanding and skills in a culminating project. 1 undergraduate hour. No graduate credit. May be repeated to a maximum of 2 hours in separate terms. Prerequisite: Enrollment by permission of area chair.

THEA 496 Professional Exploration credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/THEA/496/)
This course is intended to provide an opportunity for students to broaden their understanding of the entertainment field and network with working professionals. It will also serve to gain more experience in a specific area of expertise and receive certification in those areas making candidates more marketable and well positioned to enter the industry upon graduation. 1 undergraduate hour. No graduate credit. May be repeated in the same or separate semesters to a maximum of 2 hours, if topics vary. Prerequisite: Restricted to theatre majors with Junior or Senior standing only.

THEA 497 Audio Engineering I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/497/)
Introduction to audio engineering and system design concepts through exploration of audio consoles, amplification, loudspeaker manufacturing and design. 3 undergraduate hours. 3 graduate hours. Prerequisite: THEA 153.

THEA 498 Audio Engineering II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/498/)
Rotating Topics: Project-based study of professional techniques in sound system applications and design for sound reinforcement in music, theatre and architectural applications. 3 undergraduate hours. 3 graduate hours. May be repeated in separate semesters for up to 12 hours for undergraduate students and up to 18 hours for graduate students. Prerequisite: THEA 497: Audio Engineering I.

THEA 505 Proseminar in Theatre Practice credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/505/)
Orientation to production activity at the Krannert Center for the Performing Arts, review of contemporary theatre practice in the United States, survey of methods in production research, and selected projects in theatre specialties. Prerequisite: Enrollment limited to Theatre majors.

THEA 519 Theatrical CAD Drafting II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/THEA/519/)
Extensive knowledge of various drafting software programs is a valuable skill is becoming a more commonplace tool in Entertainment technical design and mechanics. Knowledge of the software available is a valuable asset to any student who wishes to pursue a career within the commercial side of the industry. This course will extend and enhance student skills and mastery of CAD techniques. 2 graduate hours. No professional credit. Prerequisite: THEA 419. Restricted to Theatre majors or by consent of instructor.

THEA 522 Structures for the Stage II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/522/)
The incorporation of structural analysis into the technical design of theatrical scenery has become a necessary tool of every Technical Director. This course continues the study from THEA 422 Structures for the Stage I. More advanced vocabulary and mathematical equations are examined in depth. Topics such as complex structural steel design, structural aluminum design, plywood design, and truss design will be covered. 3 graduate hours. No professional credit. Prerequisite: THEA 422.

THEA 524 Automation for the Stage credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/524/)
This course builds upon knowledge acquired in THEA 424 and applies it to practical applications when using automation onstage. The course incorporates problem-identification and solving skills in the student's work and various other scenarios to design proper theatrical machines as solutions. Hands-on lab work will also be included. 3 graduate hours. No professional credit. Prerequisite: THEA 424.

THEA 530 Technical Direction II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/530/)
This course builds on the acquired knowledge from THEA 430. The course revolves around the discussion of advanced topics in Technical Direction. The students will examine more in-depth technical design problems and find solutions to the problems both individually and as a group. The students will also be able to apply the knowledge and skills acquired from other previous courses. 3 graduate hours. No professional credit. Prerequisite: THEA 430. Enrollment limited to Theatre majors.

THEA 550 Colloquium Design & Theat Tech credit: 4 or 8 Hours. (https://courses.illinois.edu/schedule/terms/THEA/550/)
Projects in design for the theatre or in theatre technology, including stage scenery, costuming, lighting, makeup, projections, and sound and stage systems. May be repeated to a maximum of 32 hours. Prerequisite: Enrollment limited to graduate students in theatre design and technology.

THEA 559 Topics in Stage Management credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/THEA/559/)
This course surveys advanced topics in stage management focusing on skill building and development for graduate students preparing to enter the professional world. Advanced stage management techniques are discussed with an eye to promoting innovation. Assignments are designed to provide a laboratory experience where students can apply critical thinking, scholarly research, experimentation, collaboration and writing skills relevant to real-world scenarios and often with practical outcomes or applications. 2 graduate hours. No professional credit. May be repeated to a maximum of 12 hours. Prerequisite: MFA Stage Management majors only.

THEA 560 Seminar in Theatre History credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/560/)
Studies in the history of the theatre. May be repeated to a maximum of 16 hours. Prerequisite: Consent of instructor.

THEA 561 Seminar in Dramatic Literature credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/561/)
Advanced studies of plays as dramatic literature in historical and theoretical contexts. Selection of plays may vary each semester. May be repeated in separate terms to a maximum of 16 graduate hours.

THEA 562 Seminar in Theatre Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/562/)
Studies in theories of drama, theatre, and performance. Examination of major theorists in both theatre scholarship and critical theory. Emphasis placed on studies in methodology. Specific topics may vary. May be repeated in separate terms to a maximum of 16 hours.

THEA 564 Stud Theatre Hist 20th Century credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/THEA/564/)
Examines selected movements and contributors to the theatre from the late nineteenth-century to the contemporary period. May be repeated to a maximum of 8 hours with approval. Prerequisite: Consent of instructor.

THEA 571 Colloquium in Acting: Dynamics credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/THEA/571/)
Intensive professional training in voice and movement skills for the actor. May be repeated to a maximum of 6 hours. Prerequisite: Enrollment limited to graduate acting students; concurrent registration in THEA 572, THEA 573 and THEA 574.

THEA 572 Colloquium in Acting: Voice credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/THEA/572/)
Intensive professional training in voice and speech for the actor. May be repeated to a maximum of 12 hours. Prerequisite: Enrollment limited to graduate acting students; concurrent registration in THEA 571, THEA 573 and THEA 574.

THEA 573 Colloquium in Acting: Movement credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/THEA/573/)
Intensive professional training in movement and stage combat for the actor. Additional fees may apply. See Class Schedule. 2 graduate hours. No professional credit. May be repeated to a maximum of 12 hours. Prerequisite: Enrollment limited to graduate acting students; concurrent registration in THEA 571, THEA 572 and THEA 574.

THEA 574 Colloquium in Acting: Acting credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/THEA/574/)
Intensive professional training in acting with a different focus each term on a particular style of dramatic literature. May be repeated to a maximum of 18 hours. Prerequisite: Enrollment limited to graduate acting students; concurrent registration in THEA 571, THEA 572 and THEA 573.

THEA 591 Special Problems credit: 0 to 8 Hours. (https://courses.illinois.edu/schedule/terms/THEA/591/)
Individual research in selected topics by arrangement with the instructor. 0 to 8 graduate hours. No professional credit. Approved for Letter and S/U grading. May be repeated up to 72 hours if topics vary. Prerequisite: Consent of instructor.

THEA 595 Creative Project credit: 1 to 8 Hours. (https://courses.illinois.edu/schedule/terms/THEA/595/)
Open to MFA, MA, and PhD in Theatre 1 to 8 graduate hours. No professional credit. May be repeated up to 20 hours in the same term or 72 hours in separate terms, if topics vary. Prerequisite: Consent of instructor.

THEA 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/THEA/599/)
Approved for S/U grading only. May be repeated. Prerequisite: Consent of instructor.

TAM - THEORETICAL AND APPLIED MECHANICS

TAM Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/TAM/)

Courses

TAM 195 Mechanics in the Modern World credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/TAM/195/)
Freshman introduction to engineering mechanics and its role in modern engineering analysis and design. Project activity.

TAM 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/TAM/199/)
May be repeated.

TAM 201 Mechanics for Technol & Mgmt credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TAM/201/)
Engineering mechanics (statics, dynamics, solid mechanics, and fluid mechanics) and the role that mechanics plays in engineering analysis and design. For Technology and Management majors only.

TAM 210 Introduction to Statics credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/TAM/210/)
Forces, moments, couples; resultants of force systems; equilibrium analysis and free-body diagrams; analysis of forces acting on members of trusses, frames, etc.; shear-force and bending-moment distributions; Coulomb friction; centroids and center of mass; applications of statics in design. Credit is not given for both TAM 210 and TAM 211. Prerequisite: PHYS 211; credit or concurrent registration in either MATH 241 OR MATH 257.

TAM 211 Statics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TAM/211/)
Forces, moments, and couples; resultants of force systems; equilibrium analysis and free-body diagrams; analysis of forces acting on members of trusses, frames, etc.; shear-force and bending-moment distributions; Coulomb friction; centroids, center of mass, moment of inertia, polar moment of inertia, and product of inertia; virtual work; hydrostatic pressure; applications of statics in design. Credit is not given for both TAM 211 and TAM 210. Prerequisite: PHYS 211; credit or concurrent registration in either MATH 241 OR MATH 257.

TAM 212 Introductory Dynamics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TAM/212/)
Kinematics and dynamics of the three-dimensional motion of particles; kinematics and dynamics of the plane motion of rigid bodies; methods of work energy and impulse momentum; moving reference frames. Prerequisite: TAM 210 or TAM 211.

TAM 251 Introductory Solid Mechanics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TAM/251/)
Relationship between internal stresses and deformations produced by external forces acting on deformable bodies, and design principles based on mechanics of solids: normal stresses, shear stresses, and deformations produced by tensile, compressive, torsional, and bending loading of members; beam deflections; elastic energy and impact; multi-dimensional stress states; buckling of columns. Prerequisite: TAM 210 or TAM 211.

TAM 252 Solid Mechanics Design credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/TAM/252/)
Design problems and projects intended to accompany TAM 251. Prerequisite: Credit or concurrent registration in TAM 251.

TAM 270 Design for Manufacturability credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TAM/270/)
Same as ME 270. See ME 270.

TAM 297 Introductory Independent Study credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/TAM/297/)
Independent study and/or individual projects related to engineering mechanics. Approved for Letter and S/U grading. May be repeated to a maximum of 6 credit hours for letter grade; no limit for S/U grade mode. Prerequisite: Consent of Instructor.

TAM 302 Engineering Design Principles credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TAM/302/)
Examples of mechanical design problems that occur in engineering practice and the procedures and issues involved in solving them; technical aspects and societal ramifications of the design process; intellectual property, ethics, and contemporary issues; probability and statistics; computational mechanics; case studies; student discussion of design-related issues at different levels; design project reports and presentations; student teams.

TAM 324 Behavior of Materials credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TAM/324/)
Same as CEE 300. See CEE 300.
This course satisfies the General Education Criteria for:
Advanced Composition

TAM 335 Introductory Fluid Mechanics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TAM/335/)
Fluid statics; continuity, momentum, and energy principles via control volumes; ideal and real fluid flow; introduction to the Navier-Stokes equation; similitude; laminar and turbulent boundary layers; closed-conduit flow, open-channel flow, and turbomachinery. Credit is not given for both ME 310 and TAM 335. Prerequisite: TAM 212.

TAM 412 Intermediate Dynamics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TAM/412/)
Lagrangian mechanics of dynamical systems with an emphasis on vibrations; constraints and generalized coordinates; motion in accelerating frames; conservation laws and invariance of the Lagrangian; particle motion in one dimension, the two-body problem, and central-force motion; free and forced vibration of linearized single-degree-of-freedom and multi-degree-of-freedom discrete systems; weakly nonlinear vibrations; parametric resonance; introduction to Hamiltonian dynamics; rigid-body motions. 4 undergraduate hours. 4 graduate hours. Credit is not given for both TAM 412 and AE 352. Prerequisite: MATH 225 or MATH 257 or MATH 415; MATH 285 or MATH 441; TAM 212.

TAM 413 Fund of Engrg Acoustics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/TAM/413/)
Same as ECE 473. See ECE 473.

TAM 416 Introduction to Nonlinear Dynamics and Vibrations credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TAM/416/)
Single- and multi-degree-of-freedom oscillators; asymptotic methods; forced, internal and combination resonances; time-discrete dynamical systems (maps); complex dynamics; parametric vibrations and resonances; introduction to nonlinear localization and nonlinear targeted energy transfer; nonlinear vibrations of elastic continua; application in mechanics and engineering. Same as AE 452. 4 undergraduate hours. 4 graduate hours. Prerequisite: TAM 412, ME 340, or AE 352.

TAM 424 Mechanics of Structural Metals credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/TAM/424/)
Micromechanisms at the atomic, single-crystal, and polycrystal levels and their use in explaining the deformation and failure characteristics of metals; elastic deformation, dislocation mechanics, plastic deformation and strengthening mechanisms, fracture mechanics and fracture mechanisms, fatigue, and creep; design criteria; special topics. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CEE 300 or ME 330.

TAM 428 Mechanics of Composites credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TAM/428/)
Same as AE 428 and MSE 456. See MSE 456.

TAM 435 Intermediate Fluid Mechanics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TAM/435/)
Analytical solution methods for problems involving ideal and real fluids: potential flow theory, boundary-layer theory; surface waves, vortex dynamics, and compressible flows. 4 undergraduate hours. 4 graduate hours. Prerequisite: One of AE 312, ME 310, TAM 335.

TAM 445 Continuum Mechanics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TAM/445/)
Tensor algebra and analysis; kinematics of continua; mass, force, stress, and the general balance laws of continuum mechanics; introduction to constitutive equations. 4 undergraduate hours. 4 graduate hours. Prerequisite: TAM 251.

TAM 451 Intermediate Solid Mechanics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TAM/451/)
Analysis of stress and strain (definitions, transformation of axes, equilibrium equations, and symmetry of the stress tensor); linear materials, Hooke's law; strain energy, potential energy, energy principles and methods; two-dimensional problems in elasticity (torsion, axisymmetric problems); the finite-element method for two- and three-dimensional boundary-value problems in linear elasticity; plasticity (introduction, yield criteria, elastic-plastic behavior, and limit-load calculations); linear-elastic fracture mechanics (introduction, Griffith's approach, stress intensity factor, and energy release rate). 4 undergraduate hours. 4 graduate hours. Prerequisite: TAM 251.

TAM 456 Experimental Stress Analysis credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TAM/456/)
Basic theories for measuring stresses and deformations in load-carrying engineering components; use of optical, electrical, and mechanical instrumentation; laboratory sessions on brittle coatings, electrical resistance strain gages, photoelasticity, and moire interferometry. 3 undergraduate hours. 3 graduate hours. Prerequisite: TAM 251.

TAM 461 Cellular Biomechanics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TAM/461/)
Mechanics of biological cells and tissues: cell structure; mechanics of biomembranes; the cytoskeleton and cortex; dynamic cell processes; cell motility and control of cell shape and proliferation; experimental approaches and theoretical models. Same as BIOE 461. 4 undergraduate hours. 4 graduate hours. Prerequisite: TAM 251.

TAM 470 Computational Mechanics credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/TAM/470/)
Modercomputational mechanics: mappings and iterative methods; stability; convergence; consistency; numerical and symbolic solutions of ordinary and partial differential equations; finite-difference methods; the finite-element method; spectral methods. Applications to problems in solid mechanics, fluid mechanics, and dynamics. Same as CSE 450. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 101; MATH 285 OR MATH 286 OR MATH 441.

TAM 497 Independent Study credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/TAM/497/)
Individual studies in any area of theoretical and applied mechanics. 1 to 3 undergraduate hours. No graduate credit. May be repeated to a maximum of 6 hours in separate terms as topics vary. Prerequisite: Consent of Instructor. Students with Junior or Senior standing.

TAM 498 Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/TAM/498/)
Subject offerings of new and developing areas of knowledge in theoretical and applied mechanics intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated in the same or separate terms if topics vary to a maximum of 9 undergraduate hours or 12 graduate hours.

TAM 500 Seminar credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/TAM/500/)
Lectures and discussion on current topics in theoretical and applied mechanics. Approved for S/U grading only.

TAM 514 Elastodynamics and Vibrations credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TAM/514/)
Review of theory of multi-degree-of-freedom systems; problems in the free and forced vibration of continuous linear elastic structures, rods, beams, membranes, plates, and three-dimensional solid and fluid bodies; Lagrangian densities, Sturm-Liouville problems, time and frequency domains, damping, Green's functions, and elastic waves; propagation and modal analysis; modeling of damping in structures; response of complex structures. Same as AE 551. 4 graduate hours. No professional credit. Prerequisite: TAM 412, TAM 542, and TAM 551.

TAM 516 Dynamical Systems Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TAM/516/)
Same as AE 554. See AE 554.

TAM 518 Wave Motion credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TAM/518/)
Linear waves in one-dimensional homogeneous and inhomogeneous media (both solids and fluids), linear elastic waves in a homogeneous halfspace, scalar waves in a layer and in a layered halfspace, nonlinear diffusive waves, nonlinear dispersive waves, and the inverse scattering transform. Prerequisite: TAM 541 or MATH 556; one of TAM 514, TAM 531, TAM 551.

TAM 524 Micromechanics of Materials credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TAM/524/)
Advanced analysis of modern engineering materials with emphasis on relating microstructural phenomena to the mechanics of material behavior: prediction of elastic and thermal properties of materials with heterogeneous microstructure (such as composites), micromechanics of failure and damage, toughening mechanisms, mechanics of phase transformations; current topics in materials research (such as high-temperature response and ferroelasticity). Prerequisite: CEE 300 or ME 330; TAM 551.

TAM 529 Viscoelasticity Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TAM/529/)
Same as AE 529. See AE 529.

TAM 531 Inviscid Flow credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TAM/531/)
Dynamics of fluids in the limit of zero viscosity: governing equations of motion, kinematics, and vorticity transport; general theory of irrotational flow, including two-dimensional potential flow, the complex potential, and three-dimensional potential flow; applications to thin airfoil theory and free streamline theory; inviscid flows with vorticity; vortex dynamics; water wave theory; aspects of inviscid compressible flow. 4 graduate hours. No professional credit. Prerequisite: MATH 285 OR MATH 286 OR MATH 441; TAM 435.

TAM 532 Viscous Flow credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TAM/532/)
Dynamics of flow in which viscosity is significant or dominant, and the development and use of theoretical and numerical tools for practitioners of modern fluid mechanics; physics of viscous layers that arise in both high- and low-Reynolds-number flows; dimensional analysis, exact solutions to the Navier-Stokes equations; jets and wakes; microhydrodynamics; fluid stability; turbulence. Prerequisite: MATH 285 and TAM 435.

TAM 534 Non-Newtonian Fluid Mechanics & Rheology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TAM/534/)
Mechanics of complex fluids exhibiting non-Newtonian behavior including shear-thinning, viscoelasticity, extensional thickening, and thixotropy. Key ideas include rheological property measurement, tensorial constitutive models, flow calculations, and basic structure-property relations. Concepts apply to a diverse range of materials such as polymer solutions and melts, colloidal suspensions, gels, emulsions, foams, pastes, biomaterials, and other soft materials. This interdisciplinary material requires previous intermediate level coursework in at least one of the core areas of fluid mechanics, or solid mechanics, or polymer physics, or colloid physics. 4 graduate hours. No professional credit. Prerequisite: TAM 435 OR TAM 451 OR MSE 450 OR MSE 480.

TAM 536 Instability and Transition credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TAM/536/)
Stability of fluid motion: linearized flow equations and normal-mode analysis, Kelvin-Helmholtz instability, inviscid and viscous theory of parallel shear flow, Squire's and Rayleigh's inflection-point theorems, secondary instability theory; critical layers; boundary-layer stability; Orr-Sommerfeld equations, Tollmien-Schlichting waves; non-parallel theory, centrifugal instabilities, and Benard convection; nonlinear theory and transition to turbulence; bifurcations, Landau's theory; routes to chaos, strange attractors; transition modeling, prediction, and control; boundary-layer receptivity, experimental evidence. Prerequisite: TAM 532.

TAM 537 Experimental Fluid Mechanics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TAM/537/)
Methods and techniques for measurement and analysis of data used in experimental fluid mechanics: signal processing, electronics, and electro-optics; fluid mechanical properties; experimental signal processing; random data and signal analysis; analog and digital data processing; dynamic similarity, self-preservation; pressure measurement, thermal anemometry, and laser-Doppler velocimetry; flow visualization, particle-image velocimetry. Prerequisite: TAM 531 or TAM 532.

TAM 538 Turbulence credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TAM/538/)
Instability and origins of chaotic motion in fluid flow; Reynolds averaging and statistical description of turbulence, correlations and spectral dynamics of homogeneous turbulence, anisotropic flows, coherent structures, inhomogeneous turbulence, transport models, and large-eddy simulations. Prerequisite: TAM 532.

TAM 539 Fluid Mechanics Seminar credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/TAM/539/)
Weekly seminar on current research topics in turbulent and other complex flows: theoretical modeling, numerical analysis, computational techniques, and experimental investigations. Approved for S/U grading only.

TAM 541 Mathematical Methods I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TAM/541/)
Vector and tensor algebra and complex-variable methods; ordinary differential equations, qualitative questions of existence and uniqueness; analytic solution methods, numerical methods, power-series solution and special functions; eigenvalue problems, Green's functions, Laplace transforms, stability of solutions; engineering applications drawn from mechanics. 4 graduate hours. No professional credit. Prerequisite: MATH 285 OR MATH 286 OR MATH 441; TAM 251.

TAM 542 Mathematical Methods II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TAM/542/)
Continuation of TAM 541. Modeling, inequalities, elements of functional analysis; partial differential equations, existence and uniqueness, second-order equations; hyperbolic conservation laws; numerical methods, eigenfunction expansions, integral transforms, and fundamental solutions; engineering applications drawn from mechanics. Prerequisite: TAM 541.

TAM 545 Advanced Continuum Mechanics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TAM/545/)
Unified treatment of modern continuum mechanics: mathematical preliminaries; review of kinematics and general balance laws; general theory of mechanical constitutive equations, including material constraints and material symmetry. 4 graduate hours. No professional credit. Prerequisite: TAM 445 OR TAM 551.

TAM 549 Asymptotic Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TAM/549/)
Advanced methods of perturbation theory and asymptotic analysis, with examples drawn from classical dynamics, fluid mechanics, and wave propagation: asymptotics of integrals, singular perturbation theory (boundary layers, matched asymptotic expansions, and composite expansions), multiple scales, summation of series; special topics. Prerequisite: MATH 446 and TAM 541.

TAM 551 Solid Mechanics I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TAM/551/)
Mechanics of elastic deformable bodies, based on the fundamental concepts of modern continuum mechanics: kinematics, balance laws, constitutive equations; classical small-deformation theory; formulation of initial boundary-value problems of linear elastodynamics and boundary-value problems of linear elastostatics; variational formulations, minimum principles; applications of theory to engineering problems. 4 graduate hours. No professional credit. Prerequisite: MATH 285 OR MATH 286 OR MATH 441.

TAM 552 Solid Mechanics II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TAM/552/)
Continuation of TAM 551. Selected topics in linear elasticity (including St. Venant beam theory and plane problems of elastostatics), plasticity (including yield surfaces, von Mises and Tresca yield criteria, Drucker's stability postulate, J-flow theory, perfect plasticity, limit analysis, and slip-line theory), and fracture mechanics (including linear elastic analysis, fracture criteria for elastic brittle fracture, and elastic-plastic fracture). Prerequisite: TAM 551.

TAM 554 Plasticity credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TAM/554/)
Phenomenological and mathematical formulation of the constitutive laws of plasticity; yield criteria and their experimental verification; plastic stress-strain relations and their associated flow rules; correspondence between rate-independent and rate-dependent plasticity; solutions to basic boundary-value problems, including plane problems and those involving cylindrical and spherical symmetries; variational and minimum principles; limit analysis; plane-strain problems and crystal plasticity; finite-strain theory. Prerequisite: TAM 552.

TAM 555 Fracture Mechanics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TAM/555/)
Unified analytical treatment of modern fracture problems: macroscopic theories used to determine the static strength of bodies containing cracks; Griffith criterion, linear-elastic fracture mechanics, elastic-plastic fracture mechanics models; small-scale yielding results and their implications; general yielding; interfacial fracture; fracture control; micromechanisms of fracture. Prerequisite: TAM 424 or MSE 440; TAM 541; TAM 552.

TAM 557 Mechanics of Random Media credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TAM/557/)
Methods to study mechanics of complex/random microstructures involving several scales: random geometry and stochastic processes and fields, including spatial point processes, mathematical morphology, geodesics, ergodicity, entropy; (non)stationary and (an)isotropic tensor random fields for fluids (turbulence) and solids (microstructures), representations and spectra; truss- and beam-lattices and corresponding (non-)classical continua for modeling crystals, cellular media (e.g. metallic foams), and granular matter; geometric and rigidity percolation; plasticity, fracture, slip statistics, and fractals in disordered media; scaling to Representative Volume Element (RVE) in conductivity, (non)linear elasticity, elasto-plasticity, flow in porous media, and coupled field phenomena; statistical continuum theories for problems without RVE (i.e., lacking separation of scales); stochastic finite elements; effects of microscale randomness on waves and wavefronts in (non)linear elastic/dissipative solid or fluid media; fractional calculus and mechanics of fractal media. Prerequisite: TAM 445 or TAM 551; MATH 362.

TAM 559 Atomistic Solid Mechanics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TAM/559/)
Fundamental concepts in solid mechanics, including measures of stress, strain, and displacement, as well as principles of equilibrium, compatibility, and constitutive theory, all derived from an atomistic perspective; atomistic considerations in treatment of simple boundary value problems. Virial stress theorem, classical and quantum based potential energy functionals, energy minimization algorithms for molecular statics, and principles of molecular dynamics. Atomistic treatment of dislocation theory and fracture mechanics. Survey of current mechanics literature and introduction to open-source atomistic modeling software. 4 graduate hours. No professional credit. Prerequisite: TAM 451 OR TAM 551.

TAM 561 Mechanics and Thermodynamics of Soft Matter and Biological Materials credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TAM/561/)
Focuses on the physical principles and quantitative methods of describing the mechanical behavior of soft materials, particularly those of biological relevance (polymer networks, lipids, cell membranes). It has strong mathematics components, including an introduction to both variational calculus and differential geometry. Students will learn rigorous treatment of biological/soft matter topics relevant in current research, such as network and membrane mechanics, adhesion, and entropic effects. Practical exercises in numerical simulation are integrated into the course. 4 graduate hours. No professional credit. Prerequisite: Either TAM 541 or CHBE 521 or PHYS 508 or consent of instructor.

TAM 570 Computational Fluid Mechanics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TAM/570/)
Highly accurate and reliable techniques for large-scale numerical simulations of fluid flows: spectral numerical methods, including Fourier and other functional expansions, Galerkin and collocation projections, domain decompositions and the solution of partial differential equations, especially the Navier-Stokes equations; high-resolution methods for the solution of hyperbolic conservation laws with discontinuous solutions, and issues related to implementation on supercomputers. Same as CSE 560. Prerequisite: TAM 470 and TAM 542.

TAM 574 Adv Finite Element Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TAM/574/)
Advanced theory and applications of the finite-element method, as needed for research in computational science and engineering: applications to mechanics of solids and fluids, thermal problems, etc.; variational foundations of the finite-element method, error estimates, and adaptive analysis; finite-element methods for parabolic and hyperbolic problems; mixed finite-element methods; applications to systems of equations. Same as CSE 517. Prerequisite: One of TAM 470, CEE 570, CS 555, ME 471.

TAM 597 Advanced Independent Study credit: 1 to 8 Hours. (https://courses.illinois.edu/schedule/terms/TAM/597/)
Analytical, experimental, or computational studies in one or more areas of theoretical and applied mechanics, including solid mechanics, behavior of materials, fluid mechanics, dynamics, applied mathematics, and computational science and engineering. May be repeated. (Summer session, 1 to 4 hours). Prerequisite: Consent of instructor.

TAM 598 Advanced Special Topics credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/TAM/598/)
Subject offerings of new and developing areas of knowledge in theoretical and applied mechanics intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. May be repeated in the same or separate terms if topics vary to a maximum of 12 hours.

TAM 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/TAM/599/)
Approved for S/U grading only. May be repeated.

TRST - TRANSLATION STUDIES

TRST Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/TRST/)

Courses

TRST 201 Intro to Translation Studies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TRST/201/)
Introduction to translation as an academic discipline and professional field through a series of texts in translation. Explores the ways in which texts, images, and ideas move across cultures, across time, across languages, and through different art forms; to elevate the students' appreciation of literature and other art forms; and get acquainted with the complexities of a work of art as a cultural manifestation and with the ways in which various artists, writers and translators have attempted to recreate these complexities in other languages and cultures. Prerequisite: Students must have met the University of Illinois foreign language requirement.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts

TRST 403 German-English Translation: Theory & Practice credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TRST/403/)
Same as GER 403. See GER 403.

TRST 407 Terminology credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/TRST/407/)
Provides a foundation in terminology management theory and practice. Key principles, including concept orientation, term autonomy, data granularity, and interchange standards are emphasized. Practical skills learned include performing term extraction, creating a terminology database (termbase), using the termbase as an aid when translating a text, and developing interpreter-oriented formats. Requires access to a computer running Windows. 3 undergraduate hours. 4 graduate hours.

TRST 410 Translation and Interpreting Theory & Practice credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/TRST/410/)
Study of the theory and methods of translation and interpreting. Emphasis is on contemporary theoretical trends in the translation and interpreting fields, and practical application of theoretical models. 3 undergraduate hours. 4 graduate hours. Prerequisite: Departmental approval.

TRST 412 Spanish/English Translation credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/TRST/412/)
Same as SPAN 410. See SPAN 410.

TRST 413 Arabic-English Translation credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/TRST/413/)
Same as ARAB 413. See ARAB 413.

TRST 415 Machine Translation: History and Applications credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/TRST/415/)
Explores the 60-year history of using computers to translate human languages, from the 1954 Georgetown experiment to the present. Explores the dominant symbolic and statistical paradigms that have defined machine translation, and the positive and negative dynamics that human translators have experienced when interacting with machine translation systems. Provides hands-on experience with machine translation today. Same as LING 415. 3 undergraduate hours. 4 graduate hours.

TRST 419 Techniques in Translation I credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/TRST/419/)
Same as FR 419. See FR 419.

TRST 430 Chinese Poetry and Translation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TRST/430/)
Same as EALC 425. See EALC 425.

TRST 431 History of Translation credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/TRST/431/)
Same as CLCV 430, CWL 430, ENGL 486, GER 405, SLAV 430, and SPAN 436. See SLAV 430.

TRST 432 Audio Visual Translation Studies credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/TRST/432/)
Examination of how subtitles are produced, how multimodal translation works, the growing discipline of audiovisual translation, as well as hands-on training in subtitling. Students will review the history of audiovisual translation, practice using subtitling software, and produce their own subtitles for segments of films they select. Students may work from any other language into English. Access to a PC computer strongly encouraged. 3 undergraduate hours. 4 graduate hours. Prerequisite: Six semesters of foreign language study at the college level, or equivalent competence.

TRST 500 Translation and Interpretation: Reflective Practice credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TRST/500/)
Exploration of the ethical and epistemological dimensions of translation and interpreting. Through discussion of primary texts and case studies, this course aims to take students beyond codified codes of professional ethics to discover the intellectual traditions (e.g., hermeneutics and philosophy of language, critical social theory, virtue ethics, etc.) that frame reflective practice. Topics include the nature of language, dialogue across difference, and the crafting of a personally fulfilling and morally responsive life of practice. 4 graduate hours. No professional credit. Prerequisite: TRST 410 or consent of instructor.

TRST 501 Applied Literary Translation I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TRST/501/)
Focuses on both the theory and the practice of literary translation, as well as the business aspect of how to negotiate a translation proposal through the US publishing market. Students will produce a completed translation of a short story or a selection of poems. Same as CWL 511, EALC 511, GER 511, and SLAV 501. 4 graduate hours. No professional credit.

TRST 502 Applied LiteraryTranslation II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TRST/502/)
Focuses on the practice and strategies of literary translation through the study of what prominent and successful translators have written about their own experience and through comparative analysis of prize-winning translations. Students will be exposed to reader response theory and the role of the translator as cultural agent while learning how to produce paratext for their translations (prefaces, notes, etc.) and developing skills in translation, editing, grant-writing, and participation in professional associations. Same as CWL 512, EALC 512, GER 512, and SLAV 502. 4 graduate hours. No professional credit. Prerequisite: TRST 501 or consent of unit.

TRST 503 Computer-Assisted Translation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TRST/503/)
A foundation course in the history, technical underpinnings and functionality of computer-assisted translation (CAT). Students work with several CAT tools and learn the functions and features of CAT, including Project set-up, Translation Memory, Termbase, Alignment, File filters, Quality Assurance, Reports, Review files, Machine Translation, and Autosuggest dictionaries. All students require a computer running Windows, with administrator access for installing software. For campus students, this should be a laptop that can be brought to class. 4 graduate hours. No professional credit. Prerequisite: Six semesters of non-English language study or equivalent competence.

TRST 505 Commercial & Technical Translation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TRST/505/)
Theoretical and practical aspects of translation of various genres of commercial and technical content, for example, annual reports, product specifications, marketing web sites, user manuals, online help, etc. 4 graduate hours. No professional credit. Prerequisite: Six semesters of non-English language study or equivalent competence.

TRST 506 Translation for Professions credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TRST/506/)
Develop the practice of "instrumental" translation skills in a variety of technical domains, including translation for new media, medical and legal translation, and localization. Focuses on the technical, cultural and terminological problems that characterize localization and globalization as governing criteria of translation in today's knowledge economy. 4 graduate hours. No professional credit. Students may not receive credit for TRST 406 and TRST 506. Prerequisite: Six semesters of non-English language study or equivalent competence.

TRST 508 Localization credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TRST/508/)
Combines theories of localization with hands-on activities using a range of computer-assisted translation (CAT) and localization tools. Students explore and reflect on the issues that translators face when adapting content from one language and culture to another. Students also learn state-of-the-art tools and techniques for localizing software, mobile apps, SEO keywords, and web sites. Markup languages, localization project management, and standards for the language industry are also introduced. 4 graduate hours. No professional credit. Prerequisite: TRST 503.

TRST 540 Capstone credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TRST/540/)
Original capstone project completed as the culmination of the MA in Translation and Interpreting. 4 graduate hours. No professional credit. Prerequisite: TRST 407 and TRST 410.

TRST 541 Community Interpreting credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TRST/541/)
Introduction to community interpreting and its main theoretical concepts, including what is interpreting, interpreting as process, and what is community interpreting. The major areas of community interpreting will be introduced, including interpreting in the medical and legal contexts. The interpreter code of ethics and ethical dilemmas of the interpreter will be introduced and analyzed. Prerequisite: Admission to the MA program in Translation and Interpreting or consent of instructor. 4 graduate hours. No professional credit. Prerequisite: Admission to the MA in Translation and Interpreting or instructor's permission.

TRST 542 Conference Interpreting credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TRST/542/)
Introduction to conference interpreting and its main theoretical concepts, including what is interpreting, interpreting as process, and what is conference interpreting. Core skills will be introduced and practiced, such as understanding the spoken language and language analysis techniques, acquisition of subject matter knowledge, terminology management, verbal expression skills, interpreting in practice, and mastery of the technology of the interpreter booth. Interpreting practice in the students' language pairs will be a part of the course. 4 graduate hours. No professional credit.

TRST 580 Special Topics in Translation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TRST/580/)
Covers topics of special interests to rising professional translators in the three areas of specialization of the MA in Translation and Interpreting: Applied Literary Translation, Translation for the Professions and Interpreting. Examples of topics may include: Translation for Government, Literary Translation, Translation and Digital Humanities. May be repeated in separate terms for a maximum of 8 hours.

TURK - TURKISH

TURK Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/TURK/)

Courses

TURK 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/TURK/199/)
Approved for letter and S/U grading. May be repeated in separate terms to a maximum of 10 hours.

TURK 201 Elementary Turkish I credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/TURK/201/)
Mastery of Turkish alphabet and phonetics; elementary formal grammar and the development of reading and writing skills; and conversation in the formal noncolloquial style. Participation in the laboratory is required.

TURK 202 Elementary Turkish II credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/TURK/202/)
Continuation of TURK 201, with introduction of more advanced grammar; emphasis on more fluency in speaking, reading, and writing simple sentences in standard Turkish. Participation in the language laboratory required. Prerequisite: TURK 201 or equivalent.

TURK 270 Language and Culture in Turkey credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TURK/270/)
As a country located at the crossroads of Asia, Europe and Africa, Turkey has always been under the spotlight. In this course, we will study the dynamic relationship between language and culture in Ottoman and modern Turkey through a timely analysis of its transition from a long-lasting empire to a young "secular" nation-state. We will examine the complexities of Turkish modernity from a holistic perspective to better comprehend how central Asian and Middle Eastern cultural influences, continuities, and transformations gave birth to modern Turkish language. The course should help you not only in developing an understanding of the Turkish language within a cultural framework, but also in gaining insight into Turkey's history, politics, literature, and media. No former knowledge of Turkey or the Turkish language is required. Same as ANTH 272, GLBL 272, and SAME 272.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West

TURK 403 Intermediate Turkish I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TURK/403/)
Continuation of TURK 202; emphasis on the development of appropriate reading, writing, speaking, and comprehension skills in Standard and Colloquial Turkish, with increased attention to ordinary written texts. 4 undergraduate hours. 4 graduate hours. Prerequisite: TURK 202 or equivalent.

TURK 404 Intermediate Turkish II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/TURK/404/)
Continuation of TURK 403; emphasis on the development of better receptive and productive language skills in Standard and Colloquial Turkish, with increased attention to both written and spoken texts. 4 undergraduate hours. 4 graduate hours. Prerequisite: TURK 403 or equivalent.

TURK 405 Advanced Turkish I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TURK/405/)
Third-year Turkish with emphasis on conversational fluency and on increased ability in reading and comprehending texts, including newspaper prose and Turkish cultural materials. Course will also deal with the advanced level grammar found in such texts. 3 undergraduate hours. 3 graduate hours. Prerequisite: TURK 404 or equivalent.

TURK 406 Advanced Turkish II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/TURK/406/)
Continuation of TURK 405 with increased emphasis on conversational fluency and comprehension of advanced level grammar in the reading of a variety of prose texts on current cultural issues. 3 undergraduate hours. 3 graduate hours. Prerequisite: TURK 405 or equivalent.

TURK 490 Special Topics in Turkish credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/TURK/490/)
Provides an opportunity to focus on various aspects of Turkish language, culture, and society. 2 to 4 undergraduate hours. 2 to 4 graduate hours. Approved for letter and S/U grading. May be repeated in separate terms.

UKR - UKRAINIAN

UKR Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/UKR/)

Courses

UKR 101 Basic Ukrainian I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UKR/101/)
Oral and written work on basic pronunciation, grammar, and vocabulary. For students with no previous study of Ukrainian.

UKR 102 Basic Ukrainian II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UKR/102/)
Continuation of UKR 101. Prerequisite: UKR 101 or equivalent proficiency.

UKR 113 Ukrainian Culture credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/UKR/113/)
Course situates Ukrainian culture in the broad context of Slavic nations. Acquaints students with Ukrainian culture from the origins of Kievan Rus' in the Middle Ages to the present. Includes highlights of historical-cultural events, an overview of literature and of the arts, as well as an outline of Ukrainian folklore. No knowledge of Ukrainian required.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

UKR 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/UKR/199/)
May be repeated.

UKR 201 Second-Year Ukrainan I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UKR/201/)
Completion of grammar, oral drills, and written exercises. Prerequisite: UKR 102 or equivalent.

UKR 202 Second-Year Ukrainian II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UKR/202/)
Selected readings in contemporary Ukrainian literature. Prerequisite: UKR 201 or equivalent.

UKR 218 Survey of Ukrainian Literature credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/UKR/218/)
Critical survey of major works in Ukrainian literature from the beginnings to the modern period in light of their historical and cultural background; lectures and readings in English. Same as CWL 218.

UKR 498 Problems in Ukrainian Lit credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/UKR/498/)
Critical survey of major works in Ukrainian literature from the beginnings to the modern period in light of their historical and cultural background; lectures and readings in English. 3 undergraduate hours. 3 or 4 graduate hours.

UP - URBAN AND REGIONAL PLANNING

UP Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/UP/)

Courses

UP 101 Introduction to City Planning credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/UP/101/)
Provides an introduction to urban and regional planning by examining the history of American urbanization, the evolution of American planning thought and practice, and contemporary issues and planning approaches.

UP 116 Urban Informatics I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/UP/116/)
Introduces students to basic analytical techniques used to better understand how cities work. Topics include the foundational statistical concepts of data, variation, and inference. Students formulate a research question about an urban studies or planning issue, collect data, use statistical software to analyze data, and communicate the findings.
This course satisfies the General Education Criteria for:
Quantitative Reasoning I

UP 136 Urban Sustainability credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/UP/136/)
Provides students with a basic understanding of how to make cities more sustainable by connecting how and where we live to environmental issues. Emphasis on green infrastructure and urban systems, vulnerability and resilience, green design and construction methods, energy production and consumption, and water conservation.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

UP 160 Race, Social Justice, and Cities credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/UP/160/)
Study of the history and politics of American cities as sites of everyday struggles against systemic racialized exclusions rooted in patterns of residential segregation. Frame everyday racial encounters as surface symptoms of submerged and systematic forms of racism rooted in centuries of genocide, land theft, racial slavery and decades of Jim Crow segregation and neoliberal exclusions. Explore everyday racial conflicts in selected cities as expressions of historical struggles for social and spatial justice, across multiple scales. Focus on the governance of routine social practices ranging from policing, to education, to gentrification and memorialization in public places. Final student projects will focus on social struggles against systemic and everyday racisms in a self-selected city of their choice. Credit is not given for UP 160 if UP 199 section -"Race," Social Justice and the City has been taken.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

UP 185 Cities in a Global Perspective credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/UP/185/)
Introduction to the process of urbanization from a global perspective by exploring the social, political, cultural and economic forces that shape urban life. Students will learn to analyze urban development in a range of cities including those in the Middle East and South Asia, Latin America and Africa.
This course satisfies the General Education Criteria for:
Cultural Studies - Non-West
Social Beh Sci - Soc Sci

UP 199 Undergraduate Open Seminar credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/UP/199/)
May be repeated.

UP 201 Planning in Action credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/UP/201/)
Introduces students to different career paths open to urban studies and planning majors. Students interact with professionals and take part in hands-on activities related to different concentration areas: sustainability, policy & planning, social justice and global cities.

UP 203 Cities: Planning & Urban Life credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/UP/203/)
Provides a broad introduction to social science theories and analysis methods to examine how people, communities, and governments plan a city. Draws upon theories and methods of several social science disciplines including economics, geography, political science, anthropology and sociology. Includes hands-on application of fundamental analysis techniques. Credit is not given for both UP 203 and UP 204. Prerequisite: UP 101.

UP 204 Chicago: Planning & Urban Life credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/UP/204/)
Provides a broad introduction to social science theories and analysis methods, and uses the City of Chicago as a semester-long case study to examine how people, communities, and governments plan a city. Draws upon theories and methods of several social science disciplines including economics, geography, political science, anthropology, and sociology. Balances themes and concepts from the assigned readings with discussion of Chicago-specific case studies and hands-on application of fundamental analysis techniques. Credit is not given for both UP 204 and UP 203. Prerequisite: UP 101.

UP 205 Ecology & Environmental Sustainability credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/UP/205/)
Basic ecological principles underlying environmental sustainability. Examination of problems that arise from inadequate consideration of structure and function of ecological systems, and approaches to ecological restoration and environmentally sound planning. Applications of principles to case studies drawn from urban planning, natural resource management and sustainable development.
This course satisfies the General Education Criteria for:
Nat Sci Tech - Life Sciences

UP 210 Environmental Economics credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/UP/210/)
Same as ACE 210, ECON 210, ENVS 210, and NRES 210. See ACE 210.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

UP 211 Local Planning, Gov't and Law credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/UP/211/)
Provides students with a basic understanding of the governmental structure, legal aspects, and practice of local municipal planning, with special emphasis on case law, constitutional principles, zoning, subdivision regulations and comprehensive planning. Gives an introduction for students interested in pursuing more advanced studies in land use law and local government planning.

UP 246 International Environmental Planning and Governance credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/UP/246/)
Examines the environmental pressures affecting and created by cities and urbanization in the global South. Students will learn about the historical and contemporary drivers of environmental change and the potential implications of new planning approaches to current and future environmental challenges. Activities include interactive class discussions, small group exercises, and a team-based project in which students design collaborative planning interventions to address specific environmental issues in an international city of their choice. Credit will not be given for UP 246 if credit was given for UP 199-SK in Fall 2019.

UP 260 Social Inequality and Planning credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/UP/260/)
How are inequalities produced and contested in an urban environment? This course examines this question by analyzing how the urban landscape shapes and is shaped by race, class, and gender inequalities. Uses comparative cases to explore successful intervention, both from formal and informal, across multiple scales from the local to the global.
This course satisfies the General Education Criteria for:
Social Beh Sci - Soc Sci

UP 301 Capstone Preparation credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/UP/301/)
Students work with capstone advisor to develop a plan to meet the capstone experience requirement. Students submit a proposal at the end of the semester. Approved for S/U grading only. Prerequisite: Junior standing.

UP 312 Communication for Planners credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/312/)
Integrates written, verbal, and graphic communication techniques into planning and analysis. Activities simulate professional situations where students develop skills and pieces of broader arguments and synthesize them into final products. Prerequisite: Completion of campus Composition I general education requirement.
This course satisfies the General Education Criteria for:
Advanced Composition

UP 316 Urban Informatics II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/UP/316/)
Provides an introduction to formal methods for collecting and analyzing data required in various planning processes. Methods include survey research, regional demographic and economic analysis, forecasting techniques, benefit-cost analysis, and decision analysis. Prerequisite: UP 116 or an introductory statistics course.
This course satisfies the General Education Criteria for:
Quantitative Reasoning II

UP 330 The Modern American City credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/UP/330/)
The Modern American City investigates the changing social and economic composition of cities, and the changing status of cities in U.S. society. The course focuses on the propulsive role race plays in three separate periods: The post-war period of African-American migration from the South and white flight, the post-1990 revival of cities and the amplification of their social inequalities, and the current period of pro-equity politics interracial coalitions of voters and organizers. Each course section explicitly considers the role that racial difference and other forms of difference play in first creating and second responding to the inequalities that characterize U.S. cities and society.
This course satisfies the General Education Criteria for:
Cultural Studies - US Minority

UP 335 Cities and Immigrants credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/UP/335/)
Focuses on the experiences of United States cities and towns undergoing rapid demographic economic, social, and cultural changes and the local responses to those changes, including local policy making, land-use regulations, community controversy, and grassroots activism. Same as SOCW 335.

UP 340 Planning for Healthy Cities credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/UP/340/)
Explores the evolving role of health in urban planning. Historical and current theories on the relationship between public health and the built environment are highlighted, as are prescriptions for healthy urban design. Community health planning, health disparities, and the needs of special populations in the city are also examined, along with some of the major policy issues affecting urban health care today.

UP 345 Economic Development Planning credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/UP/345/)
Public-private-partnerships in urban economic development, including study of potentials, problems, and projects; financing urban economic development through federal grant programs, tax increment financing, and other means.

UP 347 Junior Planning Workshop credit: 6 Hours. (https://courses.illinois.edu/schedule/terms/UP/347/)
Introduction to planning practice, with an emphasis on physical planning skills. Includes field observation, spatial data analysis, professional communication, and design. Prerequisite: UP 205, UP 312, UP 260 and UP 316.

UP 357 The Land Development Process credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/UP/357/)
The planning practice requires an understanding of the land development process. In this course students will learn about the decision process used for land development and the technical skills required for reading site plans. The course provides the essential skills necessary in the field of public-sector planning. Developers are required to make key determinations in the decision process for developing land. Planners are required to understand these decisions and they must possess the ability to interpret proposed site plans for development. This includes an understanding of existing conditions of land proposed for development and the impact of new development on the site and surrounding areas. This course contains three primary components in teaching an understanding of the land development process. They are: Understanding Market Decision for Developing Land; Reading Site Plans; and Assembling a Development Plan. Credit is not given for UP 357 if credit for UP 347 has already been given. Prerequisite: UP 312-Communication for Planners is highly recommended or basic familiarity with InDesign, Illustrator, and SketchUp.

UP 390 Planning Internship credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/390/)
Professionally supervised field experience in public and private planning or development agencies. Designed to introduce students to professional employment and actual planning practice. Students work in an agency of their own choice, subject to departmental approval, either during the summer session or part-time during a regular term. At least two weeks of full-time employment or its equivalent is required for each term hour of credit to a maximum of 4 hours. Summary reports are submitted by both employer and student. Approved for S/U grading only. May be repeated. Counts toward the Capstone Experience Requirement. Prerequisite: Upper division undergraduate standing in urban planning.

UP 397 Undergraduate Project credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/UP/397/)
Special projects and applied research related to real world urban problems and professional practice. One credit hour requires approximately 80 hours of work. May be repeated up to 3 hours. Counts toward the Capstone Experience Requirement. Prerequisite: Upper division standing in Urban Planning and consent of Capstone advisor.

UP 401 Undergraduate Capstone Seminar credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/UP/401/)
Seminar for peer discussion about the capstone experience and required capstone experience presentation. Students will attend lectures and workshops about career opportunities, resume writing, interviewing, and networking. Meets on a monthly basis. 1 undergraduate hour. No graduate credit. Approved for S/U grading only. May be repeated in separate terms up to 2 hours. Prerequisite: Senior standing.

UP 405 Watershed Ecology and Planning credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/405/)
Uses the watershed as the basic organizing concept in environmental planning and management; methods for assessing watershed boundaries, soils, land use, and groundwater system processes and developing plans for watershed protection. Emphasizes ecological implications of patterns of land use on functional and qualitative aspects of watershed systems. All-day field trip required. 4 undergraduate hours. 4 graduate hours. Prerequisite: Should have a previous course in environmental science.

UP 406 Urban Ecology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/406/)
Examines cities as natural systems, combining ecological analyses with historical, anthropological, and sociological studies of urban nature. Addresses ecological sustainability, growth management, biodiversity, restoration, and environmental justice. Required field trip. Same as ENVS 406. 4 undergraduate hours. 4 graduate hours.

UP 407 State and Local Public Finance credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/407/)
Provides students with an understanding of the fundamental concepts of fiscal planning at the state and local levels of government. Addresses both the theory and methods of state and local finance, focused on state and local fiscal policy. Addresses emerging policy issues involving land use and taxation, spending and budgeting, intergovernmental cooperation, debt financing, financing for economic development, and privatization. 4 undergraduate hours. 4 graduate hours.

UP 418 GIS for Planners credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/418/)
Detailed introduction to the design and use of computerized geographic information systems, focusing on their significance for planning. Emphasizes GIS within an institutional setting, covering not only fundamental technical concepts, but also organizational, management, and legal issues. Students will be introduced to GIS applications and products through readings, videos, demonstrations, and exercises. Computer laboratory work is included. 4 undergraduate hours. 4 graduate hours. Prerequisite: Upper division undergaraduate or graduate standing.

UP 420 Plng for Historic Preservation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/420/)
Historic preservation in the context of urban planning, including legal issues and ordinances, economic incentives, comprehensive plans and preservation plans, public participation, media relations, and more. Students will conduct a building survey including research and architectural descriptions for an on-going project in Urbana. Tours of local preservation projects. 4 undergraduate hours. 4 graduate hours. Prerequisite: At least junior standing.

UP 423 Community Development in the Global South credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/423/)
Introduces students to the main theoretical frameworks and conceptual building blocks of urban and community development in the Global South. It helps students to develop critical grassroots focused understanding of the approaches to development planning, the notion of community participation and empowerment, and the role of various actors including the non-government organizations and the community-based groups. 4 undergraduate hours. 4 graduate hours.

UP 426 Urban Design and Planning credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/426/)
Concepts and techniques of urban analysis, plan making, and implementation essential for effective interdisciplinary work in urban design. 4 undergraduate hours. 4 graduate hours. Prerequisite: Senior standing.

UP 428 International Planning Studio credit: 3 to 6 Hours. (https://courses.illinois.edu/schedule/terms/UP/428/)
Involves multidisciplinary student teams developing design or policy proposals for urban development of sites in international contexts. The studio combines seminar and studio/workshop formats to apply critical analysis, define planning problems, and propose solutions that integrate the social, economic, physical, and cultural aspects of site development. 3 to 6 undergraduate hours. 3 to 6 graduate hours. May be repeated to a maximum of 12 hours. Prerequisite: Consent of instructor.

UP 430 Urban Transportation Planning credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/430/)
Role of transportation in urban development and planning; characteristics of urban-person transportation systems and methods of analysis and forecasting of urban-person transportation demand; transportation systems management and capital improvement programming; and emphasis on the needs and activities of metropolitan planning organizations. Same as CEE 417. 4 undergraduate hours. 4 graduate hours.

UP 431 Urban Transportation Modeling credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/UP/431/)
This course provides the basic skills needed to understand how planners and decision makers use information about travel behavior to plan transportation investments. Students will gain applied experience with travel demand modeling software. Additional course topics include an introduction to travel behavior theory, travel model evaluation, and emerging modeling applications. 3 undergraduate hours. 3 graduate hours. Prerequisite: UP 430 or CEE 417, or consent of instructor. Junior standing required.

UP 432 Transportation Equity credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/UP/432/)
This course explores principles of justice and equity in transportation policy and planning. Students will learn about foundations of equity, laws and policies governing equity and environmental justice, assessment metrics, and the role of public planners and advocates in creating equitable transportation systems. Emphasis is on the United States experience, but will include some international content. Course activities include discussion and a practicum component. Students taking the course for graduate credit will lead additional discussions and a longer final paper. 3 undergraduate hours. 3 graduate hours. Credit is not given for UP 432 and UP 494 JB: Transportation Equity.

UP 434 Pedestrian and Bicycle Planning credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/UP/434/)
This course introduces the fundamentals of planning for pedestrian and bicycle transportation. Students will learn about the benefits and challenges of planning for walking and cycling; the roles of plans, policies, and infrastructure in supporting active travel; key elements of infrastructure design; methods to assess safety and access; and processes to create, implement, and evaluate plans and programs. Activities will include interactive discussions, hands-on exercises such as safety audits and site analyses, and a client-based project addressing real-world community needs. 3 undergraduate hours. 3 graduate hours. Credit will not be given for UP 434 if credit was given for UP 494-LB in Fall 2018.

UP 436 Urban Design Workshop credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/436/)
Examines urban design theory and principles, and evaluates the built environment in a lab-based setting. Working in teams, students become immersed in real work examples and propose design interventions for specific places, including socially diverse neighborhoods in small cities and major metropolitan urban centers. Normally includes active engagement with community residents. 4 undergraduate hours. 4 graduate hours. Prerequisite: UP 426, senior or graduate standing, or consent of instructor.

UP 438 Disasters and Urban Planning credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/438/)
Introduction to the role of urban planners in preparing for and rebuilding after disasters. Emphasizes U.S. planning practice, with particular attention to the role of local government. Includes basic U.S. emergency management laws and framework, local mitigation planning, and post-disaster recovery planning. 4 undergraduate hours. 4 graduate hours. Prerequisite: Graduate standing, senior in Urban Planning, or consent of instructor.

UP 441 Land Resource Evaluation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/441/)
Same as LA 441. See LA 441.

UP 443 Scenarios, Plans & Future Cities credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/UP/443/)
This course teaches theories and tools of scenario analysis, a set of techniques useful for making plans and creating more sustainable future cities. Scenario analysis can be used to think about multiple facets of a problem simultaneously and for addressing the uncertain future in light of the limited cognitive and computational capacity of individuals and organizations. Urban planners and policymakers are adopting and extending scenario approaches to envision the future, analyze decisions, and identify robust strategies in situations as varied as comparing projected outcomes of alternative routes for highway investment, to making decisions in situations when formal regulatory mechanisms may be lacking. The need for knowledge and skills in this area is reflected in (1) the growing use of scenario analysis as a required method in many government-funded planning initiative in the United States and around the world, (2) new courses and workshops offered by urban planning programs and professional trainers, such as the American Planning Association and Planetizen, and (3) the sprouting of scenario planning support tools, such as Envision Tomorrow and Index PlanBuilder. 3 undergraduate hours. 3 graduate hours. Prerequisite: A completion of an urban planning class would be useful. Junior standing is required.

UP 446 Sustainable Planning Seminar credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/446/)
Same as LA 446, GEOG 446, and NRES 446. See LA 446.

UP 447 Land Use Planning Workshop credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/447/)
Small group field work applying principles and techniques to specific land use problems in selected jurisdictions. 4 undergraduate hours. 4 graduate hours. Prerequisite: UP 211, senior or graduate standing, or consent of instructor.

UP 455 Economic Development Workshop credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/455/)
Small group field work applying principles and techniques of economic development planning and policy analysis to specific problems in selected cities, regions, or states. 4 undergraduate hours. 4 graduate hours. Prerequisite: UP 345 or consent of instructor.

UP 456 Sustainable Planning Workshop credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/456/)
Focuses on applying sustainable planning principles in a real world setting. Readings and research into indices of sustainable development, sustainable urbanism, and related literature help establish parameters for resolving a local planning project. Course is a hybrid workshop with portions of the semester spent on reading, research, and application working with a local planning agency. 4 undergraduate hours. 4 graduate hours. Prerequisite: UP 136 and UP 205, senior or graduate standing, or consent of instructor.

UP 457 Small Town/Rural Planning Workshop credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/457/)
What is rural and why does it matter? This workshop focuses on small towns and rural communities using Central Illinois communities in local case studies. Students will apply concepts and skills from prior courses and work extensively in teams to compile, synthesize, and communicate information that furthers planning and placemaking efforts. Archival research techniques; analysis of demographic, social, and economic trends; qualitative interviewing; and documentary film production are examples of the kinds of skills students will develop and refine. 4 undergraduate hours. 4 graduate hours. Prerequisite: UP 211, senior or graduate standing, or consent of instructor.

UP 460 Transportation/Land Use Policy credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/UP/460/**)**
Provides an integrated perspective and analytical framework for understanding urban transportation and land use policies. Emphasizes the interplay between the built environment and transportation by focusing on: fundamental travel demand theories; performance measures of urban transportation systems; impacts of transportation on land use and urban form; impacts of land use and urban form on travel patterns; congestion pricing; public transportation and active transportation; and transit oriented development (TOD). 4 undergraduate hours. 4 graduate hours.

UP 466 Energy & the Built Environment credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/UP/466/**)**
Same as LA 466. See LA 466.

UP 470 Shrinking Cities credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/UP/470/**)**
This seminar examines urban shrinkage--a phenomenon typically associated with population loss, but also characterized by obsolescence, disinvestment, and abandonment. While some cities thrive and struggle to house the global urban majority, other cities face the stark reality of shrinkage and decline. What should we do to envision and enact a viable future for our shrinking cities? This course will be taught as a seminar, using readings, student facilitated discussions, and lectures as a means for creating a shared understanding around urban shrinkage. Literature from Planning, Economics, Sociology, and other areas will contribute to discussions of the meaning of urban decline as a set of social, economic, and spatial phenomena. Some seminar sessions will be "lab" sessions, focused on developing your analytical skillset via qualitative and quantitative methods. 4 undergraduate hours. 4 graduate hours. Credit is not given for UP 470 if credit for UP 494-AG has been given. Prerequisite: Students must have at least a junior standing.

UP 473 Housing & Urban Policy credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/UP/473/**)**
The role of housing in American social policy planning: the history of public and private intervention in housing, regulation of supply and demand within housing markets and market imperfections; analysis of public policies for housing as they affect special populations (for example, the poor, the elderly, the disabled, homeless, and minorities). 4 undergraduate hours. 4 graduate hours.

UP 474 Neighborhood Revitalization credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/UP/474/**)**
Examines rationale and techniques for planning at the neighborhood level; the major social, political, and economic issues that confound public and private sector efforts to revitalize distressed neighborhoods. 4 undergraduate hours. 4 graduate hours.

UP 475 Real Estate Development Fundamentals credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/UP/475/**)**
This course will provide an introduction to the fundamental concepts and techniques applied in the real estate development process. In addition, this course will examine both the broader economic and social context in which real estate development is situated as well as how various professions interact within this context. Course assessments will include several case study assignments and a group project using an actual development site that will provide students with the chance to apply the concepts and techniques learned in the course, culminating in a final report and presentation. The overall objective of the course is to provide students with a useful framework for understanding the real estate development process, allowing them to identify viable development opportunities and analyze real estate development projects, while weighing the economic, social, and environmental costs and benefits for a community. 4 undergraduate hours. 4 graduate hours. Credit is not given for UP 475 if credit was already given for UP 494-RE. Prerequisite: This course has no prerequisites, however, having had at least an introductory urban planning class would be helpful. Upper-level or graduate standing is recommended.

UP 478 Community Development Workshop credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/UP/478/**)**
Application of community development principles and techniques to the solution of environmental, economic and social problems facing low income urban communities. Involves small group projects and off-campus field work in collaboration with community leaders. 4 undergraduate hours. 4 graduate hours. Prerequisite: UP 260, senior or graduate standing, or consent of instructor.

UP 479 Community Engagement in Planning credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/UP/479/**)**
Students will explore in theory, policy and practice community engagement through a case study, and observe actual planning and decision-making processes at different scales and contexts. Students will learn different tools and strategies that bring people together, particularly in low-income neighborhoods and culturally diverse metropolitan regions. Collectively, students will design a participatory process. Throughout the semester, students will make field trips to stakeholder communities and planning agencies, and grapple with the myriad challenges and dilemmas faced by nonprofit advocates, community activists, and equity-oriented public planners. 3 undergraduate hours. 4 graduate hours. Credit is not given for UP 479 if credit has already been received for UP 494-LT.

UP 480 Sustainable Design Principles credit: 2 Hours. **(**https://courses.illinois.edu/schedule/terms/UP/480/**)**
Same as LA 480. See LA 480.

UP 481 Urban Communities & Public Pol credit: 3 or 4 Hours. **(**https://courses.illinois.edu/schedule/terms/UP/481/**)**
Same as AFRO 481 and SOC 472. See AFRO 481.

UP 486 Planning with Climate Change credit: 4 Hours. **(**https://courses.illinois.edu/schedule/terms/UP/486/**)**
This junior/senior/graduate level course introduces the role of planning in addressing the climate crisis, through the lens of social and environment justice. Topics include the science of climate change, climate justice, greenhouse gas emissions reductions strategies, and adaptation planning. In addition to weekly in-class and on-line assignments, students will work in small teams to conduct a climate action plan for a local small business. 4 undergraduate hours. 4 graduate hours. Credit is not given if credit has already been given for UP 494-SK.

UP 494 Special Topics in Planning credit: 1 to 6 Hours. (https://courses.illinois.edu/schedule/terms/UP/494/)
Seminar on topics of current interest, as announced in the Schedule. 1 to 6 undergraduate hours. 1 to 6 graduate hours. May be repeated to a maximum of 16 hours.

UP 501 Planning History and Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/501/)
Offers students a survey of classic and contemporary theories of planning. Students will gain a deeper appreciation for the profession's roots as well as be introduced to some of "the theoretical tools" used to analyze planning. An important aspect of the course is intellectual dialogue through critical reading, informed discussion and writing assignments. Prerequisite: Graduate standing in Urban Planning or consent of instructor.

UP 503 Physical Planning credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/503/)
Provides grounding in the issues and principles underlying physical planning; lecture and discussion sessions are complemented by project work that applies principles and methods. Prerequisite: Graduate standing in Urban Planning or consent of instructor.

UP 504 Urban History and Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/504/)
Historical and international comparison of the origins and evolution of cities, the process of urbanization, and the human endeavor to effect urban growth and change. Includes history of urban physical form and of planning efforts, emphasizing planning origins in the nineteenth century and transnational influences. Includes equity issues of urban spatial arrangement, including racial segregation and housing market differentiation. Covers elements of urban physical form, including grid and organic structure, commercial city forms, the urban skyline, and urban sprawl. Prerequisite: Graduate standing in Urban Planning or consent of instructor.

UP 505 Urban and Regional Analysis credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/505/)
Techniques, data sources, and skills for analyzing regions as economic, social, and spatial systems. The first half of the course focuses on understanding current conditions and trends, and the second half on forecasting most likely and alternative futures. Students may opt to enroll for only the first 8 weeks and receive 2 hours of credit. Prerequisite: Graduate standing in Urban Planning or consent of instructor.

UP 508 Survey Design and Analysis credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/UP/508/)
Design of primary data collection instruments, focusing on the large sample survey. Discusses techniques for implementing qualitative and physical data collection by mail, web, and phone. Students learn multivariate statistical techniques for analyzing survey results.

UP 509 Economics for Planners credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/509/)
Exploration of how economics can contribute to understanding and solving urban problems. Application of economic analysis and reasoning to the important issues that planners confront, including zoning, land use, housing investment, and transportation. Focuses also on skills to use economic methods effectively.

UP 510 Plan Making credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/510/)
Provides skills to develop a wide range of plans and an understanding of the processes to implement them. Topics covered include planning analysis, political constraints of planning and planning ethics, techniques of negotiation, facilitation, mediation, and presentation to the public. Uses a general framework for plan making that includes plan review, problem framing, information gathering, alternative modeling, scenarios development, impact assessment, and alternatives evaluation. Students will work on applied tasks individually and in groups. Prerequisite: Graduate standing or consent of instructor.

UP 511 Law and Planning credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/511/)
Examines the legal framework within which planning takes place in urban areas of this country. Emphasizes the role of law in structuring local government responses to social, economic and physical planning issues and in allocating power among local governments, between local governments and state and federal governments, and between governments and the private sectors of society. Course may not be repeated for credit.

UP 512 Urban Skills & Applications I: Colloquium credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/512/)
Addresses urban management challenges, based on students' professional experiences, current urban issues and challenges, and practical lessons from faculty and practitioners. Sessions rely on diverse faculty expertise on a variety of topical themes, and will often include practitioner guests. Students develop an urban management topic to research in UP 513. 4 graduate hours. No professional credit. Prerequisite: Enrollment in Sustainable Urban Management degree program or consent of instructor. For graduate students in the Sustainable Urban Management degree program.

UP 513 Urban Skills & Applications II: Chicago Practicum credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/513/)
Application of skills and concepts learned in UP 512. Students undertake a field project in close collaboration with a faculty advisor. Students work in teams on the selected project, and weekly meetings explore urban issues and fieldwork challenges. 4 graduate hours. No professional credit. Prerequisite: UP 512. For graduate students in the Sustainable Urban Management degree program.

UP 519 Advanced Applications of GIS credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/519/)
Advanced course in geographic information systems emphasizing application of GIS to problems involving spatial analysis. Building upon fundamental concepts, students learn to use GIS software frequently found in planning practice. Also prepares students to use GIS in research requiring management and analysis of geographic data. Extensive use of computing workstations. Prerequisite: UP 418 or consent of instructor.

UP 521 International Planning Seminar credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/521/)
Advanced graduate seminar concerning urban and regional development processes in a global context. Closely examines critical issues and select topics in international development planning based upon individual research readings. Prerequisite: Consent of instructor.

UP 533 Community In American Society credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/533/)
Same as HDFS 533 and SOC 572. See HDFS 533.

UP 535 Local Policy & Immigration credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/535/)
Explores major issues confronting urban planners, administrators, elected officials and community activists working in highly diverse communities that are undergoing rapid demographic, economic, social, and cultural change. Focuses specifically on local policy-making in communities with large numbers of immigrants, particularly in cities and regions in the United States, Canada, Australia and Europe. Same as LA 535 and SOCW 535.

UP 543 Environmental Policy &Planning credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/543/)
Examines environmental policy and planning from both theoretical and applied perspectives. Provides an overview of the elements of environmental policy at national and state levels and investigates local implementation of environmental policies. Students will learn how local environmental planning practice fits within the broader context of environmental policies. Intended for graduate students in Urban and Regional Planning, but also open to graduate students with appropriate background and interests from Landscape Architecture, Geography, and relevant social sciences. Prerequisite: Graduate standing in Urban and Regional Planning or consent of instructor.

UP 545 Economic Development Policy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/545/)
Explores and evaluates urban and regional economic development policy in the U.S. Taking the twin lenses of cities and urbanized regions, it asks why the public sector engages in economic development; how the goals of economic development are defined; and how different policies attempt to steer economic activity and jobs to particular places. The course pays special attention to the question of equity, asking who will benefit from different policies.

UP 546 Land Use Policy and Planning credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/546/)
Examines a variety of approaches to land use policy and planning, from both a theoretical and an applied perspective. Explores different values in American land use policy, recent evolution of land use policy. Taught as a seminar.

UP 547 Regional Planning and Policy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/547/)
When are regional approaches more common and why? This course builds knowledge of principles and practices to tackle challenges that go beyond the geographical or disciplinary domain of a single agency. Through readings, seminar discussions, and assignments, students will develop an understanding of problems and settings that involve multiple jurisdictions and actors. Topics will address crosscutting issues such as affordable housing, foreclosures, fiscal stability, and spatial inequality. Prerequisite: Intended for graduate students in Urban and Regional Planning, and others with appropriate background and interests from Public Administration, Political Science, Natural Resources, Civil Engineering, Landscape Architecture, Geography, and relevant social sciences.

UP 552 Regional Development Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/552/)
Covers fundamental concepts and theories of regional economic development including export base, neoclassical and endogenous growth, regional convergence, core-periphery, interregional trade, product cycle, industrial districts, entrepreneurship, and regional innovation systems theories. Also discusses policy and planning frameworks for applying regional theory to spatial development problems. Same as ACE 552. Prerequisite: UP 445 and UP 407, or consent of instructor.

UP 555 Economic Impact Analysis credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/UP/555/)
Same as ACE 555. See ACE 555.

UP 576 Sustainable Urban Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/576/)
Same as CEE 592 and NRES 592. See CEE 592.

UP 578 Ethnography Urban Communities credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/578/)
Same as AFRO 552, HDFS 543, and SOC 578. See AFRO 552.

UP 580 Advanced Planning Theory credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/580/)
Recent advances in planning, policy-making and decision-making theories as they relate to the efficient use of land and to the complex interrelationships among the major uses of land, i.e., housing, transportation, agriculture; specific applications vary annually, reflecting the students' dissertation research topics. Prerequisite: UP 501 or consent of instructor.

UP 585 Advanced Modeling in Planning credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/585/)
Seminar on formal models used to analyze planning problems and planning behavior. Includes static and dynamic, linear and non-linear, and deterministic and stochastic optimization models. Derivations of models and methods for solution treated in depth, but the emphasis is on applications to planning problems such as transportation, land use, and environmental management. Specific themes change from year to year. Prerequisite: UP 505 and UP 508, or consent of instructor.

UP 587 Qualitative Research Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/587/)
Students use individual research to practice qualitative methods of studying social interaction. Includes field research and historical/archival research methods; project areas include community development, environment, and landscape. Discussion is divided between 1) readings on issues such as techniques and research design, social theory, ethnocentrism, and combining qualitative with quantitative research and 2) student research reports. Same as GEOG 587.

UP 589 Research Design and Methods credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/589/)
Prepares students to embark on thesis research and independent grant proposals. Introduces the phases of research design process, including literature review, identification of the research problem, statement of research objectives and questions, establishment of the conceptual framework, and selection of methods, sampling strategies, measurements, and analyses that are most suitable to address the research questions. Provides an overview of the commonly used quantitative and qualitative research methods, e.g., survey, quasi-experiment, and case study. Guides students through the process of writing and reviewing a research proposal and providing feedback to others. Prerequisite: Enrollment in a PhD program or consent of instructor.

UP 590 Professional Internship credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/UP/590/)
Summer, part-time, or other professional-level employment in the field of planning, usually in an area of concentration; exposure to the social, political, and institutional setting in which planning operates; and full documentation of internship activities required. Approved for S/U grading only. Prerequisite: Consent of instructor.

UP 591 Capstone Seminar credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/UP/591/)
Provides general capstone advising to MUP students. Seminar is used for peer discussion and feedback about work in progress, as well as to organize for the capstone poster session held each spring semester. Meets on a monthly basis. Approved for S/U grading only. May be repeated in separate terms.

UP 592 Doctoral Urban Planning Seminar credit: 0 Hours. (https://courses.illinois.edu/schedule/terms/UP/592/)
The Doctoral Students in Urban Planning (DSUP) seminar is an invaluable platform of intellectual development for PhD students in the Department of Urban & Regional Planning (DURP) and an effective medium in building a community of scholars. The seminars facilitate exchange of ideas and perspectives among DSUP members as well as the faculty. It serves as a support system for all members of DSUP, who are at different stages in their research and doctoral studies, and provides a shared space for students to present their research and to solicit critical, yet constructive, peer reviews and advice. 0 graduate hours. No professional credit. Approved for S/U grading only. Prerequisite: For PhD students in Regional Planning only.

UP 594 Seminar credit: 1 to 6 Hours. (https://courses.illinois.edu/schedule/terms/UP/594/)
Selected topics in urban and regional planning; several sections each term. May be repeated.

UP 596 Independent Study credit: 0 to 8 Hours. (https://courses.illinois.edu/schedule/terms/UP/596/)
Independent study in selected urban and regional planning topics under the supervision of an appropriate member of the faculty. Can be used by doctoral students for synthesis paper requirement. Approved for both letter and S/U grading. May be repeated to a maximum of 8 hours if topics vary.

UP 597 Urban Planning Research credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/UP/597/)
Individual research work under the supervision of an appropriate member of the faculty. Approved for S/U grading only. May be repeated to a maximum of 8 hours. May be used by doctoral students for the research paper requirement. Prerequisite: Graduate Standing in Urban and Regional Planning, consent of instructor, and consent of the Department.

UP 598 Master's Project credit: 4 or 8 Hours. (https://courses.illinois.edu/schedule/terms/UP/598/)
Major independent or small group project applying planning principles and methods to a current problem in urban and regional planning resulting in a final professional product. Approved for S/U grading only. Prerequisite: Graduate standing in Urban and Regional Planning, consent of instructor, and consent of the Department.

UP 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/UP/599/)
Approved for S/U grading only. May be repeated to a maximum of 8 hours for Master's students. May be repeated to a maximum of 16 hours for PhD students. Prerequisite: Graduate standing in Urban and Regional Planning, consent of instructor, and consent of the Department.

VCM - VETERINARY CLINICAL MEDICINE

VCM Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/VCM/)

Courses

VCM 290 Undergraduate Independent Research credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/VCM/290/)
Supervised scholarly laboratory/field work and/or reading in fields selected in consultation with an appropriate faculty member. Approved for Letter and S/U grading. May be repeated in separate terms.

VCM 501 Zoological Medicine Seminar credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/VCM/501/)
Discussion of selected topics and literature pertaining to zoological, wildlife and aquatic animal medicine and presentation of a formal seminar. May be repeated to a maximum of 6 hours. Prerequisite: Post DVM and enrolled in the Zoological and Aquatic Animal Residency Program.

VCM 503 Current Lit in Equine Med Surg credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/503/)
This course will use current primary literature in the fields of equine medicine and surgery as a gateway to discussion. Current literature will be reviewed, critiqued, and discussed in the context of current equine clinical practice. Students are expected to be graduate veterinarians with a thorough understanding of equine medical and surgical concepts before enrolling in the course. May be repeated to a maximum of 6 hours. Prerequisite: Graduate Veterinarian or consent of instructor.

VCM 505 Introduction to Veterinary Science credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/VCM/505/)
The course is broken into three major pillars of information: anatomy/physiology, including necessary information from major body systems (cardiovascular, gastrointestinal, renal, nervous, and reproductive), evolutionary biology/bioinformatics, and microbiology/virology. Each Module will be presented with a series of short video lectures with suggested reading and reference materials to support that Module's concepts. Discussion boards will be posted each week to integrate concepts and drive discussion based on the weekly topic. 3 graduate hours. No professional credit. Prerequisite: Restricted to students in VMS program.

VCM 506 Topics in Pathophysiology credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/506/)
Advanced review and discussion of topics pertaining to the physiology/pathophysiology, diagnosis, and current therapies for diseases in the field of small animal emergency and critical care medicine. May be repeated to a maximum of 6 hours. 1 graduate hour. No professional credit. May be repeated in separate semesters to a maximum of 6 hours. Prerequisite: DVM degree. Restricted to Vet Med students.

VCM 508 Trans Mol Path Veterinary Dz credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/VCM/508/)
Translation Molecular Pathogenesis of Veterinary Disease (Trans Mol Path Veterinary Dz) equips graduate students with knowledge and skills needed to understand molecular pathologic processes and determine how they translate to clinical manifestations of disease. The pathologic processes to be covered including those involved in cellular response to stress, inflammation, tissue repair, circulation and hemodynamics, immunity, cancer, and infectious disease. Translational associations that link pathologic mechanisms with disease manifestations commonly encountered in companion animal veterinary practice will be emphasized and will promote comprehensive bench-to-bedside learning.

VCM 511 Seminar in Prod/Pop Medicine credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/511/)
Same as PATH 511. See PATH 511.

VCM 522 Adv Comp Theriogenology credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/522/)
Advanced study on the principles and practice of theriogenology in domestic and non-domestic animals. May be repeated to a maximum of 6 hours. Prerequisite: Graduate Veterniarian and consent of instructor.

VCM 524 Effective Biomedical Teacher credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/VCM/524/)
Provides current or future university-level biomedical educators with the knowledge, motivation and proficiencies needed to apply the most recent developments in higher education to their teaching. The overall aim of the course is to cultivate an informed, passionate and adventurous approach to teaching and learning in participants. This will be achieved by fostering new thinking about teaching and learning, and by encouraging collaborative and cooperative learning between the class members. May be repeated in separate terms if topics vary.

VCM 528 Comparative Veterinary Physiology credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/VCM/528/)
This graduate level physiology course covers advanced physiology of all the major organ systems. Enrolled graduate students are assumed to have a knowledge of basic physiology (such as what is obtained during veterinary school). This advanced graduate level course emphasizes the requirements for normal physiology by discussion of pathologies affecting the organ systems. The overall aim is to increase the clinician-scientist-graduate student's merging of physiology into their day to day practice on the clinic floor and research endeavors. 3 graduate hours. 3 professional hours. Prerequisite: Graduate Veterinarian or consent of instructor.

VCM 535 Small Animal Internal Medicine Book Club credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/535/)
Read and review a veterinary medical textbook in preparation for the ACVIM General and Specialty Exams. At each class meeting, we will discuss the material in the assigned chapters. At the last meeting, a practice examination will be given. 1 graduate hour. No professional credit. May be repeated in separate semesters up to 6 hours if topics vary. Prerequisite: Restricted to residents in small animal specialties.

VCM 536 ECC Journal Topics credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/536/)
Review and discuss current veterinary literature pertaining to small animal emergency and critical care medicine. 1 graduate hour. No professional credit. Approved for S/U grading only. May be repeated to a maximum of 6 hours. Prerequisite: DVM Degree. Restricted to Vet Med students.

VCM 542 Ocular Pathology credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/542/)
Same as PATH 542. See PATH 542.

VCM 547 Global One Health credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/VCM/547/)
Students will be exposed through lectures from visiting and invited guests, small group discussions, readings, and projects to various facets and health problems in both public and veterinary health globally with emphasis on low-income countries. Emphasis will be on how to understand and work within the frameworks at the national and international level to address the biggest challenges and coming threats of the health of people and animals. The survey of topics will provide a foundational understanding for further in-depth study and work in international health. Same as BSE 600. 3 graduate hours. 3 professional hours. Approved for Letter and S/U grading. Prerequisite: In good standing as graduate student, DVM or MD student.

VCM 553 Advanced Diagnostic Imaging credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/553/)
Reviews the physics, clinical indications and technical aspects of advanced diagnostic imaging. The course will utilize clinical case examples. Studies are required to prepare one lecture and take a final examination. Attendance at 80% of the classes is required. May be repeated in separate terms for unlimited graduate credit.

VCM 560 Infectious Disease in Livestock Systems credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/VCM/560/)
This is an 8-week graduate level course that covers the components and determinants of a healthy livestock system. The course will allow students to understand the interaction between animals (hosts), microorganisms (infectious disease) and the environment. The instructors assume that enrolled students have a foundational knowledge of pathogens and livestock system design and operations. 3 graduate hours. No professional credit. Prerequisite: DVM or equivalent. Restricted to graduate students only.

VCM 561 Biosecurity in Livestock Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/VCM/561/)
This is an 8-week graduate level course that covers the principles of biosecurity. The course will allow students to design a comprehensive protocol for a given site. This course emphasizes how to optimize interventions in swine production systems to minimize the economic impact of infectious disease. The instructors assume that enrolled students have foundational knowledge of pathogens and swine system design and operations. 4 graduate hours. No professional credit. Prerequisite: DVM or equivalent. Restricted to graduate students only.

VCM 562 Understanding the Host Response to Infection credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/VCM/562/)
This is an 8-week graduate level course that provides a framework for understanding the anatomical, physiological, immunological, microbiological, and pathological basis of health maintenance in the major body systems impacted by infectious disease. The course will use a case-based approach to train students how to apply the basic principles of health science in solving clinical problems in individual animal and livestock systems. The instructors assume that enrolled students have a foundational knowledge in microbiology and livestock system operations. 3 graduate hours. No professional credit. Prerequisite: Restricted to graduate students.

VCM 563 Infectious Respiratory Diseases of Swine credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/VCM/563/)
This is an 8-week graduate level course. In this course you will learn to clinically apply your understanding of pathogen biology, pathology, host responses, and interventions to address important respiratory diseases of swine. The course will allow students to do comprehensive health improvement analysis for swine respiratory diseases. This course covers the topics of porcine reproductive and respiratory syndrome virus (PRRSV), influenza A virus in swine (IAV-S), Actinobacillus pleuropneumoniae (APP), Mycoplasma hyopneumoniae (Mhp), Pasteurella and Bordetella, pseudorabies virus (PRV), and other minor viruses. 3 graduate hours. No professional credit. Prerequisite: VCM 560. Restricted to graduate students only.

VCM 564 Introduction to Livestock Business Strategy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/VCM/564/)
This is an 8-week graduate level course designed to provide students with basic business strategy concepts taught in business schools adapted to the livestock production industry. The purpose of this course is to guide learners through a complete analysis of their current business and develop a strategic plan to earn superior returns in the future. The analysis will include the internal and external environment, performance measures, and existing strategies to compete in the livestock industry. On-demand, business concept lectures are given by a business school professor, Professor Peter Foreman. Weekly reality-checks with Dr. Jim Lowe apply the concepts to the livestock industry. 3 graduate hours. No professional credit. Prerequisite: Restricted to graduate students.

VCM 565 Biostatistics, Information Management, and Data Analytics for Livestock Production Systems credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/VCM/565/)
Application of statistical methods to epidemiology, clinical and diagnostic medicine, and laboratory biomedical experiments. Topics include data collection and organization, data cleaning, data visualization, descriptive statistics, reliability, sample size estimation, analysis of group differences, correlation and linear regression. Emphasizes use of computerized statistical software in biomedical data analysis. 4 graduate hours. No professional credit. Prerequisite: Restricted to graduate students.

VCM 566 Applications of Data Science to Livestock Systems credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/VCM/566/)
Develops skills in collection, organization, wrangling, dashboarding and advanced analytics of data in animal-based food production systems. The course will focus on building skills through problem assignments which require the integration of skills and knowledge to real world problems. 3 graduate hours. No professional credit. Prerequisite: Restricted to graduate students.

VCM 568 A Systems-Based Approach to the Operation of Livestock-Based Food Production Systems I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/VCM/568/)
In this course you will explore how structured, systems-based thinking – Thinking Process techniques - can be applied to the operations of livestock production systems. Eli Goldratt's approach to problem solving through his "Theory of Constraints" has been applied in businesses in many industries around the world. In this class you will explore both the theories that Goldratt has developed and how they might be applied to livestock production systems. You will, by the end of the course, be able to apply the TOC to livestock systems to improve both biological and economic performance. 3 graduate hours. No professional credit. Prerequisite: Restricted to graduate students.

VCM 569 A Systems-Based Approach to the Operation of Livestock-Based Food Production Systems II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/VCM/569/)
In this course you will continue to learn how structured, systems-based thinking – Thinking Process techniques - can be applied to the management of the supply chain for livestock-based food systems. The theories that Goldratt has developed and how they might be applied to supply chain management are explored in this course. You will, by the end of the course, be able to apply the TOC to a livestock-based supply chain to improve economic performance of the entire supply chain. 3 graduate hours. No professional credit. Prerequisite: Restricted to graduate students.

VCM 570 Cattle Feedlot Health Systems credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/VCM/570/)
An 8-week graduate level course that covers the different aspects of feeder cattle health and well-being as it relates to management practice, biomedical conditions and treatments. We will focus on understanding the relationships between people and cattle along with evidence-based approaches to ensuring cattle are cared for properly. The animal health and well-being aspects of disease mechanisms will be taught at the individual and population level. The course is designed to around recognizing the clinical signs (individual and population) you will see throughout your career and how to remedy these animal health problems efficiently. 3 graduate hours. No professional credit. Prerequisite: Restricted to students enrolled in the MVS degree program.

VCM 572 Clinical Epidemiology credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/VCM/572/)
Reviews the common epidemiologic and statistical methods used to design studies, analyze data, and interpret diagnostic tests and research findings. 4 graduate hours.

VCM 577 Advanced Large Animal Medicine credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/577/)
A seminar series devoted to intense study of pathophysiologic and current therapeutic aspects of selected topics in large animal internal medicine. May be repeated to a maximum of 6 hours. Prerequisite: Graduate Veterinarian or consent of instructor.

VCM 581 Emergency Diagnostic Imaging credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/581/)
Provides graduate students in emergency medicine, small animal surgery and diagnostic imaging the opportunity to share principles of diagnostic imaging based on recent case examples. Students will be expected to present at least two cases demonstrating competence in reviewing radiographic findings, formulating a list of differential diagnoses and discussing additional imaging modalities, as appropriate. 1 graduate hour. May be repeated in separate terms to a maximum of 9 graduate hours.

VCM 584 Current Concepts Comp Surgery credit: 1 or 2 Hours. (https://courses.illinois.edu/schedule/terms/VCM/584/)
Advanced study of topics concerning the pathophysiology, diagnosis, and current therapy of diseases which are treated with surgical procedures. 1 or 2 graduate hours. No professional credit. May be repeated to a maximum of 6 hours. Prerequisite: Graduate Veterinarian or consent of instructor.

VCM 585 Current Lit Sm Anim Medicine credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/585/)
Participants will discuss and analyze current veterinary journal articles which pertain to small animal internal medicine. May be repeated to a maximum of 6 hours. Prerequisite: Graduate Veterinarian.

VCM 588 Advances in Vet Dermatology credit: 1 or 2 Hours. (https://courses.illinois.edu/schedule/terms/VCM/588/)
A series of lectures, seminars and discussions devoted to the intense study of pathophysiologic aspects of the integument and related systems including: structure and functions, endocrinology, immunology, microbiology, virology, parasitology, pharmacology, oncology, and miscellaneous disorders. Students enrolling for graduate credit will also participate in weekly critiques of current literature. May be repeated to a maximum of 8 hours; duplicate registration is permitted up to 4 hours. Prerequisite: Graduate Veterniarian and consent of instructor.

VCM 590 Seminar credit: 0 to 1 Hours. (https://courses.illinois.edu/schedule/terms/VCM/590/)
Required of all graduate students whose major is Veterinary Clinical Medicine. Approved for S/U grading. May be repeated.

VCM 591 Advances in Vet Internal Med credit: 0 or 1 Hours. (https://courses.illinois.edu/schedule/terms/VCM/591/)
A series of lectures, seminars, and discussions devoted to intense study of new pathophysiologic aspects of selected topics in veterinary internal medicine. Each term is devoted to three topics. Approved for letter and S/U grading. May be repeated to a maximum of 6 hours. Prerequisite: Graduate Veterinarian and consent of instructor.

VCM 592 Special Problems credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/VCM/592/)
Basic and applied study including orientation and research on pertinent initial and continuing problems in the student's area of interest. May be repeated. Prerequisite: Consent of instructor.

VCM 593 Adv Topics Vet Clin Med credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/VCM/593/)
Instruction in advanced diagnosis, therapeutic modalities, and research methodologies in the areas of small animal internal medicine, small animal surgery, equine and food animal medicine and surgery, ophthalmology, theriogenology, radiology, and clinical pharmacology. May be repeated to a maximum of 8 hours. Prerequisite: Graduate Veterinarian and consent of instructor.

VCM 595 MVS Integrative Learning Experience credit: 1 to 8 Hours. (https://courses.illinois.edu/schedule/terms/VCM/595/)
The Master of Veterinary Science (MVS) Integrative Learning Experience provides students with an opportunity to synthesize, integrate, and apply knowledge and skills acquired in MVS approved coursework. Students will work on a comprehensive project simulating an experience in a professional setting. The capstone project must integrate theory and practical experience, draw upon students' originality and creativity within appropriate scope, and stretch their research, analytical, writing, critical thinking, and other intellectual abilities. Course registration is restricted to MVS degree seeking students and requires approval from the instructor. The comprehensive capstone project will take a year to complete requiring students to register for this course the last two semesters of the degree program. 1 to 8 graduate hours. No professional credit. Approved for S/U grading only. May be repeated up to 8 hours. Prerequisite: Course registration is restricted to MVS degree seeking students and requires approval from the instructor.

VCM 598 Manuscript Research credit: 0 to 12 Hours. (https://courses.illinois.edu/schedule/terms/VCM/598/)
Independent research to fulfill requirement for non-thesis alternative in Master of Science Program. Credit is not given for both VCM 598 and VCM 599. (Summer Session, 1 to 2 hours.) Prerequisite: Must be enrolled in the departmental graduate program.

VCM 599 Thesis Research credit: 0 to 12 Hours. (https://courses.illinois.edu/schedule/terms/VCM/599/)
Approved for S/U grading only. May be repeated.

VCM 601 Clinical/Laboratory Practice credit: 1.5 to 6 Hours. (https://courses.illinois.edu/schedule/terms/VCM/601/)
Individual customized clerkship in clinical medicine and surgery for VM-4 professional students. Approved for S/U grading only. May be repeated to a maximum of 9 hours. Prerequisite: Fourth-year standing in the veterinary medicine professional curriculum.

VCM 604 Equine Medicine and Surgery credit: 1.5 to 4.5 Hours. (https://courses.illinois.edu/schedule/terms/VCM/604/)
Clerkship in equine medicine and surgery for VM-4 professional students. Approved for S/U grading only. May be repeated to a maximum of 12 hours. Prerequisite: Fourth-year standing in the veterinary medicine professional curriculum.

VCM 608 Equine Veterinary Husbandry credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/608/)
Designed to familiarize veterinary students with the basic principles of equine husbandry, including biosecurity, infectious disease prevention, anti-parasite programs, dental care, transport, and nutrition. Approved for both letter and S/U grading. Prerequisite: Good standing in the veterinary professional curriculum, Graduate College, or consent of instructor.

VCM 624 Bereavement Issues credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/624/)
Theoretical and clinical perspectives on the concepts of attachment, bonding, grief and loss will be discussed. The course also includes instruction in basic counseling and crisis intervention skills. Students will answer calls on the CVM C.A.R.E. Helpline under the supervision of the instructor.

VCM 625 Zoological Companion Mammal Medicine credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/625/)
Zoological Companion Mammal Medicine is an elective course for veterinary students in their third year of the veterinary curriculum or graduate students. Students will learn clinical aspects of comparative anatomy, physiology, husbandry and handling of zoological companion mammal species encountered in companion zoological practice including rodents (Guinea Pigs, rats, hamsters, chinchillas), lagomorph (domestic rabbit), marsupials (sugar glider), carnivores (ferret), and more (African pygmy hedgehogs). The most commonly encountered diseases of these species will also be discussed. 1 graduate hour. 1 professional hour. Approved for Letter and S/U grading. Prerequisite: Enrollment in the 3rd year veterinary curriculum.

VCM 626 Shelter Medicine I credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/626/)
Introduction to the field of Shelter Animal Medicine and is intended to create a pool of well-informed veterinarians that will become an important resource for shelter managers nationwide. This course is a prerequisite for the more advanced Shelter Medicine II (offered in the third year). Course will foster veterinarian participation in community service and encourage personal responsibility in the area of animal welfare. Offered for S/U grading only.

VCM 627 Equine Infectious Disease credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/627/)
Provides an in-depth review of common equine infectious diseases (viral, bacterial, parasitic) according to body systems. Primarily uses a lecture-based format to review the key aspects of disease pathogenesis, common clinical signs and most appropriate diagnostic test(s) for pathogen identification. Lectures are followed by several (3-4) cases that the lecturer will review in class with the students. These cases will be designed to emphasize the essential aspects of the different infectious diseases and generate critical thinking by the students with regards to developing an appropriate diagnostic plan. Approved for S/U grading only.

VCM 628 The Healer's Art credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/628/)
Creates time and space for veterinary medicine professional students to reflect and remember what it was that brought them to this field and why they want to do this work. The course provides a safe place for students to explore their feelings, passions, struggles, and aspirations with other classmates and faculty members. This is a class focused on giving students tools to build resiliency and foster self-awareness and growth. By addressing topics such as self-confidence and interpersonal relationships during veterinary school, this course gives students the opportunity to learn how to cop with some of the challenges as they occur to combat compassion fatigue, burnout, and overall job dissatisfaction. No graduate credit. 1 professional hour. Approved for S/U grading only. Prerequisite: Restricted to students with good standing in the College of Veterinary Medicine.

VCM 634 GP Surg. Oncology credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/634/)
A five-week course focusing on the theory and practice of small animal surgical oncology for general practice. This course will provide students with the theory and practical skills required to diagnose and treat surgical oncology cases at a primary care level. The module includes lectures and cadaver laboratories pertaining to the principles of surgical oncology and the diagnosis, treatment and prognosis of specific neoplasms. In the laboratories, students will practice a variety of biopsy techniques, cutaneous and subcutaneous tumor resection, intestinal resection and anastomosis, visceral tumor resection and limb amputations. No graduate credit. 1 professional hour. Prerequisite: VM 608. DVM professional students only.

VCM 635 Advanced Soft Tissue Surgery credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/635/)
Seven-week course during the second half of the Fall semester focusing on the theory and practice of small animal soft tissue surgery. This course covers many of the soft tissue surgical procedures which new veterinary graduates are expected to competently perform. Procedures to be covered include bandaging and wound management, drain placement, declaw, dewclaw removal, tendonectomy, aural hematoma repair, pinna repairs, biopsies, surgery of the integument, gastrointestinal surgery, limb amputations and mastectomy. Approved for S/U grading only. Prerequisites: VM 605, VM 606, VM 607 and VM 608.

VCM 636 Advanced Clinical Pathology credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/VCM/636/)
A case-based approach to clinical pathology. Students are required to critically evaluate clinical case data, turn in a written description of the case and be a discussion leader for at least one class period. Students will be provided with basic history and signalment of cases and with laboratory data including CBC, clinical chemistry, urinalysis and occasionally additional data. Focuses on the dog and cat, however horse and food animal cases will be presented. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Successful completion of VM 608 or permission of instructor. Third year veterinary students only.

VCM 637 Advanced Clinical Cardiology credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/637/)
This course is designed to familiarize veterinary students with advanced veterinary cardiology, from history and physical examination findings to diagnostics and treatments. Lectures will be based on clinical cases assigned prior to class and case-based discussions. This is an interactive course and each student will be expected to answer questions regarding problem and differential lists, as well as diagnostic interpretation and treatment plans. No graduate credit. 1 professional hour. Approved for S/U grading only. none Prerequisite: VM 609. Restricted to VM3 veterinary students.

VCM 639 Forensic Veterinary Medicine credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/639/)
This is a small group discussion and lecture-style course discussing different aspects of veterinary forensic medicine. Each session is devoted to a different aspect of veterinary forensic medicine. Classes are lecture style with periods of group discussion. Each session is 1 hour in length. No graduate credit. 1 professional hour. Approved for S/U grading only. Prerequisite: VM1 or VM2 standing.

VCM 640 Advanced Orthopedic Surgery credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/640/)
This course will provide hands-on training in fracture fixation and common knee and hip procedures to veterinary students with an interest in orthopedic surgery. This hands-on training is not available in the core course. Approved for S/U grading only. Prerequisite: Third year standing in the veterinary curriculum.

VCM 641 Equine Neonatology credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/641/)
Designed to familiarize the veterinary student with the basic and advanced principles of equine neonatology. Topics include normal and abnormal physiology, problems of the mare that impact the foal, prematurity, sepsis, uremia, musculoskeletal problems, and therapy. 1 graduate hour. 1 professional hour. Approved for letter and S/U grading. Prerequisite: VM 606.

VCM 642 Equine Critical Care credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/642/)
Familiarizes the veterinary student with the basic and advanced principles of equine critical medicine. Topic include normal and abnormal physiology particularly as it relates to shock and systemic inflammatory response syndrome (SIRS); point-of-care testing, clinical pathology and other testing techniques, including cardiovascular and imaging, for assessment and monitoring of critically ill horses; responsible antimicrobial use in critically ill horses; and end of life conversations. 1 graduate hour. 1 professional hour. Prerequisite: VM 606.

VCM 643 Equine Emergency Medicine credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/643/)
Familiarizes the veterinary student with the basic and advanced principles of emergency care for adult horses. Topics include gastrointestinal, musculoskeletal, respiratory, central nervous system, ophthalmic, and urogenital emergency problems of the horse. Particular attention will be paid to gastrointestinal disease of the horse that present as an emergency, such as colic, enteritis, and typhlocolitis. 1 graduate hour. 1 professional hour. Approved for letter and S/U grading. Prerequisite: VM 606.

VCM 644 Veterinary Pain Management credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/644/)
This course will serve to increase a student's knowledge base on many aspects of pain management of the veterinary patient. Subjects covered in this course will include in depth review of neuroanatomy and physiology of pain, pathophysiology of pain, pharmacology of medications used for pain management, non-pharmacologic treatments for pain, and specific pain management strategies for various domestic species, and exotic and zoo animals. No graduate credit. 1 professional hour. Approved for S/U grading only. Prerequisite: For students in the veterinary professional program only.

VCM 645 Equine Surgery Laboratory credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/645/)
Provides introductory laboratory experiences in common and basic equine surgical techniques. Topics include normal and cryptorchid equine castration, distal limb surgeries, casting techniques, and joint injections. Approved for S/U grading only. Prerequisite: VM 606.

VCM 646 Lab Animal Science I credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/646/)
Addresses fundamental issues in Laboratory Animal Sciences including career options, occupational health and safety, regulations, animal welfare, IACUC review, and rodent biology, husbandry, and medicine. 1 graduate hour. 1 professional hour. Approved for Letter and S/U grading. Prerequisite: Second or third-year standing in the veterinary medicine curriculum, registration in the graduate college, or consent of instructor.

VCM 648 One Medicine: One Health credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/VCM/648/)
Explores the interrelatedness of human, animal, and environmental health with a focus on policy development. Through a combination of lecture, class discussion, and small group papers, students will learn how human, animal, and ecosystem health are all affected by many of the same factors and how the health of one affects the health of the others. Students will examine topics such as emerging and infectious diseases; overweight/obesity; food and water security; public health law; climate change; and antimicrobial resistance. 3 graduate hours. 3 professional hours. Approved for Letter and S/U grading. Prerequisite: Restricted to first, second, or third year standing in the veterinary medicine curriculum, registration in the graduate college, or consent of the instructor.

VCM 649 Avian Medicine and Surgery credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/VCM/649/)
Avian species represent a significant segment of the companion animal population. Their anatomy, physiology, and behavior are substantially different from traditional species. Intended to provide students with the knowledge and skills required a practice clinical avian medicine and surgery. Diagnostic and therapeutic principles, as well as diseases of companion avian species are included. 2 graduate hours. 2 professional hours. Approved for letter and S/U grading.

VCM 656 Lab Animal Science II credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/656/)
Continuation of VCM 646. Additional topics in laboratory animal science including the biology, husbandry, and medicine of commonly studied laboratory animal species, researcher presentations on their animal studies, and student-led animal model presentations 1 graduate hour. 1 professional hour. Approved for Letter and S/U grading. Prerequisite: VCM 646 or equivalent, or consent of instructor.

VCM 657 Shelter Medicine II credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/657/)
Shelter Medicine is a broad discipline within veterinary medicine that requires a thorough knowledge of population medicine, surgery, epidemiology, preventive medicine, infectious disease control, policy development, facility design, public health, animal behavior, and veterinary forensics. This course will discuss select topics within Shelter Medicine to give the student a better understanding of the discipline. No graduate credit. 1 professional hour. Approved for S/U grading only. Prerequisite: VCM 626.

VCM 660 Advanced Equine Anatomy credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/660/)
Designed to provide an in-depth assessment of the unique anatomical characteristics of the horse with focused attention to clinically important aspects of equine anatomy. The material will cover the anatomy of the head, larynx and pharynx, gastrointestinal anatomy and function, and musculoskeletal anatomy in particular detail, relating equine anatomy to the diagnostic and surgical approaches used in the management of diseases involving these body systems. Prerequisite: VM 604.

VCM 661 Advanced Equine Lameness credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/VCM/661/)
Covers equine lameness from a clinician's perspective. Offers an in-depth integrative approach to the diagnosis of equine lameness using the presenting complaint as a starting point. Rather than approaching equine musculoskeletal disease from the perspective of specific injuries, students will be guided through the lameness examination process. Active student participation in class discussion is expected. 2 professional hours. May not be repeated for credit. Prerequisite: Third year veterinary student.

VCM 663 Small Animal Dermatology credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/663/)
First half of the course presents a systematic approach to small animal dermatologic diagnoses and therapeutics; the second half deals with immunological disorders, seborrheic syndromes, hereditary disorders, cutaneous neoplasms, and feline dermatology. Prerequisite: VCM 631 or equivalent, or consent of instructor.

VCM 667 Ethics and Conflict in Zoological Medicine credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/667/)
Provides students with an analytical framework and critical thinking tools to better understand both sides of charismatic and hotly debated issues in Zoological Medicine. An emphasis will be placed on the broader social contexts and the influence of the media on the public perception of these issues. By building these tools early in their career, students will be equipped to better understand and critique arguments for future issues as they develop. Course topics will include maintenance of zoological species as companion animals, management of zoological species in an institution, zoo animal advocacy, intervention of free ranging wildlife, and how a zoo veterinarian is portrayed in public platforms. No graduate credit. 1 professional hour. Approved for S/U grading only. Prerequisite: Restricted to VM1 or VM2 students.

VCM 671 International Vet Medicine credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/671/)
Discussion of selected topics relevant to animal welfare and disease in the global society and, with guest speakers, of political issues of different continents. Students present a short seminar on a topic of choice. Prerequisite: DVM student.

VCM 672 Food Supply Disease Prevention credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/672/)
This course is designed to familiarize the student with the basic principles of food supply disease control. The first half of the course is designed to enhance the student's ability to detect disease with observation of necropsy lesions at the gross level. The second half of the course will cover immunizations and the judicious use of antimicrobials. 1 graduate hour. 1 professional hour. Prerequisites: VCM 690 or permission of the instructor if a graduate student or house officer.

VCM 673 Companion Animal Rehab credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/673/)
Series of lectures/discussions focusing on the proper application of companion animal rehabilitation modalities. Designed to give an understanding of the basics of rehabilitation and begin the thought process of implementing rehabilitation in to veterinary medicine. Prerequisite: Registration in the veterinary curriculum or consent of the instructor.

VCM 674 Equine Exercise Physiology credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/674/)
Designed to familiarize veterinary students with the basic principles of equine exercise, physiology and sports medicine. Topics include physiology, energetics, thermoregulation, fatigue, conventional and alternate training techniques, and drugs and medications used in equine athletes. Approved for letter and S/U grading. Prerequisite: Good standing in the veterinary professional curriculum, Graduate College, or consent of instructor.

VCM 677 Study Abroad Germany credit: 1.5 Hours. (https://courses.illinois.edu/schedule/terms/VCM/677/)
Study Abroad Program to learn about public health issues and regulations in Germany. Approved for S/U grading only.

VCM 678 Reptile Medicine & Surgery credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/678/)
Available to VM3 students and will provide exposure to important topics including husbandry, restraint, venipuncture, physical examination, triage, radiography, zoonoses and clinical medicine. Species breadth will include those found under human management with some topics explored surrounding wildlife. Content will be delivered in a hybrid format with both online and in person content, including hands on learning activities. No graduate credit. 1 professional hour. Approved for Letter and S/U grading. Prerequisite: 3rd year VM Students.

VCM 679 Adv Veterinary Ophthalmology credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/679/)
Anatomic, physiologic, pathologic, and pharmacologic considerations in eye diseases and their treatments; instrumentation and methods of study of ocular structure, physiology, and diseases; and laboratories devoted to techniques of examination of the eye and surgical procedures used in treatment of eye diseases. No graduate credit. 1 professional hour. Approved for S/U grading only. Prerequisite: Third-year standing in veterinary medicine curriculum.

VCM 681 Advanced Equine Internal Medicine credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/681/)
Advanced instruction in case management, laboratory data interpretation, decision-making regarding therapeutics, and advanced diagnostic techniques. No graduate credit. 1 professional hour. Approved for Letter and S/U grading. none Prerequisite: Consent of instructor. Available to VM3 students only.

VCM 682 Wildlife Medicine credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/682/)
An 8-week elective course for veterinary students offered in their second or third year of the veterinary curriculum. Participation in weekly rounds and team meetings, for the purpose of independent study and training, is required. Students will be required to create a blog style report of an interesting case managed by the student's WMC team or a topic that relates to wildlife medicine, rehabilitation, or conservation. Available to VM2 students during the first 8-week terms of the fall term. Available to VM3 students during the first 8-week terms of the spring term. No graduate credit. 1 professional hour. Approved for Letter and S/U grading. May be repeated in separate terms to a maximum of 2 hours. Prerequisite: Enrolled students must be an active member assigned to a treatment team in the Wildlife Medical Clinic.

VCM 684 Client Relations credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/684/)
Introduction to client relations, including techniques of effective verbal and nonverbal communication and applications of these techniques for veterinary students.

VCM 685 Advanced Diagnostic Imaging credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/685/)
Stresses imaging principles and comparative anatomy, using clinical cases as examples for echocardiography, diagnostic ultrasound, nuclear medicine, CT and MRI. Prerequisite: First, second or third year veterinary students or by consent of instructor.

VCM 686 ZooMed: What is Your Diagnosis credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/686/)
A series of interactive, non-domestic animal cases will be discusses during each meeting. Expands a veterinary student's confidence and diagnostic skill when working with these species. No graduate credit. 1 professional hour. Approved for Letter and S/U grading.

VCM 687 Canine Occupational Health I credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/687/)
This course will address the most common occupations for working and performance dogs and how these occupational activities may impact health. Subjects covered in this course will include handling of working dogs, breed predisposition to disease, equipment and its proper use, nutrition, rehabilitation and physical therapy, pain management, alternative therapies and prevention strategies in managing occupation-related illnesses in working and performance dogs. The course will be presented in lecture format. No graduate credit. 1 professional hour. Prerequisite: First, Second or Third year standing in the DVM curriculum or permission of instructor.

VCM 688 Food Supply Disease Management credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/688/)
This course is designed to familiarize the veterinary student with the principles of disease management of the major body systems in herd situations. The student will be given case examples and opportunities to evaluate and treat diseases of the respiratory and enteric systems as well as multiple periparturient diseases. 1 graduate hour. 1 professional hour. Approved for letter and S/U grading. Prerequisite: VCM 672 or permission of the instructor if a graduate student or house officer. Class Scheduled Information: DVM graduate students or house officers in food animal related training programs.

VCM 690 Intro to Food Supply Medicine credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/690/)
This course is designed to familiarize the student with the basic principles of food supply veterinary medicine. Topics include epidemiologic investigation, veterinary inputs into food supply systems, reproductive aspects associated with production systems and therapeutic standards in food production. 1 graduate hour. 1 professional hour. Approved for letter and S/U grading. Prerequisite: VM 601 or permission of the instructor.

VCM 692 Special Problems credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/VCM/692/)
Individual research on a special problem chosen in consultation with the instructor and department head. 1 to 3 graduate hours. 1 to 3 professional hours. Approved for letter and S/U grading. May be repeated to a maximum of 6 hours. Prerequisite: Enrollment in veterinary medicine curriculum with grade point average of 3.0 or above, or consent of instructor.

VCM 693 Comparative Anatomy - Zoo credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/693/)
The comparative anatomy of zoological species commonly encountered in clinical practice will be discusses in lecture format followed by laboratory dissection of cadavers. Additionally, radiographic anatomy of these species will be discussed. Species covered include representatives of the taxonomic Classes Chondrichthyes, Osteichthyes, Amphibia, Reptilia, Aves, Mammalia. Cadaver specimens include bony fish, sharks, frogs, iguana, turtles, snakes, birds (pigeons), rats and rabbits. Emphasis will be placed on anatomical differences as related to domestic species. Meets for one hour of lecture and two hours of laboratory, one or two times each week during the eight weeks of the course for a total of eight lecture hours and 16 laboratory hours. Approved for S/U grading only.

VCM 694 Veterinary Clinical Medicine credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/VCM/694/)
To be used to designate a trial or experimental course for five or more students, designed to be an elective in the CVM professional curriculum. The course can be taught under this designation for two years or two offerings, whichever time is greater. 1 to 3 graduate hours. 1 to 3 professional hours. Approved for letter and S/U grading. May be repeated to a maximum of 6 hours. Prerequisite: Registration in the veterinary medicine curriculum or consent of instructor.

VCM 695 Food Supply Decision Making credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VCM/695/)
This course is designed to enhance veterinary student knowledge of case management and allow them to utilize case information to make decisions. The course will be laboratory and problem based with the opportunity to use antemortem and postmortem samples of animals with disease to evaluate therapeutic and management outcomes. 1 professional hour. Approved for S/U grading only. Prerequisite: VCM 688.

VCM 696 Fish Medicine and Surgery credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/VCM/696/**)**
Introduction to ornamental fish medicine and surgery. Specific topics to be addressed in this course include non-infectious and infectious diseases, diagnostic sampling techniques, anesthesia and analgesia, and common surgical procedures for fish. 1 graduate hour. 1 professional hour. Approved for letter and S/U grading.

VCM 698 Adv Small Animal Dentistry credit: 1 Hour. **(**https://courses.illinois.edu/schedule/terms/VCM/698/**)**
The recognition and appropriate treatment of various types of feline and canine dental diseases will be discussed. The laboratories will be utilized to assist students in the determination of the appropriate diagnosis based on dental radiographs, photographs and models. Oral surgery, periodontic and endodontic therapy will also be performed in the laboratory. 1 graduate hour. 1 professional hour. Approved for S/U grading only.

VM - VETERINARY MEDICINE COURSES

VM Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/VM/)

Courses

VM 290 Undergraduate Research credit: 1 to 5 Hours. (https://courses.illinois.edu/schedule/terms/VM/290/)
Scholarly activities (laboratory work, field studies, clinical case analyses, evaluation of scientific literature) conducted under the supervision of a faculty mentor. Approved for Letter and S/U grading. May be repeated in separate terms for up to 10 total hours of credit.

VM 601 Clinical Practice I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/VM/601/)
Teaches clinical skills, practices, and procedures used in the Veterinary Teaching Hospital and the Veterinary Diagnostic Laboratory and provides hands-on exposure to the methodologies used to diagnose, treat, and prevent disease in animals. No graduate credit. 4 professional hours. Approved for S/U grading only.

VM 602 Structure and Function I credit: 9.5 Hours. (https://courses.illinois.edu/schedule/terms/VM/602/)
Teaches gross anatomy of the limbs of the dog, cat, horse, and ox; histology of basic tissues, and endocrines, immune, integumentary, and musculoskeletal systems; early development; cell physiology and endocrinology; neurobiology of excitable tissues including brain, nerves, and muscles; and clinical correlations between these subjects and the clinical experiences of VM 601. No graduate credit. 9.5 professional hours.

VM 603 Structure and Function II credit: 9 Hours. (https://courses.illinois.edu/schedule/terms/VM/603/)
Teaches gross anatomy of the thoracic and abdominal cavity of the dog, cat, horse, ox, sheep, goat and pig; histology and physiology of the cardiovascular, respiratory and gastrointestinal systems; neurobiology of the autonomic system and pain; and clinical correlations between these subjects and the clinical experiences of VM 601. No graduate credit. 9 professional hours. Prerequisite: VCM 602 and good-standing in the veterinary professional curriculum or consent of instructor.

VM 604 Structure and Function III credit: 9.5 Hours. (https://courses.illinois.edu/schedule/terms/VM/604/)
Teaches gross anatomy of the pelvic cavity and head of the dog, cat, horse, ox, sheep, goat and pig; histology of the reproductive, urinary, and special senses systems; reproductive and renal physiology; neurobiology of cranial nerves and special senses; basic animal nutrition; and clinical correlations between these subjects and the clinical experiences of VM 601. Course Information:No graduate credit. 9.5 professional hours. Prerequisite: VM 603 and good-standing in the veterinary professional curriculum, or consent of instructor.

VM 605 Pathobiology I credit: 9.5 Hours. (https://courses.illinois.edu/schedule/terms/VM/605/)
Teaches principles of pharmacology; general pathology; immunology; medical genetics; and mechanistic toxicology. No graduate credit. 9.5 professional hours. Prerequisite: VM 604 and good standing in the veterinary professional curriculum, or consent of instructor.

VM 606 Clinical Practice II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/VM/606/)
Teaches in greater depth the clinical skills, practices, and procedures used in the Veterinary Teaching Hospital and the Veterinary Diagnostic Laboratory and provides hands-on exposure to the methodologies used to diagnose, treat, and prevent disease in animals. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: VM 601, VM 604, and good standing in the veterinary professional curriculum, or consent of instructor.

VM 607 Pathobiology II credit: 10 Hours. (https://courses.illinois.edu/schedule/terms/VM/607/)
Infectious disease concepts in parasitology, protozoology, bacteriology, mycology, and virology; and introduces basic antimicrobial pharmacology. No graduate credit. 10 professional hours. Prerequisite: VM 605, VM 606, and good standing in the veterinary professional curriculum; or consent of instructor.

VM 608 Pathobiology III credit: 9 Hours. (https://courses.illinois.edu/schedule/terms/VM/608/)
Pathology, clinical pathology, and imaging of organ systems; epidemiology and food safety; and includes an integrative laboratory covering commonly encountered problems in infectious diseases. No graduate credit. 9 professional hours. Prerequisite: VM 607 and good standing in the veterinary professional curriculum, or consent of instructor.

VM 609 Medicine and Surgery I credit: 10.5 Hours. (https://courses.illinois.edu/schedule/terms/VM/609/)
Teaches the practice of medicine and surgery of anesthesiology, cardiology, reproduction, neonatology, and respiratory diseases. Surgery and Theriogenology laboratories occur throughout this course. No graduate credit. 10.5 professional hours. Prerequisite: VM 608 and good-standing in the veterinary professional curriculum, or consent of instructor. Restricted to Veterinary Medicine DVM students.

VM 610 Medicine and Surgery II credit: 10.5 Hours. (https://courses.illinois.edu/schedule/terms/VM/610/)
Teaches and practice of medicine and surgery of dermatology, endocrinology, gastroenterology, and urology. Surgery and Theriogenology laboratories continue throughout this course. No graduate credit. 10.5 professional hours. Prerequisite: VM 609 and good-standing in the veterinary professional curriculum, or consent of instructor.

VM 611 Medicine and Surgery III credit: 9.5 Hours. (https://courses.illinois.edu/schedule/terms/VM/611/)
Teaches the practice of medicine and surgery of animal behavior, clinical toxicology, imaging, musculoskeletal diseases, neurology, ophthalmology, and oncology/hematology/immune-related diseases. Surgery laboratories continue throughout the course. No graduate credit. 9.5 professional hours. Prerequisite: VM 610 and good standing in the veterinary professional curriculum, or consent of instructor. Restricted to Veterinary Medicine DVM students.

VM 612 Clinical Practice III credit: 8 Hours. (https://courses.illinois.edu/schedule/terms/VM/612/)
Teaches clinical skills, practices, and procedures used in the Veterinary Teaching Hospital and the Veterinary Diagnostic Laboratory and provides hands-on experience in the methodologies used to diagnose, treat, and prevent disease in animals. No graduate credit. 8 professional hours. Approved for S/U grading only. Prerequisite: VM 611.

VM 613 Clinical Practice IV credit: 13 Hours. (https://courses.illinois.edu/schedule/terms/VM/613/)
Teaches clinical skills, practices, and procedures used in the Veterinary Teaching Hospital and the Veterinary Diagnostic Laboratory and provides hands-on experience in the methodologies used to diagnose, treat, and prevent disease in animals. No graduate credit. 13 professional hours. Approved for S/U grading only. Prerequisite: VM 611.

VM 614 Clinical Practice V credit: 8 Hours. (https://courses.illinois.edu/schedule/terms/VM/614/)
Teaches clinical skills, practices, and procedures used in the Veterinary Teaching Hospital and the Veterinary Diagnostic Laboratory and provides hands-on experience in the methodologies used to diagnose, treat, and prevent disease in animals. No graduate credit. 8 professional hours. Approved for S/U grading only. Prerequisite: VM 611.

VM 615 Clinical Practice VI credit: 8 Hours. (https://courses.illinois.edu/schedule/terms/VM/615/)
Teaches clinical skills, practices, and procedures used in the Veterinary Teaching Hospital and the Veterinary Diagnostic Laboratory and provides hands-on experience in the methodologies used to diagnose, treat, and prevent disease in animals. No graduate credit. 8 professional hours. Approved for S/U grading only. Prerequisite: VM 611.

VM 616 Clinical Practice VII credit: 8 Hours. (https://courses.illinois.edu/schedule/terms/VM/616/)
Teaches clinical skills, practices, and procedures used in the Veterinary Teaching Hospital and the Veterinary Diagnostic Laboratory and provides hands-on experience in the methodologies used to diagnose, treat, and prevent disease in animals. No gractuate credit. 8 professional hours. Approved for S/U grading only. Prerequisite: VM 611.

VM 617 Professional Development credit: 8 Hours. (https://courses.illinois.edu/schedule/terms/VM/617/)
Provides students with a capstone experience near graduation to enhance their educations with advanced professional experiences tailored to their career needs and/or to strengthen perceived areas of weakness in their professional education and development. No graduate credit. 8 professional hours. Approved for S/U grading only. Prerequisite: VM 616 and good-standing in the veterinary professional curriculum.

VM 620 Canine Feline Behavior credit: 1 or 3 Hours. (https://courses.illinois.edu/schedule/terms/VM/620/)
This lecture/discussion course examines the evolutionary histories, domestication process, development behavior social behavior and problem behavior of the dog and the cat. Topics also include learning theory, training methods, and behavior modification approaches for companion animals. Analysis and discussion of behavior/training case studies are included, and lectures and discussions focus on issues that are relevant to the involved in-depth analysis of behavior problem case studies. No graduate credit. 1 or 3 professional hours.

VM 622 Research Project I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/VM/622/)
In this lecture/discussion course, students will work in groups, each led by a faculty mentor. Each group will develop a research question, design experiments to answer the question, and write a project proposal. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Good standing in the veterinary curriculum.

VM 623 Research Project II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/VM/623/)
In this lecture/discussion course, which is a continuation of VM 622, students will work in groups, each led by a faculty mentor. The groups will conduct the research project that was planned and proposed in VM 622, analyze the data, and prepare a scientific manuscript for publication. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Good standing in the veterinary curriculum.

VM 626 The Basics of Business credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VM/626/)
Business principles related to managing a veterinary practice including economics, negotiations, finance, communication and interpersonal skills, accounting, and management. 1 graduate hour. 1 professional hour. Prerequisite: Third year standing in the veterinary curriculum or consent of instructor.

VM 627 Fundamentals of Finance credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VM/627/)
Provides students with a strong introductory background in the basic aspects of personal and corporate finance. Topics addressed include financial statements, budgeting, debt management, interest rates, personal investment strategies, developing and managing a portfolio of investments, time value of money, financial decision making, and managing financial risk. No graduate credit. 1 professional hour. Approved for S/U grading only.

VM 635 Veterinary Medical Spanish credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/VM/635/)
In this course second year veterinary students will learn basic veterinary Spanish terminology to enable them to communicate effectively with clients. This involves language skills necessary to describe diseases of various animals and discuss treatment options, their benefits and side effects, and cost of treatment with the client. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisites: Students should have basic writing, reading, and speaking skills in Spanish. Second year students only.

VM 642 Contemporary Issues in Vet Med credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VM/642/)
An introductory course for first year veterinary students that will explore issues affecting the profession and practice of veterinary medicine, as well as career opportunities. Approved for S/U grading only.

VM 643 Fundamentals of Management credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VM/643/)
An introductory course for second year veterinary students that explores the aspects of managing people in a business setting. Compliance, motivation, engagement, persuading, developing, and retaining employees will be covered as well s cross generational issues in the work place. No graduate credit. 1 professional hour. Approved for S/U grading only.

VM 645 Communications in Practice credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/VM/645/)
An introductory course for third year veterinary students that will explore the service and communication side of veterinary medicine as well as facilitate in educating students on personal finance, resume development, interviewing contracts and negotiation, and intra and interpersonal communication. No graduate credit. 1 professional hour. Approved for S/U grading only.

VM 651 Small Animal Medicine and Surgery I credit: 4.5 Hours. (https://courses.illinois.edu/schedule/terms/VM/651/)
Teaches the practice of Small Animal Medicine and Surgery in cardiology, respiratory diseases, reproduction, anesthesiology, and neonatology. Surgery and Theriogenology laboratories occur throughout this course and the companion course VM 652. No graduate credit. 4.5 professional hours. Prerequisite: VM 608 and good standing in the veterinary professional curriculum, or consent of instructor. Restricted to third year veterinary students only.

VM 652 Large Animal Medicine and Surgery I credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/VM/652/)
Teaches the practice of Large Animal Medicine and Surgery in cardiology, respiratory diseases, reproduction, anesthesiology, and neonatology. Surgery and Theriogenology laboratories occur throughout this course and the companion course VM 652. No graduate credit. 5 professional hours. Prerequisite: VM 608 and good standing in the veterinary professional curriculum, or consent of instructor. Restricted to third year veterinary students only.

VM 653 Small Animal Medicine and Surgery II credit: 7 Hours. (https://courses.illinois.edu/schedule/terms/VM/653/)
Teaches the practice of Small Animal Medicine and Surgery in Dermatology, Endocrinology, Gastroenterology, Urology, Infectious Diseases. Surgery laboratories occur throughout this course and the companion course VM 654. No graduate credit. 7 professional hours. Prerequisite: VM 651 and VM 652 and good standing in the veterinary professional curriculum, or consent of instructor. Restricted to third year veterinary students only.

VM 654 Large Animal Medicine and Surgery II credit: 3.5 Hours. (https://courses.illinois.edu/schedule/terms/VM/654/)
Teaches the practice of Large Animal Medicine and Surgery in dermatology, endocrinology, gastroenterology, urology, and infectious diseases. Surgery laboratories occur throughout this course and the companion course VM 653. No graduate credit. 3.5 professional hours. Prerequisite: VM 651 and VM 652 and good standing in the veterinary professional curriculum, or consent of instructor. Restricted to third year veterinary students only.

VM 655 Small Animal Medicine and Surgery III credit: 7 Hours. (https://courses.illinois.edu/schedule/terms/VM/655/)
Teaches the practice of Small Animal Medicine and Surgery in neurology, clinical toxicology, imaging, musculoskeletal disease, oncology, hematology, immune-related diseases, ophthalmology, and animal behavior. Surgery laboratories occur throughout this course and the companion course VM 656. No graduate credit. 7 professional hours. Prerequisite: VM 653 and VM 654 and good standing in the veterinary professional curriculum, or consent of instructor. Restricted to third year veterinary students only.

VM 656 Large Animal Medicine and Surgery III credit: 3.5 Hours. (https://courses.illinois.edu/schedule/terms/VM/656/)
Teaches the practice of Large Animal Medicine and Surgery in neurology, clinical toxicology, imaging, musculoskeletal disease, oncology, hematology, immune-related diseases, ophthalmology, and animal behavior. Surgery laboratories occur throughout this course and the companion course VM 655. No graduate credit. 3.5 professional hours. Prerequisite: VM 653 and VM 654 and good standing in the veterinary professional curriculum, or consent of instructor. Restricted to third year veterinary students only.

VM 694 Veterinary Medicine credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/VM/694/)
To be used to designate a trial or experimental course for five or more students. It is designed to be an elective fin the CVM professional curriculum. A course can be taught under this designation two times within a two-year period and cannot be renewed as a VM 694 course. No graduate credit. 1 to 4 professional hours. May be repeated to a maximum of 8 hours if topics vary. Prerequisite: Registration in the veterinary medicine curriculum or consent of instructor.

WLOF - WOLOF

WLOF Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/WLOF/)

Courses

WLOF 201 Elementary Wolof I credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/WLOF/201/)
Introduction to Wolof; emphasizes grammar, pronunciation, reading, and conversation in standard Wolof. Same as AFST 241. Participation in language laboratory required.

WLOF 202 Elementary Wolof II credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/WLOF/202/)
Continuation of elementary Wolof, with introduction of more advanced grammar; emphasizes more fluency in speaking, reading, and writing simple sentences in standard Wolof. Same as AFST 242. Prerequisite: WLOF 201. Participation in language laboratory required.

WLOF 403 Intermediate Wolof I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/WLOF/403/)
Survey of more advanced grammar, with emphasis on increasing conversational fluency, composition skills, study of written texts in standard and Dakar Wolof, and discussion of grammatical variations. Same as AFST 443. 4 undergraduate hours. 4 graduate hours. Prerequisite: WLOF 202.

WLOF 404 Intermediate Wolof II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/WLOF/404/)
Continuation of WLOF 403. Emphasizes ability to engage in reasonably fluent discourse in Wolof, comprehensive knowledge of formal grammar, and ability to read ordinary texts in standard and Dakar Wolof. Same as AFST 444. 4 undergraduate hours. 4 graduate hours. Prerequisite: WLOF 403.

WLOF 405 Advanced Wolof I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/WLOF/405/)
Third year Wolof with emphasis on conversational fluency and on increased ability in reading and comprehending texts, including newspaper prose and West African cultural materials. Course will also deal with the advanced level grammar found in such texts. Same as AFST 445. 3 undergraduate hours. 3 graduate hours. Prerequisite: WLOF 404 or equivalent.

WLOF 406 Advanced Wolof II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/WLOF/406/)
Continuation of WLOF 405 with increased emphasis on conversational fluency and comprehension of advanced level grammar in the reading of a variety of prose tests on current cultural issues. Same as AFST 446. 3 undergraduate hours. 3 graduate hours. Prerequisite: WLOF 405 or equivalent.

WLOF 407 Topics Wolof Lang & Lit I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/WLOF/407/)
Selected readings from modern Wolof authors, with a focus on novels, plays, and basic poetry illustrative of West African cultural issues and advanced level Wolof grammar, as well as development of expository writing skills. Same as AFST 447. 3 undergraduate hours. 3 graduate hours. Prerequisite: WLOF 406.

WGGP - WOMEN AND GENDER IN GLOBAL PERSPECTIVES

WGGP Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/WGGP/)

Courses

WGGP 581 Gender Relations & Intl Dev credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/WGGP/581/)
Interdisciplinary seminar examining theoretical and empirical research on gender and the transformation of social and economic structures. Students will develop a comparative perspective on issues of women and public policy by contrasting and comparing such policies in North and South America, Eastern and Western Europe, Asia, and Africa. Same as GWS 512 and SOCW 581.

WRIT - WRITING STUDIES

WRIT Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/WRIT/)

Courses

WRIT 199 Undergraduate Open Seminar credit: 1 to 5 Hours. **(**https://courses.illinois.edu/schedule/terms/WRIT/199/**)**
See course schedule for topics. Approved for Letter and S/U grading. May be repeated in separate terms if topics vary.

WRIT 300 Issues in Tutoring Writing credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/WRIT/300/**)**
Introduction to the work of writing centers, theories of composition, and writing pedagogy through readings, discussion, and observation. Theories of learning, collaborative learning, and the dynamics of the tutoring relationship will be discussed issues of working with specific writers such as English Language Learners will be explored. A relevant issue of interest will become the topic for an extended research paper. As theory is applied to practice, students will write, share their writing with others, and observe and participate in writing tutoring session. Later in the semester students will consult with writers, either with an experienced consultant or alone. Satisfactory completion of all requirements of the class and approval of the Writers Workshop Director will allow students to consult in the Writers Workshop the following semester. Credit is not given for WRIT 203 and WRIT 300. Prerequisite: Consent of instructor.

WRIT 303 Writing Across Media credit: 3 Hours. **(**https://courses.illinois.edu/schedule/terms/WRIT/303/**)**
Same as INFO 303. See INFO 303.
This course satisfies the General Education Criteria for:
Advanced Composition

YDSH - YIDDISH

YDSH Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/YDSH/)

Courses

YDSH 101 Beginning Yiddish I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/YDSH/101/)
Course develops basic conversational and reading skills as well as the essentials of Yiddish grammar.

YDSH 102 Beginning Yiddish II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/YDSH/102/)
Continuation of YDSH 101 focusing on comprehension and reading skills. Prerequisite: YDSH 101.

YDSH 103 Intermediate Yiddish I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/YDSH/103/)
Continuation of YDSH 102. Develops more advanced conversational, comprehension, reading and writing skills as well as introducing more advanced features of Yiddish grammar. Prerequisite: YDSH 102 or equivalent placement score.

YDSH 104 Intermediate Yiddish II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/YDSH/104/)
Continuation of YDSH 103. Prerequisite: YDSH 103 or equivalent placement score.

YDSH 220 Jewish Storytelling credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/YDSH/220/)
Course will introduce the great Jewish storytellers such as Nachman of Bratslav, Scholem-Aleichem, and I.B. Singer through readings of Yiddish tales, short stories, poetry, drama and excerpts from novels and autobiographies from the 19th and 20th centuries. In addition, Yiddish films and folklore will be used to exemplify the variety of Jewish cultural expression in Eastern Europe, Russia, and America. Course will also present a sample of critical approaches to Yiddish literature. Taught in English translation. Same as CWL 221, ENGL 223, JS 220, and REL 220.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

YDSH 320 Responses to the Holocaust credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/YDSH/320/)
Same as CWL 320, ENGL 359, JS 320, and REL 320. See CWL 320.
This course satisfies the General Education Criteria for:
Humanities - Lit Arts
Cultural Studies - Western

YDSH 420 Jewish Life-Writing credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/YDSH/420/)
Jewish life-writing from the late 18th century until today. Emphasis on cultural historical context, literary styles, and forms. All texts will be available in English translation. Same as CWL 421, HIST 436, REL 420, and SLAV 420. 3 undergraduate hours. 4 graduate hours.

ZULU - ZULU

ZULU Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/ZULU/)

Courses

ZULU 201 Elementary Zulu I credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/ZULU/201/)
Introduction to Zulu; emphasis on grammar, pronunciation, reading and conversation in standard Zulu. Same as AFST 251. Participation in the language laboratory is required.

ZULU 202 Elementary Zulu II credit: 5 Hours. (https://courses.illinois.edu/schedule/terms/ZULU/202/)
Continuation of ZULU 201 with introduction of more advanced grammar; emphasis on more fluency in speaking, reading, and writing simple sentences in standard Zulu. Same as AFST 252. Participation in the language laboratory is required. Prerequisite: ZULU 201.

ZULU 403 Intermediate Zulu I credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ZULU/403/)
Survey of more advanced grammar; emphasis on increasing conversational fluency, composition skills, study of written texts in standard Zulu and discussions of grammatical variations. Same as AFST 451. 4 undergraduate hours. 4 graduate hours. Prerequisite: ZULU 202.

ZULU 404 Intermediate Zulu II credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/ZULU/404/)
Continuation of ZULU 403; emphasis on increasing conversational fluency, composition skills, study of written texts in the standard and spoken Zulu dialects, and discussion of grammatical variations. Same as AFST 452. 4 undergraduate hours. 4 graduate hours. Prerequisite: ZULU 403.

ZULU 405 Advanced Zulu I credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ZULU/405/)
Third year Zulu with emphasis on conversational fluency and on increased facility in reading, comprehension, writing in response to authentic Zulu texts such as those documented in selected newspapers, magazines, and South African cultural materials. Same as AFST 453. 3 undergraduate hours. 3 graduate hours. Prerequisite: ZULU 404.

ZULU 406 Advanced Zulu II credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/ZULU/406/)
Continuation of ZULU 405 with increased emphasis on conversational fluency and increased facility in reading and comprehending authentic literary texts including prose and cultural materials from South Africa. Same as AFST 454. 3 undergraduate hours. 3 graduate hours. Prerequisite: ZULU 405.